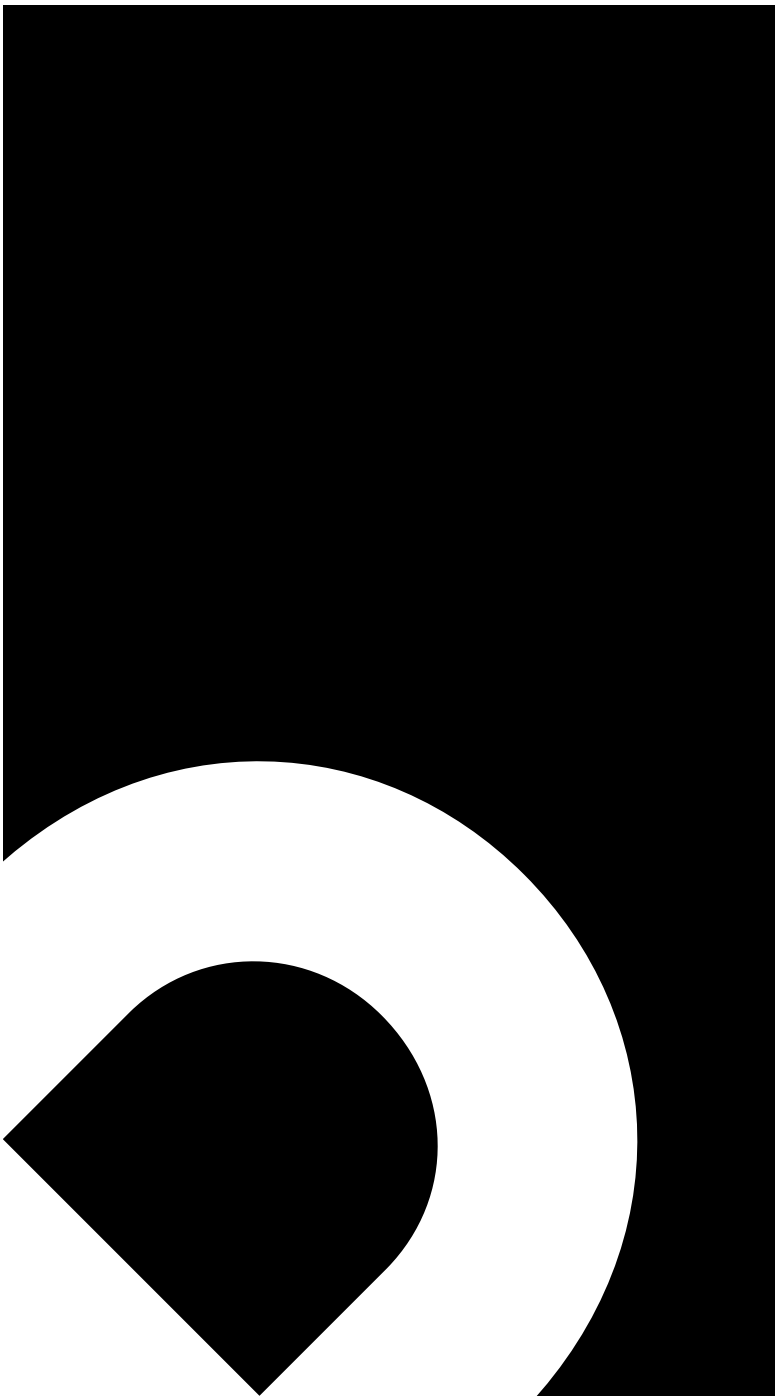
Darco



products catalogue

CHIMNEY COWLS
STEERING & POWER SUPPLY
HOT AIR DISTRIBUTION SYSTEMS
CHIMNEYS
VENTILATION

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DARCO catalogue consists of five sections.

To make usage of this compilation easier, each section is marked with color marker according to the scheme below::

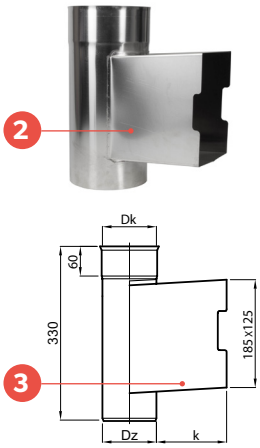
- CHIMNEY COWLS
- STEERING & POWER SUPPLY
- HOT AIR DISTRIBUTION SYSTEM
- CHIMNEYS
- VENTILATION

Each of the sections has a detailed index.
Particular attention should be paid to the section "Steering", because it contains elements, that are used with products from sections "Chimney cowls" as well as "Hot air distribution systems"

How should the information in product data sheet be read?

Vast majority of products in Darco catalogue is presented uniformly. Below we present a short description showing how to read technical data in order to set an appropriate product code..

1 25. WC CLEAN OUT ELEMENT



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2
k	170	160	155	150	145	140	135	155	145	135	157	145	145	145	145	145	145
Weight [kg]	0.90	1.00	1.05	1.10	1.10	1.10	1.15	1.30	1.35	1.40	1.60	1.70	1.95	2.20	2.45	2.70	2.95

4 for s=0.6

5

WC m x - m s

- s – steel sheet thickness
- m – material
- x – diameter DN
- m – denotation for heat-resistant steel
- WC – clean out element

6

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - gas and oil exhaust ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - acid-resistant steel sheet 1.4404
	-	X	-	X - acid-resistant steel sheet 1.4301
	-	-	Z	Z - heat-resistant steel sheet 1.4828
Steel sheet thickness s	5	-	-	5 - thickness 0.5 mm
	6	6	-	6 - thickness 0.6 mm
	8	8	8	8 - thickness 0.8 mm
	1	1	1	1 - thickness 1.0 mm

1. Product name and key fragment of product code
2. Picture or 3D product render.
3. Basic technical drawing with dimensions or letters with references to the measurements table.
4. Table with dimensions and weights.
5. Product code or pattern on how to read the code for every product version.
6. Table of available material types and product usage.

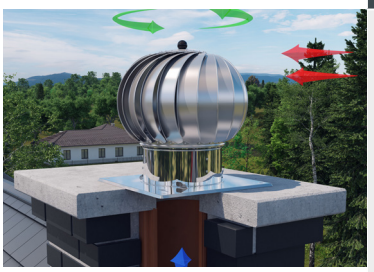
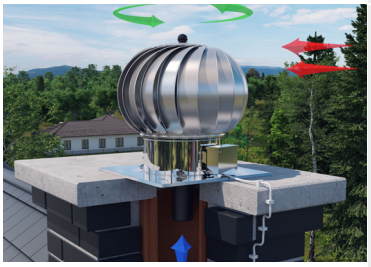
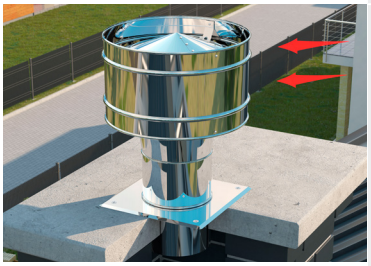
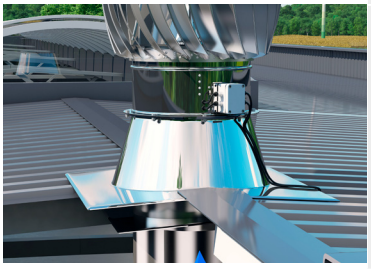
Each table column should be read in direction shown by the arrow (from up to down).
Product from the column presented is designated for ventilation and smoke (gas) exhausting purposes, product is available in material version - acid-resistant steel sheet with possible thicknesses: 0.5 mm, 0.6 mm, 0.8 mm and 1.0 mm.

Example of product code: WC150-CH5
means WC clean out element of 150 mm diameter, made with acid-resistant steel of 0.5 mm thickness.

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Chimney cowls are to be mounted on top of chimney ducts. Their function is to protect against downwind, rainwater and birds nesting, but most of all their purpose is to create chimney draught.
All DARCO chimney cowls are available with variety of mounting bases to choose from, many inlet diameters and material versions (including chrome-nickel acid resistant steel). Most of them can be also powder-coated (any color from RAL palette). We produce also non-standard devices upon individual order.

We have the most complex chimney cowls offer in the world!

	Chimney cowl version / description	Product name
	**Rotary chimney cowls** Rotary chimney cowls use wind speed to increase chimney draught.	· Turbowent · Turbowent with external bearings · Turbowent Tulipan
	**Hybrid chimney cowls** Hybrid chimney cowls that work just like ordinary wind-driven cowl, using wind force to rotate the turbine. Difference is that they are additionally equipped with low power brushless electric motor used to maintain their rotation even if there is no wind or wind force is too weak to achieve desired parameters.	· Hybrid Turbowent · Hybrid Turbowent Plus · Hybrid Solar Turbowent · Hybrid Turbowent Tulipan
	**Self-adjusting chimney cowls** Self-adjusting chimney cowls always position themselves in direction of wind, thanks to that, covering the chimney duct and improving draught.	· Rotowent · Rotowent Swing · Rotowent Dragon
	**Mechanical chimney cowls** Mechanical chimney cowls (chimney fans) called draught generators allow to create chimney draught in situations when usage of wind driven appliances is not possible or demand for chimney draught is big.	· Draught Generator
	**Static chimney cowls** Static chimney cowls use kinetic energy of wind to improve chimney draught.	· Static chimney cowl CAGI · Cap with base · Air intake for air-type ground heat exchanger · Sewer Venting Ring-type terminal · Chimney extensions · Envelope-type cap · Sombrero-type cap
	**Chimney bases** Chimney bases allow to mount cowls in various roof or chimney configurations.	Wide range of bases, connectors and roof adapters.

Rotary chimney cowls - characteristics



TURBOWENT Ø150÷Ø350

Rotary chimney cowl Turbowent is a device, which, in a dynamic way, uses force of the wind to increase chimney draught. No matter from what direction is the wind blowing, no matter of its kind (horizontal, upwind, downwind) and strength, turbine always rotates in the same direction, creating underpressure in the inlet pipe.
Turbowent is recommended to be mounted on top of natural (gravitation) functioning chimney ducts (only ventilation) for blocks as well as individual houses.



TURBOWENT WITH EXTERNAL BEARINGS Ø150÷Ø250

Chimney cowl, in which bearing system is placed outside the influence of hot gases, improves chimney draught on chimneys exhausting flue and smoke from heating appliances. It is recommended to be mounted on chimney duct endings especially for individual houses.



TURBOWENT TULIPAN Ø150

Turbowent equipped with unique, narrow turbine and special force-in mounting method. Construction of the cowl allows it to be mounted on chimney ducts (ventilation) which are very close to each other, where mounting of standard cowl with bigger turbine diameter is not possible.



TURBOWENT Ø400÷Ø500

Chimney cowls of large diameters are devices providing high efficiency. It is recommended to use them for commercial, utility and industrial ventilation. Used in combination with multiple duct reducing bases, they can improve chimney draught in many ventilation ducts at the same time.

Hybrid chimney cowls - characteristics



HYBRID TURBOWENT Ø150÷Ø200

Hybrid chimney cowl is an improved version of Turbowent. Energy efficient motor allows device to continue working also when there is no wind or wind strength is not sufficient. It assures that ventilation efficiency does not fall below a certain, set by the customer, value. HYBRID TURBOWENT is a solution for individual, multi-storey and utility buildings. It is an integral part of hybrid ventilation system and is used to improve draught in natural ventilation ducts.



HYBRID TURBOWENT TULIPAN Ø150

Hybrid Turbowent Tulipan is a device, which is special because of the construction of turbine. Its reduced diameter allows to place the cowl on ventilation chimneys situated very close to each other. Force-in mounting system does not require usage of any tools. Chimney cowl is dedicated to be mounted on individual ventilation ducts, where there is no space for using Turbowent with standard turbine size.



HYBRID TURBOWENT PLUS Ø200÷400

Hybrid Turbowent PLUS is a cowl having significantly increased efficiency compared to standard versions. Special vanes mounted inside the turbine allow to increase efficiency as well as pressure created. Thanks to this, cowl works nearly like fan, but, at the same time, does not lose advantages of a chimney cowl, such as: low energy consumption and low emission of sound. It is used for multi duct ventilation endings as well as for ventilation ducts of high efficiency.



HYBRID SOLAR TURBOWENT Ø150

Hybrid Solar Turbowent combines advantages of hybrid and ordinary chimney cowl. It is equipped with motor and photovoltaic panel, thanks to this it works in windless but sunny days. It does not need any cables for proper working, what makes mounting quick and simple.



HYBRID SOLAR TURBOWENT TULIPAN Ø150

Two original solutions in one chimney cowl: Hybrid Tulipan version equipped with a photovoltaic panel. Thanks to this combination it is possible to make terraced chimney ventilation without leading electric cables.

Self-adjusting chimney cowls - characteristics



ROTOWENT Ø150÷Ø400

Classic self-adjusting chimney cowl is available with slide bearings - designed for smoke ducts (max working temperature 500°C).



ROTOWENT DRAGON Ø150÷Ø300

Patented ball bearing system is placed outside the cowl and away from high temperature of fumes. This specific cowl construction ensures long-lasting and maintenance-free usage. Maximal working temperature is 500°C. It is recommended to be used as an ending of smoke ducts from fireplaces and wood burning stoves.



ROTOWENT SWING Ø150÷Ø200

Popular in Poland, cost-effective, self-adjusting cowl made according to Darco standards with particular emphasis on quality and stability. It is equipped with slide bearings, allowing it to work in temperatures up to 400°C.

Mechanical chimney cowls - characteristics



DRAUGHT GENERATOR Ø150÷Ø200

Draught generator is a solution for problems with too weak chimney draught (flue and smoke ducts) in cases where no wind-driven cowl can help. It is effective even if the problems are caused by small diameter or length of chimney duct.

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Static chimney cowls - characteristics



CAGI - STATIC CHIMNEY COWL Ø100÷Ø400

Classic chimney cowl for ventilation and flue chimney duct endings. It is designed to protect against rainwater, snow and downwind.



CAP WITH BASE (WDA) Ø100÷Ø250

Cap with base is a device that protects the chimney duct (ventilation, flue) from rain or snow.



CAP (DA) Ø100÷Ø250

Cap is a device that protects ventilation and flue chimney ducts from rain or snow.



DASZEK WYWIETRZNIKOWY Z SIATKĄ (DAL) Ø100÷Ø250

Stanowi osłonę wylotu kominów wentylacyjnych i spalinowych. Chroni przed deszczem, śniegiem i ptakami.



CAP WITH FORCE-IN MOUNTING BASE (DA-PT) Ø100÷Ø250

Cap is a device that protects ventilation and flue ducts from rain or snow.



CAP IN A BOX DAP Ø60÷Ø80, Ø100÷Ø130, Ø140÷Ø180, Ø200÷Ø250

Cap in a box is a chimney cap of full value that fits in … a pizza box. Unique mounting method, with no usage of tools needed, universal sizes and simple installation, makes it a good solution for all chimney pipe endings. Rigid design and reliable mounting method ensures that the cap is as durable and aesthetic as a traditional chimney cap. Packing in small box is a great advantage of this solution, allowing easy storage and cheap logistic.



AIR INTAKE FOR AIR-TYPE GROUND HEAT EXCHANGER (GWC) Ø160÷Ø400

Air intake for air-type ground heat exchanger provides an aesthetical termination of the air inlet. It is equipped with stainless steel mesh protecting from rodents. Cap can be easily dismounted (for cleaning or maintenance), it also allows application of a special anti-pollen filter.



SEWER VENTING RING-TYPE TERMINAL (PNK) Ø160÷Ø400

Sewer venting terminal is an aesthetical ending of a plumbing vent duct. The cowl should be attached to a concrete chimney top with screws, according to building principles.



CHIMNEY EXTENSIONS PKK, PKKD, PKO

Chimney extensions are used to lengthen the existing chimney ducts of non-standard dimensions. They should be attached to a concrete chimney top with screws, the connection then should be sealed with proper sealant.



ENVELOPE-TYPE CAP, SOMBRERO-TYPE CAP

They are an aesthetical ending of chimney duct. These products are produced upon individual order.

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Types of chimney cowls

Type	Name	Diameters													
		ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø300	ø350	ø400	ø500
TU...	Turbowent	-	-	-	-	-	X	-	-	X	X	X	X	X	X
TUZ...	Turbowent with external bearings	-	-	-	-	-	X	-	-	X	X	-	-	-	-
TU...T	Turbowent Tulipan	-	-	-	-	-	X	-	-	-	-	-	-	-	-
TH...	Hybrid Turbowent	-	-	-	-	-	X	-	-	X	-	-	-	-	-
THP...	Hybrid Turbowent Plus	-	-	-	-	-	-	-	-	X	X	X	X	X	X
TH...T	Hybrid Turbowent Tulipan	-	-	-	-	-	X	-	-	-	-	-	-	-	-
TUS...CHAL-H	Hybrid Solar Turbowent	-	-	-	-	-	X	-	-	-	-	-	-	-	-
TUS ... CHAL-T-H	Hybrid Solar Turbowent Tulipan	-	-	-	-	-	X	-	-	-	-	-	-	-	-
RO...	Rotowent	-	-	-	-	-	X	-	-	X	X	X	X	X	-
RO...DR	Rotowent Dragon	-	-	-	-	-	X	-	X	X	X	X	-	-	-
RO...SW	Rotowent Swing	-	-	-	-	-	X	-	X	X	-	-	-	-	-
GCK...	Draught Generator	-	-	-	-	-	X	-	-	X	-	-	-	-	-
WCG...	Cagi	X	X	X	X	X	X	X	X	X	X	X	X	X	-
WDA...	Cap with base	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DA...	Cap	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DAL...	Daszek wywietrznikowy z siatką	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DAP...	Cap in a box	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DA...PT	Cap with force-in mounting base	X	X	X	X	X	X	X	X	X	X	-	-	-	-

Diameters presented in the chart are standard versions of chimney cowls produced by DARCO. Apart from the standard versions, there is a possibility for production of untypical reducers, bases, roof flashings according to individual orders of an investor or designer.

Materials

Basic materials used for chimney cowls production are:

Material	CH	CH - chrome-nickel sheet
	OC	OC - galvanized steel sheet
	AL	AL - aluminum

Application of cowls:

- on already existing ventilation chimneys, which create insufficient natural draught for proper room ventilation
- in rooms located on the higher- storey parts of building where chimney height is limited
- whenever a downwind causes backdraught, particularly in places with adverse landform features
- whenever a chimney is unfavourably situated towards roof sweep (lowered chimney)
- whenever an effective work of a ventilation chimney is disturbed by other chimneys located on the same roof.

Type	Name	Max. work temp. [°C]	Chimney ducts		
			Ventilation	Flue	Smoke*
TU...	Turbowent	150	X	-	-
TUZ...	Turbowent with external bearings	250	-	X	X
TU...T	Turbowent Tulipan	150	X	-	-
TH...	Hybrid Turbowent	60	X	-	-
THP...	Hybrid Turbowent Plus	60	X	-	-
TH...T	Hybrid Turbowent Tulipan	60	X	-	-
TUS...CHAL-H	Hybrid Solar Turbowent	60	X	-	-
TUS ... CHAL-T-H	Hybrid Solar Turbowent Tulipan	60	X	-	-
RO...	Rotowent (slide bearings)	500	-	X	X
RO...DR	Rotowent Dragon	500	-	X	X
RO...SW	Rotowent Swing	400	-	X	X
GCK...	Draught Generator	400	-	X	X
WCG...	Cagi	180	X	X	-
WDA...	Cap with base	180	X	X	-
DA...	Cap	180	X	X	-
DAL...	Daszek	180	X	X	-
DAP...	Cap in a box	180	X	X	-
DA...PT	Cap with force-in mounting base	180	X	X	-
GWC...-CH-...	Airintake for air type ground heat exchanger	150	X	-	-
PNK...-CH	Sever Venting Ring - type terminal	150	X	-	-

* Cowl should not be mounted on ducts exhausting fumes from coal burning devices.

Application of the cowl on chimney ducts from fume and smoke chimney ducts is appropriate only when the building is equipped with properly functioning air supply ventilation.

Application of the cowl is always dependent on the choice of proper material version.

X - recommended

Hybrid ventilation system

Hybrid ventilation is a system based on natural ventilation ducts supported by mechanical devices. Proper air exhaust efficiency is secured by a Hybrid Turbowent chimney cowl. This cowl controls proper chimney draught and, thanks to the possibility of adjusting rotation speed, allows to set desired efficiency of ventilation. Wide range of chimney cowls offered by Darco allows to choose the one optimal for single-family housing, multi-family housing or for industrial applications.
Chimney cowl is only one of the three devices assuring stable and efficient ventilation working. Other elements that are needed are: draught stabilizer and air intake. Precise description of their work can be found in the "Ventilation" section of this catalogue.
What must be remembered, is that all elements are complementary and only complete system gives warranty of stable working and desired efficiency of ventilation.



Hybrid ventilation system in single-family housing

What is particularly worth noticing, is that Darco Hybrid ventilation system is more than useful with existing natural ventilation systems reconstruction, both in single- and multi-family housing. Devices responsible for proper functioning are located on inlets and outlets of ventilation ducts. Such mounting allows to install them with no special demolition works needed.



Single-pipe ventilation

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Method of cowl's efficiency measurement

Measurement of the chimney cowl's efficiency gives rise to many difficulties. Obviously, it is impossible to create conditions in a research laboratory that would perfectly correspond to natural weather conditions. Detailed examination of all presented cowls was carried out according to the French norms P50-413, in aerodynamic tunnel of Technical University in Rzeszów, where all the measurements were taken to determine the underpressure of the cowls caused by wind. Specification of pressure loss ratio was prepared on the basis of French norms on a stand presented on the picture (Fig. 2)

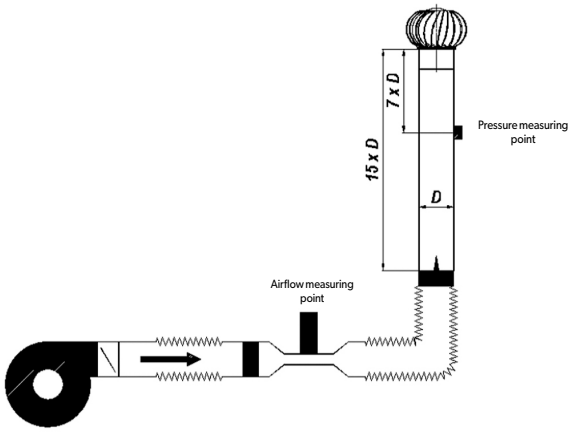


Fig.1. Schema of pressure loss measurement..

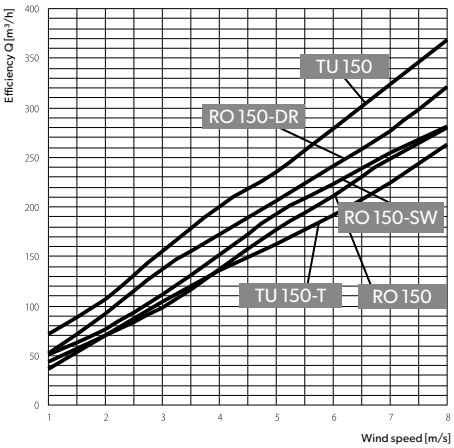


Fig.2. Comparison of efficiencies of dynamic chimney cowls diameter ø150.

Designing cues

While designing ventilation, fume exhaust and smoke chimneys, it is necessary to specify the diameter and height of ducts, location of their outlets towards the roof and setting according to PN-89/B-10425.
While defining diameter of ventilation ducts, it is obligatory to establish an airflow value, which will be extracted from the building, according to the norm PN-89/B-03430 (the chart on next page).
Efficiency of already existing chimneys with or without a cowl may be defined from graphs or through calculation.

$$Q=3600 \cdot v_k \cdot S$$

where:
Q - stream of air flow [m³/h]
$\mathbf{v_k}$ - air velocity in a duct [m/s]
S - cross - section of a duct [m²]

Cowls installed on ventilation chimney are under the influence of two forces: force of wind and gravitational buoyancy of air (the active gravitational pressure). The condensed interaction of both forces towards the scheme "a cowl- a ventilation chimney" can take a form of the equation:

$$P_w + P_G = \left[\lambda \frac{h_k}{d} + \sum\zeta\right] \frac{v_k^2 \rho_w}{2}$$

$$\frac{c_{śr} v_w^2 \rho_z}{2} + P_G = \left[\lambda \frac{h_k}{d} + \sum\zeta\right] \frac{v_k^2 \rho_w}{2}$$

from which air velocity in ventilation duct vk [m/s] can be calculated

$$v_k = \sqrt{\frac{c_{śr} v_w^2 \rho_z + 2 g h_k (\rho_z - \rho_w)}{\left(\lambda \frac{h_k}{d} + \sum\zeta\right) \rho_w}}$$

where:
$\mathbf{c_{śr}}$ - average ratio of underpressure influenced by wind
$\mathbf{v_w}$ - wind velocity [m/s]
$\mathbf{p_z}$ - density of outer air [kg/m³]
$\mathbf{p_w}$ - density of inner air [kg/m³]
$\mathbf{P_W}$ - active pressure of a cowl caused by blowing wind [Pa]
$\mathbf{P_G}$ = ghk(pz-pw) - active pressure of gravitational ventilation [Pa]
λ - a ratio of air friction against the walls in chimney duct
$\mathbf{h_k}$ - a height of chimney duct (from the axis of an inlet to the axis of an outlet) [m]
d - a diameter of chimney duct or its equivalence [m]
Σς =ςn+ςp - summarised pressure loss of a cowl and ventilation duct
g - gravity[9.81 m/s²]

Conditions in which the efficiency measurements were taken:

- Wind blows with horizontal direction with the velocity of 3 m/s (the velocity characteristic for wind in central territories of Poland) or 4 m/s (highlands and Baltic coasts)
- Outer temperature tz = 12°C and inner temperature tw = 20°C are defined according to the norm PN-83/B-03430 and PN-82/B-02402 (they are decisive for specifying gravitational air buoyancy in chimney)
- Ratio of air friction against the surface of chimney is defined for metal sheet chimney = 0.02 and brick chimney = 0.038
- Any additional pressure loss caused by ventilation shield grates or changes in airflow direction (e.g. elbow) were not taken into account
- Difference of pressures caused by wind blowing against building walls were not taken into account
- Air intake devices (e.g. air intake set) are in opened position - securing stable air flow in indispensable amounts.

Established coefficients:
ς_p **= 1.3** - pressure loss of air inlet (shield grate + a change of diameter + airflow curving) towards a diameter of vertical chimney duct.

Type	Name	Cowl's static friction ratio ς_n	Average underpressure ratio $C_{śr}$
TU...	Turbowent ø150÷300	1.18-1.25	0.62-0.82
TU...	Turbowent ø400÷500	1.25-1.3	0.68-0.94
TUZ...	Turbowent with external bearings	1.18-1.25	0.62-0.82
TU...T	Turbowent Tulipan	1.5	0.40
TH...	Hybrid Turbowent	1.41-1.60	0.57
TH...T	Hybrid Turbowent Tulipan	1.66	0.35
RO...	Rotowent	1.2-1.8	0.35-0.73
RO...DR	Rotowent Dragon	1.36-1.55	0.48-0.61
RO...SW	Rotowent Swing	1.2-1.8	0.35-0.73
WCG...	Cagi	1.2	0.40
WDA...	Cap with base	1.1	0
DA...	Cap	1.1	0
DAP...	Cap in a box	1.1	0
DA...PT	Cap with force-in base	1.1	0

The streams of ventilation air flow according to PN-83/B-03430

Room	Stream of air flow [m^3/h]	Remarks / Additional requirements
Living quarters		
Kitchen with outer window with: · cooker for gas or solid fuel · electrical cooker (apartment for 1 or 2 people) · electrical cooker (apartment for 3 people)	 70 30 50	
A kitchen without an outer window or dining alcove, kitchen with electric cooker	50	
A bathroom with or without WC	50	
Separate WC	30	
Additional room without windows	15	
Living rooms and bedrooms	20	per person
Buildings for larger communities (hotels, boarding houses etc.)		
Living rooms and bedrooms	20	per person,min 1 exchange/h
Rooms for communal life (dining rooms, day rooms, etc.)	20	per person
Bathrooms	50	
WCs: · individual · communal	 40 50	 25 m^3/h per pisuar
Individual showers	30	communal, min.5 exchanges/h
Smoking rooms	35	per person, min 10 exchanges/h
Public utility buildings		
Rooms for permanent and temporary stays: · no smoking rooms · rooms where smoking is permitted	 20 30	 per person per person
Day care centres and kindergartens	15	per person

Other streams of air flow are available at appriopriate norms

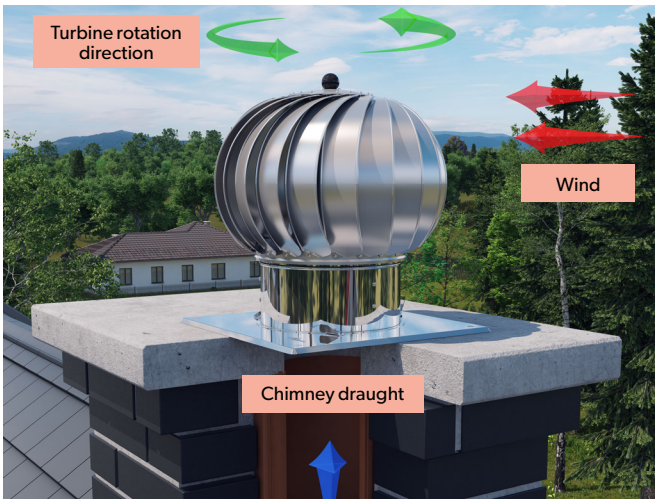
Presented data are based on:

- the results of the research laboratory: "CAGI"
- joint thesis: "Ventilation devices a collection of technical data"- 1962. Arkady: Warsaw
- academic publications of dr inz. Z. Nowakowski Technical University in Wroclaw:
  - "The cooperation of roof vents with ventilation ducts." COW no. 2/2000
  - " The ventilation chimneys." COW no.5/2000
  - " The diameters of gravitational ventilation ducts." COW no. 2/1999

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1. TURBOWENT Ø150÷Ø350





TU x a b - c

- c — base version
- b — turbine material
- a — base material
- x — diameter
- TU — turbowent

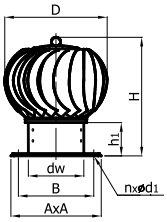
Destination	W	W	W	W	W - ventilation ducts
Base material	CH	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	-	-	OC - galvanised steel sheet
	-	-	-	ML	ML - galvanised steel sheet powder coated
Turbine material	CH	-	-	-	CH - chrome-nickel sheet 1.4301
	-	AL	AL	-	AL - aluminium
	-	-	-	ML	ML - aluminium powder coated

Diameter [mm]	ø150	ø200	ø250	ø300	ø350
Efficiency [m³/h] (at wind speed 4 m/s)	200	325	550	750	850
Underpressure [Pa] (at wind speed 4 m/s)	7.0	6.3	7.0	6.1	6.0
Max. working temperature [°C]	150				
Rotating unit	ball bearings system				

Versions of bases

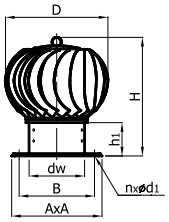
1. Square base openable ø150, ø200, ø250 -PK





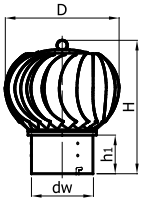
2. Square base not openable ø300, ø350 -PK





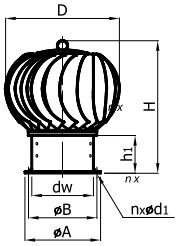
3. Dismountable base -R





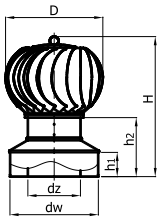
4. Base with collar -BIII





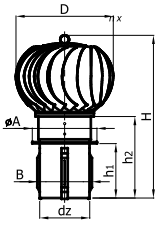
5. Base with insulation closing -B-K





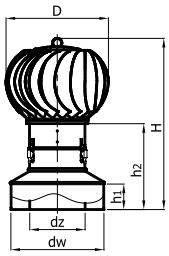
6. Force-in mounting base -PT





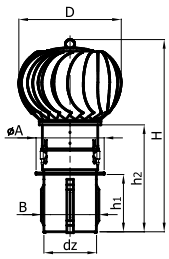
7. Base with insulation closing - openable -B-K-U





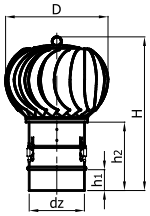
8. Force-in mounting base - openable -PT-U





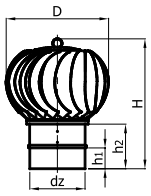
9. Inlet pipe openable ø150, ø200, ø250, ø300 -B





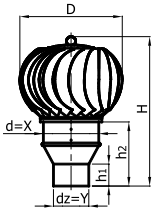
10. Inlet pipe - not openable -B-S





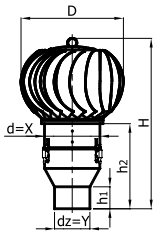
11. Inlet pipe reduced -X/Y-...-B-S





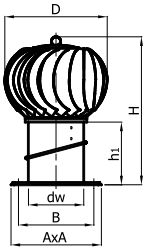
12. Inlet pipe reduced openable ø150, ø200, ø250, ø300 -X/Y-...-B





13. Adjustable base -N

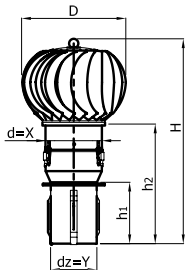




Adjustment ranges for various inlet diameters:
- ø150÷ø250 - angle 0°÷45°
- ø300÷ø350 - angle 0°÷45° or 0°÷30°

14. Force in-mounting base, reduced -X/Y-...PTU





Measurements table for various inlet diameters

ø 150	Dimensions [mm]										Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~260	150.4	-	305	100	-	250	208	6.2	4	1.50	1.60	1.60	1.80
-R	~260	150.4	-	320	105	-	-	-	-	-	1.40	1.45	1.45	1.65
-BIII	~260	150.1	-	292	90	-	212	182	9.5	6	1.80	1.85	1.85	2.05
-B-K	~260	253.3	151.7	399	70	194	-	-	-	-	2.00	2.20	2.20	2.40
-PT	~260	-	144.0	450	157	244	202	158	-	-	1.75	1.85	1.85	2.05
-B-K-U	~260	253.3	151.7	449	70	244	-	-	-	-	2.20	2.40	2.40	2.60
-PT-U	~260	-	144.0	500	157	294	202	158	-	-	1.95	2.05	2.05	2.25
-X/Y-...PTU	~260	-	Y	560	157	354	-	-	-	-	2.10	2.25	2.25	2.45
-B	~260	-	152.0	402	60	197	-	-	-	-	1.50	1.60	1.60	1.80
-B-S	~260		152.0	349	60	144	-	-	-	-	1.35	1.40	1.40	1.60
-X/Y-...-B-S	~260	-	Y	399	60	194	-	-	-	-	1.50	1.55	1.55	1.75
-X/Y-...-B	~260	-	Y	492	60	287	-	-	-	-	1.80	1.90	1.90	2.10
-N	~260	150.4	-	425	220	-	250	-	-	-	1.80	1.90	1.90	2.10

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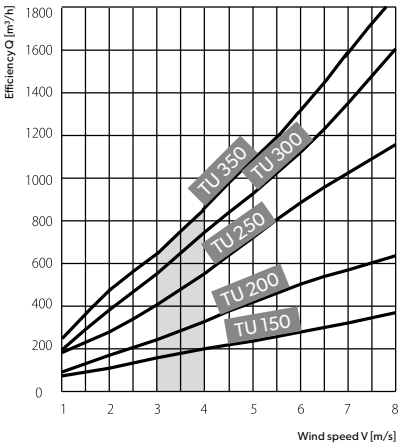
ø 200	Dimensions [mm]										Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~320	200.0	-	340	100	-	330	284.0	6.2	4	1.90	2.00	2.00	2.30
-R	~320	199.7	-	355	105	-	-	-	-	-	1.45	1.50	1.50	1.80
-BIII	~320	199.4	-	362	90	-	263	233	9.5	6	2.00	2.00	2.00	2.30
-B-K	~320	303.1	201.0	434	70	194	-	-	-	-	2.35	2.50	2.40	2.80
-PT	~320	-	194.0	494	157	254	252	208	-	-	2.05	2.20	2.10	2.50
-B-K-U	~320	303.1	201.0	484	70	244	-	-	-	-	2.65	2.80	2.70	3.10
-PT-U	~320	-	194.0	544	157	304	252	208	-	-	2.35	2.50	2.40	2.80
-X/Y-...PTU	~320	-	Y	604	157	364	-	-	-	-	2.50	2.70	2.65	2.95
-B	~320	-	201.0	471	60	197	-	-	-	-	1.80	1.90	1.90	2.20
-B-S	~320	-	201.0	384	60	144	-	-	-	-	1.55	1.60	1.60	1.90
-X/Y-...-B-S	~320	-	Y	434	60	194	-	-	-	-	1.75	1.80	1.80	2.10
-X/Y-...-B	~320	-	Y	527	60	287	-	-	-	-	2.16	2.26	2.26	2.56
-N	~320	199.7	-	460	220	194	330	-	-	4	2.30	2.40	2.40	2.70

ø 250	Dimensions [mm]										Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~380	250.7	-	410	105	-	380	330	6.2	4	2.50	2.60	2.60	3.10
-R	~380	250.7	-	400	105	-	-	-	-	-	1.95	2.00	2.00	2.50
-BIII	~380	250.7	-	432	100	-	313	283	9.5	8	3.35	3.45	3.45	3.95
-B-K	~380	352.4	252.3	480	70	194	-	-	-	-	2.95	3.20	3.05	3.70
-PT	~380		244.0	550	157	264	302	259	-	-	2.75	2.80	2.85	3.40
-B-K-U	~380	352.4	252.3	530	70	244	-	-	-	-	3.40	3.65	3.50	4.15
-PT-U	~380	-	244.0	600	157	314	302	259	-	-	3.20	3.25	3.80	3.85
-B	~380	-	252.3	541	60	197	-	-	-	-	2.40	2.50	2.50	3.00
-B-S	~380	-	252.3	430	60	144	-	-	-	-	2.10	2.20	2.20	2.70
-X/Y-...-B-S	~380	-	Y	480	60	190	-	-	-	-	2.30	2.40	2.40	2.90
-X/Y-...-B	~380	-	Y	593	60	303	-	-	-	-	2.85	2.95	2.95	3.45
-N	~380	250.4	-	525	220	-	380	-	-	-	2.95	3.05	3.05	3.55

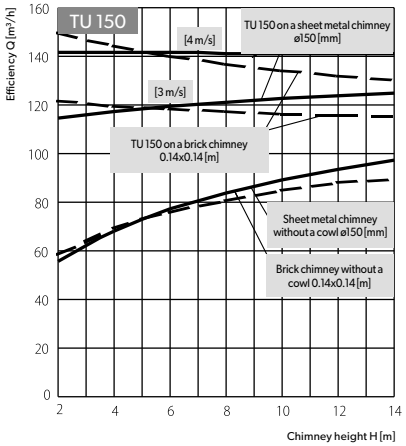
ø 300	Dimensions [mm]										Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~460	298.0	-	445	90	-	430	380	6.2	4	3.00	3.25	3.25	4.00
-R	~460	300.0	-	445	105	-	-	-	-	-	2.00	2.10	2.10	2.85
-BIII	~460	300.0	-	440	100	-	363	337	9.5	8	2.95	3.05	3.05	3.80
-B-K	~460	403.7	301.6	534	70	194	-	-	-	-	3.25	3.50	3.50	4.30
-PT	~460	-	294.0	600	157	244	352	308	-	-	3.00	3.20	3.20	4.00
-B-K-U	~460	403.7	301.6	550	70	244	-	-	-	-	3.90	4.15	4.15	4.95
-PT-U	~460	-	294.0	650	157	294	352	308	-	-	3.65	3.85	3.85	4.65
-B	~460	-	301.6	535	60	197	-	-	-	-	2.60	2.70	2.70	3.45
-B-S	~460	-	301.6	485	60	144	-	-	-	-	2.20	2.30	2.30	3.05
-X/Y-...-B-S	~460	-	Y	561	60	174	-	-	-	-	2.50	2.60	2.60	3.35
-X/Y-...-B	~460	-	Y	612	60	287	-	-	-	-	3.10	3.20	3.20	3.95
-N	~460	300	-	635	300	-	430	-	-	-	4.50	4.75	4.75	5.50

ø 350	Dimensions [mm]										Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PK	~490	347.3	-	450	90	-	500	460	6.2	4	3.60	3.85	3.85	4.60
-R	~490	349.3	-	445	105	-			-	-	2.10	2.20	2.20	2.95
-BIII	~490	349.3	-	440	100	-	411	387	9.5	8	3.15	3.25	3.25	4.00
-B-K	~490	349.3	350.9	534	70	194			-	-	3.65	3.80	3.80	4.60
-PT	~490	-	344	616	157	244	402	358	-	-	3.60	3.80	3.80	4.60
-B-S	~490	-	350.9	485	60	144			-	-	2.35	2.45	2.45	3.20
-X/Y-...-B-S	~490	-	Y	560	60	174			-	-	2.70	2.80	2.80	3.55
-N	~490	349.3	-	635	300	-	500		-	-	5.35	5.60	5.60	6.35

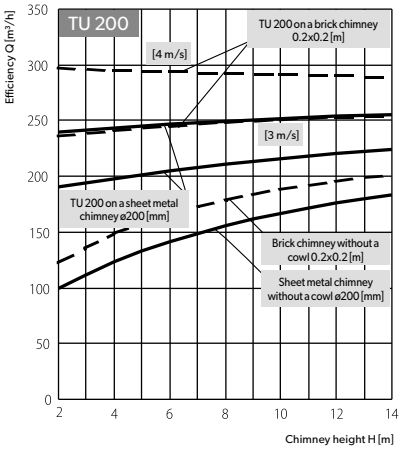
Airfow charts



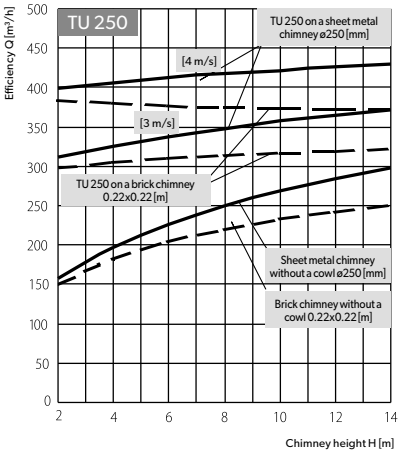
Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



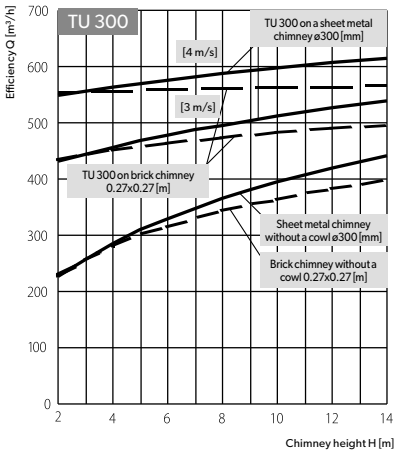
Efficiency chart for Turbowents ø150 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for Turbowents ø200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



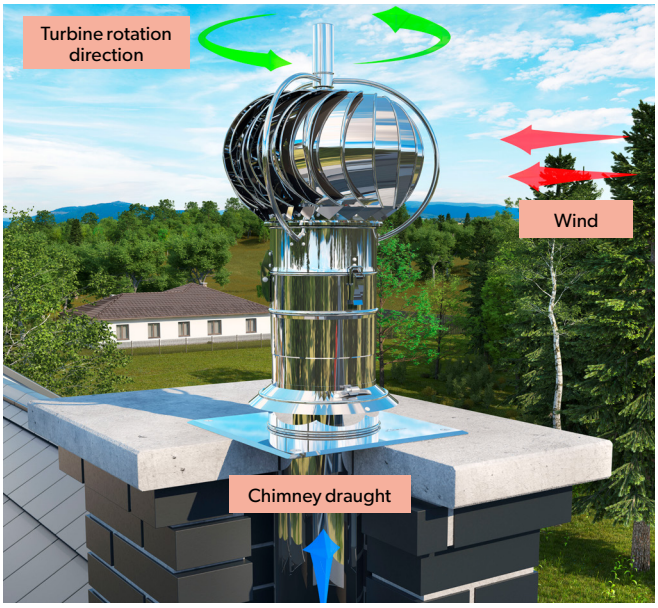
Efficiency chart for Turbowents ø250 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for Turbowents ø300 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

2. TURBOWENT WITH EXTERNAL BEARINGS Ø150÷Ø250





TUZ x a b - c - ML

- ML — powder coated
- c — base version
- b — turbine material
- a — base material
- x — diameter
- TUZ — turbowent with external bearings

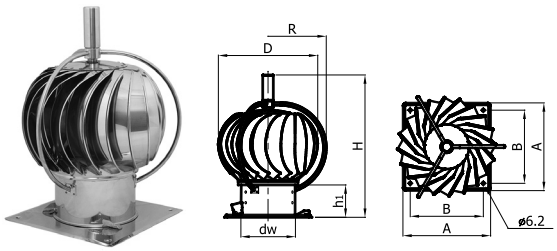
Destination	S	S - flue and smoke ducts
Materia	CH	CH - chrome-nickel sheet 1.4301
	ML	ML - chrome-nickel sheet 1.4301 powder coated (black)

Diameter [mm]	ø150	ø200	ø250
Efficiency [m³/h] at wind speed 4 m/s	200	325	550
Underpressure [Pa] (at wind speed 4 m/s)	7.0	6.3	7.0
Max. working temperature [°C]	250		
Rotating unit	greased ball bearings, placed outside the turbine		

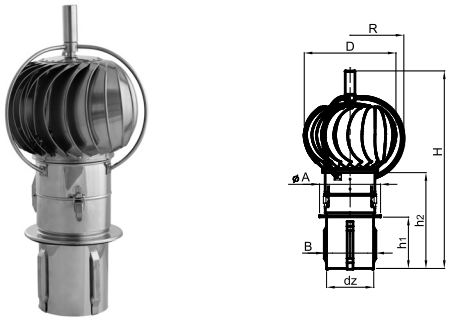
invent. build. enjoy.

Versions of bases

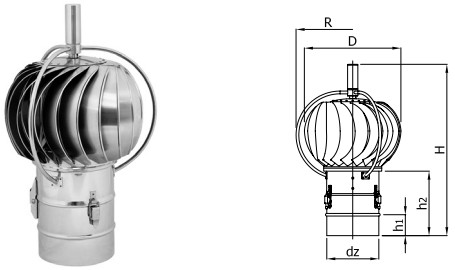
1. Square base openable -PK



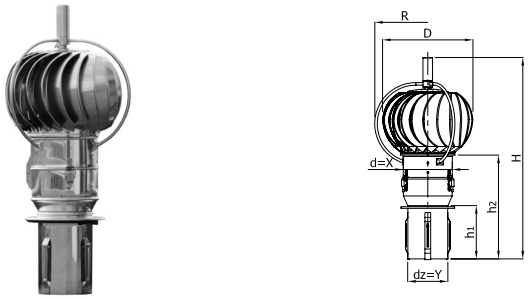
2. Force-in mounting base - openable -PT-U



3. Inlet pipe openable -B



4. Force in-mounting base, reduced -X/Y-...PTU



Measurements table for various inlet diameters

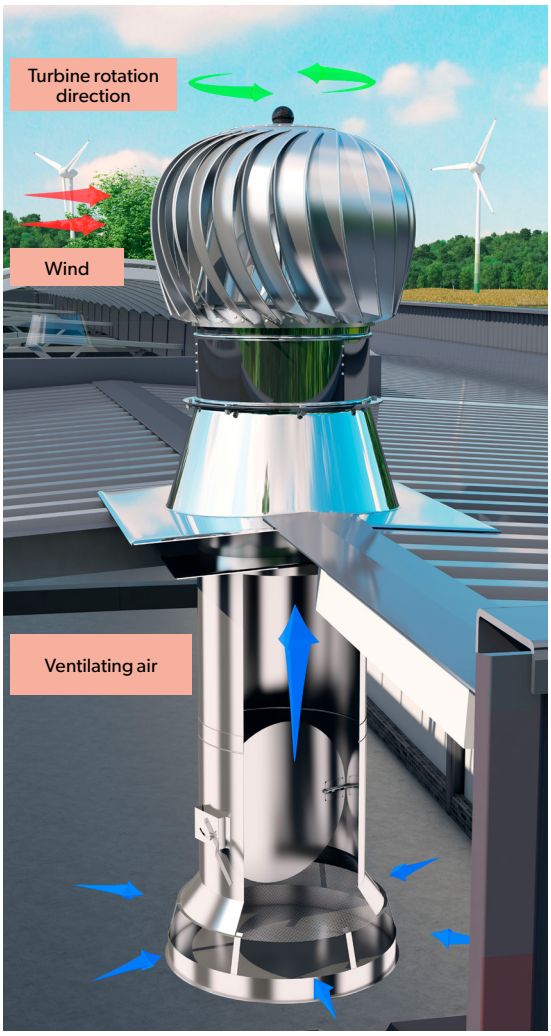
ø 150	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	R	CHCH
-PK	~260	150.4	-	400	100	-	250	208	6.2	4	165	2.00
-PT-U	~260	-	144.0	500	157	294	202	158	-	-	165	2.20
-B	~260	-	152.0	495	60	197	-	-	-	-	165	2.00
-X/Y-...PTU	~260	-	Y	560	157	354	-	-	-	-	165	2.30

ø 200	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	R	CHCH
-PK	~320	200.0	-	450	100	-	330	284	6.2	4	195	2.50
-PT-U	~320	-	194.0	540	157	304	202	208	-	-	195	2.80
-B	~320	-	201.0	545	60	197	-	-	-	-	195	2.50
-X/Y-...PTU	~320	-	Y	600	157	364	-	-	-	-	195	2.95

ø 250	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	R	CHCH
-PK	~380	250.7	-	470	105	-	380	330	6.2	4	225	3.80
-PT-U	~380	-	244.0	660	157	314	287	259	-	-	225	4.50
-B	~380	-	252.3	585	60	197	-	-	-	-	225	3.70

3. TURBOWENT Ø400÷Ø500





TU x a b - c

- c — base version
- b — turbine material
- a — base material
- x — diameter
- TU — turbowent

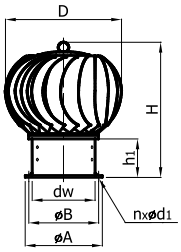
Destination	W	W	W	W - ventilation ducts
Base material	CH	-	CH	CH - chrome-nickel sheet 1.4301
	-	OC	-	OC - galvanised steel sheet
Turbine material	CH	-	-	CH - chrome-nickel sheet 1.4301
	-	AL	AL	AL - aluminium

Diameter [mm]	ø400	ø500
Efficiency [m³/h] (at wind speed 4 m/s)	1580	2060
Underpressure [Pa] (at wind speed 4 m/s)	9.5	6.4
Max. working temperature [°C]	150	
Rotating unit	ball bearings system	

Versions of bases

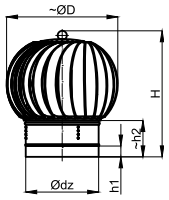
1. Base with collar -BIII





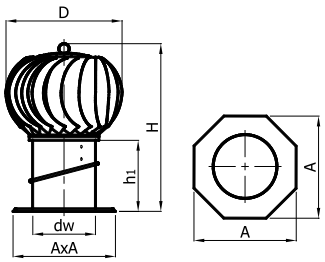
2. Inlet pipe -B-S





3. Adjustable base -N





Adjustment ranges for various inlet diameters:
- ø400÷ø500 - angle 0°÷45° or 0°÷30°

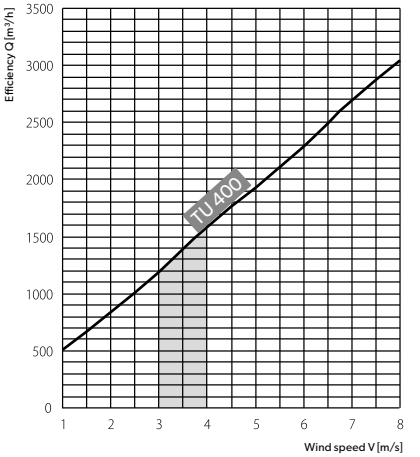
invent. build. enjoy.

Measurements table for various inlet diameters

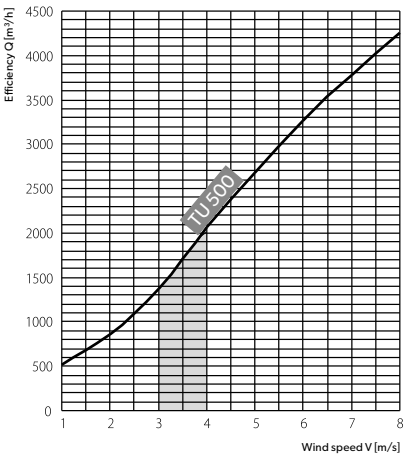
ø 400	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	CHCH
-BIII	~630	398.8	-	649	165	-	464	438	9.5	8	8.00	8.00	11.00
-B-S	~630	-	400.8	650	170	-	-	-	-	-	6.85	6.85	9.80
-N	~630	398.8	-	785	300	-	550	-	-	-	12.90	12.90	15.90

ø 500	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	CHCH
-BIII	~740	498.8		784	178		564	538	9.5	8	10.70	10.70	14.80
-B-S	~740		500.8	795	183				-	-	8.80	8.80	13.40
-N	~740	498.8		905	300		650		-	-	15.20	15.20	19.80

Airfow charts



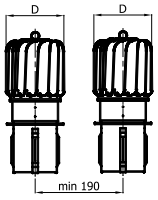
Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])

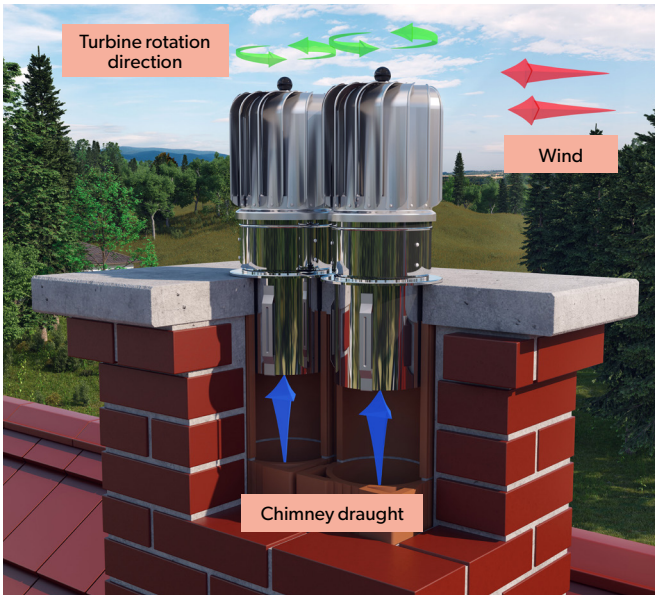


Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])

4. TURBOWENT TULIPAN Ø150







TU 150 a b - T - c

- c — base version
- T — Tulipan version code
- b — turbine material
- a — base material
- 150 — diameter
- TU — turbowent

Diameter [mm]	ø150
Efficiency [m³/h] at wind speed 4 m/s	135
Underpressure [Pa] (at wind speed 4 m/s)	4.1
Max. working temperature [°C]	150
Rotating unit	ball bearings system

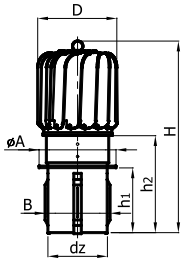
Destination	W	W	W	W	W - ventilation ducts
Base material	CH	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	-	-	OC - galvanised steel sheet
	-	-	-	ML	ML - galvanised steel sheet powder coated
Turbine material	CH	-	-	-	CH - chrome-nickel sheet 1.4301
	-	AL	AL	-	AL - aluminium
	-	-	-	ML	ML - aluminium powder coated

invent. build. enjoy.

Versions of bases

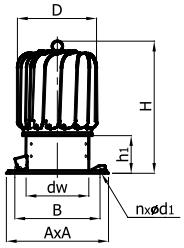
1. Force-in mounting base -PT





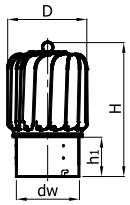
2. Square base -PK





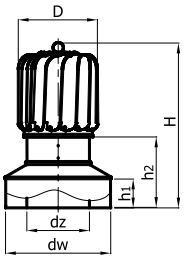
3. Dismountable base -R





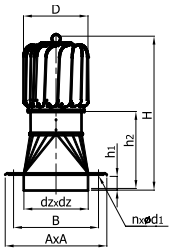
4. Base with insulation closing -B-K





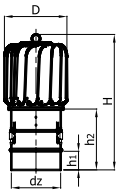
5. Inlet pipe reduced PKR -PKR





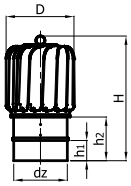
6. Inlet pipe openable -B





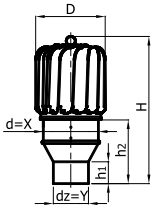
7. Inlet pipe not openable -B-S





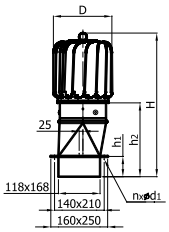
8. Inlet pipe reduced -X/Y-...-B-S





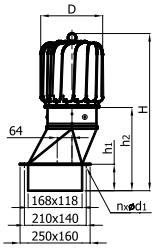
9. Inlet pipe reduced T/25+Tulipan with dismountable base -R -PKR T/25





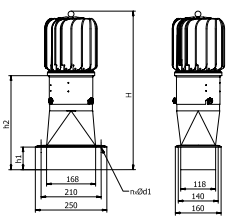
10. Inlet pipe reduced T/64 +Tulipan with dismountable base -R -PKR T/64





11. Inlet pipe reduced T/O+Tulipan with dismountable base -R -PKR T/O



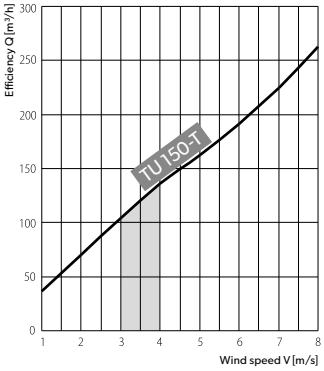


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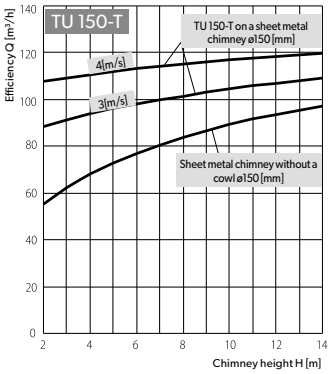
Measurements table for various inlet diameters

ø 150	Dimensions [mm]										Weight [kg]			
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCAL	CHAL	ML	CHCH
-PT	~180	-	144.0	475	157	240	187	158	6.2	-	1.30	1.40	1.40	1.60
-PK	~180	149.0	-	330	95	-	250	208	6.2	4	1.05	1.15	1.15	1.35
-R	~180	150.4	-	345	110	-	-	-	-	-	0.95	1.00	1.00	1.20
-B-K	~180	253.3	151.7	425	70	190	-	-	-	-	1.55	1.70	1.70	1.90
-PKR	~180	-	140.0	435	50	200	250	187	6.2	4	2.05	2.30	2.30	2.50
-B	~180	-	152.0	428	60	193	-	-	-	-	1.35	1.40	1.40	1.60
-B-S	~180	-	152.0	375	60	140	-	-	-	-	1.15	1.20	1.20	1.40
X/Y-...-B-S	~180	-	Y	425	60	190	-	-	-	-	1.30	1.35	1.35	1.55
-PKR T/25	~180	-	-	595	80	360	168	118	6.2	4	1.80	2.05	2.05	2.30
-PKR T/64	~180	-	-	595	80	360	168	118	6.2	4	1.95	2.20	2.20	2.40
-PKR T/O	~180	-	-	595	80	360	168	118	6.2	4	1.95	2.20	2.20	2.40

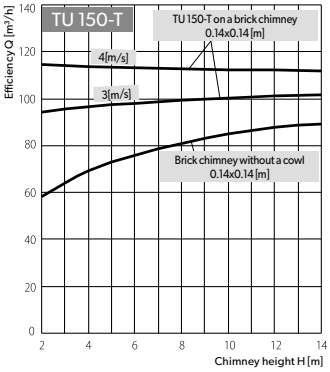
Airfow charts



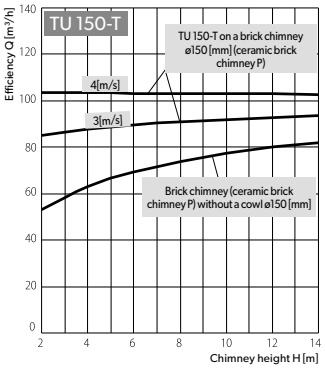
Efficiency chart for Tulipan (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



Efficiency chart for Tulipan ø150 in a function of chimney height on a sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



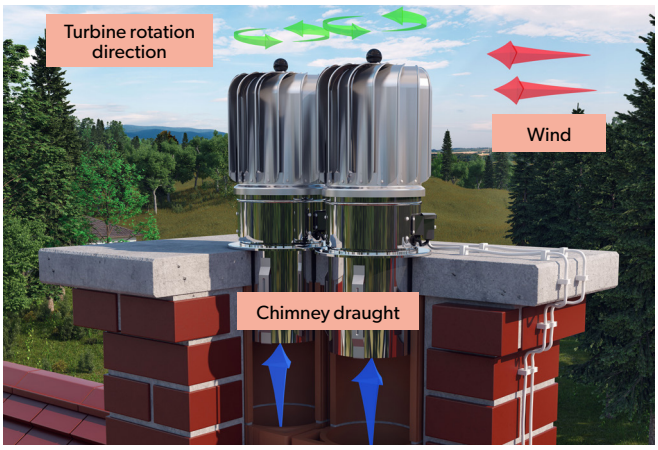
Efficiency chart for Tulipan ø150 in a function of chimney height on a brick chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for Tulipan in a function of chimney height on a round ceramic chimney (for two speeds 3 and 4 [m/s]).

5. HYBRID TURBOWENT TULIPAN -STANDARD Ø150





TH x a b - T - d

- d — base version
- T — Tulipan version code
- b — turbine material
- a — base material
- x — diameter
- TH — hybrid turbowent

Destination	W	W	W	W - ventilation ducts
Base material	CH	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML- chrome-nickel sheet powder coated
Turbine material	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML - aluminium powder coated
	AL	-	-	AL - aluminium

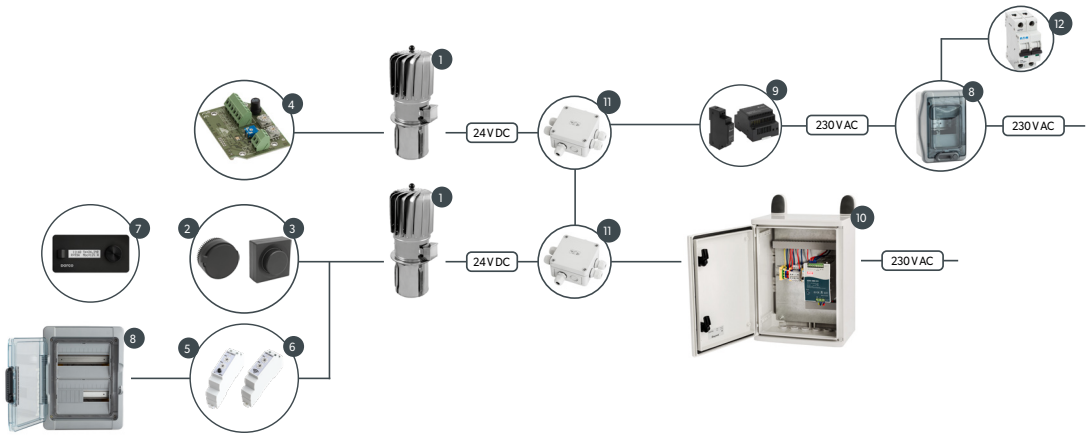
	Diameter [mm]	ø150
	Max. efficiency [m³/h]	197
	Max. underpressure [Pa]	7
	Rotating speed adjustment range [rev/min]	90 - 500
	Voltage [V DC]	24
	Nominal power* [W]	3.9
	Max.current [mA]	360
	Ambient temperature [°C]	-20 - +60
	Rotating unit	ball bearings system

*at maximum efficiency

	Sound pressure level A at a distance of 4 m from cowl (for rotation speed n)		Sound power level L (for min. rotation speed acc. to PN-EN ISO 3741:2003)	
Diameter	N_{oAmin} for n=90	N_{oAmax} for n=270	L_{WA} for n=90	L_{WA} for n=270
ø150	8 dB	15 dB	26 dB	33 dB

invent. build. enjoy.

Connecting diagram



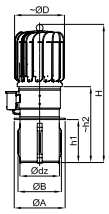
No	Symbol	Name
		CONTROLLERS
1	TH...-T	Turbowent Tulipan version
2	ERO-32MN-2	ERO Electronic motor speed controller
3	ERO-32MN-1	ERO Electronic motor speed controller
4	ERO-31MW-1	ERO type electronic motor speed controller mounted on the cowl
5	ERO-32MS-0	ERO Electronic motor speed controller - on rail version TS-35
6	ERO-32WS-0	ERO Electronic motor speed controller - WiFi version (wBox application is required)
7	ERO-32AP-0	ERO Electronic motor speed controller - surface version
8	ESR-03W-0	Electronic control cabinet ESR - max amount of controllers: 3
	ESR-04W-0	Electronic control cabinet ESR - max amount of controllers: 4
	ESR-06W-0	Electronic control cabinet ESR - max amount of controllers: 6
	ESR-08W-0	Electronic control cabinet ESR - max amount of controllers: 8
	ESR-12W-0	Electronic control cabinet ESR - max amount of controllers: 12
	ESR-24W-0	Electronic control cabinet ESR - max amount of controllers: 24
	ESR-36W-0	Electronic control cabinet ESR - max amount of controllers: 36
	ESR-54W-0	Electronic control cabinet ESR - max amount of controllers: 54
	ESR-72W-0	Electronic control cabinet ESR - max amount of controllers: 72

No	Symbol	Name
		POWER FEEDERS
9	EZN-010M-0	Electronic power supply EZN, nominal power 10 W
	EZN-030M-0	Electronic power supply EZN, nominal power 30 W
	EZN-060M-0	Electronic power supply EZN, nominal power 60 W
10	ESZ-060W-0	Electronic power supply cabinet ESZ, connected power 60 W
	ESZ-120W-0	Electronic power supply cabinet ESZ, connected power 120 W
	ESZ-240W-0	Electronic power supply cabinet ESZ, connected power 240 W
	ESZ-480W-0	Electronic power supply cabinet ESZ, connected power 480 W
11	ERZ-06D-0	Electronic power divider ERZ
12	CLS6-B4/1N	Circuit breaker

Versions of bases

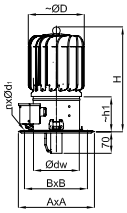
1. Force-in mounting base -PT





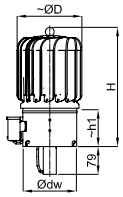
2. Square base -PK





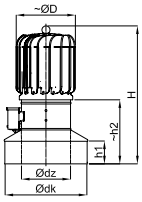
3. Dismountable base -R





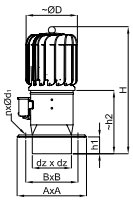
4. Base with insulation closing -B-K





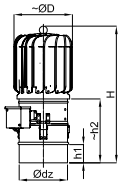
5. Inlet pipe reduced -PKR





6. Inlet pipe openable -B

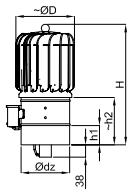




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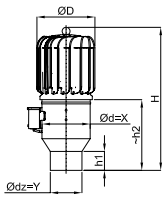
7. Inlet pipe not openable -B-S



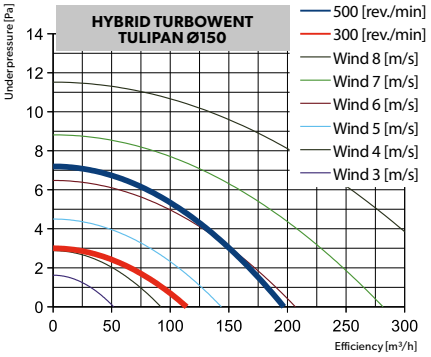


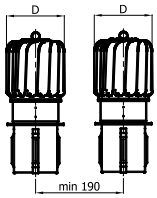
8. Inlet pipe reduced -X/Y-...-B-S





Airfow charts



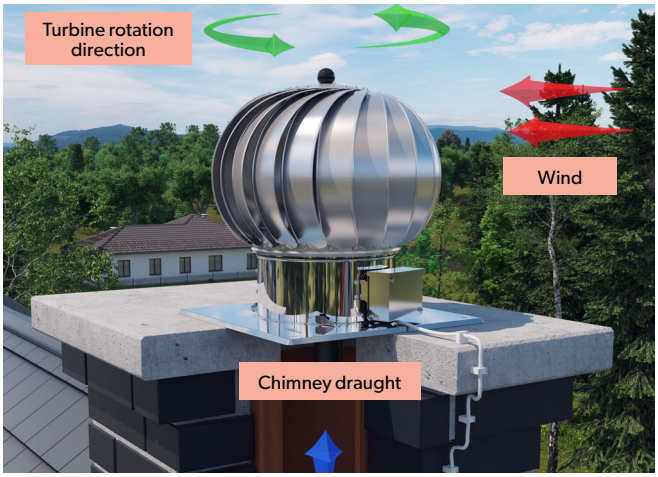


Measurements table for various inlet diameters

ø 150	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CHAL
- PT	~180	-	144.0	477	157	244	187	158	6.2	-	2.40
-PK	~180	149.0	-	333	100	-	250	208	6.2	4	2.15
-R	~180	150.4	-	337	107	-	-	-	-	-	2.00
-B-K	~180	253.3	151.7	427	70	197	-	-	-	-	2.70
-PKR	~180	-	140.0	429	60	200	250	187	6.2	4	3.30
-B	~180	-	152.0	422	60	196	-	-	-	-	2.40
-B-S	~180	-	152.0	376	60	147	-	-	-	-	2.20
-X/Y-...-B-S	~180	-	Y	427	60	194	-	-	-	-	2.35

6. HYBRID TURBOWENT Ø150÷Ø200 - STANDARD





TH x a b - d

- d — base version
- b — turbine material
- a — base material
- x — diameter
- TH — hybrid turbowent

Diameter [mm]	ø150	ø200
Max. efficiency [m³/h]	197	373
Max. underpressure [Pa]	6	8
Rotating speed adjustment range [obr./min]	90 - 300	90 - 270
Voltage [V DC]	24	24
Nominal power* [W]	3.9	6.8
Max.current [mA]	360	360
Ambient temperature [°C]	-20 - +60	
Rotating unit	ball bearings system	

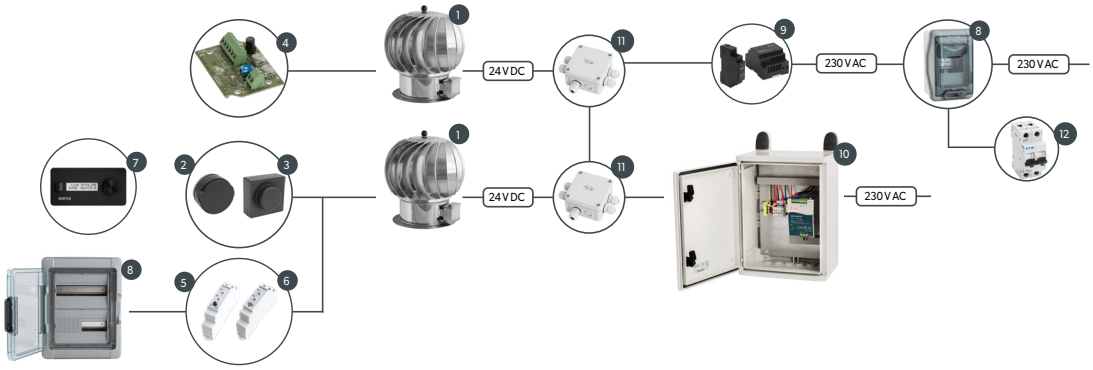
*at maximum efficiency

Destination	W	W	W	W - ventilation ducts
Base material	CH	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML- chrome-nickel sheet powder coated
Turbine material	-	CH	-	CH - chrome-nickel sheet 1.4301
	-	-	ML	ML - aluminium powder coated
	AL	-	-	AL - aluminium

	Sound pressure level A at a distance of 4 m from cowl (for rotation speed n)		Sound power level L (for min. rotation speed acc. to PN-EN ISO 3741:2003) (for rotation speed n)	
Diameter	N_{oAmin} for n=90	N_{oAmax} for n=270	L_{WA} for n=90	L_{WA} for n=270
ø150	8 dB	15 dB	26 dB	33 dB
ø200	7 dB	14 dB	25 dB	35 dB

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Connecting diagram



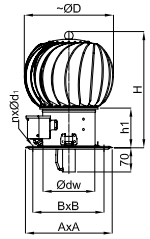
No	Symbol	Name
		CONTROLLERS
1	TH...	Hybrid Turbowent ø150÷ø200
2	ERO-32MN-2	ERO Electronic motor speed controller
3	ERO-32MN-1	ERO Electronic motor speed controller
4	ERO-31MW-1	ERO type electronic motor speed controller mounted on the cowl
5	ERO-32MS-0	ERO Electronic motor speed controller - on rail version TS-35
6	ERO-32WS-0	ERO Electronic motor speed controller - WiFi version (wBox application is required)
7	ERO-32AP-0	ERO Electronic motor speed controller - under- surface version
8	ESR-03W-0	Electronic control cabinet ESR - max amount of controllers: 3
	ESR-04W-0	Electronic control cabinet ESR - max amount of controllers: 4
	ESR-06W-0	Electronic control cabinet ESR - max amount of controllers: 6
	ESR-08W-0	Electronic control cabinet ESR - max amount of controllers: 8
	ESR-12W-0	Electronic control cabinet ESR - max amount of controllers: 12
	ESR-24W-0	Electronic control cabinet ESR - max amount of controllers: 24
	ESR-36W-0	Electronic control cabinet ESR - max amount of controllers: 36
	ESR-54W-0	Electronic control cabinet ESR - max amount of controllers: 54
	ESR-72W-0	Electronic control cabinet ESR - max amount of controllers: 72

No	Symbol	Name
		POWER FEEDERS
9	EZN-010M-0	Electronic power supply EZN, nominal power 10 W
	EZN-030M-0	Electronic power supply EZN, nominal power 30 W
	EZN-060M-0	Electronic power supply EZN, nominal power 60 W
10	ESZ-060W-0	Electronic power supply cabinet ESZ, connected power 60 W
	ESZ-120W-0	Electronic power supply cabinet ESZ, connected power 120 W
	ESZ-240W-0	Electronic power supply cabinet ESZ, connected power 240 W
	ESZ-480W-0	Electronic power supply cabinet ESZ, connected power 480 W
11	ERZ-06D-0	Electronic power divider ERZ
12	CLS6-B4/1N	Circuit breaker

Versions of bases

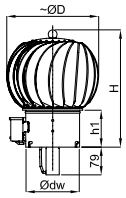
1. Square base -PK





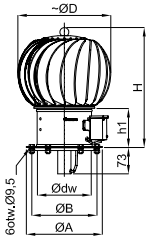
2. Dismountable base -R





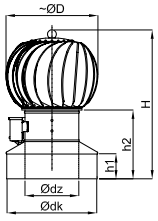
3. Base with collar -BIII





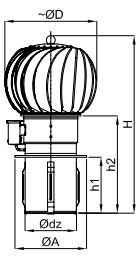
4. Base with insulation closing -B-K





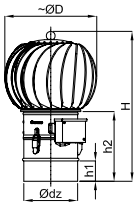
5. Force-in mounting base -PT





6. Inlet pipe openable -B

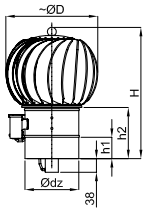




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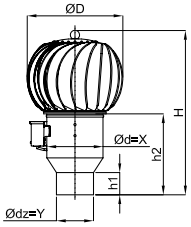
7. Inlet pipe not openable -B-S





8. Inlet pipe reduced -X/Y/...-B-S



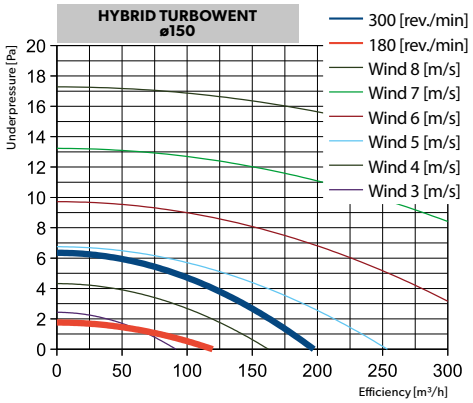


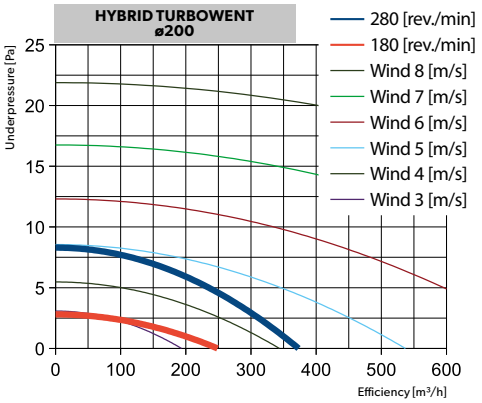
Measurements table for various inlet diameters

ø 150	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CHAL
-PK	~260	150.4	-	326	100	-	250	208	6.2	4	2.60
-R	~260	150.4	-	330	105	-	-	-	-	-	2.45
-BIII	~260	150.1	-	292	90	-	211	182	9.5	6	2.85
-B-K	~260	253.4	151.7	399	70	194	-	-	-	-	3.20
-PT	~260	-	144.0	450	157	244	202	158	-	-	2.85
-B	~260	-	152.0	402	60	197	-	-	-	-	2.60
-B-S	~260	-	152.0	349	60	144	-	-	-	-	2.40
-X/Y-...-B-S	~260	-	Y	420	60	194	-	-	-	-	2.55

ø 200	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CHAL
-PK	~320	200.0	-	340	100	-	330	284.0	6.2	4	3.00
-R	~320	199.7	-	355	115	-	-	-	-	-	2.50
-BIII	~320	199.7	-	362	90	-	261	233	9.5	6	3.00
-B-K	~320	303.1	201.0	434	70	194	-	-	-	-	3.50
-PT	~320	-	194.0	494	157	254	252	208	-	-	3.20
-B	~320	-	201.0	471	60	197	-	-	-	-	2.90
-B-S	~320	-	201.0	410	60	144	-	-	-	-	2.60
-X/Y-...-B-S	~320	-	Y	454	60	194	-	-	-	-	2.80

Airfow charts





7. HYBRID TURBOWENT PLUS Ø200÷Ø500 - STANDARD



Destination	W	W	W - ventilation ducts
Base material	CH	-	CH - chrome-nickel sheet 1.4301
	-	ML	ML - chrome-nickel sheet powder coated
Turbine material	-	ML	ML - aluminium powder coated
	AL	-	AL - aluminium

Diameter [mm]	ø200	ø250	ø300	ø350	ø400	ø500
Max. efficiency [m³/h]	486	883	1094	1400	1700	3600
Max. underpressure [Pa]	20	25	20	17	13	22
Rotating speed adjustment range [rev/min]	90 - 380	90 - 380	90 - 280	90 - 262	40 - 180	
Voltage [V DC]	24					
Nominal power* [W]	10	17	20	24	14	70
Max.current [A]	2.3				4.2	
Ambient temperature [°C]	-30 - +60				-30 - +50	
Rotating unit	ball bearings system					

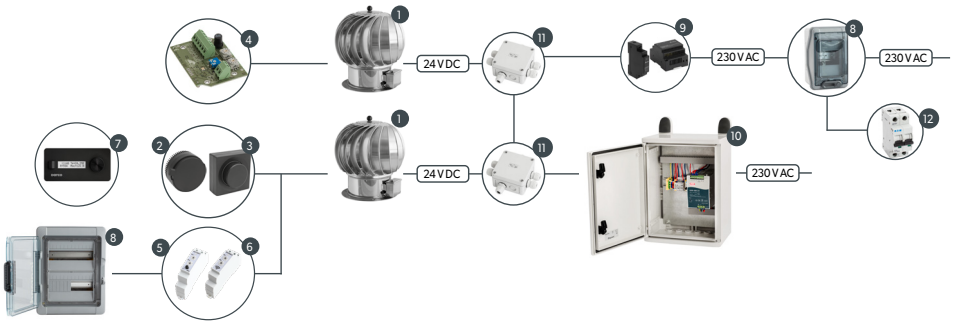
*at maximum efficiency

THP x a b - d

- base version
- turbine material
- base material
- diameter
- hybrid turbowent Plus

	Sound pressure level A at a distance of 4 m from cowl (for rotation speed n)		Sound power level LWA (for min. rotation speed acc. to PN-EN ISO 3741:2003)	
Diameter	N_{oAmin} for n=min	N_{oAmax} for n=max	L_{WA} for n=min	L_{WA} for n=max
ø200	16 dB	33 dB	36 dB	53 dB
ø250	18 dB	35 dB	37 dB	55 dB
ø300	24 dB	36 dB	43 dB	56 dB
ø350	25 dB	38 dB	45 dB	58 dB

Connecting diagram



No	Symbol	Name
		CONTROLLERS
1	THP...	Hybrid Turbowent Plus ø200÷ø350
2	ERO-32MN-2	ERO Electronic motor speed controller
3	ERO-32MN-1	ERO Electronic motor speed controller
4	ERO-31MW-2	ERO type electronic motor speed controller mounted on the cowl THP200-350
4b	ERO-31MW-3	ERO type electronic motor speed controller mounted on the cowl THP400-500
5	ERO-32MS-0	ERO Electronic motor speed controller - on rail version TS-35
6	ERO-32WS-0	ERO Electronic motor speed controller - WiFi version (wBox application is required)
7	ERO-32AP-0	ERO Electronic motor speed controller - surface version
8	ESR-03W-0	Electronic control cabinet ESR - max amount of controllers: 3
	ESR-04W-0	Electronic control cabinet ESR - max amount of controllers: 4
	ESR-06W-0	Electronic control cabinet ESR - max amount of controllers: 6
	ESR-08W-0	Electronic control cabinet ESR - max amount of controllers: 8
	ESR-12W-0	Electronic control cabinet ESR - max amount of controllers: 12
	ESR-24W-0	Electronic control cabinet ESR - max amount of controllers: 24
	ESR-36W-0	Electronic control cabinet ESR - max amount of controllers: 36
	ESR-54W-0	Electronic control cabinet ESR - max amount of controllers: 54
	ESR-72W-0	Electronic control cabinet ESR - max amount of controllers: 72

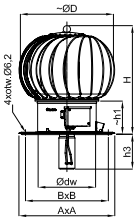
No	Symbol	Name
		POWER FEEDERS
9	EZN-010M-0	Electronic power supply EZN, nominal power 10 W
	EZN-030M-0	Electronic power supply EZN, nominal power 30 W
	EZN-060M-0	Electronic power supply EZN, nominal power 60 W
10	ESZ-060W-0	Electronic power supply cabinet ESZ, connected power 60 W
	ESZ-120W-0	Electronic power supply cabinet ESZ, connected power 120 W
	ESZ-240W-0	Electronic power supply cabinet ESZ, connected power 240 W
	ESZ-480W-0	Electronic power supply cabinet ESZ, connected power 480 W
11	ERZ-06D-0	Electronic power divider ERZ
12	CLS6-B4/1N	Circuit breaker

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Versions of bases

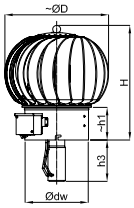
1. Square base -PK





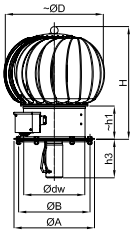
2. Dismountable base -R





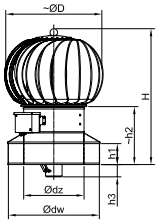
3. Base with collar -BIII





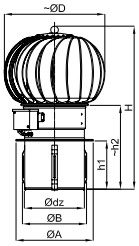
4. Base with insulation closing -B-K





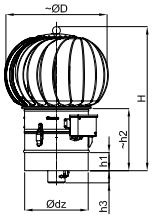
5. Force-in mounting base -PT





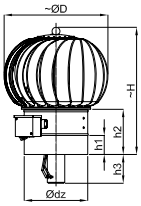
6. Inlet pipe openable -B





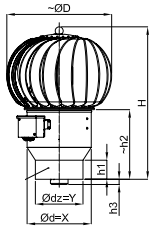
7. Inlet pipe not openable -B-S





8. Inlet pipe reduced -X/Y/...-B-S





Measurements table for various inlet diameters

ø 200	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-PK	~320	197.6	-	371	112	-	123	330	284	6.2	4	2.90
-R	~320	199.7	-	363	103	-	131	-	-	-	-	2.40
-BIII	~320	199.4	-	368	108	-	126	261	233	9.5	6	2.90
-B-K	~320	303.1	199.4	453	70	193	41	-	-	-	-	3.40
-PT	~320	-	194.0	533	157	254	-	252	208	-	-	3.10
-B	~320	-	201.0	456	57	196	39	-	-	-	-	2.80
-B-S	~320	-	201.0	403	57	143	91	-	-	-	-	2.50
-X/Y-...-B-S	~320	-	Y	478	60	218	-	-	-	-	-	2.70

ø 250	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-PK	~380	248.3	-	408	112	-	122	380	330	6.1	4	3.50
-R	~380	252.3	-	399	106	-	130	-	-	-	-	2.90
-BIII	~380	250.7	-	404	111	-	125	311	283	9.5	8	4.35
-B-K	~380	352.4	252.3	489	70	196	41	-	-	-	-	4.10
-PT	~380	-	244.0	533	157	264	-	302	259	-	-	3.70
-B	~380	-	252.3	512	57	219	17	-	-	-	-	3.40
-B-S	~380	-	252.3	439	60	146	90	-	-	-	-	3.10
-X/Y-...-B-S	~380	-	Y	514	60	221	-	-	-	-	-	3.40

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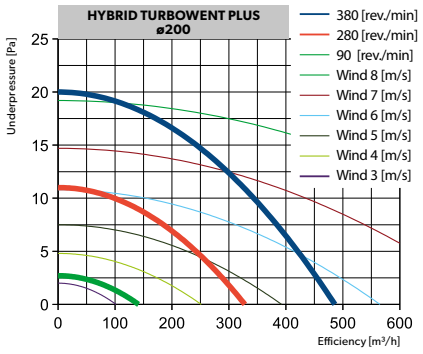
ø 300	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-PK	~460	297.6	-	460	121	-	116	430	380	6.2	4	4.15
-R	~460	300.0	-	446	130	-	130	-	-	-	-	3.00
-BIII	~460	300.0	-	451	112	-	125	361	337	9.5	8	3.95
-B-K	~460	403.6	301.6	536	70	197	41	-	-	-	-	4.40
-PT	~460	-	294.0	606	157	244	-	352	308	-	-	4.10
-B	~460	-	301.5	559	57	220	18	-	-	-	-	3.60
-B-S	~460	-	301.6	486	60	147	90	-	-	-	-	3.20
-X/Y-...-B-S	~460	-	Y	561	60	222	-	-	-	-	-	3.50

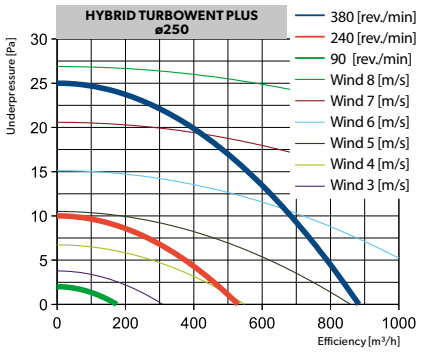
ø 350	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-PK	~490	346.9	-	447	114	-	128	500	460	6.2	4	4.75
-R	~490	349.3	-	436	102	-	140	-	-	-	-	3.10
-BIII	~490	346.9	-	441	107	-	135	411	387	9.5	8	4.15
-B-K	~490	453.0	350.9	526	70	192	50	-	-	-	-	4.70
-PT	~490	-	344.0	616	157	244	-	402	358	-	-	4.70
-B-S	~490	-	350.9	476	60	142	100	-	-	-	-	3.35
-X/Y-...-B-S	~490	-	Y	551	60	217	-	-	-	-	-	3.70

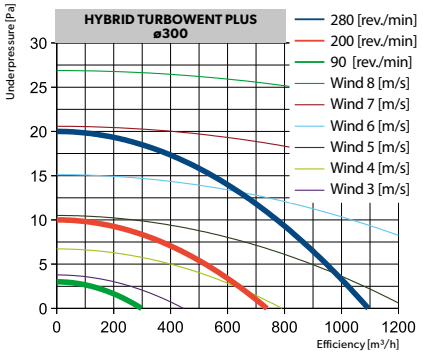
ø 400	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-BIII	~610	398.0	-	657	165	-	131	464	437	9.5	8	8.90
-B-S	~610	-	401.0	687	60	195	101	-	-	-	-	7.80

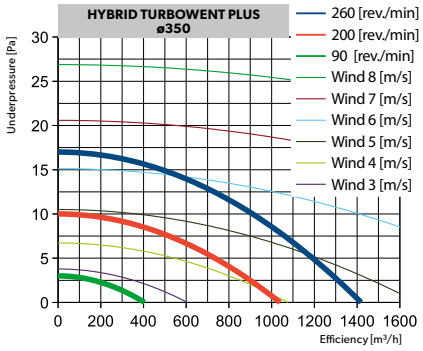
ø 500	Dimensions [mm]											Weight [kg]
Base version	D	dw	dz	H	h1	h2	h3	A	B	d1	Amount n	CHAL
-BIII	~740	499.0	-	765	165	-	131	564	538	9.5	8	12.20
-B-S	~740	-	501.0	795	60	200	101	-	-	-	-	10.70

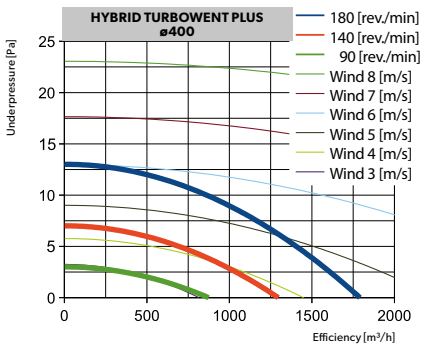
Airflow charts

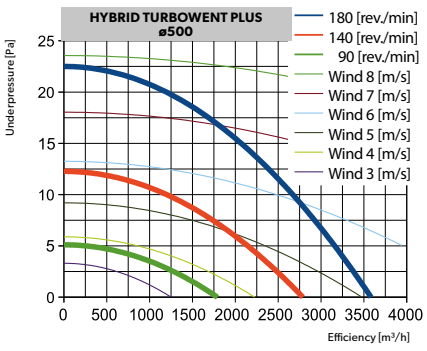












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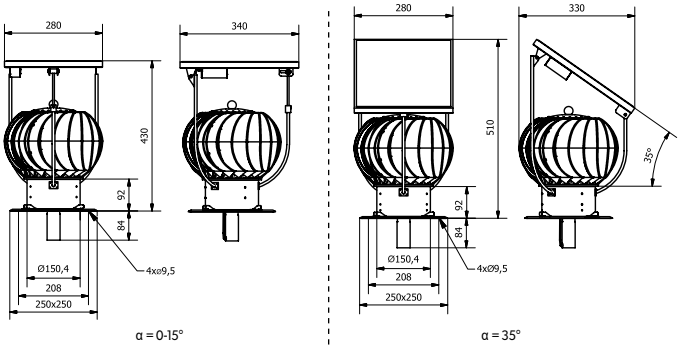
8. HYBRID SOLAR TURBOWENT



Diameter [mm]	ø150
Solar panel power [W]	10
Maximal rotating speed of cowl powered by energy from solar panel [rev/min]	360
Efficiency by maximal rotating speed [m³/h]	230
Power from panel needed to start the motor [W]	1.13
Minimal power required to rotate the cowl [W]	0.7
Regulation of the panel position in relations to axis of the turbine [°]	360

TUS x a b - H - d / α

- α — solar panel angle
- d — base version
- H — hybrid version
- b — turbine material
- a — base material
- x — diameter
- TUS — solar Turbowent



Destination	W	W - ventilation ducts
Base material	CH	CH - chrome-nickel sheet 1.4301
Turbine material	AL	AL - aluminium
Solar panel angle	0-15	0-15° - adjustable
	35	35° - constant (version suitable for most European countries)

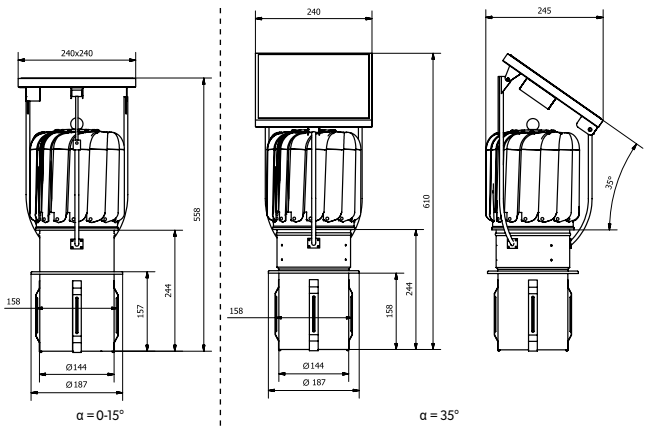
9. HYBRID SOLAR TURBOWENT TULIPAN



Diameter [mm]	ø150
Solar panel power [W]	5
Maximal rotating speed of cowl powered by energy from solar panel [rev/min]	600
Efficiency by maximal rotating speed [m³/h]	246
Power from panel needed to start the motor [W]	1.13
Minimal power required to rotate the cowl [W]	0.7
Regulation of the panel position in relations to axis of the turbine [°]	360

TUS x a b - T - H - d / α

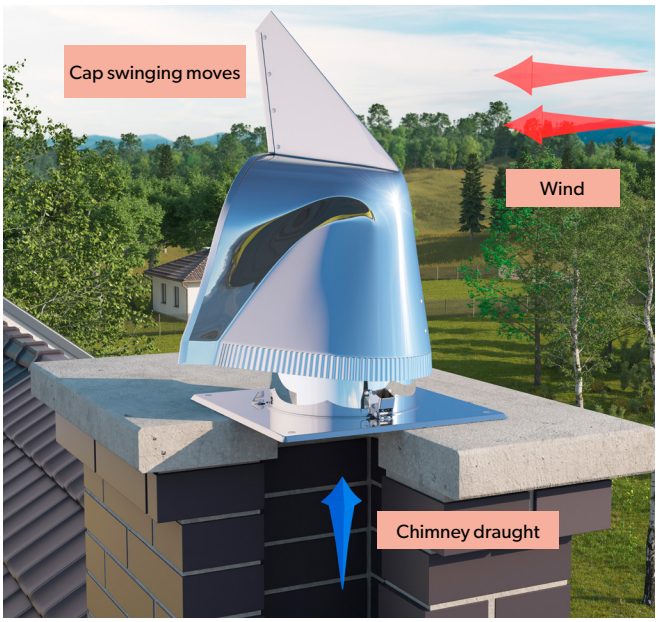
- α — solar panel angle
- d — base version
- H — hybrid version
- T — Tulipan version code
- b — turbine material
- a — base material
- x — diameter
- TUS — solar Turbowent



Destination	W	W - ventilation ducts
Base material	CH	CH - chrome-nickel sheet 1.4301
Turbine material	AL	AL - aluminium
Solar panel angle	0-15	0-15° - adjustable
	35	35° - constant (version suitable for most European countries)

10. ROTOWENT Ø150÷Ø400





RO x a b - c

- c — base version
- b — cap material
- a — base material
- x — diameter
- RO — Rotowent

Diameter [mm]	ø150	ø200	ø250	ø300	ø350	ø400
Efficiency [m³/h] at wind speed 4 m/s	137	247	401	591	813	1236
Underpressure [Pa] (at wind speed 4 m/s)	3.35	4.1	4.3	4.8	5.3	8.08
Max. working temperature [°C]	500					

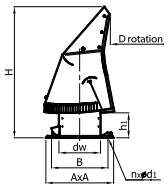
Destination	S	S	S - gas and oil exhaust ducts
	-	D	D - smoke ducts
Base material	CH	CH	CH - chrome-nickel sheet 1.4301
Cap material	CH	-	CH - chrome-nickel sheet 1.4301
	-	*)	*) - chrome-nickel sheet 1.4404

Warning!
Cowl may not be mounted on ducts exhausting fumes from coal burning stoves.

Versions of bases

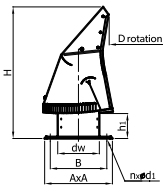
1. Square base openable ø150, ø200, ø250 -PK





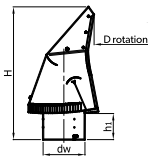
1a. Square base not openable ø300÷ø400 -PK





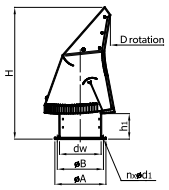
2. Dismountable base -R





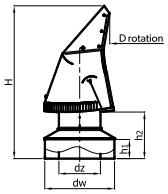
3. Base with collar -BIII





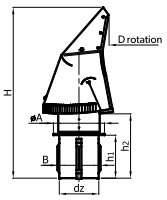
4. Base with insulation closing -B-K





5. Force-in mounting base -PT

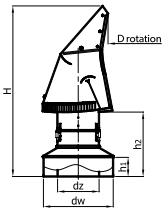




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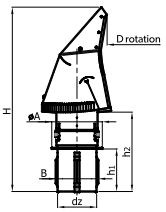
6. Base with insulation closing openable -B-K-U





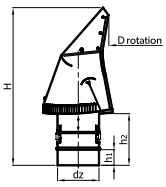
7. Force-in mounting base - openable ø150÷ø300 -PT-U





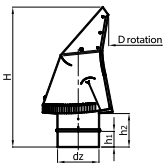
8. Inlet pipe openable ø150÷ø300 -B





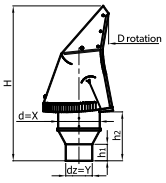
9. Inlet pipe not openable -B-S





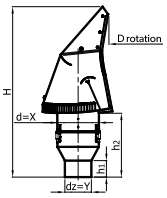
10. Inlet pipe reduced -X/Y-...-B-S





11. Inlet pipe reduced openable ø150÷ø300 -X/Y-...-B





Measurements table for various inlet

ø 150	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~325	148.0	-	465	54	-	250	208	6.2	4	1.75	1.80	1.80
-R	~325	150.5	-	500	89	-	-	-	-	-	1.40	1.45	1.45
-BIII	~325	150.5	-	460	50	-	211	182	9.5	6	1.80	1.85	1.85
-B-K	~325	253.3	151.8	580	70	170	-	-	-	-	2.30	2.35	2.35
-PT	~325	-	144.0	615	157	205	202	158	-	-	2.10	2.15	2.15
-B-K-U	~325	253.3	151.8	630	70	220	-	-	-	-	2.60	2.65	2.65
-PT-U	~325	-	144.0	665	157	255	202	158	-	-	2.30	2.35	2.35
-B	~325	-	152.0	585	60	174	-	-	-	-	1.75	1.80	1.80
-B-S	~325	-	152.0	531	60	120	-	-	-	-	1.55	1.60	1.60
-X/Y-...-B-S	~325	-	Y	576	60	165	-	-	-	-	1.75	1.80	1.80
-X/Y-...-B	~325	-	Y	675	60	264	-	-	-	-	2.10	2.15	2.15

ø 200	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~395	198.0	-	500	55	-	330	284	6.2	4	2.50	2.60	2.60
-R	~395	200.0	-	535	90	-	-	-	-	-	1.85	1.95	1.95
-BIII	~395	199.0	-	495	50	-	261	233	9.5	6	2.35	2.45	2.45
-B-K	~395	303.1	201.1	615	70	170	-	-	-	-	2.90	3.00	3.00
-PT	~395	-	194.0	660	167	215	252	208	-	-	2.70	2.80	2.80
-B-K-U	~395	303.1	201.1	665	70	220	-	-	-	-	3.25	3.35	3.35
-PT-U	~395	-	194.0	710	167	265	252	208	-	-	3.05	3.15	3.15
-B	~395	-	201.1	619	60	174	-	-	-	-	2.30	2.40	2.40
-B-S	~395	-	201.1	565	60	120	-	-	-	-	2.00	2.10	2.10
-X/Y-...-B-S	~395	-	Y	610	60	165	-	-	-	-	2.25	2.35	2.35
-X/Y-...-B	~395	-	Y	709	60	264	-	-	-	-	2.75	2.85	2.85

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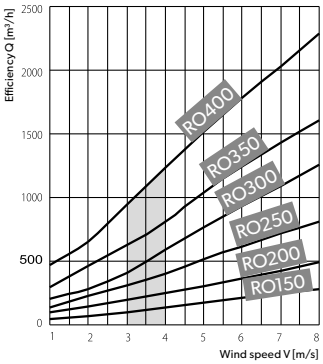
ø 250	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~455	245.0	-	628	56	-	380	330	6.2	4	3.30	3.50	3.50
-R	~455	250.3	-	652	80	-	-	-	-	-	2.35	2.55	2.55
-BIII	~455	250.8	-	622	50	-	311	283	9.5	8	3.05	3.25	3.25
-B-K	~455	352.4	252.3	732	70	160	-	-	-	-	3.70	3.90	3.90
-PT	~455	-	244.0	787	177	215	302	259	-	-	3.55	3.75	3.75
-B-K-U	~455	352.4	252.3	782	70	210	-	-	-	-	4.15	4.35	4.35
-PT-U	~455	-	244.0	837	177	355	302	259	-	-	4.00	4.20	4.20
-B	~455	-	252.3	776	60	204	-	-	-	-	3.20	3.40	3.40
-B-S	~455	-	252.3	682	60	110	-	-	-	-	2.60	2.80	2.80
-X/Y-...-B-S	~455	-	Y	647	60	165	-	-	-	-	2.95	3.15	3.15
-X/Y-...-B	~455	-	Y	866	60	294	-	-	-	-	3.80	4.00	4.00

ø 300	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~550	293.0	-	750	87	-	470	420	6.2	4	6.30	6.60	5.40
-R	~550	300.0	-	760	97	-	-	-	-	-	4.60	4.90	4.30
-BIII	~550	298.7	-	766	103	-	361	337	9.5	8	4.90	5.20	4.80
-B-K	~550	403.7	301.7	820	70	157	-	-	-	-	5.50	5.80	5.00
-PT	~550	-	294	925	177	217	352	308	-	-	5.30	5.60	4.80
-B-K-U	~550	403.7	301.7	870	70	207	-	-	-	-	6.00	6.30	5.50
-PT-U	~550	-	294	975	177	262	352	308	-	-	5.80	6.10	5.30
-B	~550	-	301.7	864	60	201	-	-	-	-	5.20	5.50	4.90
-B-S	~550	-	301.7	770	60	107	-	-	-	-	4.50	4.80	4.20
-X/Y-...-B-S	~550	-	Y	870	60	207	-	-	-	-	5.00	5.30	4.55

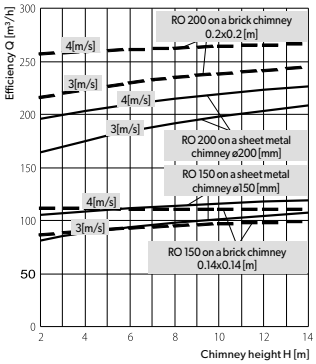
ø 350	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~630	343.0	-	843	88	-	500	450	8.5	4	7.40	7.70	6.30
-R	~630	349.3	-	853	98	-	-	-	-	-	5.40	5.70	4.90
-BIII	~630	348.0	-	869	104	-	411	387	9.5	8	5.70	5.00	5.60
-B-K	~630	452.0	351	913	70	158	-	-	-	-	6.40	6.70	5.80
-PT	~630	-	-	-	-	-	402	-	-	-	-	-	-
-B	~630	-	-	-	-	-	-	-	-	-	-	-	-
-B-S	~630	-	351	863	60	107	-	-	-	-	5.25	5.55	4.90
-X/Y-...-B-S	~630	-	Y	963	60	207	-	-	-	-	5.90	6.20	5.35

ø 400	Dimensions [mm]										Weight [kg]		
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	OCOC	OCCH	CHCH
-PK	~670	393.0	-	930	90	-	600	550	8.5	4	11.85	12.40	10.65
-R	~670	400.2	-	960	120	-	-	-	-	-	8.20	8.75	7.90
-BIII	~670	398.3	-	946	106	-	461	438	9.5	8	8.70	9.25	8.55
-B-K	~670	503.9	402.1	1000	70	160	-	-	-	-	9.95	10.50	9.30
-B-S	~670	-	402.1	950	60	110	-	-	-	-	8.40	8.95	8.00
-X/Y-...-B-S	~670	-	Y	1050	60	210	-	-	-	-	9.40	9.96	8.75

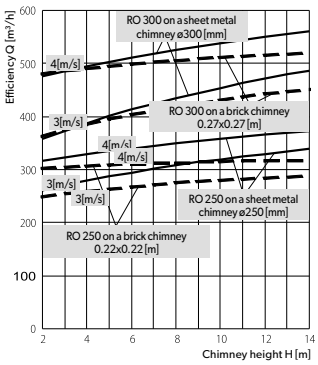
Airflow charts



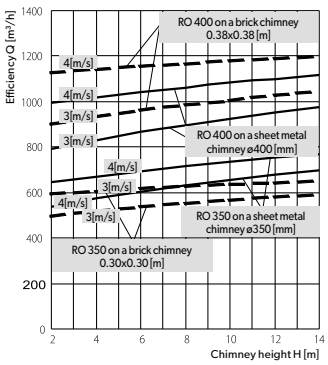
Efficiency chart for Turbowents (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



Efficiency chart for ROTOWENTS ø150 and ø200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for ROTOWENTS ø250 and ø300 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

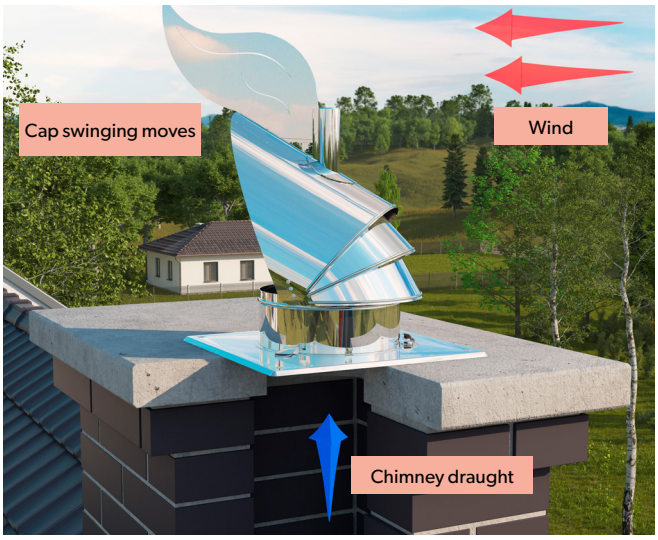


Efficiency chart for ROTOWENTS ø350 and ø400 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

invent. build. enjoy.

11. ROTOWENT DRAGON Ø150÷Ø300





RO x CH - DR - e

- e – base version
- DR – Dragon version code
- CH – base material
- x – diameter
- RO – rotowent

Warning!
Cowl may not be mounted on ducts exhausting fumes from coal burning stoves.

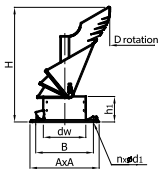
Destination	S	S - gas and oil exhaust ducts
	D	D- smoke ducts
Material	CH	Base: chrome-nickel sheet 1.4301
		Cap: chrome-nickel sheet 1.4404
	ML	Base: chrome-nickel sheet 1.4301 powder coated
		Cap: chrome-nickel sheet 1.4404 powder coated

Diameter [mm]	ø150	ø180	ø200	ø250	ø300
Efficiency [m³/h] at wind speed 4 m/s	172	217	247	490	638
Underpressure [Pa] (at wind speed 4 m/s)	6.6	5.7	4.3	6.3	5.85
Max. working temperature [°C]	500				
Rotating unit	ball bearings system				

Versions of bases

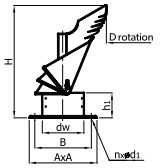
1. Square base openable ø150÷ø250 -PK





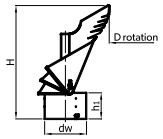
1a. Square base not openable ø300 -PK





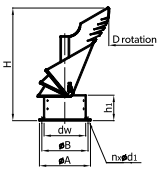
2. Dismountable base -R





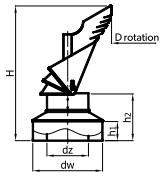
3. Base with collar -BIII





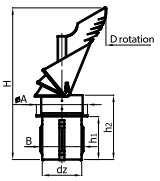
4. Base with insulation closing -B-K





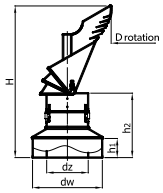
5. Force-in mounting base ø150÷ø300 -PT





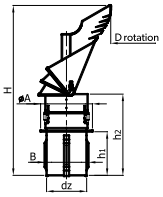
6. Base with insulation closing openable -B-K-U





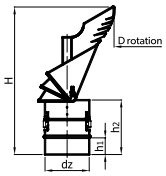
7. Force-in mounting base - openable ø150÷ø300 -PT-U





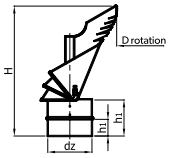
8. Inlet pipe openable ø150÷ø300 -B





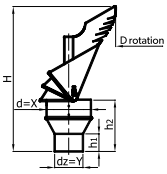
9. Inlet pipe not openable -B-S





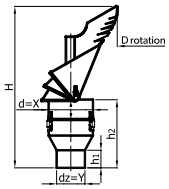
10. Inlet pipe reduced -X/Y-...-B-S





11. Inlet pipe reduced openable ø150, ø300 -X/Y-...-B





Measurements table for various inlet diameters

ø 150	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~335	148.0	-	405	85	-	250	208	6.2	4	1.90
-R	~335	150.5	-	440	120	-	-	-	-	-	1.55
-BIII	~335	150.5	-	400	80	-	211	182	9.5	6	1.95
-B-K	~335	253.3	151.8	520	70	200	-	-	-	-	2.45
-PT	~335	-	144.0	555	157	235	202	158	-	-	2.25
-B-K-U	~335	253.3	151.8	570	70	250	-	-	-	-	2.75
-PT-U	~335	-	144.0	605	157	285	202	158	-	-	2.45
-B	~335	-	152.8	530	60	205	-	-	-	-	1.90
-B-S	~335	-	152.8	470	60	150	-	-	-	-	1.70
-X/Y-...-B-S	~335	-	Y	515	60	195	-	-	-	-	1.90
-X/Y-...-B	~335	-	Y	620	60	295	-	-	-	-	2.25

ø 180	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~431	180.4	-	481	84.9	-	300	250	6.2	4	2.20
-R	~431	182.1	-	496	100	-	-	-	-	-	1.75
-BIII	~431	182.1	-	496	100	-	237	210	9.5	6	2.20
-B-K	~431	282	182.1	597	70	200	-	-	-	-	2.80
-PT	~431	-	174	647	172	250	233	189	-	-	2.50
-PT/STAB	~431	-	163	647	165	250	220	178	-	-	2.50
-B-K-U	~431	282	182.1	647	70	250	-	-	-	-	3.10
-PT-U	~431	-	174	720	172	323.1	233	189	-	-	3.00
-PT-U/STAB	~431	-	163	749	165	352	220	178	-	-	3.00
-B	~431	-	182.1	600	60	203	-	-	-	-	2.30
-B-S	~431	-	182.1	546	60	150	-	-	-	-	1.95
-X/Y-...-B-S	~431	-	Y	600	60	195	-	-	-	-	2.20
-X/Y-...-B	~431	-	Y	690	60	295	-	-	-	-	2.60

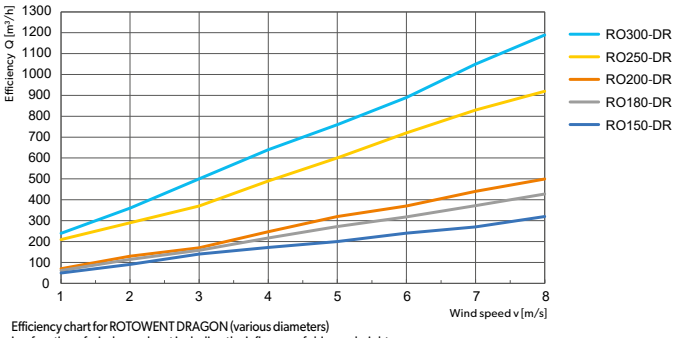
ø 200	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~440	198.0	-	520	85	-	330	284	6.2	4	2.70
-R	~440	200.0	-	555	120	-	-	-	-	-	2.05
-BIII	~440	199.0	-	515	80	-	261	233	9.5	6	2.55
-B-K	~440	303.1	201.1	635	70	200	-	-	-	-	3.10
-PT	~440	-	194.0	680	167	245	252	208	-	-	2.90
-PT/STAB	~440	-	183	680	165	250	240	198	-	-	2.90
-B-K-U	~440	303.1	201.1	685	70	250	-	-	-	-	3.45
-PT-U	~440	-	194.0	730	167	295	252	208	-	-	3.25
-PT-U/STAB	~440	-	183	794	165	352	240	198	-	-	3.25
-B	~440	-	201.1	635	60	205	-	-	-	-	2.50
-B-S	~440	-	201.1	585	60	150	-	-	-	-	2.20
-X/Y-...-B-S	~440	-	Y	630	60	195	-	-	-	-	2.45
-X/Y-...-B	~440	-	Y	725	60	295	-	-	-	-	2.95

invent. build. enjoy.

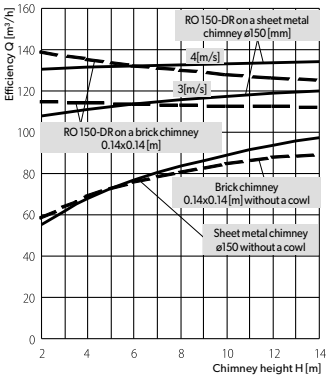
ø 250	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~560	245.0	-	620	80	-	380	330	6.2	4	3.60
-R	~560	250.3	-	645	120	-	-	-	-	-	2.65
-BIII	~560	250.8	-	615	90	-	311	283	9.5	8	3.35
-B-K	~560	352.4	252.3	725	70	200	-	-	-	-	4.00
-PT	~560	-	244.0	780	177	255	302	259	-	-	3.85
-B-K-U	~560	352.4	252.3	775	70	250	-	-	-	-	4.45
-PT-U	~560	-	244.0	830	177	305	302	259	-	-	4.30
-B	~560	-	252.3	735	60	245	-	-	-	-	3.50
-B-S	~560	-	252.3	675	60	150	-	-	-	-	2.90
-X/Y-...-B-S	~560	-	Y	730	60	205	-	-	-	-	3.25
-X/Y-...-B	~560	-	Y	825	60	315	-	-	-	-	4.10

ø 300	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	~660	293.0	-	730	80	-	470	420	6.2	4	5.60
-R	~660	300.0	-	740	140	-	-	-	-	-	4.50
-BIII	~660	298.7	-	745	145	-	361	337	9.5	8	5.00
-B-K	~660	403.7	301.7	800	70	200	-	-	-	-	5.20
-PT	~660	-	294	855	177	255	352	308	-	-	5.00
-B-K-U	~660	403.7	301.7	850	70	250	-	-	-	-	5.70
-PT-U	~660	-	294	905	177	305	352	308	-	-	5.50
-B	~660	-	301.7	825	60	225	-	-	-	-	4.95
-B-S	~660	-	301.7	750	60	150	-	-	-	-	4.40
-X/Y-...-B-S	~660	-	Y	850	60	250	-	-	-	-	4.75
-X/Y-...-B	~660	-	Y	900	60	300	-	-	-	-	5.25

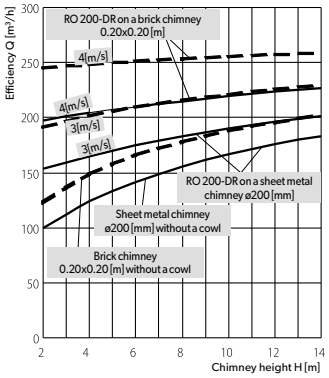
Airflow charts



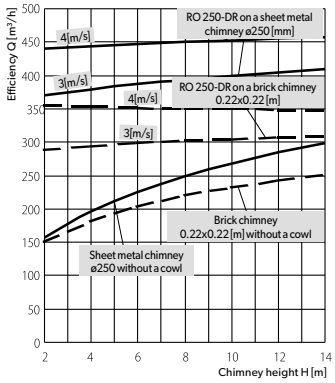
Efficiency chart for ROTOWENT DRAGON (various diameters)
in a function of wind speed, not including the influence of chimney height.
*1 [m/s] = 3.6 [km/h]



Efficiency chart for ROTOWENT DRAGON ø150 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



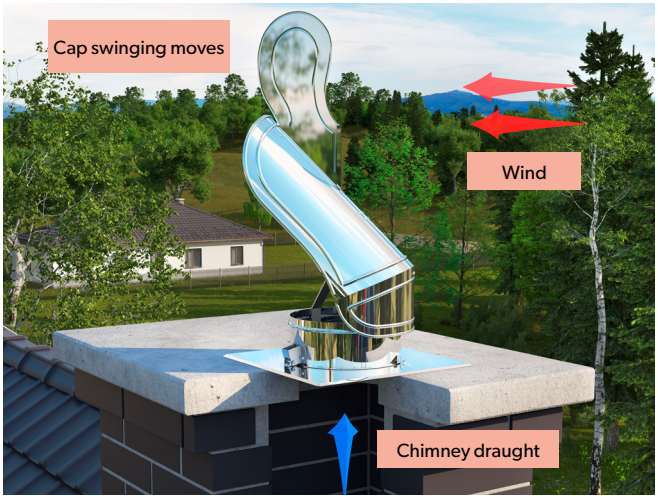
Efficiency chart for ROTOWENT DRAGON ø200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for ROTOWENT DRAGON ø250 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

12. ROTOWENT SWING Ø150÷Ø200





RO x CH CH - SW - d

- d – base version
- SW – Swing version code
- CH – cap material
- CH – base material
- x – diameter
- RO – rotowent

Destination	S	S - gas and oil exhaust ducts
	D	D- smoke ducts
Base material	CH	CH - chrome-nickel sheet 1.4301
Cap material	CH	CH - chrome-nickel sheet 1.4301

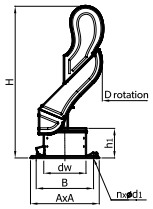
Diameter [mm]	ø150	ø180	ø200
Efficiency [m³/h] at wind speed 4 m/s	152	220	270
Underpressure [Pa] at wind speed 4 m/s	6.35		
Max. working temperature [°C]	400		
Rotating unit	slide bearings		

Warning!
Cowl may not be mounted on ducts exhausting fumes from coal burning stoves.

Versions of base

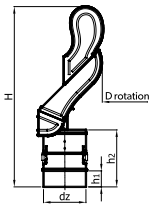
1. Square base openable -PK





2. Inlet pipe openable -B





Measurements table for various inlet diameters

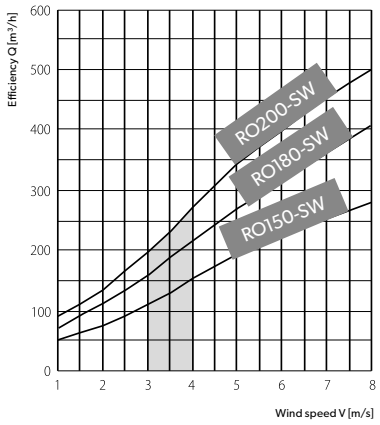
ø 150	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	310	148.0	-	525	85	-	250	208	6.2	4	3.30
-B	310	-	151.8	645	60	205	-	-	-	-	3.10

ø 180	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	340	178.0	-	590	85	-	300	250	6.2	4	3.70
-B	340	-	182	710	60	205	-	-	-	-	3.35

ø 200	Dimensions [mm]										Weight [kg]
Base version	D	dw	dz	H	h1	h2	A	B	d1	Amount n	CH
-PK	380	198.0	-	620	85	-	330	284	6.2	4	4.00
-B	380	-	201.1	740	60	205	-	-	-	-	3.50

invent. build. enjoy.

Airflow charts



Efficiency chart for ROTOWENT DRAGON (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6 [km/h]).

13. DRAUGHT GENERATOR GCK



Destination	S	S - gas and oil exhaust ducts
	D	D*- smoke ducts
Material	CH	CH - chrome-nickel sheet 1.4301
	ML	ML - chrome-nickel sheet powder coated

*) CAUTION - only smoke ducts from wood burning devices

Diameter [mm]	ø150	ø200
Max. efficiency [m³/h]	300	450
Max. underpressure [Pa]	42	29
Single-phase voltage [V/Hz]	230/50	
Power [W]	94	141
Protection level	IP34	
Max.fumes temperature [°C]	400	
Ambient temperature [°C]	-30 -+65	

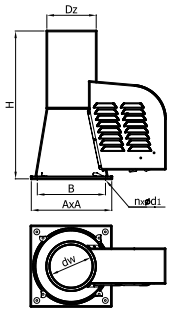
GCK x - d - ML

- ML — powder coated
- d — base version
- x — diameter
- GCK — draught generator

Versions of bases

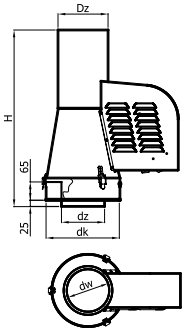
1. Square base -PK





2. Base with insulation closing -B-K



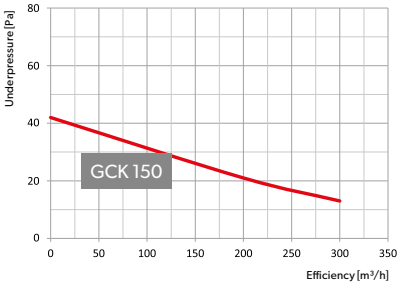


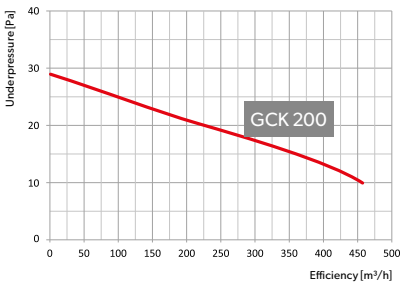
Measurements table for various inlet diameters

ø 150	Dimensions [mm]									Weight [kg]
Base version	dw	dz	H	dk	A	B	Dz	d1	Amount n	CH
-PK	147.0	-	518	-	282	240	173	6.2	4	7.80
-B-K	-	149	607	253.3	-	-	173	-	-	8.00

ø 200	Dimensions [mm]									Weight [kg]
Base version	dw	dz	H	dk	A	B	Dz	d1	Amount n	CH
-PK	197.0	-	598	-	342	290	230	6.2	4	10.00
-B-K	-	199	686	303	-	-	230	-	-	10.40

Airflow charts





14. GCK CAP





Basic function of the diffuser cap is protection from rain and snow. However, special design does not only minimize fumes exhaust obstruction , but also significantly increases chimney draught when wind blows.
Basic function of the diffuser cap is protection from rain and snow. However, special design does not only minimize fumes exhaust obstruction , but also significantly increases chimney draught when wind blows.
Mounting on the GCK is made using a special clamp (supplied with the cap)

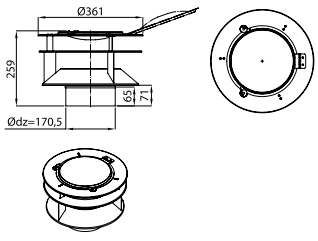
DA-GCK x - CH - ML

- powder coated
- material
- diameter
- GCK cap

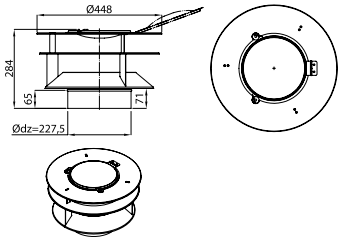
Destination	S	S - gas and oil exhaust ducts
	D	D*- smoke ducts
Material	CH	CH - chrome-nickel sheet 1.4301
	ML	ML - chrome-nickel sheet powder coated

*) CAUTION - only smoke ducts from wood burning devices

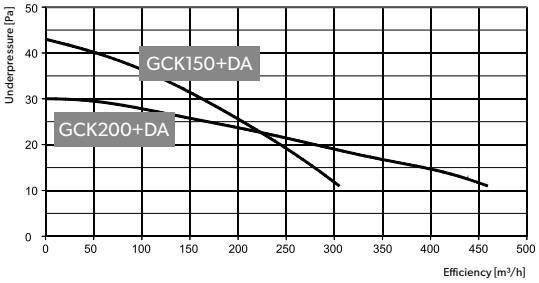
1. GCK cap mounted on the GCK - ø150



2. GCK cap mounted on the GCK - ø200



Airflow charts



Measurements table for various inlet diameters

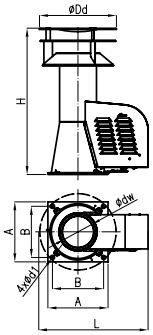
ø 150	Dimensions [mm]										Weight [kg]
Base version	Dd	H	dz	dk	dw	A	B	L	d1	Amount n	CH
-PK	361	686	-	-	147	282	240	510	6.2	4	10.40
-B-K	361	770	149	253.3	-	-	-	510	-	-	10.60

ø 200	Dimensions [mm]										Weight [kg]
Base version	Dd	H	dz	dk	dw	A	B	L	d1	Amount n	CH
-PK	448	790	-	-	197	342	290	579	6.2	4	13.00
-B-K	448	876	199	303	-	-	-	579	-	-	13.40

Versions of bases

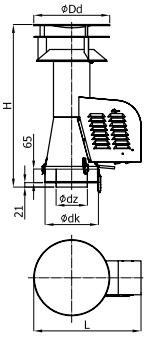
1. Square base -PK





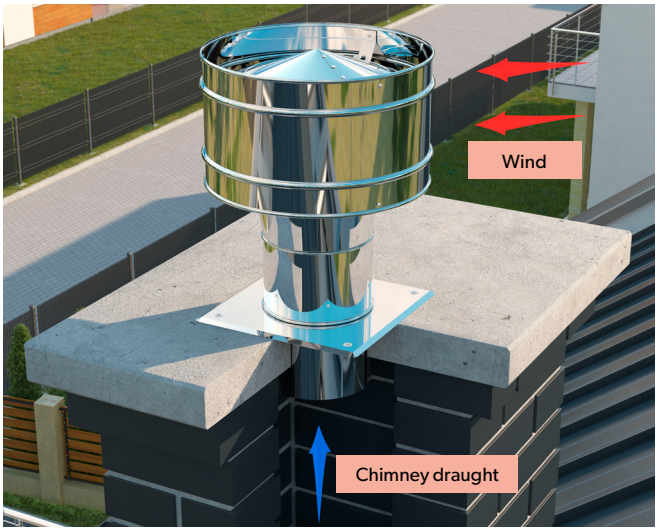
2. Inlet pipe with insulation closing -B-K





15. CAGI - STATIC CHIMNEY COWL





WCG x - a - b

- b: base version
- a: material
- x: diameter
- WCG: CAGI static chimney cowl

Openable for diameters from 100 to 160

Destination	W	W	W - ventilation ducts
	S	-	S - gas and oil exhaust ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Diameter [mm]	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø300	ø315	ø350	ø400
Efficiency [m³/h] at wind speed 4 m/s	41	61	74	87	95	103	119	136	171	206	242	392	543	683	823	965
Max. working temperature [°C]	180															

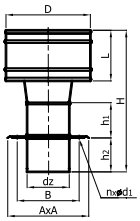
Diameter		ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø300	ø315	ø350	ø400
Cylinder dimensions [mm]	Diameter D	160	200	220	240	250	260	280	300	320	360	400	500	600	630	700	800
	Height L	108	120	132	144	150	156	168	180	192	216	240	300	340	378	420	480

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Versions of bases

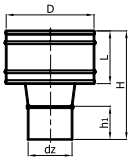
1. Square base -PK





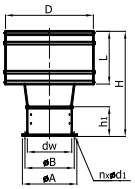
2. Inlet pipe -B





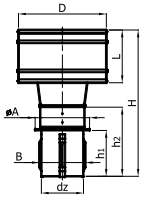
3. Base with collar -BIII





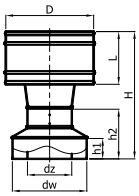
4. Force-in mounting base -PT





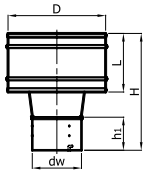
5. Base with insulation closing -B-K





6. Dismountable base -R





Measurements table for various inlet diameters

ø 80	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	80.2	356	97	115	220	170	6.2	4	0.90	0.85
-B	-	80.2	358	215	-	-	-	-	-	0.70	0.65
-BIII	79.2	-	353	210	-	142	112	9.5	4	0.95	0.90
-PT	-	74	403	157	260	130	89	-	-	0.85	0.80
-B-K	-	-	-	-	-	-	-	-	-	-	-
-R	79.2	-	358	215	-	-	-	-	-	0.70	0.65

ø 100	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	100.8	389	115	100	220	170	6.2	4	1.15	1.10
-B	-	100.8	389	215	-	-	-	-	-	1.00	0.95
-BIII	99.8	-	384	210	-	162	132	9.5	4	1.25	1.20
-PT	-	94	432	157	258	150	109	-	-	1.10	1.05
-B-K	202.1	100.8	385	70	215	-	-	-	-	1.30	1.25
-R	99.8	-	389	215	-	-	-	-	-	0.95	0.90

ø 110	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	111.9	402	115	100	220	170	6.2	4	1.30	1.20
-B	-	111.9	405	215	-	-	-	-	-	1.15	1.05
-BIII	110.9	-	400	210	-	172	142	9.5	4	1.45	1.35
-PT	-	104	448	157	258	160	119	-	-	1.30	1.20
-B-K	202.1	111.9	402	70	215	-	-	-	-	1.50	1.40
-R	110.9	-	405	215	-	-	-	-	-	1.15	1.05

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ø 120	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	123	423	115	100	220	170	6.2	4	1.50	1.40
-B	-	123	423	215	-	-	-	-	-	1.30	1.20
-BIII	122	-	418	210	-	182	152	9.5	4	1.65	1.55
-PT	-	114	466	157	258	170	129	-	-	1.50	1.40
-B-K	227.6	123	423	70	215	-	-	-	-	1.60	1.50
-R	122	-	423	215	-	-	-	-	-	1.30	1.20

ø 125	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	124.6	432	115	100	220	170	6.2	4	1.55	1.45
-B	-	124.6	432	215	-	-	-	-	-	1.40	1.30
-BIII	123.6	-	427	210	-	187	157	9.5	4	1.75	1.65
-PT	-	119	474	157	258	175	134	-	-	1.55	1.45
-B-K	227.6	124.6	432	70	215	-	-	-	-	1.70	1.60
-R	123.6	-	432	215	-	-	-	-	-	1.40	1.30

ø 130	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	132.5	441	115	100	250	200	6.2	4	1.70	1.60
-B	-	132.5	441	215	-	-	-	-	-	1.50	1.40
-BIII	131.5	-	436	210	-	192	162	9.5	4	1.85	1.75
-PT	-	124	483	157	258	180	139	-	-	1.70	1.60
-B-K	227.6	132.5	435	70	215	-	-	-	-	1.90	1.80
-R	132.5	-	441	215	-	-	-	-	-	1.50	1.40

ø 140	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	140.6	461	115	100	250	200	6.2	4	1.90	1.80
-B	-	140.1	461	215	-	-	-	-	-	1.70	1.60
-BIII	139.6	-	456	210	-	202	172	9.5	6	2.10	2.00
-PT	-	134	503	157	258	190	149	-	-	1.90	1.80
-B-K	227.6	140.6	453	70	215	-	-	-	-	2.00	1.90
-R	139.6	-	461	215	-	-	-	-	-	1.70	1.60

ø 150	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	151.7	481	115	100	250	200	6.2	4	2.15	2.05
-B	-	151.7	481	215	-	-	-	-	-	1.95	1.85
-BIII	150.7	-	476	210	-	212	182	9.5	6	2.35	2.25
-PT	-	144	523	157	258	202	159	-	-	2.25	2.15
-B-K	253.3	151.7	470	70	215	-	-	-	-	2.45	2.35
-R	151.7	-	481	215	-	-	-	-	-	1.95	1.85

ø 160	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	161.3	498	115	100	250	200	6.2	4	2.40	2.35
-B	-	161.3	498	215	-	-	-	-	-	2.25	2.30
-BIII	160.3	-	493	210	-	222	192	9.5	6	2.65	2.60
-PT	-	154	540	157	258	210	169	-	-	2.45	2.40
-B-K	253.3	161.3	475	70	215	-	-	-	-	2.60	2.55
-R	160.3	-	498	215	-	-	-	-	-	2.25	2.20

ø 180	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	179.6	700	200	180	300	250	6.2	4	5.00	4.30
-B	-	182.4	491	170	-	-	-	-	-	3.55	3.00
-BIII	180.8	-	486	165	-	242	212	9.5	6	4.00	3.50
-PT	-	174	639	157	318	225	174	-	-	4.10	3.50
-B-K	281.9	182	485	70	215	-	-	-	-	2.95	2.90
-R	181.4	-	491	170	-	-	-	-	-	3.55	3.00

ø 200	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	199.6	733	200	180	330	280	6.2	4	6.00	5.15
-B	-	201	526	170	-	-	-	-	-	4.35	3.70
-BIII	199.7	-	521	165	-	263	233	9.5	6	4.85	4.15
-PT	-	194	674	157	318	252	194	-	-	5.10	4.35
-B-K	303.1	201	500	70	160	-	-	-	-	5.50	4.70
-R	199.7	-	526	170	-	-	-	-	-	4.35	3.70

ø 250	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	250.6	800	200	180	360	320	6.2	4	8.55	9.80
-B	-	252	591	170	-	-	-	-	-	6.50	7.40
-BIII	250.7	-	586	165	-	313	283	9.5	8	7.15	8.15
-PT	-	244	739	157	318	302	259	-	-	7.50	8.55
-B-K	352.4	252.3	585	70	160	-	-	-	-	7.60	8.70
-R	250.7	-	591	170	-	-	-	-	-	6.50	7.40

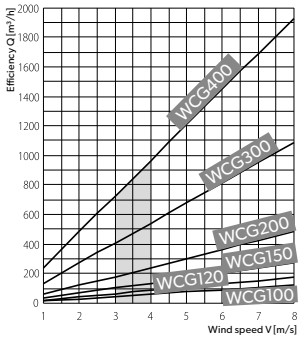
ø 300	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	299.9	883	200	180	430	380	6.2	4	11.65	13.30
-B	-	301.3	676	170	-	-	-	-	-	9.15	10.45
-BIII	300	-	671	165	-	363	337	9.5	8	9.90	11.30
-PT	-	294	824	152	318	345	309	-	-	10.10	11.55
-B-K	403.6	301.3	670	70	160	-	-	-	-	12.05	13.75
-R	300	-	676	170	-	-	-	-	-	9.15	10.45

ø 315	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	314.3	949	200	180	430	380	6.2	4	12.85	14.70
-B	-	315.7	741	170	-	-	-	-	-	10.35	11.80
-BIII	314.4	-	736	165	-	378	352	9.5	8	11.10	12.70
-PT	-	309.4	889	152	318	365	324	-	-	11.35	12.95
-B-K	403.6	316	696	70	160	-	-	-	-	12.05	13.75
-R	314.4	-	741	170	-	-	-	-	-	10.35	11.80

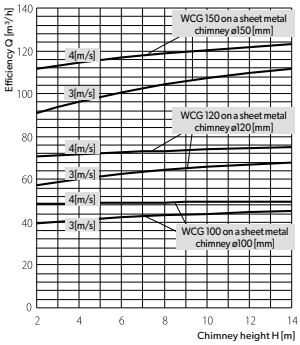
ø 350	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	-	-	-	-	-	-	-	-	-	-
-B	-	349.7	781	170	-	-	-	-	-	12.45	14.20
-BIII	348.1	-	776	165	-	413	392	9.5	8	13.30	15.20
-PT	-	-	-	-	-	-	-	-	-	-	-
-B-K	452.9	349.7	730	70	160	-	-	-	-	16.95	19.35
-R	348.1	-	781	170	-	-	-	-	-	12.45	14.20

ø 400	Dimensions [mm]									Weight [kg]	
Base version	dw	dz	H	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	-	-	-	-	-	-	-	-	-	-
-B	-	401.9	846	170	-	-	-	-	-	15.90	18.15
-BIII	400.3	-	841	165	-	464	438	9.5	8	16.85	19.25
-PT	-	-	-	-	-	-	-	-	-	-	-
-B-K	503.8	401.9	830	70	160	-	-	-	-	16.95	19.35
-R	400.3	-	846	170	-	-	-	-	-	15.90	18.15

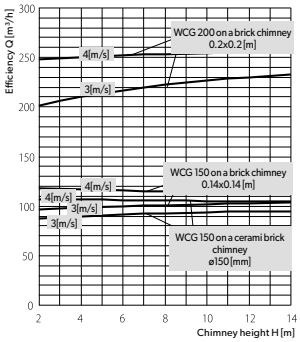
Airflow charts



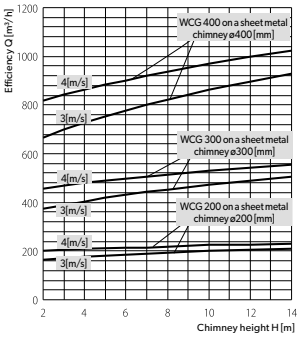
Efficiency chart for CAGI cowls (various diameters) in a function of wind speed, not including the influence of chimney height. (1[m/s]=3.6[km/h])



Efficiency chart for CAGI cowls ø100, 120, 150 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).



Efficiency chart for CAGI cowls ø150, 200 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

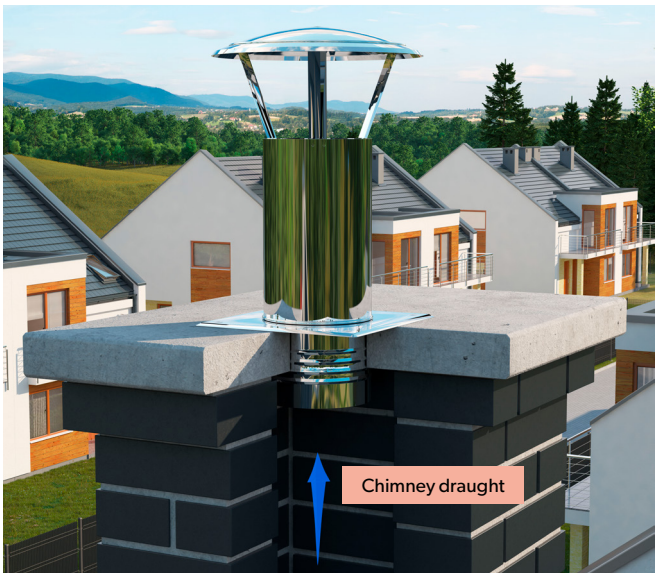


Efficiency chart for CAGI cowls ø200, 300, 400 in a function of chimney height on a brick or sheet metal chimney (for two wind speeds: 3 and 4 [m/s]).

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1. CAP WITH BASE



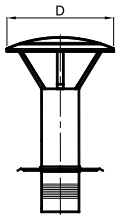


WDA x - CH - b

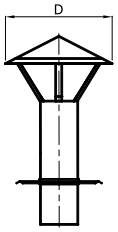
- base version
- material
- diameter
- cap with base

WDAC x - OC - b

- base version
- material
- diameter
- cap with base



for ø ≤ 200



for ø > 200

Destination	W	W	W - ventilation ducts
	S	-	S - gas and oil exhaust ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

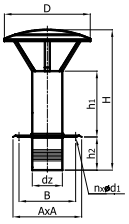
Diameter [mm]	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø250
Cap diameter D	220	220	250	250	290	290	290	290	350	400

*Openable for diameters from ø 100 mm to ø200mm (only WDA-CH version)

Versions of bases

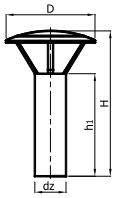
1. Square base -PK





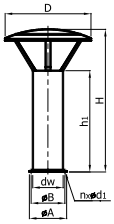
2. Inlet pipe -B





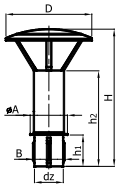
3. Base with collar -BIII





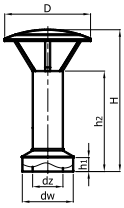
4. Force-in mounting base -PT





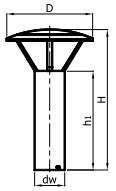
5. Base with insulation closing -B-K





6. Dismountable base -R





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Measurements table for various inlet diameters

ø 100	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	100.8	442	425	250	81	220	170	6.2	4	0.80	0.90
-B	-	100.8	442	425	333	-	-	-	-	-	0.70	0.75
-BIII	99.8	-	362	345	253	-	162	132	9.5	4	0.90	0.90
-PT	-	94	514	497	157	407	150	108	-	-	0.80	0.85
-B-K	202.1	100.8	358	341	70	250	-	-	-	-	1.10	1.10
-R	99.8	100.8	442	425	333	-	-	-	-	-	0.70	0.75

ø 110	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	112	444	427	250	81	220	170	6.2	4	0.90	1.00
-B	-	112	444	427	333	-	-	-	-	-	0.70	0.85
-BIII	111	-	364	347	253	-	172	142	9.5	4	0.90	1.05
-PT	-	104	516	499	157	407	160	118	-	-	0.90	0.95
-B-K	202.1	111.9	365	348	70	250	-	-	-	-	1.20	1.20
-R	111	112	444	427	333	-	-	-	-	-	0.70	0.85

ø 120	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	123.1	456	433	250	81	220	170	6.2	4	1.00	1.10
-B	-	123.1	456	433	333	-	-	-	-	-	0.80	0.95
-BIII	122.1	-	376	353	253	-	182	152	9.5	4	1.00	1.20
-PT	-	114	529	506	157	407	170	128	-	-	1.00	1.10
-B-K	202.1	123.1	372	349	70	250	-	-	-	-	1.30	1.30
-R	122.1	123.1	456	433	333	-	-	-	-	-	0.80	0.95

ø 130	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	132.6	458	435	250	81	250	200	6.2	4	1.10	1.20
-B	-	132.6	458	435	333	-	-	-	-	-	0.90	1.00
-BIII	131.6	-	378	355	253	-	192	162	9.5	4	1.10	1.30
-PT	-	124	529	506	157	407	180	138	-	-	1.00	1.15
-B-K	227.6	132.5	379	356	70	250	-	-	-	-	1.40	1.40
-R	131.6	132.6	458	435	333	-	-	-	-	-	0.90	1.00

ø 140	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	140.6	455	433	250	81	250	200	6.2	4	1.30	1.30
-B	-	140.6	455	433	333	-	-	-	-	-	1.10	1.10
-BIII	139.6	-	375	353	253	-	202	172	9.5	6	1.40	1.40
-PT	-	134	529	507	157	407	190	148	-	-	1.40	1.25
-B-K	227.6	140.6	386	364	70	250	-	-	-	-	1.50	1.50
-R	139.6	140.6	455	433	333	-	-	-	-	-	1.10	1.10

ø 150	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	151.8	480	458	250	81	250	200	6.2	4	1.40	1.40
-B	-	151.8	480	458	333	-	-	-	-	-	1.20	1.20
-BIII	150.8	-	400	378	253	-	212	182	9.5	6	1.50	1.50
-PT	-	144	552	530	157	407	200	158	-	-	1.40	1.60
-B-K	253.3	151.7	393	371	70	330	-	-	-	-	1.75	1.75
-R	150.8	151.8	480	458	333	-	-	-	-	-	1.20	1.20

ø 160	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	161.3	482	460	250	81	250	200	6.2	4	1.40	1.40
-B	-	161.3	482	460	330	-	-	-	-	-	1.20	1.20
-BIII	160.3	-	400	378	253	-	222	192	9.5	6	1.50	1.50
-PT	-	154	552	530	157	407	210	168	-	-	1.50	1.50
-R	160.3	161.3	482	460	333	-	-	-	-	-	1.20	1.20

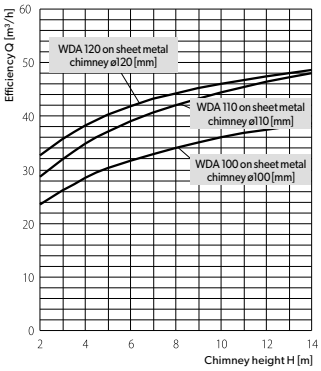
ø 180	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	182	485	463	250	81	300	250	6.2	4	1.60	1.60
-B	-	182	485	463	330	-	-	-	-	-	1.30	1.30
-BIII	181	-	400	378	253	-	242	212	9.5	6	1.60	1.60
-PT	-	154	552	530	157	407	230	198	-	-	1.60	1.60
-R	181	182	485	463	333	-	-	-	-	-	1.30	1.30

ø 200	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	201.1	497	486	250	81	330	280	6.2	4	1.70	2.30
-B	-	201.1	497	486	333	-	-	-	-	-	1.40	1.50
-BIII	200.1	-	417	406	253	-	262	232	9.5	6	1.70	2.00
-PT	-	194	570	559	157	407	250	208	-	-	1.70	2.15
-B-K	302.6	201.0	428	417	70	250	-	-	-		2.20	2.20
-R	200.1	201.1	497	486	333	-	-	-	-	-	1.40	1.50

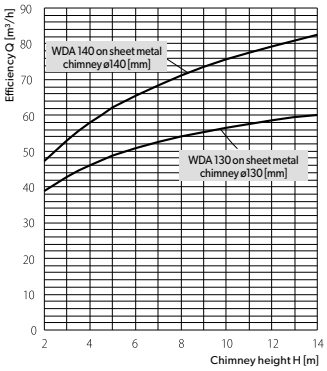
invent. build. enjoy.

ø 250	Dimensions [mm]										Weight [kg]	
Base version	dw	dz	H	H (OC)	h1	h2	A	B	d1	Ilość n	OC	CH
-PK	-	252.0	688	677	250	83	370	290	6	4	4.15	3.65
-B	-	252.3	603	592	333	-	-	-	-	-	2.75	2.45
-BIII	250.7	-	603	592	333	-	313	283	9.5	8	3.60	3.30
-PT	-	244.0	674	663	157	407	287	259	-	-	3.55	3.25
-B-K	352.4	252.3	532	521	70	250	-	-	-	-	3.65	3.35
-R	250.7	-	609	598	333	-	-	-	-	-	2.75	2.45

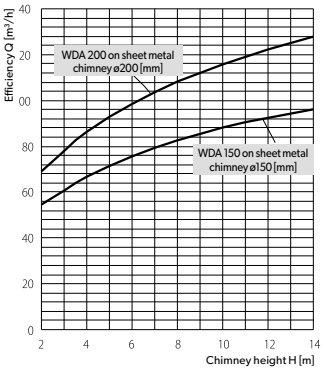
Airflow charts



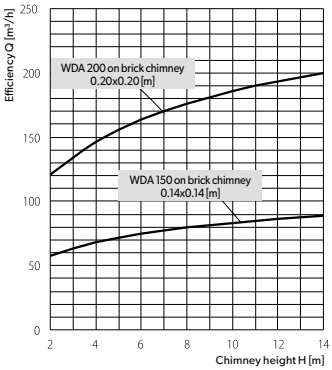
Efficiency chart for cap with base ø100, 110, 120 on sheet metal chimney in situation with no wind.



Efficiency chart for cap with base ø130, 140 on sheet metal chimney in situation with no wind.



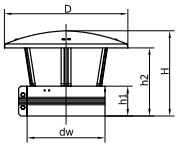
Efficiency chart for cap with base ø150, 200 on sheet metal chimney in situation with no wind.



Efficiency chart for cap with base ø150, 200 on brick chimney in situation with no wind.

2. CAP





DA x - a

- a: material
- x: diameter
- DA: cap

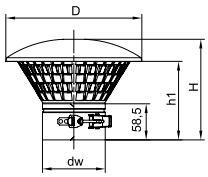
Diameter	Dimensions [mm]					Weight [kg]	
	D	H	dw	h1	h2	OC	CH
ø100	220	178	100	70	140	0.30	0.30
ø110	220	185	110	70	147	0.35	0.35
ø120	250	202	120	80	164	0.37	0.37
ø130	250	209	130	80	171	0.40	0.40
ø140	290	218	140	80	178	0.45	0.45
ø150	290	225	150	80	185	0.50	0.50
ø160	290	225	160	80	185	0.55	0.55
ø180	290	198	180	70	158	0.70	0.70
ø200	350	260	200	80	220	0.94	0.94
ø250	400	340	250	80	270	1.25	1.70



Destination	W	W	W	W - ventilation ducts
	S	-	-	S - gas and oil exhaust ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301
	-	OC	-	OC - galvanised steel sheet

3. CAP WITH MESH





DAL x - a

- a: material
- x: diameter
- DAL: cap with mesh

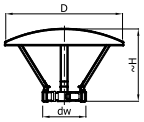
Diameter	Dimensions [mm]				Weight [kg]
	D	H	dw	h1	CH
ø100	220	163.5	100	127.5	0.39
ø110	220	167.0	110	131.0	0.40
ø120	250	162.5	120	123.5	0.42
ø130	250	166.0	130	127.5	0.49
ø140	250	169.5	140	130.5	0.50
ø150	250	180.0	150	139.0	0.68
ø160	290	183.5	160	143.0	0.70
ø180	290	189.5	180	149.0	0.72
ø200	350	183.5	200	141.0	0.90
ø250	350	195.0	250	152.5	0.96

Destination	W	W - ventilation ducts
	S	S - gas and oil exhaust ducts
Material	CH	CH - chrome-nickel sheet 1.4301

invent. build. enjoy.

4. CAP IN A BOX





DAP x - a

- a - material
- x - diameters
- DAP - cap in a box

Diameter range	Dimensions [mm]			Weight [kg]
	D	H	dw	CH
ø60÷ø80	160	150	60-80	0.20
ø100÷ø130	220	180	100-130	0.30
ø140÷ø180	290	210	140-180	0.45
ø200÷ø250	350	240	200-250	0.60



Destination	W	W - ventilation ducts
	S	S - gas and oil exhaust ducts
Material	CH	CH - chrome-nickel sheet 1.4301

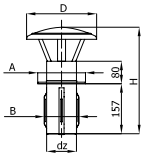
5. CAP WITH FORCE-IN BASE



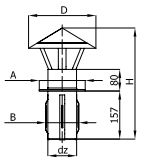
DA x - a - PT

- PT - force-in base
- a - material
- x - diameter
- DA - cap

Diameter	Dimensions [mm]					Weight [kg]	
	A	B	D	H	dz	OC	CH
ø100	150	108	220	335	94	0.60	0.60
ø110	160	118	220	345	104	0.70	0.70
ø120	170	128	250	360	114	0.75	0.75
ø130	180	138	250	370	124	0.80	0.80
ø140	190	148	290	375	134	0.95	0.95
ø150	200	158	290	385	144	1.00	1.00
ø160	210	168	290	385	154	1.11	1.11
ø180	230	198	290	385	174	1.50	1.50
ø200	250	208	350	420	194	1.85	1.85
ø250	287	259	400	500	244	3.40	3.40

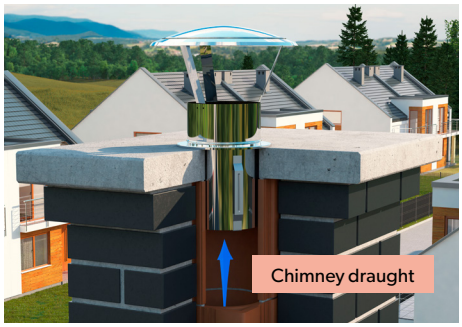


for ø ≤ 200



for ø > 200

Openable for diameters from 100 to 200 mm.



Destination	W	W	W - ventilation ducts
	S	-	S - gas and oil exhaust ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

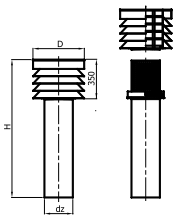
6. AIR INTAKE FOR AIR-TYPE GROUND HEAT EXCHANGER GWC



GWC x - CH - ...

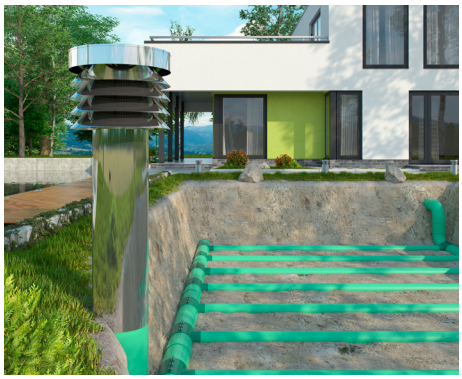
- ... - finish
- CH - material
- x - diameter
- GWC - air intake GWC

..... - BA - glossy finish
..... - 4N - brushed finish
..... - 2B - matt finish



Diameter	Dimensions [mm]			Cross section [cm²]	Weight
	D	H	dz		CH
ø160	360	1200	160	201	6.00
ø200	400	1200	200	314	7.50
ø250	450	1200	250	491	9.50
ø300	500	1200	300	707	12.0
ø350	550	1200	350	962	18.0
ø400	600	1200	400	1256	21.5

* other dimensions upon request

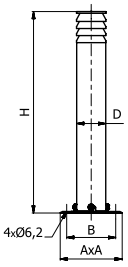


Destination	Air intake ground heat exchanger	
Material	CH	CH - chrome-nickel sheet 1.4301

invent. build. enjoy.

7. SEWER VENTING RING-TYPE TERMINAL PNK



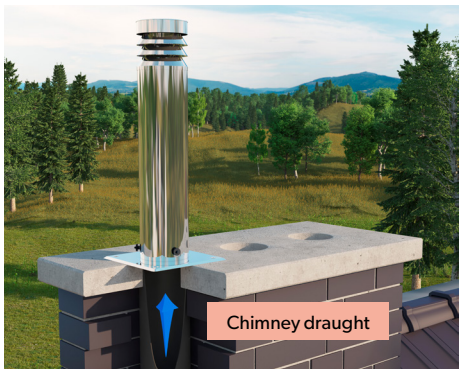


PNK x - CH

- material
- diameter
- sewer venting ring-type terminal

Diameter D	Dimensions [mm]				Cross section [cm²]	Weight CH
	A	B	D	H		
80	215	170	80	700	84	1.45
100	215	170	100	700	84	1.65
110	215	170	110	700	95	1.75
120	215	170	120	700	116	1.85
130	215	170	130	700	119	1.95
140	245	200	140	700	122	2.10
150	245	200	150	700	132	2.20
160	245	200	160	700	140	2.35
180	325	280	180	700	166	2.85
200	325	280	200	700	180	3.15

* other dimensions upon request



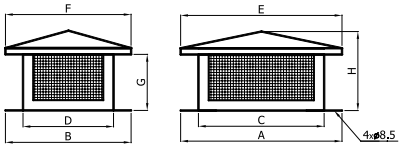
Destination	Ventilations ducts	
Material	CH	CH - chrome-nickel sheet 1.4301

8. ENVELOPE - TYPE CAP



DA K - CxD - a

- material
- base dimenssions
- envelope - type cap code
- cap



Example dimensions: DAK-CxD							
A	B	C	D	E	F	G	H
550	400	450	300	600	450	200	300

Product made upon order.



Destination	Ventilation ducts	
Material	CH	CH - chrome-nickel sheet 1.4301
	OC	OC - galvanised steel sheet
	MI	MI- copper sheet

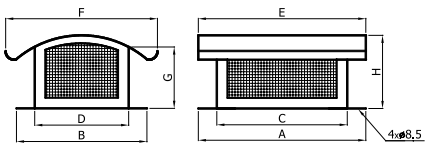
* in version MI- chrome-nickel mesh

9. SOMBRERO I - TYPE CAP



DA SI - CxD - a

- material
- base dimenssions
- Sombrero I - type cap code
- cap



Example dimensions: DAK-CxD							
A	B	C	D	E	F	G	H
550	400	450	300	600	450	200	300

Product made upon order.



Destination	Ventilation ducts	
Material	CH	CH - chrome-nickel sheet 1.4301
	OC	OC - galvanised steel sheet
	MI	MI- copper sheet

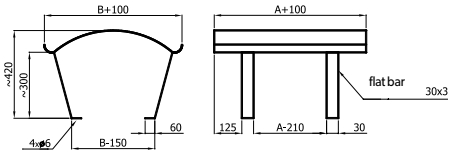
* in version MI- chrome-nickel mesh

10. SOMBRERO II - TYPE CAP



DA SII - AxB - a

- a — material
- AxB — chimney dimensions
- SII — Sombrero II - type cap code
- DA — cap



Product made upon order.



Destination	Ventilation ducts	
Material	CH	CH - chrome-nickel sheet 1.4301
	OC	OC - galvanised steel sheet
	MI	MI- copper sheet

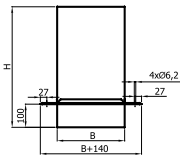
* in version MI- chrome-nickel mesh

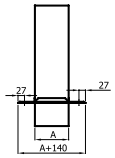
1. RECTANGULAR CHIMNEY EXTENSION



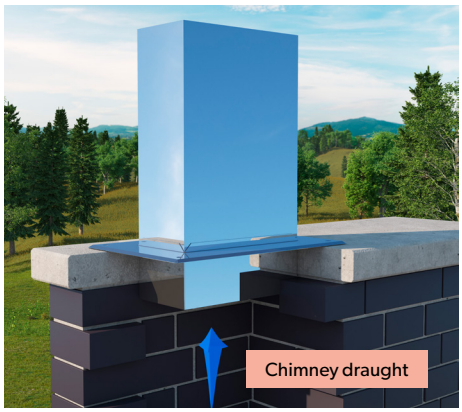
PKK AxB / H - a - s

- thickness
- material
- height H = 1000 (500 lub 250)
- dimensions
- rectangular chimney extension





NOTICE !
Product made upon order. Precise AxB, height H dimensions and kind of material should be given when ordering



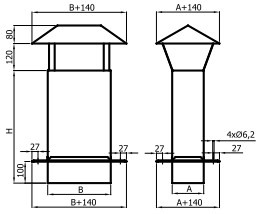
Destination	S	-	S - gas and oil exhaust ducts
	-	D	D - smoke ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	Z	Z - heat resistant sheet 1.4828
	*)	-	*) - chrome-nickel sheet 1.4404

2. RECTANGULAR CHIMNEY EXTENSION WITH CAP

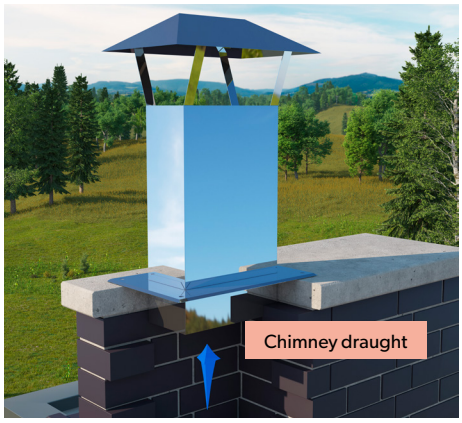


PKKD AxB / H - a - s

- thickness
- material
- height H = 1000 (500 lub 250)
- dimensions
- rectangular chimney extension with cap



NOTICE !
Product made upon order. Precise AxB, height H dimensions and kind of material should be given when ordering



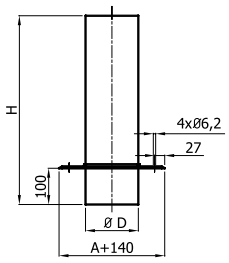
Destination	S	-	S - gas and oil exhaust ducts
	-	D	D - smoke ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	Z	Z - heat resistant sheet 1.4828
	*)	-	*) - chrome-nickel sheet 1.4404

3. ROUND CHIMNEY EXTENSION

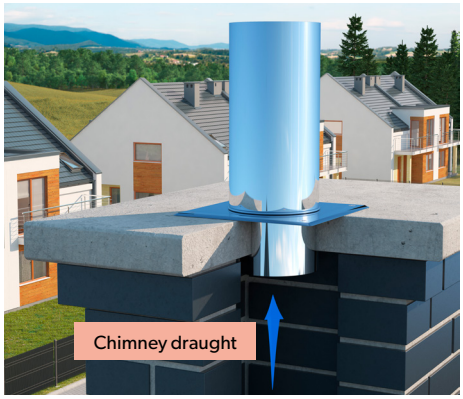


PKO D / H - a - s

- thickness
- material
- height H = 1000 (500 lub 250)
- diameter
- round chimney extension



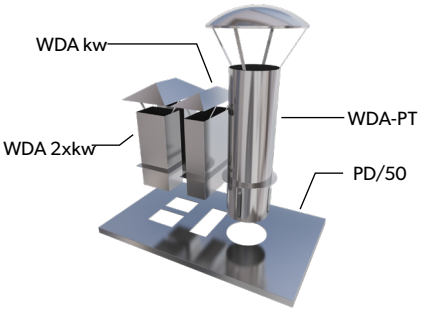
NOTICE !
Product made upon order. Precise AxB, height H dimensions and kind of material should be given when ordering



Destination	S	-	S - gas and oil exhaust ducts
	-	D	D - smoke ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	Z	Z - heat resistant sheet 1.4828
	*)	-	*) - chrome-nickel sheet 1.4404

invent. build. enjoy.

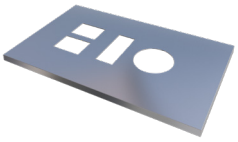
I. CHIMNEY COVER WITH CHIMNEY CAPS

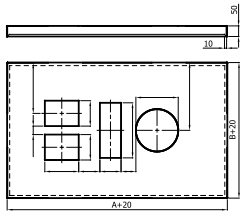


Symbol	Name
PD...x.../50-...	Chimney plate
WDA.../500...-...-PT	Round cap on force-in mounting base
WDA2xkw...x.../0.25-...	Double rectangular cap
WDAkw...x.../0.25-...	Single rectangular cap

Chimney cover with caps enables building up top of concrete chimneys with vertical ducts in a easy way. This type of covering protects ducts from rain and snow as well as assures aesthetical chimney top finishing.
The solution allows building up chimneys, which are made od prefabricated elements covered with a concrete cap. Elements of the set should be fixed to concrete cap with mounting elements like screws or silicone.

1. CHIMNEY PLATE PD/50





Notice!
Missing dimensions should be given when ordering or a separate hand made drawing should be send.
Product avaliable on customer's request.

(----) actual outer dimensions of a chimney plate AxB

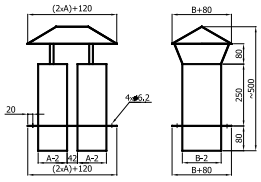
PD AxB / 50 - m - s

- thickness
- material
- plate height
- dimensions
- chimney plate

Destination	Flashing		
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

2. DOUBLE RECTANGULAR CAP WDA 2xKW/0,25





Notice!
Missing dimensions should be given when ordering or a separate hand made drawing should be send.

Product avaliable on customer's request

WDA2xkw AxB / 0,25 - m s

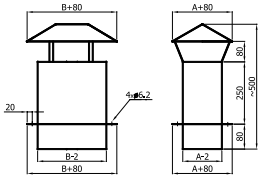
- thickness
- material
- height
- dimensions
- double rectangular cap

Destination	Chimney outlet cover		
Material	CH	-	CH - chrome-nickel sheet 1.4301≠0.6
	-	OC	OC - galvanised steel sheet ≠0.5

A	B
120	160

3. SINGLE RECTANGULAR CAP WDA KW/0,25





Notice!
Missing dimensions should be given when ordering or a separate hand made drawing should be send.

Product avaliable on customer's request

WDA kw AxB / 0,25 - m s

- thickness
- material
- height
- dimensions
- single rectangular cap

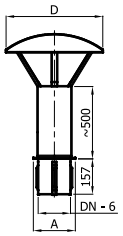
Destination	Chimney outlet cover		
Material	CH	-	CH - chrome-nickel sheet 1.4301≠0.6
	-	OC	OC - galvanised steel sheet ≠0.5

A	B
100	70

invent. build. enjoy.

4. ROUND CAP ON FORCE-IN MOUNTING BASE WDA/500-PT





DN	140	160	180	200	225	250
A	177	197	217	237	257	287
D	290	290	290	350	370	400

Attention! For fi>200 cone type cap

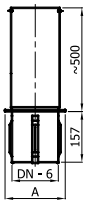
WDA x / 500 m - s - PT

- force-in mounting
- thickness
- material
- height
- DN diameter
- round cap

Destination	-	S	S - exhaust ducts (gas and oil)
	D	-	D - smoke ducts
Material	Z	-	Z - heat-resistant sheet 1.4828÷0.8
	-	CH	CH - chrome-nickel sheet 1.4301÷0.8

5. PIPE WITH FORCE-IN MOUNTING BASE - DISMOUNTABLE PRT/500-R





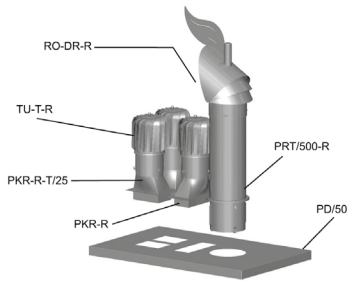
DN	140	160	180	200	225	250
A	177	197	217	237	257	287

PRT x / 500 m - s - R

- dismountable base
- thickness
- material
- height
- DN diameter
- force-in mounting

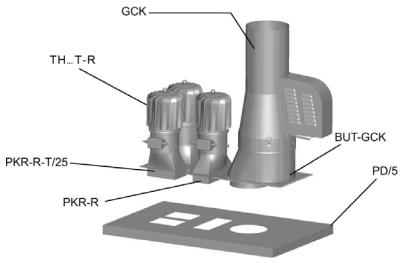
Destination	-	S	S - exhaust ducts (gas and oil)
	D	-	D - smoke ducts
Material	Z	-	Z - heat-resistant sheet 1.4828÷0.8
	-	CH	CH - chrome-nickel sheet 1.4301

II. SET WITH CHIMNEY COWLS



Symbol	Name
PD...x.../50-...	Chimney plate
PRT.../500...-...-R	Pipe with force in mounting base-dismountable
RO200CH-DR-R	Rotowent Dragon on dismountable base
TU.....-T-R	Turbowent Tulipan on dismountable base
PKR...x.../150...-R	Chimney base reduced
PKR...x.../150...-R-T/25	Chimney base reduced T/25

III. SET WITH HYBRID CHIMNEY COWLS



Symbol	Name
PD...x.../50-...	Chimney plate
BUT.../...-CH-GCK	Adaptor BUT GCK
GCK...-B-K	Chimney draught generator on base with inslulation closing
TH...T-R	Hybrid Turbowent Tulipan on dismountable base
PKR...x.../150...-R	Chimney base reduced
PKR...x.../150...-R-T/25	Chimney base reduced T/25

Destination

- Protects the concrete chimney top from destructive influence of atmospheric factors.
- Chimney cowls protect outlets from downwind and increase chimney draught.

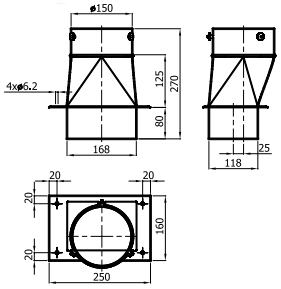
Chimney cover with cowls enables building up top of concrete chim- neys with vertical ducts in an easy way. This type of covering protects ducts from rain and snow as well as assures aesthetical chimney top finishing.

Notice! Make sure arrangement of cowls will allow their collision-free (rotating) operation.

Solution allows building up chimneys, which are made of prefabricated elements covered with a concrete cap. Elements of the set should be fixed to concrete cap with mounting elements like screws or silicone.

1. CHIMNEY BASE REDUCED T/25





* other dimensions available upon request

Notice!
When ordering please check the dimensions of chimney ducts so the arrangement of cowls will allow their collision-free (rotating) operation

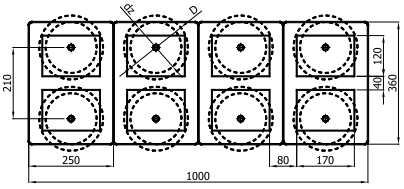
Destination	TU	TU	TU - Turbowent base
Material	CH	-	CH - chrome-nickel sheet 1.4301 ≠0.8
	-	OC	OC - galvanised steel sheet

PKR 120x170 / 150 m - R - T/25

- version T/25
- openable version
- material
- diameter DN
- dimension of chimney duct
- chimney base reduced

Example of Turbowent Tulipan chimney cowls mounted on brick chimney (duct size 120x170) in configuration as shown on drawing :



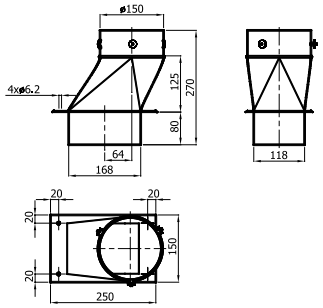


Diameter D	Diameter dz
188	150

dz - Tulipan base diameter
D - Tulipan turbine rotation diameter

2. CHIMNEY BASE REDUCED T/64





* other dimensions available upon request

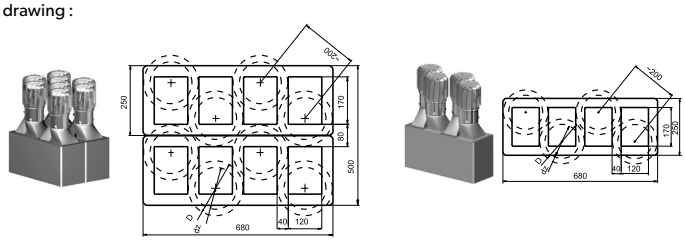
Notice!
When ordering please check the dimensions of chimney ducts so the arrangement of cowls will allow their collision-free (rotating) operation

Destination	TU	TU	TU - Turbowent base
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PKR 120x170 / 150 m - R - T/64

- version T/64
- dismountable version
- material
- diameter DN
- dimension of chimney duct
- chimney base reduced

Example of Turbowent Tulipan chimney cowls mounted on brick chimney (duct size 120x170) in configuration as shown on drawing :

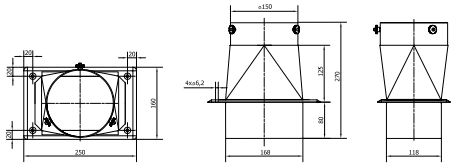


Diameter D	Diameter dz
188	150

dz - Tulipan base diameter
D - Tulipan turbine rotation diameter

3. CHIMNEY BASE REDUCED T/0





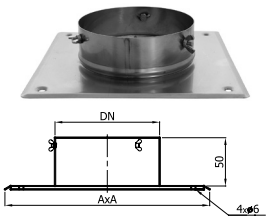
Destination	TU	TU	TU - Turbowent base
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PKR 120x170 / 150 m - R - T/0

- version T/0
- dismountable version
- material
- diameter DN
- dimension of chimney duct
- chimney base reduced

invent. build. enjoy.

4. DISMOUNTABLE CHIMNEY BASE PK-R



Diameter DN	ø150	ø200	ø250	ø300	ø350	ø400
AxA	250x250	330x330	380x380	430x430	500x500	600x600

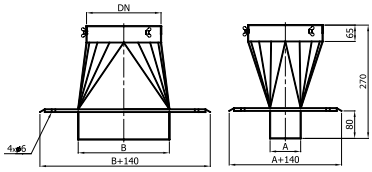
PK x m - R - N

- N – cowl type
- R – dismountable version
- m – material
- x – diameter DN
- PK – chimney base

Destination	TU	TU	TU - Turbowent base
	RO	RO	RO - Rotowent base
	S	-	S - exhaust ducts (gas and oil)
	-	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

5. DISMOUNTABLE CHIMNEY BASE PKR-R





Diameter DN	ø150	ø200	ø250	ø250	ø300
A	140	140	140	200	270
B	140	270	350	200	270

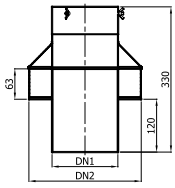
PKR AxB / x m - R - N

- N – cowl type
- R – dismountable version
- m – material
- x – diameter DN
- AxB – chimney duct dimensions
- PKR – chimney base reduced

Destination	TU	TU	TU	TU - Turbowent base
	RO	RO	RO	RO - Rotowent base
	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301≠0.8
	-	OC	-	OC - galvanised steel sheet ≠0.7
	-	-	Z	Z - heat resistand sheet 1.4828≠0.8

6. PIPE WITH INSULATION CLOSING- DISMOUNTABLE KNKD





Diameter DN1	ø150	ø200	ø250	ø300
Diameter DN2	ø250	ø300	ø350	ø400

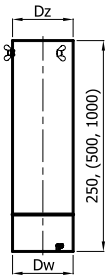
KNKD DN1 / DN2 m1 m2 - R - N

- N – cowl type
- R – dismountable
- m2 – outer pipe material
- m1 – inner pipe material
- DN2 – outer pipe diameter
- DN1 – inner pipe diameter
- KNKD – pipe with insulation closing

Destination	TU	TU	TU	TU - Turbowent base
	RO	RO	RO	RO - Rotowent base
	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301≠0.8
	-	OC	-	OC - galvanised steel sheet ≠0.7
	-	-	Z	Z - heat resistand sheet 1.4828≠0.8

7. LENGTHENING PIPE DISMOUNTABLE RP-PKR





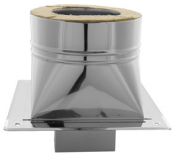
Diameter DN	ø150	ø200	ø250	ø300
Diameter Dw	150.5	200	250.3	300
Diameter Dz	150	199	249.3	299

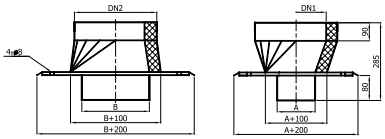
RP m DN / L m s - PKR - N

- N – cowl type
- m – marking for base
- s – material thickness
- m – material
- L – length
- DN – DN diameter
- m – marking for heat-resistance
- RP – lengthening pipe PKR

Destination	TU	TU	TU	TU - Turbowent base
	RO	RO	RO	RO - Rotowent base
	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301≠0.8
	-	OC	-	OC - galvanised steel sheet ≠0.7
	-	-	Z	Z - heat resistand sheet 1.4828≠0.8

8. INSULATED CHIMNEY BASE PDR-O





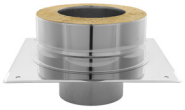
Diameter DN1	ø150	ø200	ø250	ø250	ø300
A	140	140	140	200	270
B	140	270	350	200	270

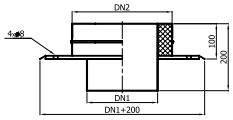
PDR AxB / DN1 / DN2 m1 m2 - O

- O - insulated
- m2 - outer pipe material
- m1 - inner pipe material
- DN2 - outer pipe diameter
- DN1 - inner pipe diameter
- AxB - duct dimennsions
- PDR - insulated chimney base

Destination	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301÷0.8
	-	OC	-	OC - galvanised steel sheet ÷0.7
	-	-	Z	Z - heat resistand sheet 1.4828÷0.8

9. INSULATED CHIMNEY BASE PDR-0





Diameter DN1	ø150	ø200	ø250	ø300
Diameter DN2	ø250	ø300	ø350	ø400

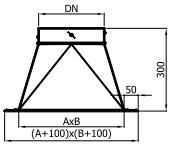
PDR DN1 / DN2 m1 m2 - O

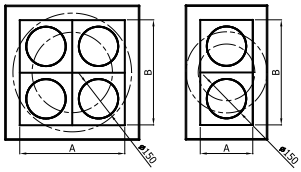
- O - insulated
- m2 - outer pipe material
- m1 - inner pipe material
- DN2 - outer pipe diameter
- DN1 - inner pipe diameter
- PDR - insulated chimney base

Destination	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301÷0.8
	-	OC	-	OC - galvanised steel sheet ÷0.7
	-	-	Z	Z - heat resistand sheet 1.4828÷0.8

10. MULTIPLE DUCT REDUCING BASE PZR-I-R





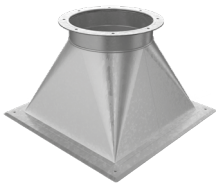


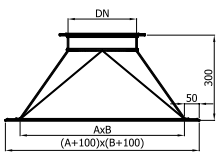
PZR-I AxB / DN - m - R

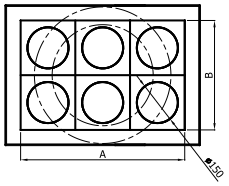
- R - dismountable
- m - material
- DN - diameter
- AxB - chimney duct dimensions
- PZR-I - multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

11. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-I-BIII







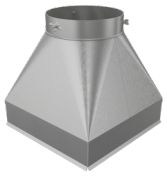
PZR-I AxB / DN - m - BIII

- BIII - version with collar
- m - material
- DN - diameter
- AxB - chimney duct dimensions
- PZR-I - reducing base with collar

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

invent. build. enjoy.

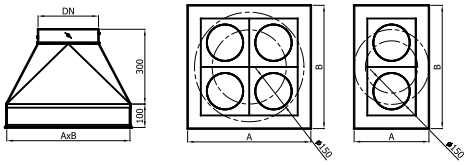
12. MULTIPLE DUCT REDUCING BASE PZR-II-R



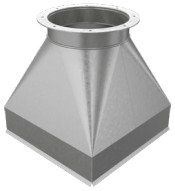
PZR-II AxB / DN - m - R

- dismountable
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet



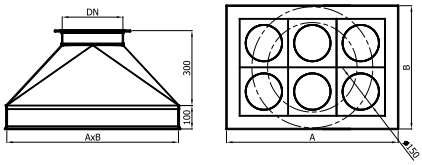
13. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-II-BIII



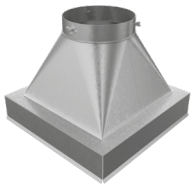
PZR-II AxB / DN - m - BIII

- version with collar
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet



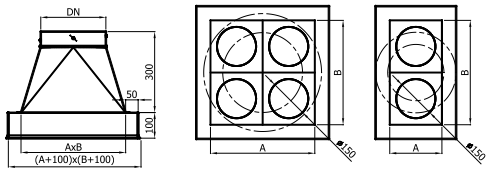
14. MULTIPLE DUCT REDUCING BASE PZR-III-R



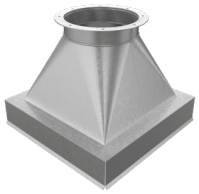
PZR-III AxB / DN - m - R

- dismountable
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet



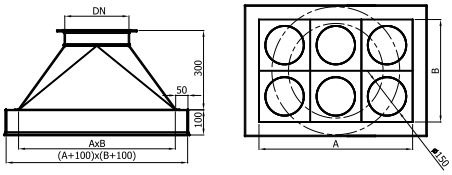
15. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-III-BIII



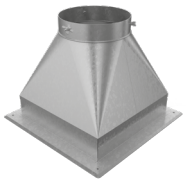
PZR-III AxB / DN - m - BIII

- version with collar
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet



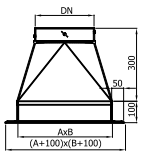
16. MULTIPLE DUCT REDUCING BASE PZR-IV-R

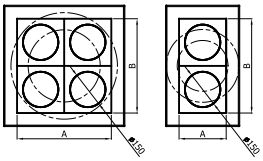


PZR-IV AxB / DN - m - R

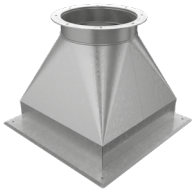
- dismountable
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet





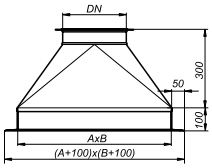
17. MULTIPLE DUCT REDUCING BASE WITH COLLAR PZR-IV-BIII

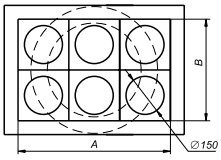


PZR-IV AxB / DN - m - BIII

- version with collar
- material
- diameter
- chimney duct dimensions
- multiple duct reducing base

Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet



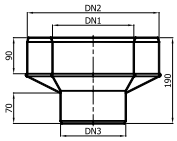


18. REDUCING ADAPTER ZTD-GCK TO DRAUGHT GENERATOR



Diameter DN	150/120	150/130	200/160	200/180
DN1	150	150	200	200
DN2	250	250	300	300
DN3	120	130	160	180

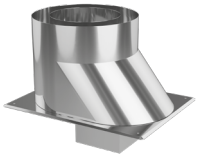
Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 ≠1.0



ZTD DN1 / DN3 CH - GCK

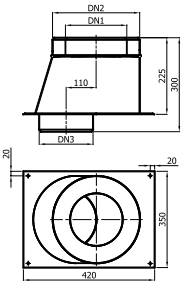
- cowl version
- material
- diameter DN3
- diameter DN1
- reducing adapter

19. REDUCING ADAPTER BUT-GCK TO DRAUGHT GENERATOR



DN1/DN2	150/250	150/250	150/250	200/300	200/300	200/300
DN3	120	140	160	180	200	225

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 ≠1.0



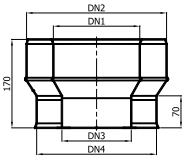
BUT DN1 / DN3 CH - GCK

- cowl version
- material
- diameter DN3
- diameter DN1
- reducing adapter BUT

invent. build. enjoy.

20. DOUBLE WALLED REDUCER RDD-GCK TO DRAUGHT GENERATOR





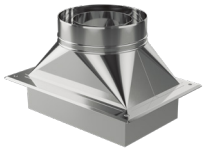
Diameter DN	150/120	150/130	200/160	200/180
DN1	150	150	200	200
DN2	250	250	300	300
DN3	120	130	160	180
DN4	225	225	150	280

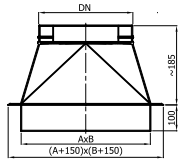
Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 ≠1.0

RDD DN1 / DN3 CH - GCK

- cowl version
- material
- diameter DN3
- diameter DN1
- double walled reducer

21. REDUCING BASE PKR-GCK TO DRAUGHT GENERATOR





Diameter DN	ø150	ø200	ø250	ø250	ø300
A	140	140	140	200	270
B	140	270	350	200	270

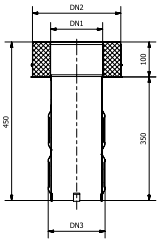
Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404

PKR AxB / DN m GCK

- cowl version
- material
- diameter
- duct dimensions
- reducing base

22. REDUCING ADAPTER PRT-GCK FOR DRAUGHT GENERATOR





Diameter DN	150/120	150/130	150/150	200/160	200/180	200/200
DN1	150	150	150	200	200	200
DN2	250	250	250	300	300	300
DN3	120	130	150	160	180	200

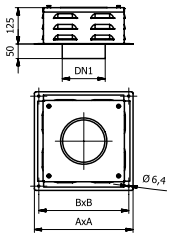
Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 ≠1.0

PRT DN1 / DN3 CH / 0,35-ZTD-GCK

- cowl version
- material
- diameter DN3
- diameter DN1
- reducing adapter

23. ADAPTER PRTD-CH-GCK FOR DRAUGHT GENERATOR





Diameter DN	150	180	200
DN1	150	180	200
A	340	400	400
B	310	370	370

Destination	S	-	S - exhaust ducts (gas and oil)
	-	D	D - smoke ducts
Material	CH	CH	CH - chrome-nickel sheet 1.4404 ≠1.0

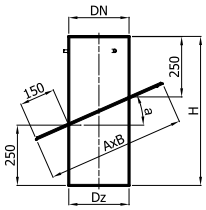
PRT DN1 / DN3 CH - GCK

- cowl version
- material
- diameter DN3
- diameter DN1
- adaptor for chimneys

invent. build. enjoy.

24. SINGLE SLOPE ROOF CHIMNEY BASE PRJ





Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	460	510	560	610
	B	450	500	550	600
	H	600	600	600	600
α 35	A	480	540	600	660
	B	450	500	550	600
	H	700	700	700	700
α 50	A	540	610	680	750
	B	450	500	550	600
	H	800	800	800	800

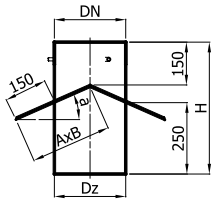
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PRJ x m - R / α

- α – precise angle α
- R – dismountable version
- m – material
- x – DN diameter
- PRJ – single slope roof chimney base

25. DOUBLE SLOPE ROOF CHIMNEY BASE PRD





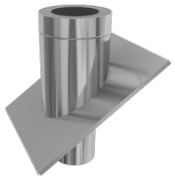
Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	230	255	280	305
	B	450	500	550	600
	H	500	500	500	500
α 35	A	240	270	300	330
	B	450	500	550	600
	H	500	500	500	500
α 50	A	270	305	370	350
	B	450	500	550	600
	H	500	500	500	500

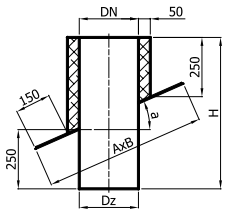
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PRD x m - R / α

- α – precise angle α
- R – dismountable version
- m – material
- x – DN diameter
- PRD – double slope roof chimney base

26. INSULATED SINGLE SLOPE ROOF CHIMNEY BASE PJD





Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	570	620	670	720
	B	550	600	650	700
	H	600	600	600	600
α 35	A	610	670	730	790
	B	550	600	650	700
	H	700	700	700	700
α 50	A	700	770	840	910
	B	550	600	650	700
	H	800	800	800	800

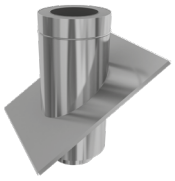
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

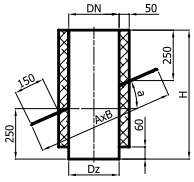
PJD x m1 m2 - O / α

- α – precise angle α
- O – insulated
- m2 – outer pipe material
- m1 – inner pipe material
- x – DN diameter
- PJD – insulated single slope roof chimney base

invent. build. enjoy.

27. INSULATED INTERMEDIATE SINGLE SLOPE ROOF CHIMNEY BASE PPD





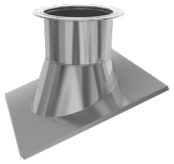
Diameter DN		150	200	250	300
Dz		149.1	198.8	249.7	299.0
α 20	A	570	620	670	720
	B	550	600	650	700
	H	600	600	600	600
α 35	A	610	670	730	790
	B	550	600	650	700
	H	700	700	700	700
α 50	A	700	770	840	910
	B	550	600	650	700
	H	800	800	800	800

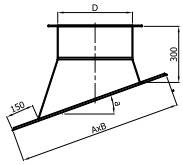
Destination	W	W	W - ventilation ducts
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

PPD x m1 m2 - O / α

- α — precise angle α
- O — insulated
- m2 — outer pipe material
- m1 — inner pipe material
- x — DN diameter
- PPD — insulated intermediate single slope roof chimney base

28. SINGLE SLOPE ROOF FLASHING PDKD-I-J





Diameter DN		150	200	250	300	400	500
α 20	A	580	640	700	760	870	990
	B	550	600	650	700	800	900
α 35	A	600	670	740	805	940	1060
	B	550	600	650	700	800	900
α 50	A	700	800	890	990	1170	1350
	B	550	600	650	700	800	900

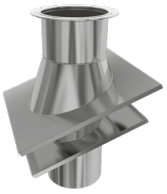
Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

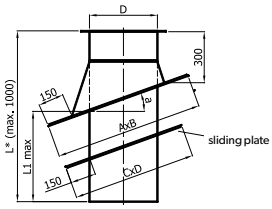
Notice! Precise angle must be given at order placing

PDKD-I-J x - m / α

- α — angle
- m — material
- x — diameter
- PDKD-I-J — single slope roof flashing

29. SINGLE SLOPE ROOF FLASHING PDKD-II-J





Diameter DN		150	200	250	300	400	500
α 20	AxB	580x550	640x600	700x650	760x700	870x800	990x900
	CxD	460x450	510x500	570x550	620x600	725x700	835x800
	L1max	625	605	585	570	530	515
α 35	AxB	600x550	670x600	740x650	805x700	940x800	1060x900
	CxD	490x450	550x500	610x550	670x600	790x700	910x800
	L1max	560	525	490	455	382	350
α 50	AxB	700x550	800x600	890x650	990x700	1170x800	1350x900
	CxD	540x450	610x500	690x550	770x600	880x700	1075x800
	L1max	460	400	345	285	164	105

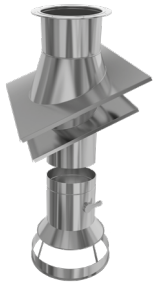
Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

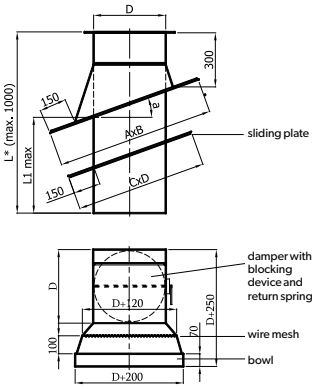
Notice! Precise angle must be given at order placing

PDKD-II-J x - m / α

- α — angle
- m — material
- x — diameter
- PDKD-II-J — single slope roof flashing

30. SINGLE SLOPE ROOF FLASHING PDKD-III-J





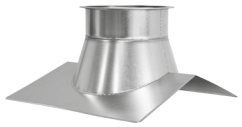
Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

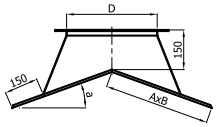
Notice! Precise angle must be given at order placing

PDKD-III-J x - m / α

- α — angle
- m — material
- x — diameter
- PDKD-III-J — single slope roof flashing

31. DOUBLE SLOPE ROOF FLASHING PDKD-I-D





Diameter DN		150	200	250	300	400	500
α 20	A	315	350	380	410	470	535
	B	550	600	650	700	800	900
α 35	A	305	340	375	415	485	555
	B	550	600	650	700	800	900
α 50	A	375	430	480	540	630	750
	B	550	600	650	700	800	900

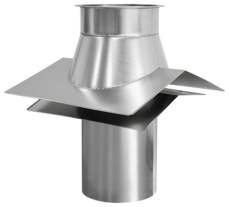
Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

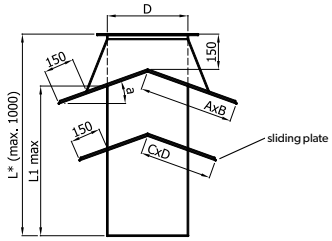
Notice! Precise angle must be given at order placing

PDKD-I-D x - m / α

- α — angle
- m — material
- x — diameter
- PDKD-I-D — double slope roof flashing

32. DOUBLE SLOPE ROOF FLASHING PDKD-II-D





Diameter DN		150	200	250	300	400	500
α 20	AxB	315x550	350x600	380x650	410x700	470x800	535x900
	CxD	230x450	255x500	280x550	310x600	360x700	425x800
	L1max	790	780	770	760	740	725
α 35	AxB	305x550	340x600	375x650	415x700	485x800	555x900
	CxD	235x450	265x500	295x550	330x600	390x700	450x800
	L1max	765	745	730	710	670	640
α 50	AxB	375x550	430x600	480x650	540x700	630x800	750x900
	CxD	255x450	295x500	335x550	370x600	450x700	525x800
	L1max	725	695	665	635	570	515

Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

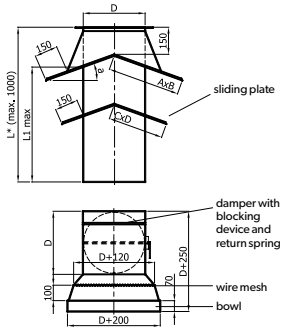
Notice! Precise angle must be given at order placing

PDKD-II-D x - m / α

- α — angle
- m — material
- x — diameter
- PDKD-II-D — double slope roof flashing

33. DOUBLE SLOPE ROOF FLASHING PDKD-III-D





Destination	P	P	P - industrial processes
Material	CH	-	CH - chrome-nickel sheet 1.4301
	-	OC	OC - galvanised steel sheet

Notice! Precise angle must be given at order placing

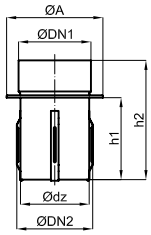
PDKD-III-D x - m / α

- α — angle
- m — material
- x — diameter
- PDKD-III-D — double slope roof flashing

invent. build. enjoy.

34. FORCE-IN MOUNTING BASE





Diameter DN1	Diameter DN2	dz	h1	h2	A
150	150	144.0	157	244	187
200	200	194.0	167	254	237
250	250	244.0	177	260	287
300	300	294.0	177	244	337

* other diameters upon request

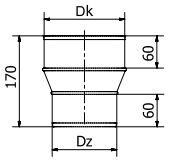
PRT DN1 / DN2 m N

- N — cowl type
- m — material
- DN2 — DN2 diameter
- DN1 — DN1 diameter
- PRT — force-in mounting base

Destination	TU	TU	TU	TU - Turbowent base
	RO	RO	RO	RO - Rotowent base
	S	-	-	S - exhaust ducts (gas and oil)
	-	W	-	W - ventilation ducts
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - chrome-nickel sheet 1.4301≠0.8
	-	OC	-	OC - galvanised steel sheet ≠0.7
	-	-	Z	Z - heat resistand sheet 1.4828≠0.8

35. INLET PIPE REDUCED RD





DN	150				
Dz	100	110	120	130	140
Dk	152.8				

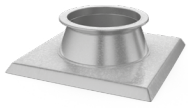
WN-RD +DN / -Dz - m N

- N — cowl type
- m — material
- Dz — Dz diameter
- DN — DN diameter
- WN-RD — inlet pipe reduced

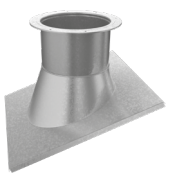
Destination	TU	TU - Turbowent base
	W	W - ventilation ducts
Material	OC	OC - galvanised steel sheet ≠0.7
	X6	X6 - chrome-nickel sheet 1.4301 ≠0.6

Base roof types:

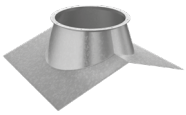
POD-BI-OC



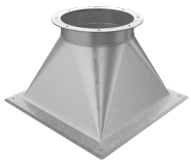
PDKD-I-J



PDKD-I-D



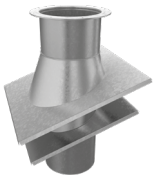
PZR-I



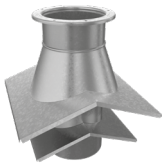
POD-BII-OC



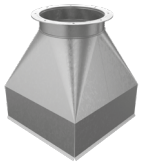
PDKD-II-J



PDKD-II-D



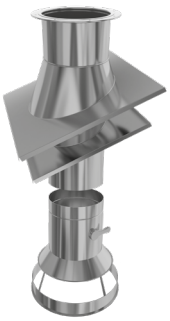
PZR-II



POD-BIII-OC



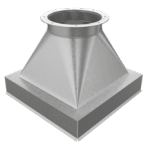
PDKD-III-J



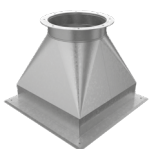
PDKD-III-D



PZR-III



PZR-IV



Electronic motor speed controllers ERO

N°	Name	Picture	Mounting	Compatible with
			AUTOMATIC CONTROLLERS	
1	Electronic motor speed controller ERO-32AP-0		Under surface	Hot Air Ventilators*: · AN1-II · AN2-II · AN3-II · ANeco1-II · ANeco2-II · ANeco3-II Draught Generators: · GCKV150 · GCKV200 Hybrid Turbowents: · TH150-T · TH150 · TH200 · THP200 · THP250 · THP300 · THP350 · THP400 · THP500
			MANUAL CONTROLLERS	
2	Electronic motor speed controller ERO-31MW-...		Mounted in the cowl	ERO-31MW-1 — Hybrid Turbowents: TH150-T, TH150, TH200 ERO-31MW-2 — Hybrid Turbowents: THP200, THP250, THP300, THP350 ERO-31MW-3 — Hybrid Turbowents: THP400, THP500
3	Electronic motor speed controller ERO-32MN-1		On surface and under surface	Hot Air Ventilators*: · AN1-II · AN2-II · AN3-II · ANeco1-II · ANeco2-II · ANeco3-II Draught Generators: · GCKV150 · GCKV200 Hybrid Turbowents: · TH150-T · TH150 · TH200 · THP200 · THP250 · THP300 · THP350 · THP400 · THP500
4	Electronic motor speed controller ERO-32MN-2		On surface and under surface	
5	Electronic motor speed controller ERO-32MS-0		On TS-35 rail	
			WIFI CONTROLLERS	
6	Electronic motor speed controller ERO-32WS-0		On TS-35 rail	Hot Air Ventilators*: · AN1-II · AN2-II · AN3-II · ANeco1-II · ANeco2-II · ANeco3-II Draught Generators: · GCKV150 · GCKV200 Hybrid Turbowents: · TH150-T · TH150 · TH200 · THP200 · THP250 · THP300 · THP350 · THP400 · THP500 The controller cooperates with smart building system elements offered by BleBox.
7	Electronic motor speed controller ERO-98SW-0		In the connector of the controlled device	Hot Air Ventilators*: · AN1-II · AN2-II · AN3-II · ANeco1-II · ANeco2-II · ANeco3-II Draught Generators: · GCKV150 · GCKV200

* Hot Air Ventilators II generation

1. ELECTRONIC MOTOR SPEED CONTROLLER ERO-32AP-0



ERO-32 A P - 0

- 0 — producer's internal number
- P — under surface
- A — automatic
- ERO-32 — electronic motor speed controller

Automatic motor speed controller can operate in following modes:

- Sensor mode: in which motor speed of the controlled device depends on temperature detected by the PT1000 thermal probe (the probe is an external element, that may be placed e.g. in the fireplace hood).
- Fixed mode: in which motor speed of the device remains constant.
- Zonal mode: in which motor speed of the controlled device depends on time zones defined by the user. Individual zones can be adjusted on a weekly basis, divided into: working days, Saturdays and Sundays. Four independent time zones can be set for each day.
- Fixed sensor mode: similar to fixed mode with the difference that controlled device is switched on/off basing on the status of the bistable sensor (measuring given physical parameter).
- Zonal sensor mode: similar to zonal mode with the difference that controlled device is switched on/off basing on the status of the bistable sensor (measuring given physical parameter).

Controllers are equipped with two line alphanumeric display, allowing user to modify the parameters in convenient way.

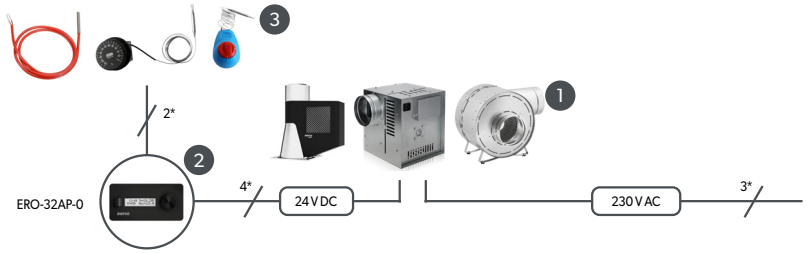
Product code	Mounting	Voltage [V DC]	Nominal power* [W]	Max current [mA]
ERO-32AP-0	under surface	20 - 24	0.6	40

* power consumption in stand by mode: 0.3 [W]

Usage:
Hot Air Ventilators AN-II, ANeco-II, Hybrid Turbowents, Draught Generators GCKV

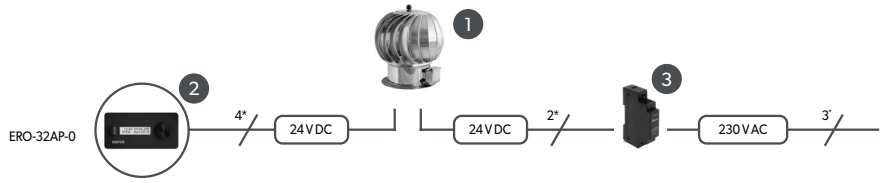
invent. build. enjoy.

Connecting diagram for hot air ventilators AN-II, ANeco-II and Draught Generator GCKV



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II, Draught Generator GCKV
2	Electronic motor speed controller ERO-32AP-0
3	Sensor (as option)
*	number of wires in the cable

Connecting diagram for Hybrid Turbowents ø150-500



N°	Name
1	Hybrid Turbowent ø150-500
2	Electronic motor speed controller ERO-32AP-0
3	Electronic power supply
*	number of wires in the cable

2. ELECTRONIC MOTOR SPEED CONTROLLERS



ERO-32MN-1-...*



ERO-32MN-2-...*



ERO-31MW-...



ERO-32MS-0



ERO-98SW-0

Manual motor speed controllers maintain constant motor speed set by the user. Their status is signalled with a bicolour diode (LED lighting), which may inform i.e. about:

- type of controlled device,
- correct or incorrect rotation speed of the controlled device,
- damage to the controlled device or to the controller itself.

Type of controlled device is to be selected with the usage of two code switches installed on back side of the controller.

Product code	Mounting version	Voltage [V DC]	Nominal power [W]	Max current [mA]	Color
ERO-32MN-1-...	on surface and under surface*	20 - 24	0.6	40	black / white
ERO-32MN-2-...	on surface and under surface*	20 - 24	0.6	40	black / white
ERO-31MW-...	in the cowl steering box	20 - 24	0.3	30	-
ERO-32MS-0	on TS-35 rail	20 - 24	0.3	30	-
ERO-98SW-0**	in the controlled device	20 - 24	0,1	2	-

*) Controllers delivered for on-surface mounting, dismounting the rear cover enables under surface mounting

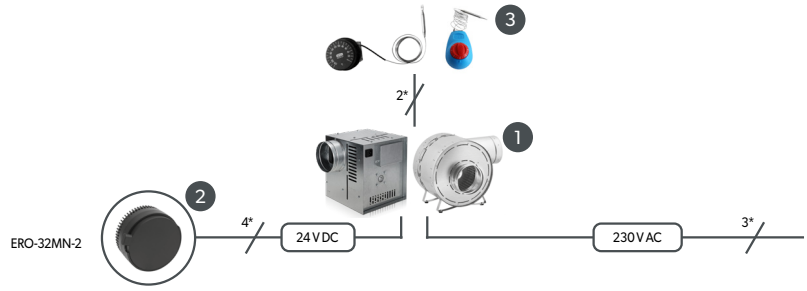
Usage:
Hot Air Ventilators AN-II, ANeco-II, Hybrid Turbowents, Draught Generators GCKV
**) is used as a maximum speed transmitter only for device types AN-II, ANeco-II and GCKV

ERO-...M...- x -...*

- color for ERO-32MN (**B**-white, **CZ**-black)
- producer's internal number
- mounting version (**P**-under surface / **N**-surface / **S**-on TS-35 rail / **W**-in the cowl steering box)
- manual
- usage (**31**-THø150-200, THP / **32**-ANeco, GCKV, TH, THP)
- electronic motor speed controller

*) for ex. ERO-32MN-1-B, ERO-32MN-2 -CZ, for other regulators there is no color option for ex. ERO-31MW-0

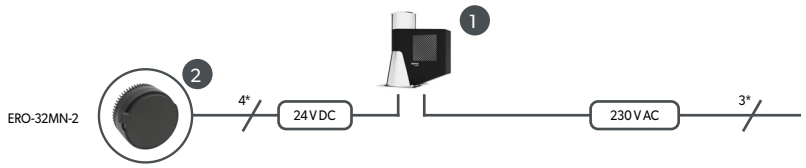
Connecting diagram for hot air ventilators AN-II, ANeco-II



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Sensor (as option)
*	number of wires in the cable

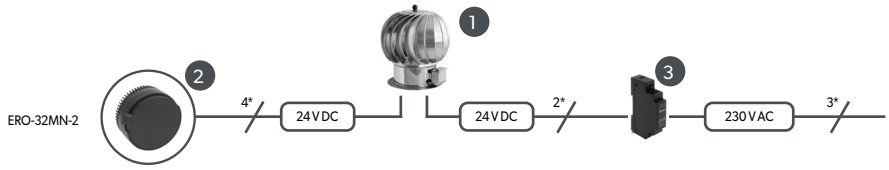
invent. build. enjoy.

Connecting diagram for Draught Generators GCKV



N°	Name
1	Draught Generator GCKV
2	Electronic motor speed controller
*	number of wires in the cable

Connecting diagram for Hybrid Turbowents ø150-500



N°	Name
1	Hybrid Turbowent ø150÷500
2	Electronic motor speed controller
3	Electronic power supply
*	number of wires in the cable

3. ELECTRONIC MOTOR SPEED CONTROLLER ERO-32WS-0



These type of motor speed controllers are equipped with Wi-Fi module. They can operate in two modes:

- Fixed mode: in which motor speed of the controlled device remains constant.
- Zonal mode: in which motor speed of the controlled device depends on time schedule defined by the user.

Controllers may be operated with the usage of a special application (BleBox) available for mobile phones and tablets (Android, iOS).

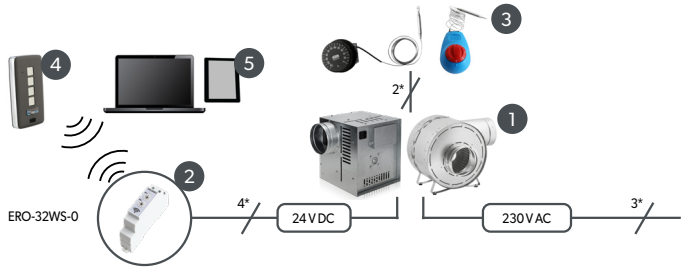
ERO-32 W S - 0

- producer's internal number
- mounting version (on TS-35 rail)
- Wi-Fi
- electronic motor speed controller

Product code	Mounting	Voltage [V DC]	Nominal power [W]	Max current [mA]	Transmission [GHz]
ERO-32WS-0	on TS-35 rail	20 - 24	1	50	2.4

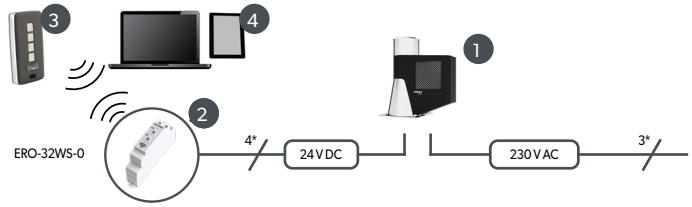
Usage:
Hot Air Ventilators AN-II, ANeco-II, Hybrid Turbowents, Draught Generators GCKV

Connecting diagram for hot air ventilators AN-II, ANeco-II



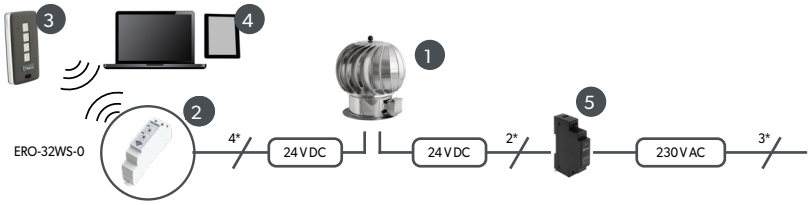
N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Sensor (as option)
4	Remote control (as option)
5	Laptop/tablet/smart phone
*	number of wires in the cable

Connecting diagram for Draught Generators GCKV



N°	Name
1	Draught Generator GCKV
2	Electronic motor speed controller
3	Remote control (as option)
4	Laptop/tablet/smart phone
*	number of wires in the cable

Connecting diagram for Hybrid Turbowents ø150-500



N°	Name
1	Hybrid Turbowent ø150÷500
2	Electronic motor speed controller
3	Remote control (as option)
4	Laptop/tablet/smart phone
5	Electronic power supply
*	number of wires in the cable

invent. build. enjoy.

Other electronic motor speed controllers

N°	Name	Picture	Mounting	Compatible with
			AUTOMATIC CONTROLLERS	
1	Automatic motor speed controller ARO		Under surface	Hot Air Ventilators: · AN1 · AN2 · AN3
			MANUAL CONTROLLERS	
2	Motor speed controller RO-DSS2		On surface	Hot Air Ventilators: · AN1 · AN2 · AN3 Draught Generators: · GCK150 · GCK200
3	Motor speed controller RO-N		On surface	
4	Motor speed controller RO-P		Under surface	
5	Motor speed controller RO-200		Under surface	

1. AUTOMATIC MOTOR SPEED CONTROLLER ARO



ARO

automatic motor speed controller

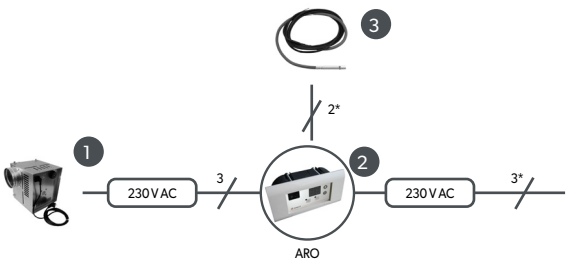
Product code	Mounting	Voltage [V / Hz]	Maximal load [W]
ARO	under surface	230 / 50	300

Automatic motor speed controllers enable operation in following modes:

- Manual mode: in which motor speed of the controlled device is constant - user may set one of ten different speed values.
- Automatic mode: in which motor speed of the controlled device depends on temperature detected by the analogue KTY84 thermal probe (an external element, included in the set), which may be placed f.e. in the fireplace hood.

Usage: Hot Air Ventilators.

Connecting diagram for hot air ventilators



2. MOTOR SPEED CONTROLLER RO-DSS2



RO-DSS2

RO-DSS2 manual motor speed controller is a digital controller, using IGBT transistors eliminating the so-called motor "buzzing" effect - that can appear with the standard, thyristor-based regulators. Motor speed of the controlled device can be changed using keyboard on the front panel. Front part is also equipped with an array of LED diodes, informing about current setting.

RO-DSS2
- motor speed controller, on surface version

3. MOTOR SPEED CONTROLLERS RO



RO-N



RO-P

RO-N / RO-P digital manual speed controllers are used for precise adjustment of rotating speed of single-phase motors (having 10 possible speed settings).

RO- x
- mounting [**N** - on surface, **P** - under surface]
- motor speed controller

4. MOTOR SPEED CONTROLLER RO-200



RO-200

RO-200 analogue manual motor speed controller is used for precise adjustment of rotating speed of single-phase motors.

RO-200
- motor speed controller, under surface version

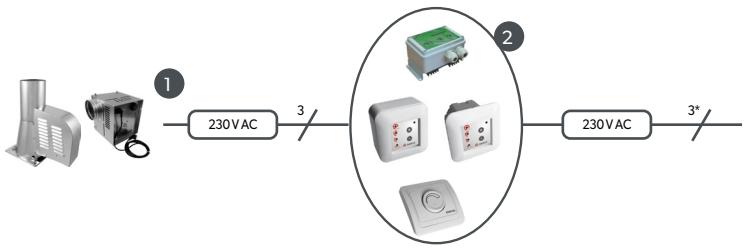
Product code	Mounting	Voltage [V / Hz]	Maximal load [W]
RO-DSS2	on surface	230 / 50	350
RO-N	on surface	230 / 50	400
RO-P	under surface	230 / 50	400
RO-200	under surface	230 / 50	200

Usage:

Hot Air Ventilators:
- AN1,
- AN2,
- AN3.

Draught Generators:
- GCK150,
- GCK200.

Connecting diagram for hot air ventilators AN and Draught Generators GCK



N°	Name
1	Hot Air Ventilator AN, Draught Generator GCK
2	Motor speed controller
*	number of wires in the cable

invent. build. enjoy.

N°	Name	Picture	Usage
		SENSORS	
1	Thermal probe PT1000		Sensor with analogue output: · ERO-32AP-0
2	Thermostat TERMO		Switching the steering devices on and off: · Hot Air Ventilators AN · Hot Air Ventilators AN-II · Hot Air Ventilators ANeco-II Sensor with digital (bistable) output: · ERO-32AP-0
3	Thermostat TERMO-ARTH097		
4	Thermostat ETT-MN-0		Switching on and off the following units: · Hot Air Ventilators AN-II · Hot Air Ventilators ANeco-II Sensor with digital (bistable) output for controllers: · ERO-32AP-0
5	Surface-mounted box ETT-PUSZKA		For installation of thermostat TERMO
		REMOTE CONTROL FOR MOTOR SPEED CONTROLLERS	
6	Remote control PRO		Remote control for motor speed controllers: · ERO-32WS-0 The remote control cooperates with smart building system elements offered by BleBox.
		ELECTRONIC CONTROL CABINET	
7	Electronic control cabinet ESR-03W-0 ESR-04W-0 ESR-06W-0 ESR-08W-0 ESR-12W-0 ESR-24W-0 ESR-36W-0 ESR-54W-0 ESR-72W-0		Modular cabinets for motor speed controllers: · ERO-32MS-0 · ERO-32WS-0

1. THERMAL PROBE PT1000



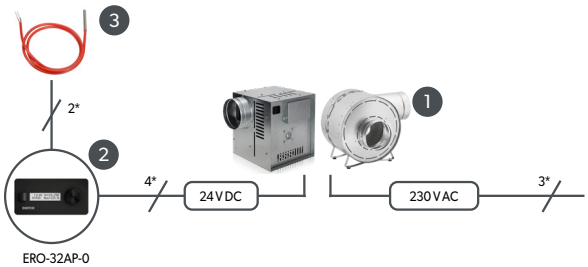
PT1000 is a thermal probe designed for temperature measurement of hot air inside the fireplace hood.

Usage:
Probe with analogue output, compatible with following controllers:
- ERO-32-AP-0

Product code	Range of temperature measured [°C]	Cable length [m]
PT1000	-40 ÷ 200	1.5

PT1000
└ temperature probe

Connecting diagram for motor speed controllers ERO-32AP-0



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Thermal probe PT1000
*	number of wires in the cable

invent. build. enjoy.

2. THERMOSTAT TERMO, TERMO-ARTH097, ETT-MN-0



TERMO



TERMO-ARTH097



ETT-MN-0

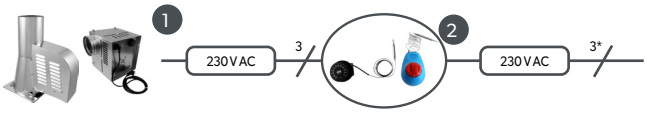
Thermostats are sensors used to switch the controlled devices on and off according to temperature set by the user. They may also be used as sensors with digital output, that may be connected with ERO-32AP-0 type controllers (operating modes: fixed sensor mode, zonal sensor mode).

Usage:
Switching controlled devices on and off:
- Hot air ventilators AN, AN-II, ANeco-II
- Draught Generator GCK

Thermostat with digital (bistable) output for controllers:
- ERO-32AP-0

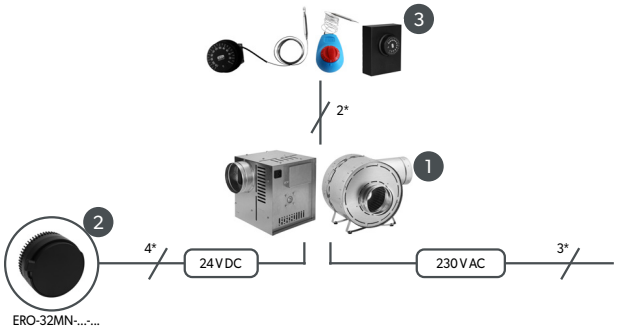
Product code	Adjustment range [°C]	Capillary length [m]
TERMO	0 ÷ 220	1.5
TERMO-ARTH097	0 ÷ 90	
ETT-MN-0	0 ÷ 220	

Connecting diagram for Hot Air Ventilator AN and Draught Generator GCK



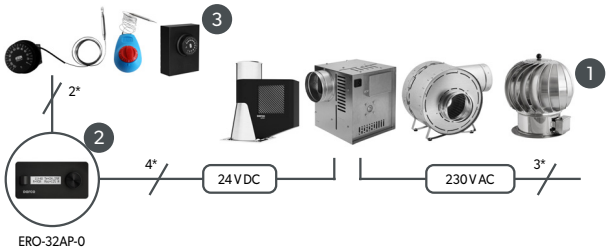
N°	Name
1	Hot Air Ventilator AN, Draught Generator GCK
2	Thermostat
*	number of wires in the cable

Connecting diagram for Hot Air Ventilator AN-II, ANeco-II



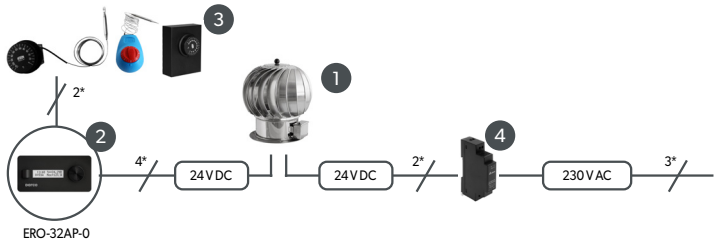
N°	Name
1	Hot Air Ventilator AN-II, ANeco-II
2	Electronic motor speed controller
3	Thermostat
*	number of wires in the cable

Connecting diagram for Hot Air Ventilator AN-II, ANeco-II, Draught Generator GCKV, Hybrid Turbowent ø400÷500



N°	Name
1	Hot Air Ventilator AN-II, ANeco-II, Draught Generator GCKV, Hybrid Turbowent ø400÷500
2	Electronic motor speed controller
3	Thermostat
*	number of wires in the cable

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic motor speed controller
3	Thermostat
4	Electronic power supply
*	number of wires in the cable

invent. build. enjoy.

3. PRO REMOTE CONTROL



PRO-type remote controls are intended to replace mobile phone, tablet or PC computer in communication with the ERO-32WS-0 controller. It allows to increase and decrease rotating speed of the controlled device in a simple way. Also various different functions may be assigned to remote control buttons, i.e.:

- Incremental increase of rotating speed
- Setting a fixed value of rotating speed
- Switching the controlled device on and off

Usage:

Remote control for controllers

- ERO-32WS-0

PRO - ...

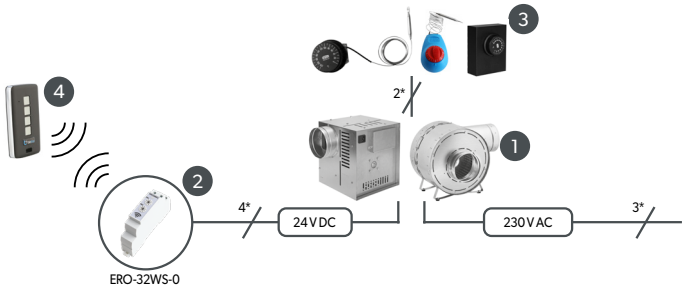
color (**B**- white, **C**- black)

WiFi remote control

Product code	Transmission [GHz]	Power supply	Charging
PRO	2.4	lithium polymer battery	standard micro USB charger

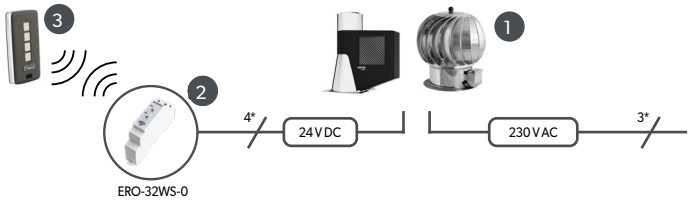
Remote control is compatible with smart building solutions offered by the company BleBox.

Connecting diagram for Hot Air Ventilators AN-II, ANeco-II



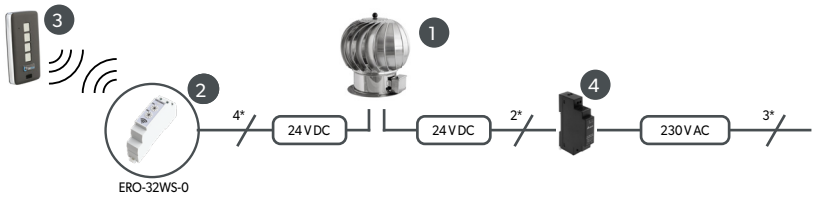
N°	Name
1	Hot Air Ventilators AN-II, ANeco-II
2	Electronic motor speed controller WiFi
3	Sensor (as option)
4	Remote control (as option)
5	wBox steering application
*	number of wires in the cable

Connecting diagram for Draught Generator GCKV and Hybrid Turbowent ø400÷500



N°	Name
1	Draught Generator GCKV, Hybrid Turbowent ø400÷500
2	Electronic motor speed controller WiFi
3	Remote control (as option)
4	wBox steering application
*	number of wires in the cable

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic motor speed controller WiFi
3	Remote control (as option)
4	Electronic power supply
5	wBox steering application
*	number of wires in the cable

4. ELECTRONIC CONTROL CABINET ESR W-O



Modular control cabinets are used to gather larger number of ERO-32-MS-0 and/or ERO-32WS-0 controllers.

CAUTION! In cases where group of Hybrid Turbowents consumes power not exceeding 60W in total, it is allowed to install one EZN type power supply inside the cabinet.

Usage:
Cabinets for controllers:
- ERO-32MS-0
- ERO-32WS-0

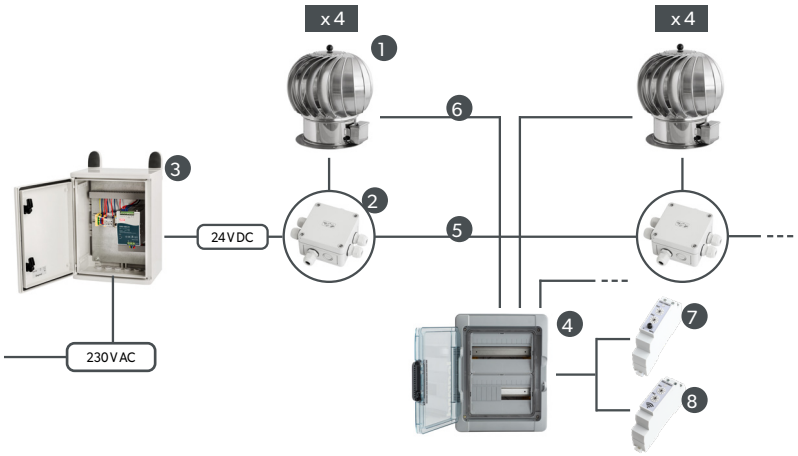
ESR - ... W - 0

- producer's internal number
- mounting [W]**
- maximal amount of controllers [03, 04, 06, 08, 12, 24, 36, 54, 72]*
- electronic control cabinet

* 04 - 4 controllers
** W - on surface, inside buildings

Product code	Maximal amount of controllers	Dimensions	Mounting
ESR-03W-0	3 controllers	174 x 93 x 109	on surface inside buildings
ESR-04W-0	4 controllers	128 x 200 x 115.6	
ESR-06W-0	6 controllers	200 x 164 x 115.6	
ESR-08W-0	8 controllers	200 x 200 x 115.6	
ESR-12W-0	12 controllers	340 x 282 x 141	
ESR-24W-0	24 controllers	340 x 432 x 161	
ESR-36W-0	36 controllers	340 x 622 x 161	
ESR-54W-0	54 controllers	448 x 622 x 161	
ESR-72W-0	72 controllers	448 x 822 x 161	

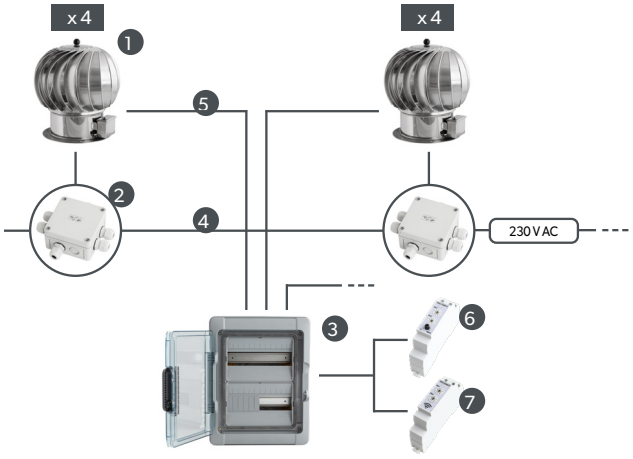
Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply cabinet
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] [2] (OMY/OWY 2x1.5") [1]
6	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") [1]
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

[1] it is necessary to protect cables from influence of UV light
[2] length of cables needs to be checked by means of the „cable and power calculator" software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

Connecting diagram for Hybrid Turbowent ø400÷500



N°	Name
1	Hybrid Turbowent ø400÷500
2	Any electrical box meeting the legal requirements
3	Electronic control cabinet
4	Cable cord type 2x[from 0.75 mm to 2.5 mm] [2] (OMY/OWY 2x1.5") [1]
5	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") [1]
6	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
7	Wi-Fi controller on rail TS-35 (ERO-32WS)

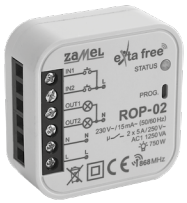
[1] it is necessary to protect cables from influence of UV light
[2] length of cables needs to be checked by means of the „cable and power calculator" software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

N°	Name	Picture	Usage
1	Radio switch single-channel ROM-01		Switching the steering devices on and off: · Hot air ventilators AN · Hot air ventilators AN-II · Hot air ventilators ANeco-II · Draught Generators GCK · Draught Generators GCKV · Hybrid Turbowents TH · Hybrid Turbowents THP
2	Under surface radio switch single-channel ROP-01		

MODULAR RADIO SWITCHES SINGLE-CHANNEL



ROM-01



ROP-01

Signal receivers are used to wirelessly switch on and off following devices: Hot air ventilators AN-II and ANeco-II, Draught Generators GCK , GCKV and Hybrid Turbowents TH ,THP.
Controllers may operate in five modes:

- Bistable - device is alternately switched on and off using a single button.
- Time control - pressing the button causes device to switch on for a time period programmed by the user, after which it is switched off again.
- Switch On - device is switched on when the button is pressed.
- Switch Off - device is switched off when the button is pressed.
- Monostable - device is switched on for the time when button remains pressed (this mode is not recommended).

RO - ... - 01

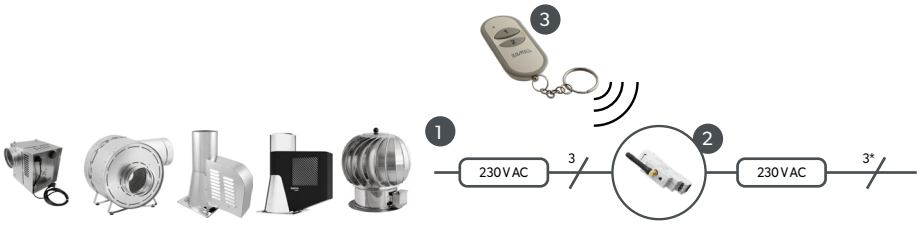
- quantity of channels
- mounting [**M** - on TS-35 rail , **P** - under surface]
- radio switches

Product code	Mounting	Voltage [V/Hz]	Nominal power [W]	Transmission [MHz]
ROM-01	on rail TS-35	230 / 50	0.45	868.32
ROP-01	under surface		0.29	

Usage:
Switching controlled devices on and off:

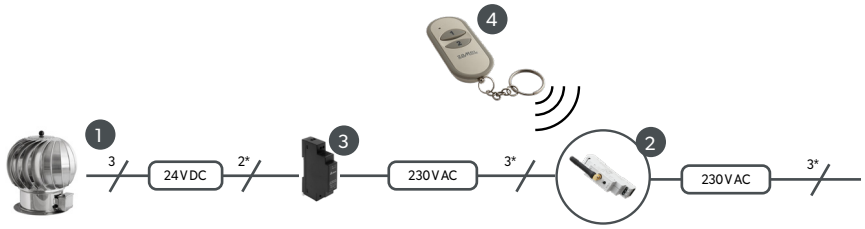
- Hot air ventilators AN
- Hot air ventilators AN-II
- Hot air ventilators ANeco-II
- Draught Generators GCK , GCKV
- Hybrid Turbowents TH, THP

Connecting diagram for Hot Air Ventilator AN, AN-II, ANeco-II, Draught Generator GCK, GCKV, Hybrid Turbowent ø400÷500



N°	Name
1	Hot Air Ventilator AN, AN-II, ANeco-II, Draught Generator GCK, GCKV, Hybrid Turbowent ø400÷500
2	Modular radio switch
3	Remote control P-257/2
*	number of wires in the cable

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Modular radio switch
3	Electronic power supply
4	Remote control P-257/2
*	number of wires in the cable

N°	Name	Picture	Usage
1	Electronic power supplier EZN-010M-0		Hybrid Turbowent power supply: · TH150-T · TH150 · TH200 · THP200 · THP250 · THP300 · THP350
2	Electronic power supplier EZN-030M-0		
3	Electronic power supplier EZN-060M-0		

ELECTRONIC POWER SUPPLIERS



EZN-010M-0



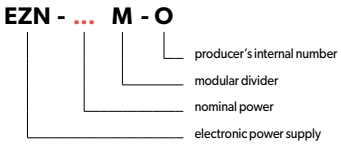
EZN-030M-0



EZN-060M-0

Presented devices are used as power supply for 1 to 8 pieces of Hybrid Turbowents (depending on their type). They are to be mounted on a TS-35 rail, in ESR type cabinets, with controllers.
CAUTION! Only one power supply is allowed to be installed inside the cabinet because of the heat it releases.

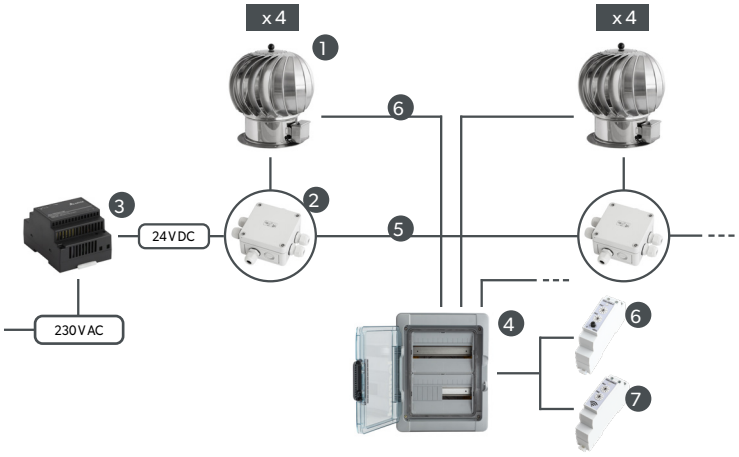
Usage:
Power supply of Hybrid Turbowents:
- TH150-T
- TH150
- TH200
- THP200
- THP250
- THP300
- THP350



Product code	Output parameters			Max. ambient temp. [°C]	Usage / maximal amount			
	Power [V DC]	Nominal power * [W]	Max current [A]		TH150T	TH150	TH200	THP200-350
EZN-010M-0	24	10	0.42	60	max 1	max 1	max 1	-
EZN-030M-0		30	1.25		max 3	max 3	max 3	-
EZN-060M-0		60	2.5		max 8	max 8	max 8	max 1

* by max load

Connecting diagram for Hybrid Turbowent ø150÷350



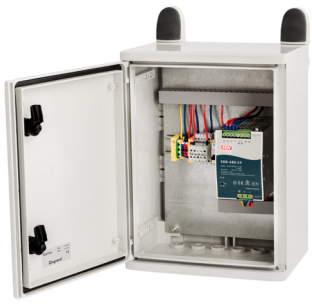
N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm]²⁾ (OMY/OWY 2x1.5") ¹⁾
6	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") ¹⁾
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

¹⁾ it is necessary to protect cables from influence of UV light
²⁾ length of cables needs to be checked by means of the „cable and power calculator" software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

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N°	Name	Picture	Usage
1	Electronic power supply cabinet ESZ-060Z-0		Hybrid Turbowent power supply: · TH150-T · TH150 · TH200 · THP200 · THP250 · THP300 · THP350
2	Electronic power supply cabinet ESZ-120Z-0		
3	Electronic power supply cabinet ESZ-240Z-0		
4	Electronic power supply cabinet ESZ-480Z-0		

ELECTRONIC POWER SUPPLY CABINET ESZ



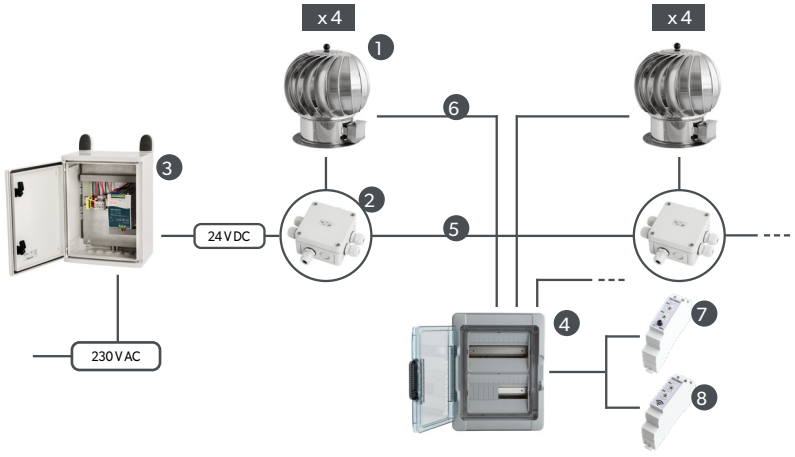
Most convenient way of providing power supply to a group of Hybrid Turbowents is to use an Electronic Power Supply Cabinet ESZ type. Each version is equipped with connection terminals: one input for 230 V AC and five outputs for 24 V DC; they are also provided with required protection measures: against short-circuit, overvoltage, overload. Individual models differ in terms of the power supply unit used (while retaining the same external dimensions).
Selection of a specific device depends on the type and number of connected cowls. Use the "Wiring Calculator" programme available freeware at www.darco.pl or ask a DARCO technical advisor for assistance.

Usage:
Power supply of Hybrid Turbowents:
- TH150-T,
- TH150,
- TH200,
- THP200,
- THP250,
- THP300,
- THP350.

ESZ - ... Z - 0
- producer's internal number
- outside and inside mounting
- maximal connected power
- electronic power supply cabinet

Product code	Dimensions [mm]	Output parameters			Max ambient temp. [°C]
		Power [V DC]	Nominal power [W]	Max current [A]	
ESZ-060Z-0	300 x 400 x 200	24	60	2.5	40
ESZ-120Z-0			120	5	
ESZ-240Z-0			240	10	
ESZ-480Z-0			480	20	

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply cabinet
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] [2] (OMY/OWY 2x1.5") [1]
6	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") [1]
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

[1] it is necessary to protect cables from influence of UV light
[2] length of cables needs to be checked by means of the „cable and power calculator" software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

N°	Name	Picture	Usage
		POWER DIVIDERS	
1	Electronic power divider ERZ-06D-0		Power supply for Hybrid Turbowents: · TH150-T · TH150 · TH200 · THP200 · THP250 · THP300 · THP350
		CIRCUIT BREAKERS	
2	Circuit breaker CLS6-B4/1N		Circuit breaker cutting off power at both poles

ELECTRONIC POWER DIVIDER ERZ-06D-0



Power dividers are devices enabling convenient distribution of powering voltage to individual Hybrid Turbowents. A maximum of four (or five if the wire is terminated) devices may be connected to a single divider.

Usage:

Power supply of Hybrid Turbowents:

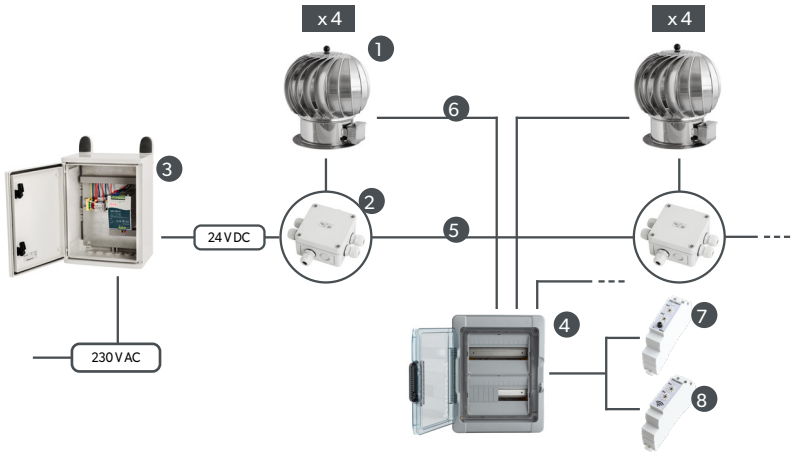
- TH150-T,
- TH150,
- TH200,
- THP200,
- THP250,
- THP300,
- THP350.

ERZ-06D-0

electronic power divider (24 V DC)

Product code	Input (WE)		Output (WY)		Outputs (U1, U2, U3, U4)	
	Power [V DC]	Current [A]	Power [V DC]	Current [A]	Power [V DC]	Current [A]
ERZ-06D-0	25	10	25	10	25	2.5

Connecting diagram for Hybrid Turbowent ø150÷350



N°	Name
1	Hybrid Turbowent ø150÷350
2	Electronic power divider
3	Electronic power supply cabinet
4	Electronic control cabinet
5	Cable cord type 2x[from 0.75 mm to 2.5 mm] [2] (OMY/OWY 2x1.5") [1]
6	Cable cord type 4x 0.5 mm max: 50 mm (OMY/OWY 4x0.5") [1]
7	Manual motor speed controller on TS-35 rail mounted (ERO-32MS)
8	Wi-Fi controller on rail TS-35 (ERO-32WS)

[1] it is necessary to protect cables from influence of UV light
[2] length of cables needs to be checked by means of the „cable and power calculator" software - the application is available upon request by contacting DARCO technical assistance: darco@darco.pl

CIRCUIT BREAKER CLS6-B4/1N



Circuit breaker cutting off power at both poles.

CLS6-B4/1N

circuit breaker

Product code	Rated power [V AC]	Rated current [A]	Number of poles
CLS6-B4/1N	230	4	1 + N

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Legal regulations and rules of situating fireplaces in the building

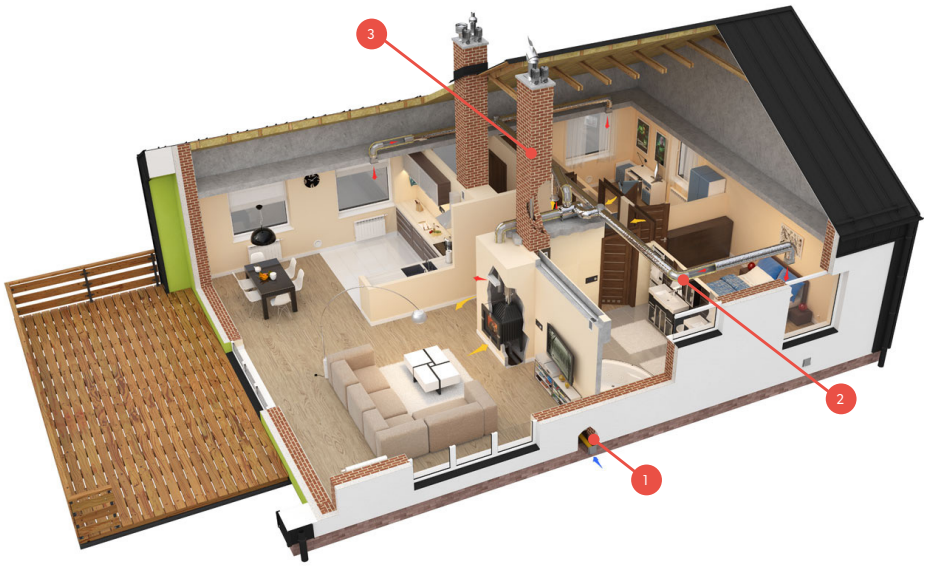
Wood fired fireplaces with open furnace chamber or those equipped with fireplace insert are to be mounted only in single-family housing, enclosure buildings, individual recreation, as well as low-rise multi-family housing, in the subsequent rooms:

1. Of cubic capacity not smaller than the one calculated with the index of 4 m^3 per each kW of fireplace's nominal power, though not less than 30 m^3
2. Fulfilling requirements concerning ventilation,
3. Equipped with proper chimney ducts
4. To which proper amount of inflow air into the firebox is provided:
   a) at least 10 m^3/h for 1 kW of the fireplace's nominal power for fireplaces with fireplace inserts
   b) of velocity in fireplace chamber not smaller than 0.2 m/s for fireplaces with open chamber.

Elements of fireplace installation

Fireplace installation, even in its most complex variants, consists of three independent systems:

1. System of fresh air supply for burning and ventilation
2. System of hot air distribution, convection or mechanical (supported by ventilator)
3. System of fume extraction from the fireplace



Designation of particular systems

1. System of fresh air supply for burning and ventilation

Its main objective is to supply the fireplace with air necessary for burning. This function is extremely significant, especially when dealing with the problem of too tightly insulated buildings, where access of fresh (cold) air is limited. For the process of burning, great amount of fresh air is needed, therefore providing proper air supply guarantees protection against situation of sucking air through ventilation outlets (e.g. from bathroom's shield grates) and disorganizing the exhaust ventilation. In extreme cases, when there is no proper air supply, usage of fireplaces may have effects dangerous for life and health, such as sucking fumes from fume exhaust ducts (by causing backdraught in these ducts).

2. System of hot air distribution, convection and mechanical

It is a system of ducts, fittings and other equipment enabling supply of hot air from the fireplace (through the process of convection) to many distant rooms. The system may be of natural type (gravitational buoyancy of air) or of mechanical type (supported by ventilator).

3. System of fume extraction from the fireplace

System securing safe extraction of dangerous for life and health products of wood burning, outside the building. Elements of the system, made with stainless steel or cold rolled steel sheet of appropriate thickness, provide resistance to temperature and acids, which are an elementary component of fumes. Application of radiator on the fume exhaust duct may serve as an additional source of air heating in HAD (hot air distribution) system. A chimney cowl may be mounted on top of the chimney securing improvement and stabilization of chimney draught.

AN-II HOT AIR VENTILATOR



Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

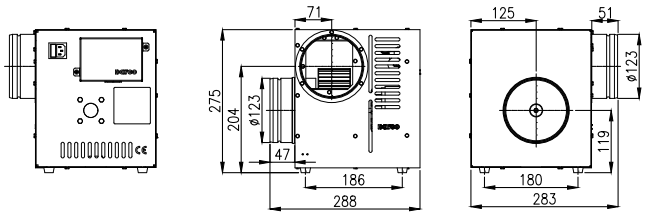
Technical data	AN1-II	AN2-II	AN3-II
Max. airflow [m³/h]	490	860	990
Max. pressure [Pa]	150	220	210
Max. transported air temperature [°C]	150		
Accoustic pressure [dB]	65		
Supply voltage [V/Hz]	230/50		
Rated power [W]	50	95	120
Max. current [A]	0.4	0.7	1.1
Power socket fuses	2A		
B1 fuse	100 mA (SCHUSTER 0034.6004)		
Max. ambient temperature [°C]	40		
IP protection class	IP20		
Weight [kg]	5.50	6.70	8.30

AN x - II

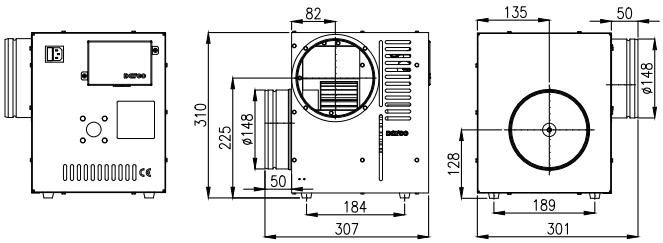
- second generation
- type
- hot air ventilator

Hot air ventilators - types / dimensions

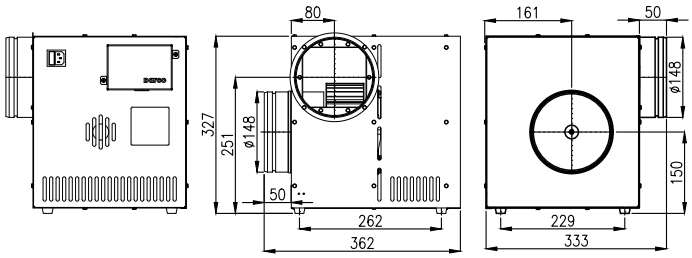
AN1-II



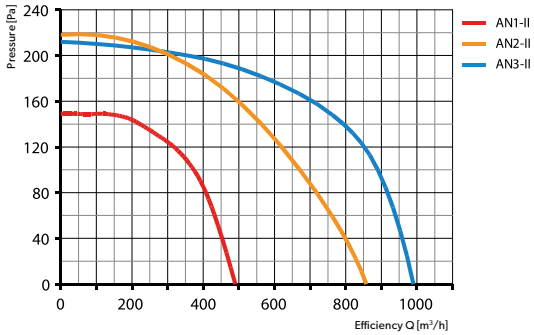
AN2-II



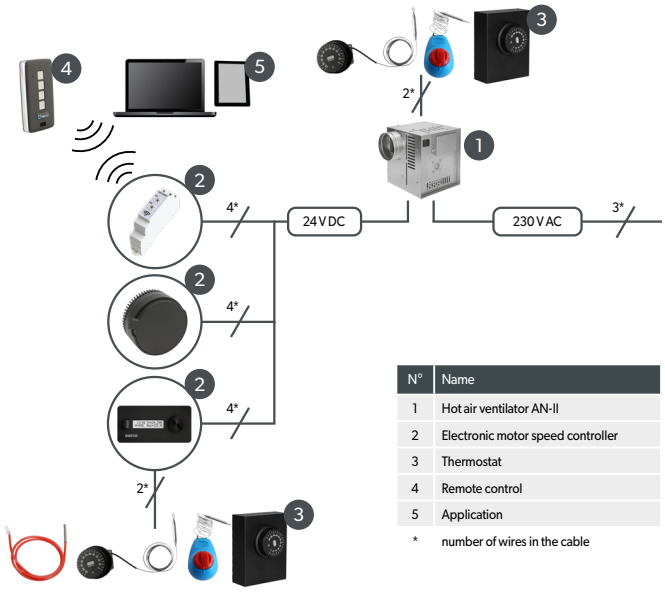
AN3-II



Airflow chart



Connecting diagram



N°	Name
1	Hot air ventilator AN-II
2	Electronic motor speed controller
3	Thermostat
4	Remote control
5	Application
*	number of wires in the cable

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ANeco-II HOT AIR VENTILATOR



Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

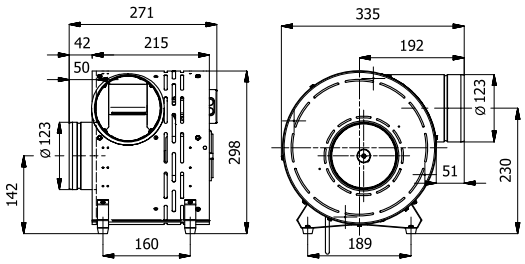
Technical data	ANeco1-II	ANeco2-II	ANeco3-II
Max. airflow [m³/h]	490	690	1080
Max. pressure [Pa]	150	180	205
Max. transported air temperature [°C]		150	
Supply voltage [V/Hz]		230/50	
Rated power [W]	30	50	125
Max. current [A]	0.7	0.7	1.4
Max. ambient temperature [°C]		40	
IP protection class		IP20	
Weight [kg]	6.30	7.30	8.30

ANeco x - II

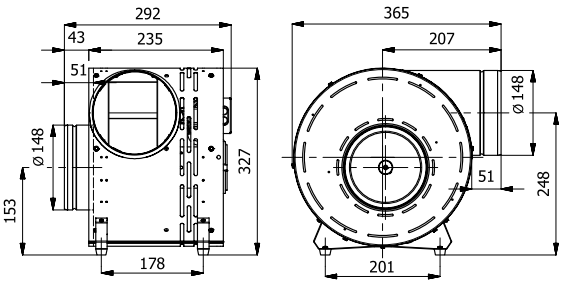
- second generation
- type
- hot air ventilators - eco

Hot air ventilators - types / dimensions

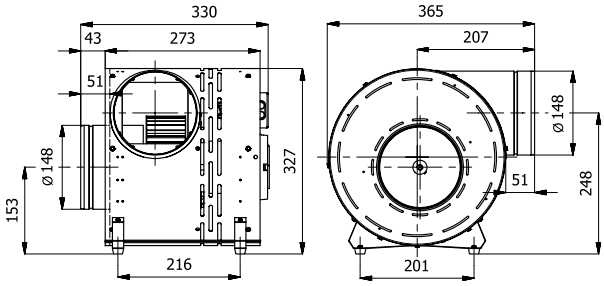
ANeco1-II



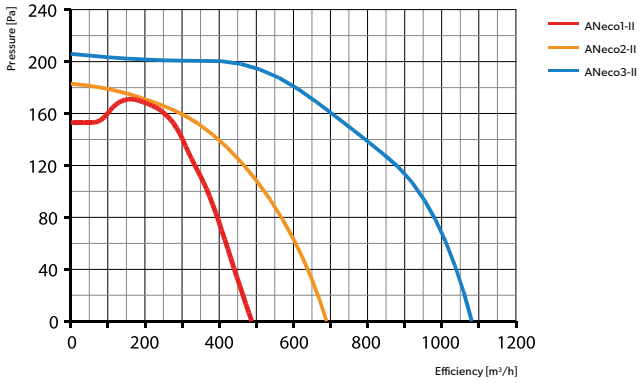
ANeco2-II



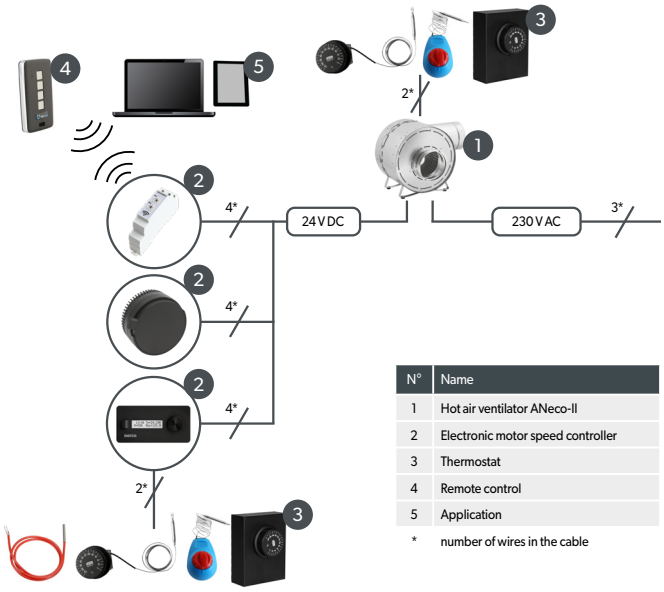
ANeco3-II



Airflow chart



Connecting diagram



N°	Name
1	Hot air ventilator ANeco-II
2	Electronic motor speed controller
3	Thermostat
4	Remote control
5	Application
*	number of wires in the cable

BYPASS FOR HOT AIR VENTILATOR BAN



Destination	O	O - air heating
Material	OC	OC - galvanised steel sheet

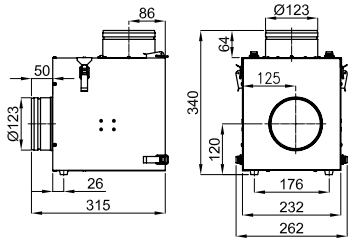
BAN x

x: type, bypass

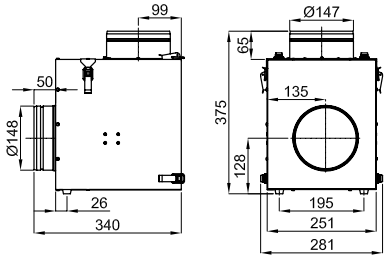
Type	Dimensions length/width/height [mm]	Inlets diameter	Weight [kg]	Max working temp. [°C]
BAN1	315x262x340	ø125	3.50	180
BAN2	340x281x375	ø150	4.00	
BAN3	340x313x392	ø150	4.50	

Bypass - types / dimensions

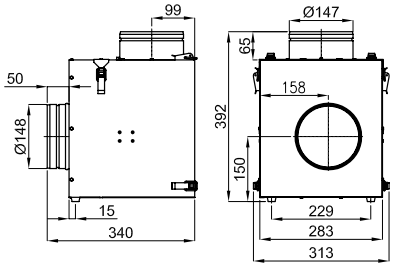
BAN1



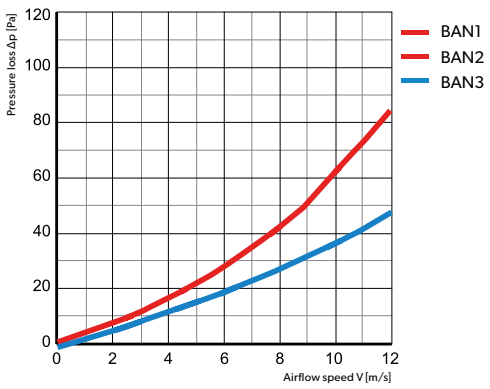
BAN2



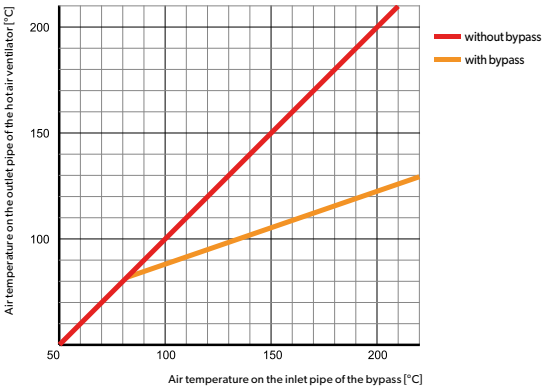
BAN3



Airflow charts



Construction diagram



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BYPASS FOR HOT AIR VENTILATOR ANeco



Destination	O	O - air heating
Material	OC	OC - galvanised steel sheet

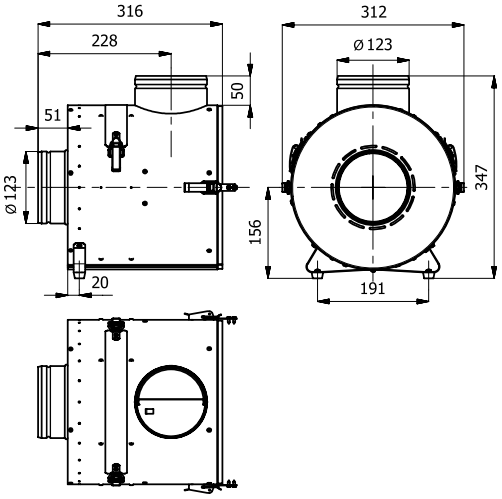
BANeco x

- x: type
- BANeco: bypass - eco

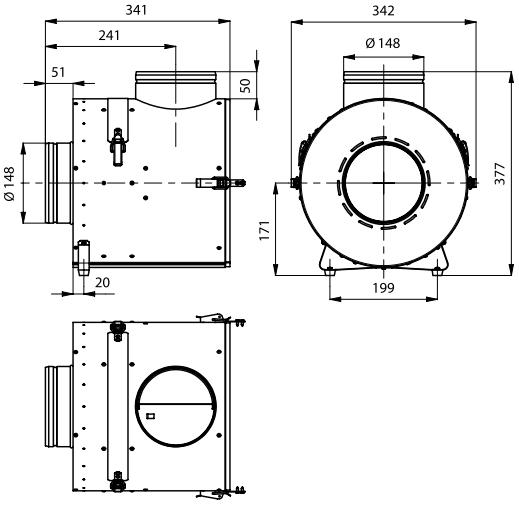
Types	Dimensions length/width/height [mm]	Inlets diameter	Weight [kg]
BANeco1	316x312x347	ø125	5.00
BANeco2	341x342x377	ø150	8.00
BANeco3	341x342x377	ø150	8.00

Bypass - types / dimensions

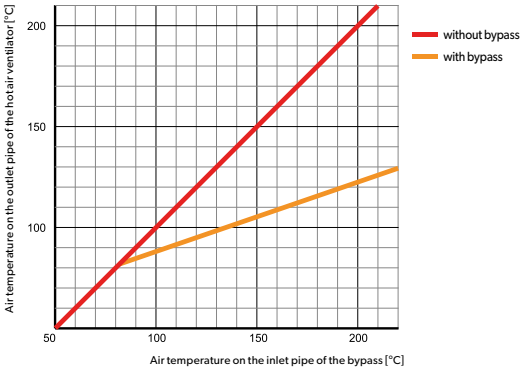
BANeco1



BANeco2, BANeco3

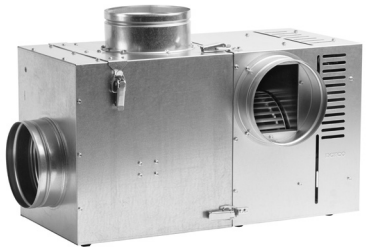


Construction diagram



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BANAN-II HOT AIR DISTRIBUTION SET



Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

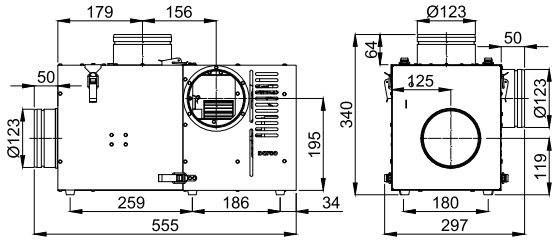
Technical data	BANAN1-II	BANAN2-II	BANAN3-II
"Spiro" diameter [mm]	ø 125	ø 150	ø 150
Max efficiency [m³/h]	370	570	660
Max pressure [Pa]	140	170	195
Max power [W]	50	80	90
Voltage [V/Hz]	230/50		
Max hot air temperature [°C]	180		
Ambient temperature [°C]	40		
IP protection class	IP20		

BANAN x - II

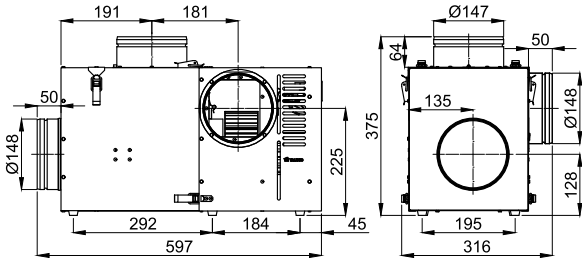
- second generation
- hot air ventilator and bypass type
- hot air distribution set

Hot air distribution sets - types / dimensions

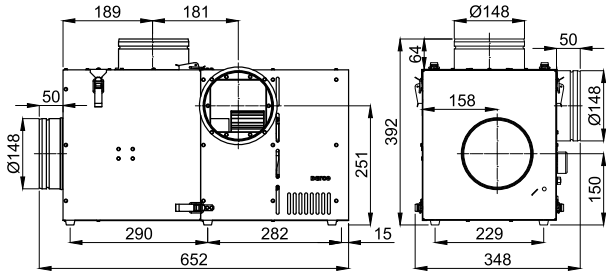
BANAN1-II



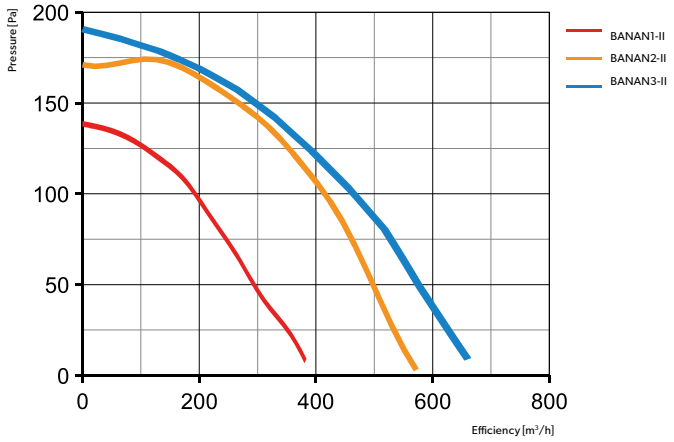
BANAN2 -II



BANAN3 -II

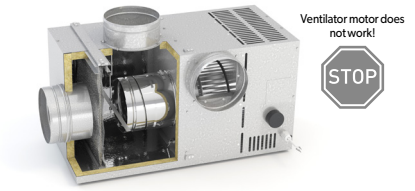


Airflow charts

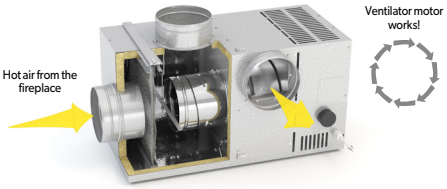


Function principle

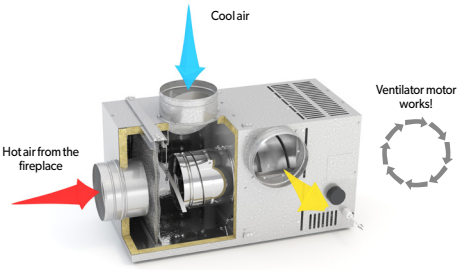
I. Temperature in fireplace hood is below the one set on the thermostat (recommended 40°C).



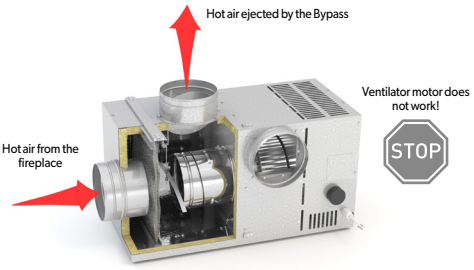
II. Temperature in fireplace hood is between 40°C and 70°C.



III. Temperature in fireplace hood is high (between 70°C and 180°C).



IV. Hot air ventilator does not work (for example due to power failure).



BANANeco-II HOT AIR DISTRIBUTION SET



Destination	W	W - supply/exhaust ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

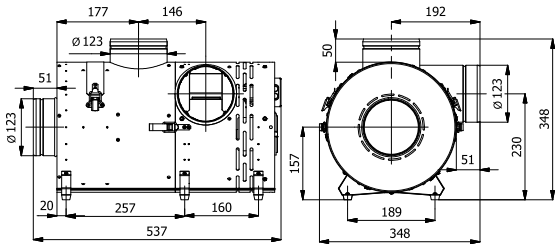
Technical data	BANANeco1-II	BANANeco2-II	BANANeco3-II
"Spiro" diameter [mm]	ø 125	ø 150	ø 150
Max efficiency [m^3/h]	340	540	760
Max pressure [Pa]	125	155	180
Max power [W]	31	48	78
Voltage [V/Hz]	230/50		
Speed regulation method: by voltage [V]	0-10		
Max hot air temperature [°C]	180		
Ambient temperature [°C]	40		
IP protection class	IP20		

BANANeco x - II

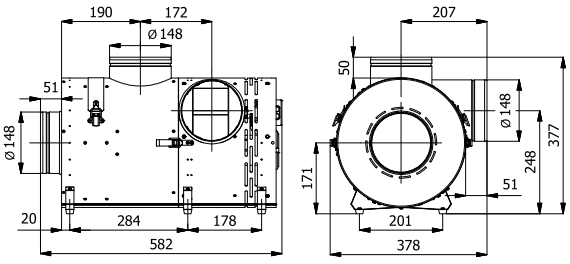
- second generation
- type
- hot air distribution set

Hot air distribution sets - types / dimensions

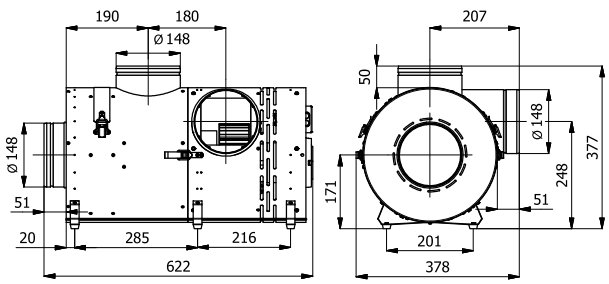
BANANeco1-II



BANANeco2-II

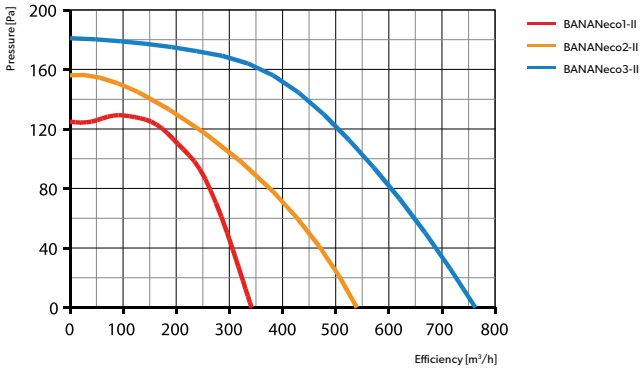


BANANeco3-II



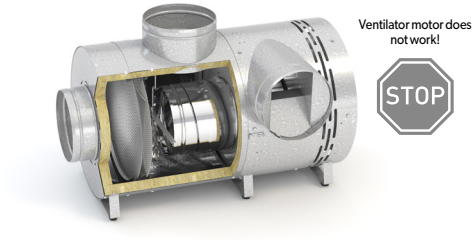
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Airflow charts

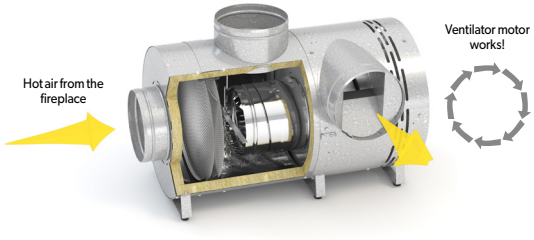


Function principle

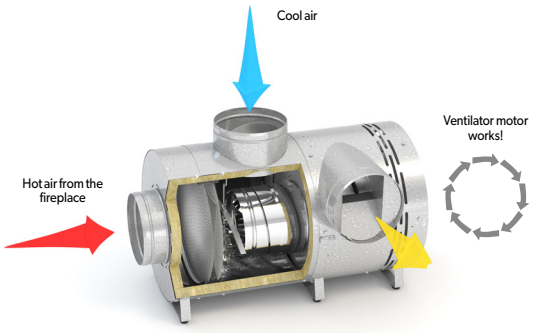
I. Temperature in fireplace hood is below the temperature of automatic start set on ART-AN-ZSA controller (for example 40°C).



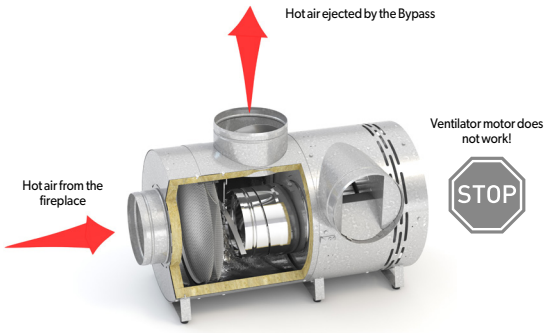
II. Temperature in fireplace hood is between 40°C and 70°C.



III. Temperature in fireplace hood is high (between 70°C and 180°C).



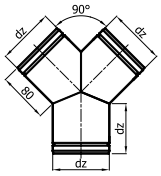
IV. Hot air ventilator does not work (for example due to a power failure).



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1. TEE YS/90





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.23	0.26	0.27	0.28	0.29	0.33	0.35	0.38	0.42	0.45	0.51	0.56

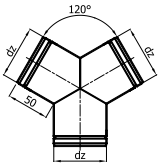
YS x / 90 - OC

- material
- angle 90°
- "spiro" diameter
- Y-shaped tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

2. TEE YS/120





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.19	0.21	0.22	0.23	0.24	0.26	0.28	0.30	0.33	0.34	0.38	0.42

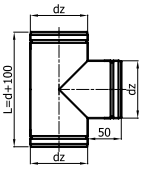
YS x / 120 - OC

- material
- angle 120°
- "spiro" diameter
- Y-shaped tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. TEE TRS/90





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.23	0.30	0.35	0.38	0.40	0.43	0.45	0.50	0.57	0.62	0.72	0.80

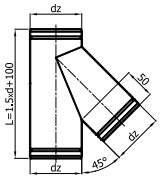
TRS x / 90 - OC

- material
- angle 90°
- "spiro" diameter
- tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

4. TEE TRS/45





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.33	0.48	0.55	0.61	0.66	0.71	0.76	0.87	0.98	1.05	1.15	1.28

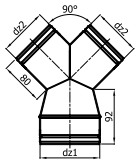
TRS x / 45 - OC

- material
- angle 45°
- "spiro" diameter
- tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

5. REDUCING TEE YRS/90





"Spiro" diameter	ø100-2xø80		ø125-2xø100		ø150-2xø100		ø150-2xø125		ø160-2xø125		ø160-2xø100		ø200-2xø150		ø200-2xø160	
dz1 / dz2	98	78	123	98	148	98	148	123	158	123	158	98	198	148	198	158
Weight [kg]	0.30		0.35		0.39		0.40		0.40		0.40		0.50		0.52	

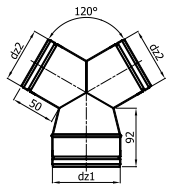
YRS x-2x y / 90 - OC

- material
- angle 90°
- 2x "spiro" diameter dz2
- "spiro" diameter dz1
- reducing tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

6. REDUCING TEE YRS/120





"Spiro" diameter	ø100-2xø80		ø125-2xø100		ø150-2xø125		ø150-2xø100		ø160-2xø125		ø160-2xø100		ø200-2xø150		ø200-2xø160	
dz1 / dz2	98	78	123	98	148	123	148	98	158	123	158	98	198	148	198	158
Weight [kg]	0.28		0.30		0.35		0.35		0.35		0.35		0.50		0.52	

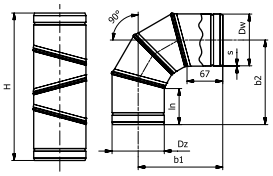
YRS x-2x y / 120 - OC

- material
- angle 120°
- 2x "spiro" diameter dz2
- "spiro" diameter dz1
- reducing tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

7. ADJUSTABLE ELBOW KNS/90





"Spiro" diameter	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250
Dw[mm]	78.1	97.5	107.4	117.3	122.4	127.5	137.3	147.2	157.4	177.1	197.2	222.6	247.8
Dz [mm]	79.1	98.5	108.4	118.3	123.4	128.5	138.3	148.2	158.4	178.1	198.2	223.6	248.8
b1 [mm]	149	159	164	169	174	175	179	184	189	199	209	221	234
b2 [mm]	150	159	157	161	164	164	175	172	195	199	204	221	238
H[mm]	262	278	278	285	292	292	305	305	332	342	352	377	402
ln [mm]	68	68	60	59	58	57	63	55	74	68	62	67	71
Weight [kg]	0.29	0.37	0.41	0.46	0.49	0.51	0.57	0.61	0.70	0.81	0.93	1.12	1.32

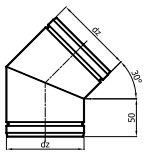
KNS x / 90 - OC

- material
- angle 90°
- "spiro" diameter
- adjustable elbow

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

8. ADJUSTABLE ELBOW KNS/30





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.18	0.25	0.29	0.31	0.33	0.35	0.38	0.42	0.45	0.48	0.58	0.63

KNS x / 30 - OC

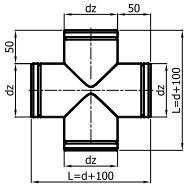
- material
- angle 30°
- "spiro" diameter
- adjustable elbow

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

9. QUADRUPED TEE CZO/90





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.27	0.35	0.38	0.41	0.43	0.45	0.47	0.52	0.58	0.63	0.84	1.00

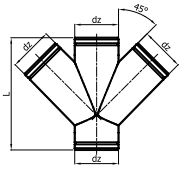
CZO x / 90 - OC

- material
- angle 90°
- "spiro" diameter
- quadruped tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

10. QUADRUPED TEE CZO/45





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.50	0.58	0.66	0.73	0.79	0.88	0.92	1.05	1.18	1.26	1.38	1.54

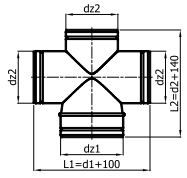
CZO x / 45 - OC

- material
- angle 45°
- "spiro" diameter
- quadruped tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

11. QUADRUPED REDUCING TEE CZOR/90





"Spiro" diameter	ø125-3xø80	ø125-3xø100	ø150-3xø100	ø150-3xø125
dz1 / dz2	123/78	123/98	148/98	148/123
Weight [kg]	0.35	0.45	0.52	0.58

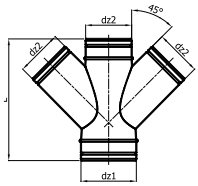
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CZOR x /3x y /90 - OC

- material
- angle 90°
- "spiro" diameter dz2
- "spiro" diameter dz1
- quadruped reducing tee

12. QUADRUPED REDUCING TEE CZOR/45





"Spiro" diameter	ø125-3xø80	ø125-3xø100	ø150-3xø100	ø150-3xø125
dz1 / dz2	123/78	123/98	148/98	148/123
Weight [kg]	0.85	0.88	1.05	1.18

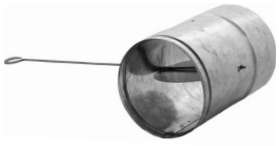
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

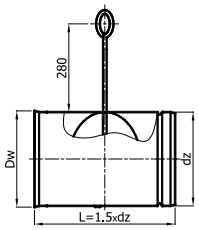
CZOR x /3x y /45 - OC

- material
- angle 45°
- "spiro" diameter dz2
- "spiro" diameter dz1
- quadruped reducing tee

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13. DAMPER PJS/1 (FOR PVC PIPES)





"Spiro" diameter	ø110	ø160	ø200
dz	108	158	198
Dw	110	160	200
Weight [kg]	0.29	0.58	0.96

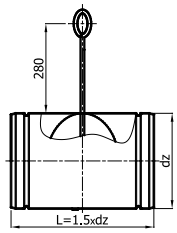
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

PJS x/1 - OC

- material
- type
- PVC diameter
- damper

14. DAMPER PJS/2





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.18	0.26	0.29	0.30	0.33	0.35	0.38	0.45	0.50	0.58	0.71	0.84

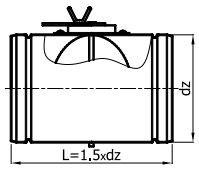
PJS x/2 - OC

- material
- type
- "spiro" diameter
- damper

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

15. DAMPER PJS/3





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.18	0.26	0.29	0.30	0.33	0.35	0.38	0.45	0.50	0.58	0.71	0.84

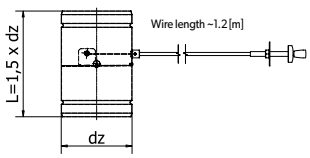
PJS x/3 - OC

- material
- type
- "spiro" diameter
- damper

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

16. DAMPER WITH WIRE CORD PJS/C





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.38	0.46	0.50	0.52	0.55	0.58	0.60	0.64	0.70	0.77	0.93	1.15

PJS x/C - OC

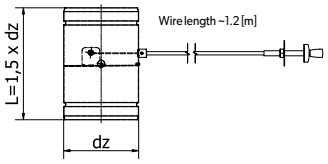
- material
- type
- "spiro" diameter
- damper

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

17. DAMPER WITH WIRE CORD AND SEAL PJSS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.45	0.50	0.57	0.59	0.62	0.66	0.67	0.73	0.80	0.87	1.03	1.25

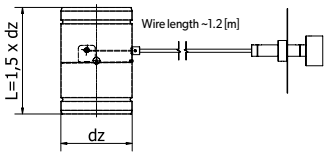
PJSS x/C - OC - SILICON

- seal material
- material
- type
- "spiro" diameter
- damper

Destination	W	W - ventilation
	O	O - air heating
PJSS/...SILICON	W	Maximal temperature of flowing air: 150°C
	O	
Material	OC	OC - galvanised steel sheet

18. DAMPER WITH WIRE CORD AND SEAL PJSS/C/OS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.45	0.50	0.57	0.59	0.62	0.66	0.67	0.73	0.80	0.87	1.03	1.25

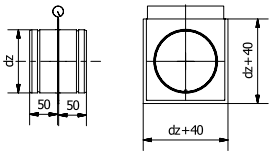
PJSS x/C/ OS/P-ML... - OC - SILICON

- seal material
- material
- knob type and colour
- type
- "spiro" diameter
- damper

Destination	W	W - ventilation
	O	O - air heating
PJSS/...SILICON	W	Maximal temperature of flowing air: 150°C
	O	
Material	OC	OC - galvanised steel sheet
Knob colour	ML	B - white
	ML	CZ - black

19. LATCH ZAS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.20	0.30	0.35	0.38	0.40	0.43	0.45	0.50	0.55	0.60	0.75	0.90

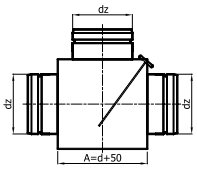
ZAS x - OC

- material
- "spiro" diameter
- latch

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

20. SUMMER-WINTER TEE TZL





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.60	0.75	0.85	0.90	0.95	1.00	1.05	1.15	1.25	1.35	1.50	1.65

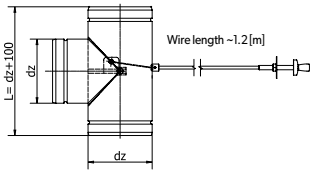
TZL x - OC

- material
- "spiro" diameter
- summer-winter tee

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

21. SUMMER-WINTER TEE WITH WIRE CORD TZL/C





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.53	0.60	0.65	0.68	0.70	0.73	0.75	0.80	0.87	0.92	1.02	1.10

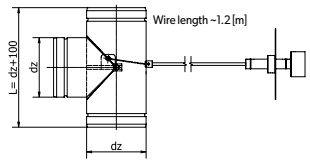
TZL/C ... - OC

- material
- "spiro" diameter
- tee with wire cord

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

22. SUMMER-WINTER TEE WITH WIRE CORD TZL/C/OS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.53	0.60	0.65	0.68	0.70	0.73	0.75	0.80	0.87	0.92	1.02	1.10

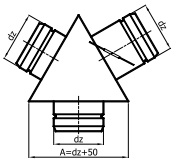
TZL/C ... / OS/P-ML... - OC

- material
- knob type and colour
- "spiro" diameter
- tee with wire cord

Destination	W	-	W - ventilation
	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black

23. Δ-TYPE TEE WITH DAMPER YPS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.45	0.55	0.65	0.68	0.71	0.75	0.80	0.85	0.95	1.00	1.15	1.30

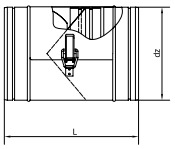
YPS x - OC

- material
- "spiro" diameter
- Δ-type tee with damper

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

24. ROUND FILTER (CHANNEL TYPE) FOK





"Spiro" diameter	ø100	ø125	ø150	ø160	ø180	ø200
dz	98	123	148	158	178	198
L	200	210	225	230	240	250
Weight [kg]	0.60	0.90	1.20	1.30	1.40	1.50

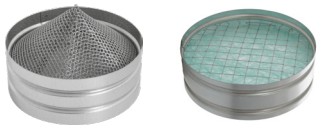
FOK / x / FM - OC

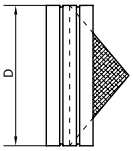
- material
- metal filter
- "spiro" diameter
- round filter

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet
	FM	FM - metal filter

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25. ROUND FILTER (CHANNEL TYPE) - REPLACEMENT FILTER FOK





FM-FOK - x - STOZEK

- shape
- "spiro" diameter
- metal filter

FW-FOK - x - PASTYLKA

- shape
- "spiro" diameter
- non-woven filter

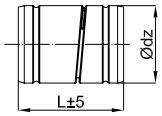
"Spiro" diameter	ø100	ø125	ø150	ø160	ø180	ø200
D	97	122	147	157	177	197
Weight [kg]	0.11	0.17	0.23	0.25	0.28	0.30

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

Temperature resistance:
- FM: 250°C
- FW: 120°C

26. DIRECTIONAL VALVE ZZ





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø250	ø315
dz	78	98	108	113	118	123	128	138	148	158	178	198	248	313
L	103	103	103	117	117	117	117	134	134	152	172	192	242	305
Weight [kg]	0.16	0.20	0.23	0.26	0.28	0.30	0.31	0.38	0.40	0.47	0.60	0.72	1.13	1.78

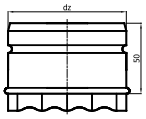
ZZ x - CH

- material
- "spiro" diameter
- directional valve

Destination	W	W - ventilation
	O	O - air heating
Material	CH	CH - chrome-nickel steel sheet

27. AIR OUTLET KSP





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.08	0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.12	0.12	0.14	0.16

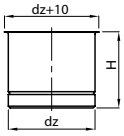
KSP x - OC

- material
- "spiro" diameter
- air outlet

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

28. AIR OUTLET KSP/H





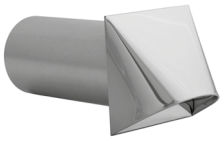
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.10	0.13	0.14	0.14	0.15	0.16	0.16	0.18	0.19	0.20	0.23	0.25

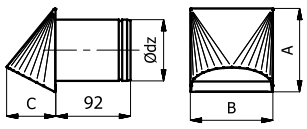
KSP x - OC /H

- air outlet hight (H=100mm)
- material
- "spiro" diameter
- air outlet

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

29. ROUND AIR INTAKE CZNP





"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160	ø180	ø200
dz	79	99	108	123	148	158	178	198
A	105	147	147	147	197	197	228	228
B	104	146	146	146	196	196	226	226
C	62	87	87	87	117	117	134	134
Weight [kg]	0.48	0.53	0.53	0.62	0.78	0.80	0.85	0.95

CZNP x - m

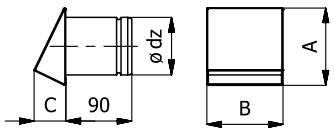
- material
- "spiro" diameter
- round air intake

Destination	W	W - ventilation
Material	CH	CH - chrome-nickel steel sheet
	OC	OC - galvanised steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

invent. build. enjoy.

30. ROUND AIR INTAKE CZNP II





"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160	ø180	ø200
dz	79	99	108	123	148	158	178	198
A	106	147	147	147	197	197	228	228
B	104	146	146	146	196	196	226	226
C	44	60	60	60	80	80	91	91
Weight [kg]	0.21	0.33	0.34	0.34	0.54	0.54	0.67	0.67

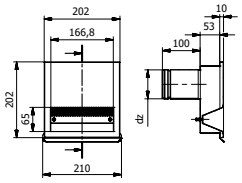
CZNP-II x - m

- material
- "spiro" diameter
- round air intake

Destination		
Material	W	W - ventilation
	CH	CH - chrome-nickel steel sheet
	OC	OC - galvanised steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

31. ROUND AIR INTAKE CZNP III





"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160
dz	78	98	108	123	148	158
Weight [kg]	0.72	0.73	0.74	0.75	0.76	0.76

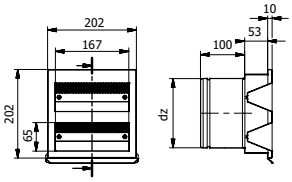
CZNP-III x - m

- material
- "spiro" diameter
- round air intake

Destination		
Material	W	W - ventilation
	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

32. ROUND AIR INTAKE CZNP IV





"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160
dz	78	98	108	123	148	158
Weight [kg]	0.73	0.75	0.75	0.76	0.77	0.77

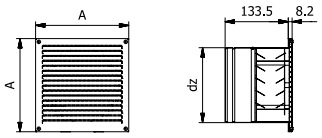
CZNP-IV x - m

- material
- "spiro" diameter
- round air intake

Destination		
Material	W	W - ventilation
	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel sheet powder coated ML.B - white color ML.GR/7016 - grey color

33. ROUND AIR INTAKE RAINSTOP CZNP-RS





"Spiro" diameter	ø80	ø100	ø110	ø125	ø150	ø160	ø180	ø200
dz	79	99	108	123	148	158	178	198
A	197	197	197	197	197	197	227	227
Weight [kg]	0.60	0.70	0.70	0.80	0.90	0.90	1.10	1.30

CZNP x - m - RS

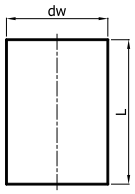
- rainstop
- material
- "spiro" diameter
- round air intake

Destination		
Material	W	W - ventilation
	CH	CH - chrome-nickel steel sheet
	ML	ML - chrome-nickel sheet powder coated

invent. build. enjoy.

34. EXTENSION PO





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dw	79.4	99.4	109.3	114.4	119.3	124.3	129.5	139.4	149.4	159.3	179.3	199.4

Available lengths L = 150, 200, 250 [mm]

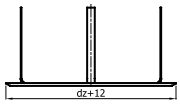
PO x - L - OC

- material
- length
- "spiro" diameter
- extension

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

35. PLUGS ZS AND ZSR

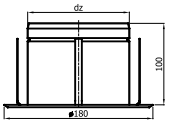




ZS x - OC

- material
- "spiro" diameter
- plug





ZSR x - OC

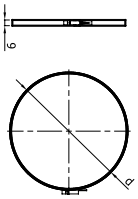
- material
- "spiro" diameter
- reducing plug

"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.11	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.20	0.22	0.26	0.31

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

36. TUBING CLAMP OPS





OPS x - CH - ML...

- color
- painted
- material
- "spiro" diameter
- tubing clamp

"Spiro" d diameter range	ø80-160	ø160-200
Weight [kg]	0.025	0.032

Destination	W	W - ventilation
	O	O - air heating
Material	CH	CH - chrome-nickel steel sheet
Color	CZ	black
	SZ	grey

37. ALUMINIUM TAPE TA50



TA 50x L / T

- max temperature
- length
- width 50 [mm]
- aluminium tape

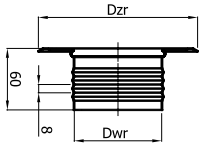
	Length L [m]			
Symbol	5	10	50	Weight [kg]
TA50x.../150	-	0.11	0.48	
TA50x.../350	0.07	0.11	0.48	

TA50x.../150 - max. working temperature: 150 [°C]
TA50x.../350 - max. inst. temperature: 350 [°C]

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminum

38. ROSETTE ROZ





Diameter DN	ø80	ø85	ø90	ø95	ø100	ø105	ø110	ø115	ø120	ø125	ø130	ø135
Dwr [mm]	86	91	96	101	106	111	116	121	126	131	136	141
Dzr [mm]	157	162	167	172	177	182	187	192	207	212	217	222
Weight [kg]	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.20

Diameter DN	ø140	ø145	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø315	ø350	ø400	ø450	ø500
Dwr [mm]	146	151	156	166	186	206	231	256	286	306	321	356	406	456	506
Dzr [mm]	227	242	247	257	277	297	322	347	377	397	412	448	498	548	598
Weight [kg]	0.21	0.22	0.23	0.25	0.28	0.30	0.34	0.37	0.41	0.44	0.46	0.51	0.58	0.65	0.72

ROZ x - m - b

- face colour
- material
- diameter DN
- rosette

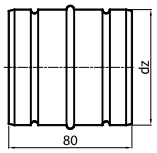
Destination	W	W	W	W - ventilation ducts
Material	CH	-	-	CH - chrome steel H17
	-	OC	-	OC - galvanised steel sheet
	-	-	ML	ML - mild steel powder coated*
Sheet thickness	5	5	5	5 - sheet thickness 0.5 mm

* powder coated - white colour standard

invent. build. enjoy.

39. INNER CONNECTOR ZWS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.10	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.19	0.20	0.23	0.26

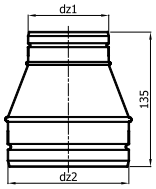
ZWS x - OC

- material
- "spiro" diameter
- inner connector

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

40. REDUCER RDS





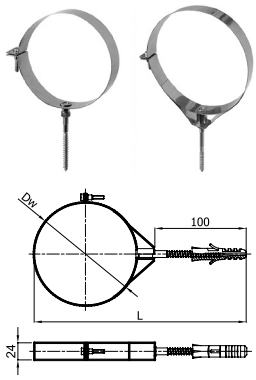
"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz1	78	98	108	113	118	123	128	138	148	158	178	198
dz2	98	108	113	118	123	128	133	143	158	178	198	223

RDS x / y - OC

- material
- "spiro" diameter dz1
- "spiro" diameter dz2
- reducer

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

41. MOUNTING BRACKET UMO



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø250
Dw	80	100	110	120	130	140	150	160	180	200	250
L	180	200	210	220	230	240	250	260	280	300	350
Weight [kg]	0.08	0.10	0.12	0.12	0.12	0.13	0.14	0.21	0.28	0.30	0.34

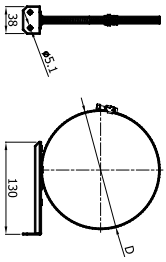
UMO x - CH

- material
- diameter
- mounting bracket

Destination	W	W - ventilation
	O	O - air heating
Material	CH	CH - chrome-nickel steel sheet 1.4301

42. MOUNTING BRACKET WITH TUBING CLAMP UMS





UMS x - OC

- material
- diameter
- mounting bracket

"Spiro" d diameter range	ø80-160
Weight [kg]	0.07

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

1. NON-INSULATED FILTER BOX SFS

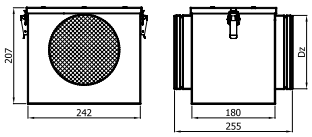


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø135	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	133	138	148	158	178	198
Weight [kg]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	2.55	2.55

SFS x / FM - OC

- material
- metal filter
- "spiro" diameter
- non-insulated filter box

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



2. INSULATED FILTER BOX SFS/IZ

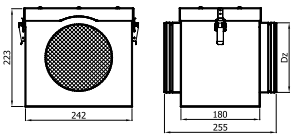


"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø135	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	133	138	148	158	178	198
Weight [kg]	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.55	2.55

SFS x / IZ / FM - OC

- material
- metal filter
- nsulation
- "spiro" diameter
- insulated filter box

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet



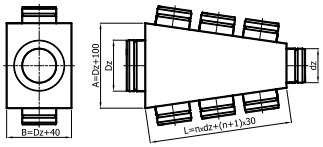
3. DISTRIBUTING BOX SRRS



SRRS x - y x z - OC

- material
- "spiro" diameter d
- number of outlets
- "spiro" diameter D
- distributing box

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

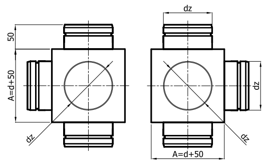


"Spiro" diameter	ø125-3xø100		ø150-3xø125		ø150-3xø100		ø150-5xø100		ø150-7xø100		ø160-5xø100		ø160-7xø100		ø180-5xø100		ø180-7xø100		ø200-5xø100		ø200-7xø100	
dz	123	98	148	123	148	98	148	98	148	98	158	98	158	98	178	98	178	98	198	198	198	98
Weight [kg]	0.85		1.00		0.90		1.80		2.50		1.80		1.80		2.25		2.25		2.25		2.25	

invent. build. enjoy.

4. DISTRIBUTING BOX SRS





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dz	78	98	108	113	118	123	128	138	148	158	178	198
Weight [kg]	0.50	0.65	0.75	0.80	0.85	0.88	0.92	1.00	1.08	1.15	1.45	1.45

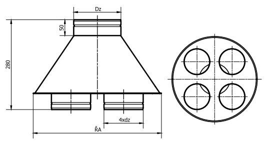
SRS - yxx OC

- material
- "spiro" diameter
- number of outlets
- distributing box

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

5. DISTRIBUTING BOX SRDS





"Spiro" diameter	ø125/4xø100	ø150/4xø125	ø150/4xø100	ø160/4xø100	ø180/4xø125	ø200/4xø100
Dz/dz/A	123/98/402	148/123/402	148/98/402	158/98/402	178/123/402	198/98/402
Weight [kg]	0.80	0.85	0.85	0.90	1.00	1.10

SRDS x/yxz - OC

- material
- "spiro" diameter
- number of outlets
- "spiro" diameter
- distributing box

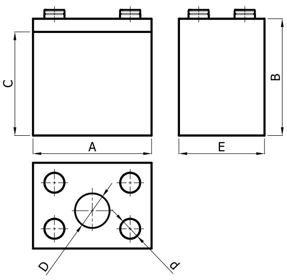
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

DISTRIBUTORS

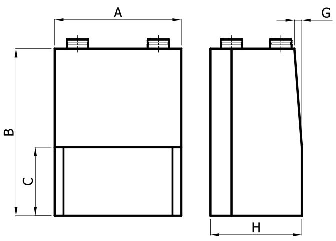
Distributors - example

CAUTION! Distributors are always made according to a specific model of fireplace insert or upon individual order.









Measurements [mm]	A	B	C	E	d	D
Firplace insert type	690	620	560	380	150	210

Number of outlets 0-8 pcs

Measurements [mm]	A	B	C	H	E	F	G	D	d
Firplace insert type	850	1150	500	475	500	300	50	230	100

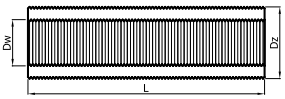
Number of outlets 0-8 pcs

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

1. INSULATED FLEXIBLE PIPE RESD





"Spiro" diameter	ø100	ø125	ø150	ø200
Dw	102	127	152	203
Dz	152	177	202	253
Weight 10m piece [kg]	4.90	6.00	7.20	8.00
Weight 5m piece [kg]	2.70	3.40	4.10	6.00

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium foil

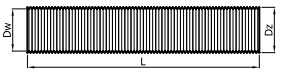
Pieces L = 10 [m] length compressed to 1.2 [m]
Pieces L = 5 [m] length compressed to 0.8 [m]
Max working temperature: 250 [°C]

RESD x - L - AL

- material
- length (5 or 10m)
- diameter
- insulated flexible pipes

2. SPIRO-TYPE FLEXIBLE PIPE DARCO - RESF





"Spiro" diameter	ø80	ø100	ø110	ø115	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200
dw	80	100	110	115	120	125	130	140	150	160	180	200
dz	87	107	117	122	127	132	137	147	157	167	187	207
Weight [kg]	0.45	0.46	0.50	0.52	0.55	0.57	0.60	0.67	0.71	0.73	0.75	0.77

RESF x - AL

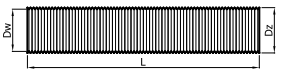
- material
- diameter
- "spiro" flexi pipe

Pieces of L = 2.7 [m] length, compressed to 1 [m]
Max working temperature : 200 [°C]

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium tape

3. FRESH AIR FLEXI PIPE REP





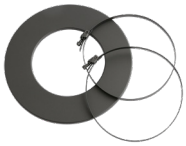
"Spiro" diameter	ø67	ø80	ø100	ø125	ø150
dw	67	80	100	125	150
dz	73	87	107	132	157
Weight [kg]	0.25	0.35	0.40	0.50	0.60

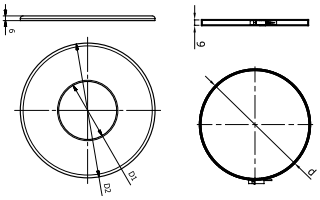
Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium tape
Colour	CZ	CZ - black
	SZ	SZ - grey

REP ... / 1,5 AL. ML. ...

- colour (black or grey)
- painted
- material
- length
- diameter
- fresh air flexi pipe

4. FLEXI PIPE CONNECTION SET REP-SET





ROSETE

Diameter DN	ø50	ø63	ø80	ø100	ø125	ø150
D1	58	75	88	108	133	158
D2	158	175	188	208	233	258

REP x - SET - ML. ...

- color (black or grey)
- painted
- set (rosette + 2 clamps)
- diameter
- fresh air flexi pipes

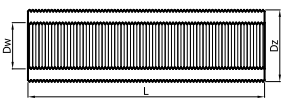
CLAMP

"Spiro" d diameter range	ø80-160	ø160-200
Weight [kg]	0.025	0.032

Destination	O	O - air heating
Material	AL	AL - aluminium tape
	CZ	CZ - black steel sheet DC01 - 0, 5 mm
Colour	CZ	CZ - black
	SZ	SZ - grey

5. FRESH AIR FLEXI PIPE INSULATED REPI





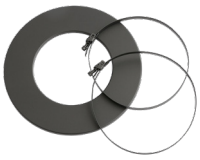
"Spiro" diameter	ø50	ø67	ø80	ø100	ø125
dw	50	67	80	100	125
dz	96	106	118	136	166
Weight [kg]	0.40	0.42	0.48	0.53	0.60

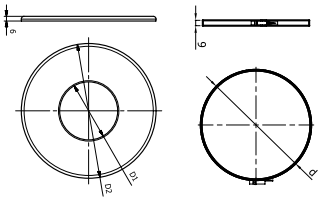
Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium tape
Colour	CZ	CZ - black
	SZ	SZ - grey

REPI ... / 0,75 AL. ML. ...

- color (black or grey)
- painted
- material
- length
- diameter
- fresh air flexi pipe insulated

6. FLEXI PIPE INSULATED CONNECTION SET REPI-SET





ROSETE

Diameter DN	ø67	ø80	ø100	ø125
D1	108	119	139	168
D2	208	219	244	264

CLAMP

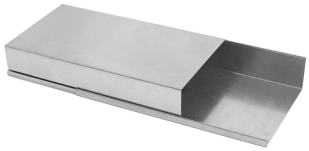
"Spiro" d diameter range	ø80-160	ø160-200
Weight [kg]	0.025	0.032

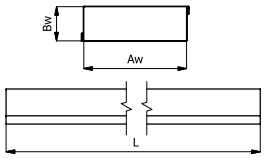
REPI x - SET - ML. ...

- color (black or grey)
- painted
- set (rosette + 2 clamps)
- diameter
- fresh air flexi pipe insulated

Destination	O	O - air heating
Material	CZ	CZ - black steel sheet DC01 - 0, 5 mm
Colour	CZ	CZ - black
	SZ	SZ - grey

1. FOLDWAY STRAIGHT DUCT KPS





Duct dimensions Aw x Bw [mm]	150 x 50			200 x 50			200 x 90		
Length L [mm]	2000	1000	500	2000	1000	500	2000	1000	500
Weight [kg]	3.60	1.80	0.90	1.00	2.00	1.00	4.70	2.35	1.18

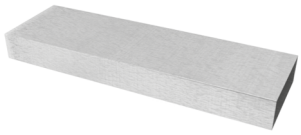
KPS AxB / L - OC

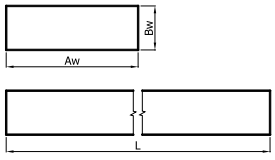
- material
- duct length
- duct dimensions
- foldway straight duct

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

Caution!
After assembling, duct needs to be sealed with aluminum tape or silicone (of working temp. 250°C). No connectors needed when assembling in „pass-by" method.

2. STRAIGHT RECTANGULAR DUCT KP





Duct dimensions Aw x Bw [mm]	150 x 50		200 x 50		200 x 90	
Length L [mm]	1000	500	1000	500	1000	500
Weight [kg]	1.64	0.82	2.00	1.00	2.18	1.09

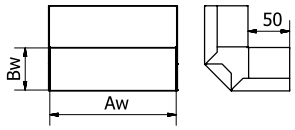
KP AxB / L - OC

- material
- duct length
- duct dimensions
- straight rectangular duct

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. WALL-FLOOR RECTANGULAR ELBOW KSS-90°





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.20	0.30	0.40

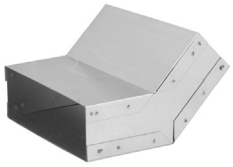
KSS AxB / 90 - OC

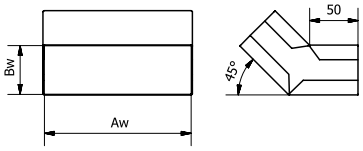
- material
- angle 90°
- duct dimensions
- wall-floor rectangular elbow

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

4. WALL-FLOOR ELBOW KSS-45°





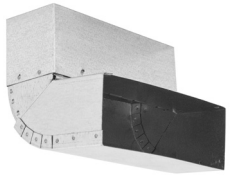
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.20	0.30	0.40

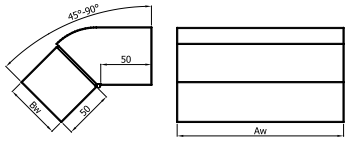
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KSS AxB / 45 - OC

- material
- angle 45°
- duct dimensions
- wall-floor elbow

5. ADJUSTABLE WALL-FLOOR ELBOW KSSN 45-90°





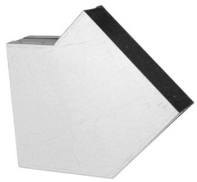
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.32	0.50	0.55

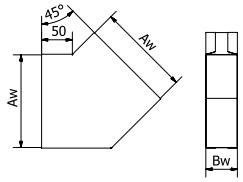
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KSSN AxB / 45-90 - OC

- material
- angle 45°-90°
- duct dimensions
- adjustable wall-floor elbow

6. RECTANGULAR ELBOW KL/45(30)





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.60	0.70

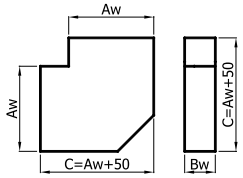
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KL AxB / x - OC

- material
- angle 45°-30°
- duct dimensions
- rectangular elbow

7. ELBOW KL/90





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.50	0.60

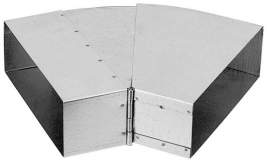
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

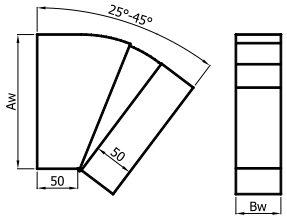
KL AxB / 90 - OC

- material
- angle 90°
- duct dimensions
- elbow

invent. build. enjoy.

8. ADJUSTABLE ELBOW KLN 25-45





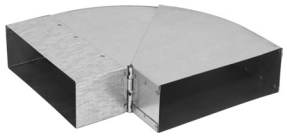
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.30	0.45	0.50

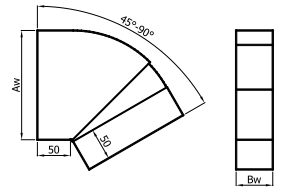
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLN AxB / 25-45 - OC

- material
- angle 25°-45°
- duct dimensions
- adjustable elbow

9. ADJUSTABLE ELBOW KLN 45-90





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.50	0.60

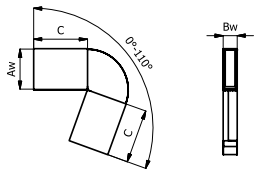
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLN AxB / 45-90 - OC

- material
- angle 45°-90°
- duct dimensions
- adjustable elbow

10. ADJUSTABLE ELBOW 0-110 KLN





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
C [mm]	200	250	250
Weight [kg]	1.40	1.70	1.95

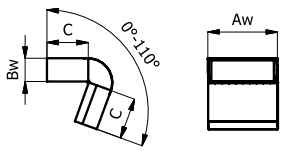
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

KLN AxB / 0-110 - OC

- material
- angle 0°-110°
- duct dimensions
- adjustable elbow

11. ADJUSTABLE RECTANGULAR WALL-FLOOR ELBOW 0-110 KSSN





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
C [mm]	120	120	140
Weight [kg]	0.50	0.80	0.90

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

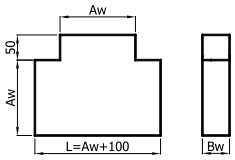
KSSN AxB / 0-110 - OC

- material
- angle 0°-110°
- duct dimensions
- adjustable rectangular wall-floor elbow

invent. build. enjoy.

12. TEE TRP/90





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.45	0.65	0.75

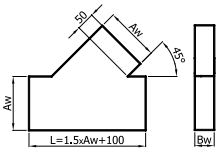
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

TRP AxB / 90 - OC

- material
- angle 90°
- duct dimensions
- rectangular tee

13. TEE TRP/45





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.70	0.90	1.05

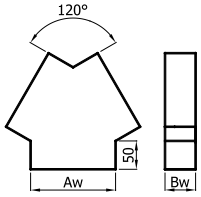
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

TRP AxB / 45 - OC

- material
- outlet angle 45°
- duct dimensions
- rectangular tee

14. TEE YP/120





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.30	0.40	0.45

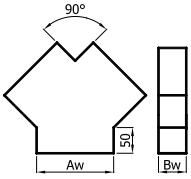
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

YP AxB / 120 - OC

- material
- angle 120°
- duct dimensions
- rectangular tee

15. TEE YP/90





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.60	0.70

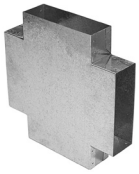
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

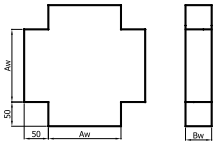
YP AxB / 90 - OC

- material
- angle ramion 90°
- duct dimensions
- rectangular tee

invent. build. enjoy.

16. QUADRUPED TEE CZP





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.60	0.70

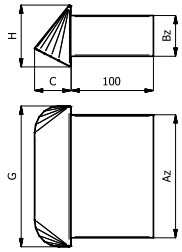
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

CZP AxB - OC

- material
- duct dimensions
- quadruped rectangular tee

17. RECTANGULAR AIR INTAKE CZNP





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Az [mm]	149.5	199.5	199.5
Bz [mm]	49.5	49.5	89.5
C [mm]	44	44.0	69
G [mm]	171	221	221
H [mm]	75	75	115

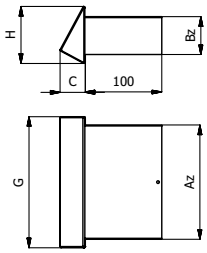
Destination	W	W - ventilation
Material	OC	OC - galvanised steel sheet
	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel powder coated (white)

CZNP AxB - m

- material
- duct dimensions
- rectangular air intake

18. RECTANGULAR AIR INTAKE CZNP II





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Az [mm]	149.5	199.5	199.5
Bz [mm]	49.5	49.5	89.5
C [mm]	33	33	49
G [mm]	171	221	221
H [mm]	75	75	115

Destination	W	W - ventilation
Material	OC	OC - galvanised steel sheet
	CH	CH - chrome-nickel steel sheet
	ML	ML - galvanised steel powder coated (white)

CZNP-II AxB - m

- material
- duct dimensions
- rectangular air intake

19. AIR INTAKE FOR ENDING OF VENTILATION DUCTS

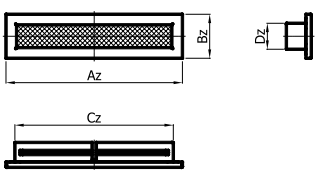


KRCZNP x - a - ML

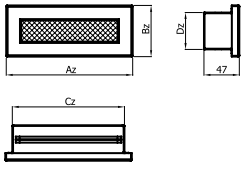
- face color
- face material
- duct dimensions
- shield grate - air intake for ending of ventilation ducts

Destination	W	W	W - ventilation
	O	O	O - air heating
Face material	ML	-	ML - chrome-nickel steel sheet powder coated
	-	CH	CH - chrome-nickel steel sheet 1.4301
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301

Face material for ML:
B - white, CZ - black, KR - beige, GR - graphite / 7024



KRCZNP 300x50

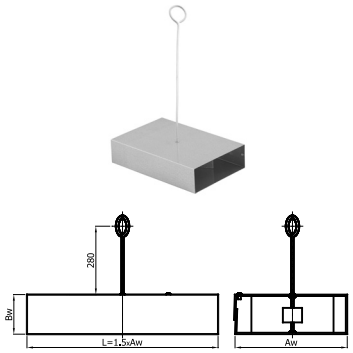


KRCZNP 150x50, 200x50 and 200x90

Type	Face outer dimensions Az x Bz	Cz	Dz	Cross-section [cm²]	Weight [kg]
KRCZNP 150X50	184 x 84	149	49	60	0.30
KRCZNP 200X50	234 x 84	199	49	80	0.35
KRCZNP 200X90	234 x 124	199	89	160	0.45
KRCZNP 300X50	334 x 84	299	49	125	0.54

invent. build. enjoy.

20. RECTANGULAR DAMPER PJP



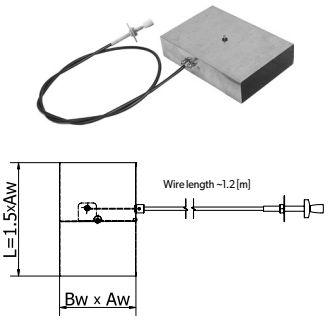
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.40	0.70	0.80

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

PJP AxB - OC

- material
- duct dimensions
- rectangular damper

21. DAMPER WITH WIRE CORD PJP/C



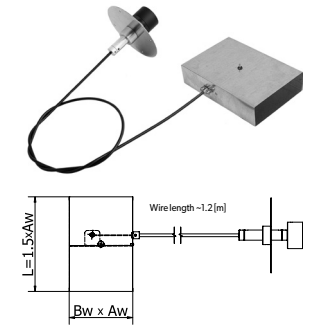
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

PJP AxB / C - OC

- material
- type
- duct dimensions
- damper

22. DAMPER WITH WIRE CORD PJP/C/OS



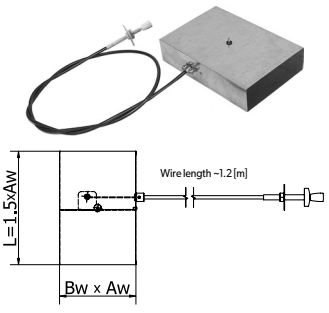
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

Destination	W	-	W - ventilation
	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black

PJP AxB /C/ OS/P-ML... - OC

- material
- knob type
- type
- duct dimensions
- damper

23. DAMPER WITH CORD AND SEAL PJPS/C



Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

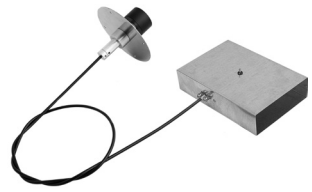
Destination	W	W - ventilation
	O	O - air heating
PJPS/...SILICON	W	Maximal temperature of flowing air: 150°C
	O	
Material	OC	OC - galvanised steel sheet

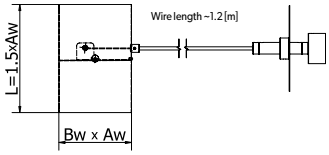
PJPS AxB /C - OC - SILICON

- seal material
- material
- type
- duct dimensions
- damper

invent. build. enjoy.

24. DAMPER WITH CORD AND SEAL PJPS/C/OS





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

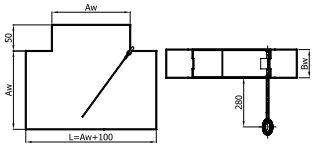
Destination	W	-	W - ventilation
	-	O	O - air heating
PJPS/...SILICON	W	W	Maximal temperature of flowing air: 150°C
	O	O	
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black

PJPS AxB /C/ OS/P-ML... - OC - SILICON

- seal material
- material
- knob type
- type
- duct dimensions
- damper

25. SUMMER-WINTER TEE TRP/90/Z





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.75	0.85

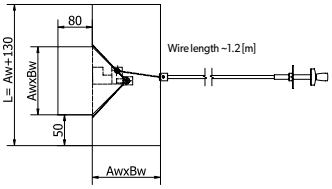
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

TRP AxB / 90 / Z - OC

- material
- damper
- angle
- duct dimensions
- summer-winter tee

26. SUMMER-WINTER TEE WITH CORD TRP/C





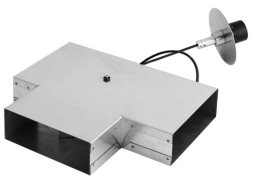
Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.80	1.00	1.15

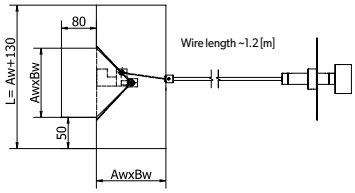
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

TRP/C AxB / 90 / Z - OC

- material
- damper
- angle
- duct dimensions
- summer-winter tee with cord

27. SUMMER-WINTER TEE WITH CORD TRP/C/OS





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.80	1.00	1.15

Destination	W	-	W - ventilation
	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet
Knob colour	ML	ML	B - white
	ML	ML	CZ - black

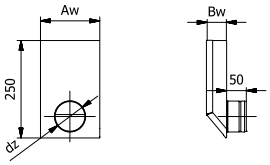
TRP/C AxB / 90 / Z / OS/P-ML... - OC

- material
- knob type
- damper
- angle
- duct dimensions
- summer-winter tee with cord

invent. build. enjoy.

28. L-TYPE FITTING WITH ROUND OUTLET KLO





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
dz	ø78 - 158		
Weight [kg]	0.50	0.70	0.80

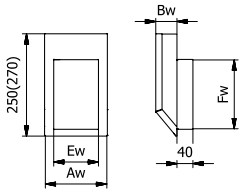
KLO AxB / d - OC

- material
- outket diameter
- duct dimensions
- L-type fitting with round outlet

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

29. L-TYPE FITTING WITH RECTANGULAR OUTLET KLP





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.50	0.70	0.80

KLP AxB / Kx - OC

- material
- shield grate type
- duct dimensions
- L-type fitting with rectangular outlet

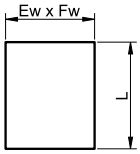
	Ew	Fw
K1	105	165
K2	140	165
K3	140	215

Outlet adjusted to Kz1, Kz2, Kz3 shield grate frames

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

30. RECTANGULAR EXTENSION PP





PP Kx / L - OC

- material
- length
- shield grate type
- extension

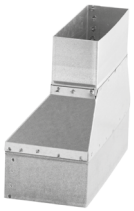
	Ew	Fw
K1	105	165
K2	140	165
K3	140	215

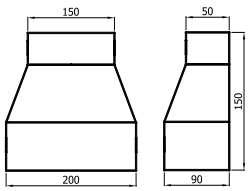
Dimensions of the extension fittings are adjusted to the K1, K2 or K3 shield grate frames.

Available lengths L = 150, 200, 250 [mm].

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

31. NON-SYMMETRIC RECTANGULAR REDUCER RDSS-NS





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.35	0.35	0.35

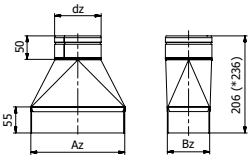
RDSS AxB - CxD - OC - NS

- non-symmetric
- material
- rectangular duct dimensions
- rectangular duct dimensions
- reducer

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

32. SYMMETRIC REDUCER RDSS





RDSS x / AxB - OC

- material
- rectangular duct dimensions
- "spiro" diameter
- reducer

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

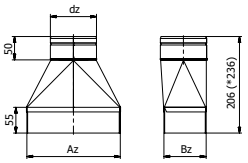
"Spiro" diameter	ø80/150x50	ø100/150x50	ø110/150x50	ø120/150x50	ø125/150x50	ø130/150x50	ø140/150x50	ø150/150x50	ø160/150x50	ø200/150x50	ø250/150x50
dz/Az/Bz	78 149.5 49.5	98 149.5 49.5	108 149.5 49.5	118 149.5 49.5	123 149.5 49.5	128 149.5 49.5	138 149.5 49.5	148 149.5 49.5	158 149.5 49.5	198 149.5 49.5	248 149.5 49.5
Weight [kg]	0.33	0.35	0.37	0.38	0.39	0.40	0.41	0.43	0.44	0.51	0.67

"Spiro" diameter	ø100/200x50	ø125/200x50	ø150/200x50	ø160/200x50	ø200/200x50
dz/Az/Bz	98 199.5 49.5	123 199.5 49.5	148 199.5 49.5	158 199.5 49.5	198 199.5 49.5
Weight [kg]	0.42	0.45	0.49	0.50	0.56

"Spiro" diameter	ø100/200x90	ø115/200x90	ø120/200x90	ø125/200x90	ø140/200x90	ø150/200x90	ø160/200x90	ø180/200x90	ø200/200x90	ø250/200x90
dz/Az/Bz	98 199.5 89.5	113 199.5 89.5	118 199.5 89.5	123 199.5 89.5	138 199.5 89.5	148 199.5 89.5	158 199.5 89.5	178 199.5 89.5	198 199.5 89.5	248 199.5 89.5
Weight [kg]	0.46	0.48	0.48	0.49	0.51	0.52	0.54	0.57	0.60	0.76

33. NON-SYMMETRIC REDUCER RDSS-NS





RDSS x / AxB - OC NS

- non-symmetric
- material
- rectangular duct dimensions
- "spiro" diameter
- reducer

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

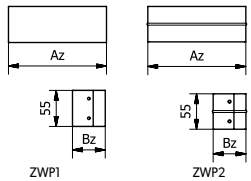
"Spiro" diameter	ø80/150x50	ø100/150x50	ø110/150x50	ø120/150x50	ø125/150x50	ø140/150x50	ø150/150x50	ø160/150x50
dz/Az/Bz	78 149.5 49.5	98 149.5 49.5	108 149.5 49.5	118 149.5 49.5	123 149.5 49.5	138 149.5 49.5	148 149.5 49.5	158 149.5 49.5
Weight [kg]	0.33	0.36	0.37	0.39	0.40	0.42	0.44	0.46

"Spiro" diameter	ø100/200x50	ø125/200x50	ø150/200x50	ø160/200x50	ø200/200x50
dz/Az/Bz	98 199.5 49.5	123 199.5 49.5	148 199.5 49.5	158 199.5 49.5	198 199.5 49.5
Weight [kg]	0.42	0.46	0.50	0.51	0.59

"Spiro" diameter	ø100/200x90	ø125/200x90	ø130/200x90	ø150/200x90	ø160/200x90	ø200/200x90	ø250/200x90
dz/Az/Bz	98 199.5 89.5	123 199.5 89.5	128 199.5 89.5	148 199.5 89.5	158 199.5 89.5	198 199.5 89.5	248 199.5 89.5
Weight [kg]	0.46	0.49	0.50	0.53	0.54	0.61	0.78

34. RECTANGULAR CONNECTOR ZWP1 AND ZWP2





Duct dimensions Aw x Bw [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.08	0.10	0.12

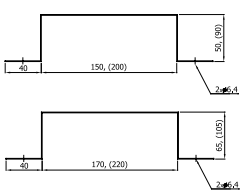
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

ZWP AxB / C - OC

- material
- type
- duct dimensions
- rectangular connector

35. MOUNTING BRACKET UM; UM/IZOL (FOR INSULATED DUCTS)





Duct dimensions Aw x Bw [mm]		150 x 50	220 x 50	220 x 90
	UM/IZOL	170 x 65	200 x 65	200 x 105
Weight [kg]	UM	0.08	0.12	0.15
	UM/IZOL	0.15	0.13	0.16

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

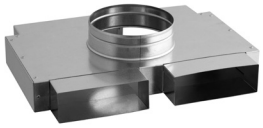
UM

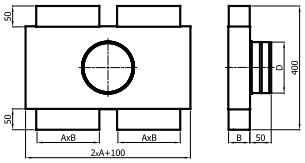
UM/IZOL AxB - OC

- material
- duct dimensions
- mounting bracket (/IZOL for insulated ducts)

invent. build. enjoy.

1. DISTRIBUTING BOX SRO-1





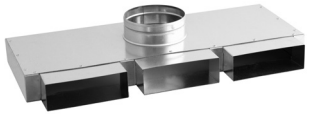
Duct dimensions A x B [mm]	150 x 50			200 x 50			200 x 90		
øD	ø123	ø148	ø198	ø123	ø148	ø198	ø123	ø148	ø198
Weight [kg]	1.50	1.52	1.56	1.80	1.80	1.80	2.08	2.10	2.13

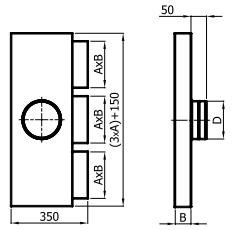
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-1 x/4x AxB - OC

- material
- duct dimensions
- number of outlets
- "spiro" diameter
- distributing box

2. DISTRIBUTING BOX SRO-2





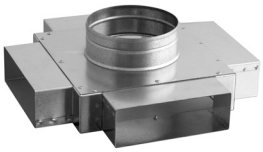
Duct dimensions A x B [mm]	150 x 50			200 x 50			200 x 90		
øD	ø123	ø148	ø198	ø123	ø148	ø198	ø123	ø148	ø198
Weight [kg]	0.78	0.80	0.82	1.10	1.15	1.15	1.30	1.32	1.34

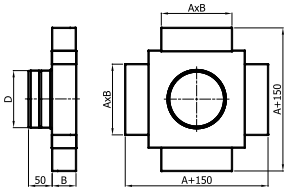
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-2 x/3x AxB - OC

- material
- duct dimensions
- number of outlets
- "spiro" diameter
- distributing box

3. DISTRIBUTING BOX SRO-3





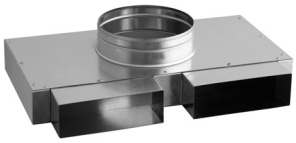
Duct dimensions A x B [mm]	150 x 50			200 x 50			200 x 90		
øD	ø123	ø148	ø198	ø123	ø148	ø198	ø123	ø148	ø198
Weight [kg]	1.50	1.52	1.56	2.35	2.40	2.25	2.70	2.72	2.74

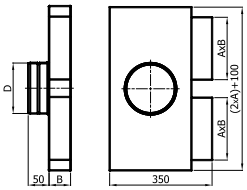
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-3 x/4x AxB - OC

- material
- duct dimensions
- number of outlets
- "spiro" diameter
- distributing box

4. DISTRIBUTING BOX SR0-4





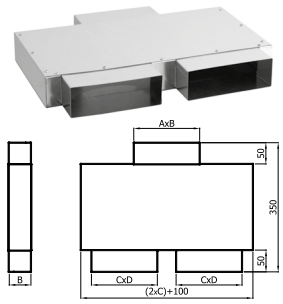
Duct dimensions A x B [mm]	150 x 50			200 x 50			200 x 90		
øD	ø123	ø148	ø198	ø123	ø148	ø198	ø123	ø148	ø198
Weight [kg]	1.38	1.40	1.42	1.67	1.69	1.71	1.94	1.96	1.98

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRO-4 x/2x AxB - OC

- material
- duct dimensions
- number of outlets
- "spiro" diameter
- distributing box

5. DISTRIBUTING BOX SRP-1



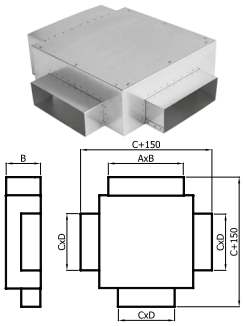
Duct dimensions A x B [mm]	150 x 50	200 x 50		200 x 90	
CxD	150 x 50	150 x 50	200 x 50	150 x 50	200 x 90
Weight [kg]	1.22	1.30	1.60	1.62	1.70

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-1 AxB / 2x CxD - OC

- material
- duct dimensions
- number of outlets
- duct dimensions
- distributing box

6. DISTRIBUTING BOX SRP-2



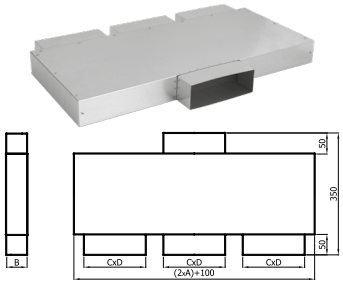
Duct dimensions A x B [mm]	200 x 50	200 x 90
CxD	200 x 50	150 x 50
Weight [kg]	0.60	0.69

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-2 AxB / 3x CxD - OC

- material
- duct dimensions
- number of outlets
- duct dimensions
- distributing box

7. DISTRIBUTING BOX SRP-3



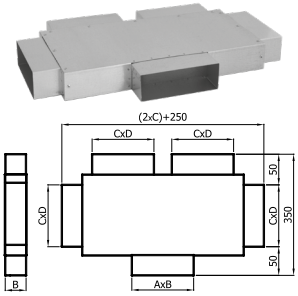
Duct dimensions A x B [mm]	150 x 50	200 x 50		200 x 90	
CxD	150 x 50	150 x 50	200 x 50	150 x 50	200 x 90
Weight [kg]	1.75	2.05	2.10	2.35	2.40

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-3 AxB / 3x CxD - OC

- material
- duct dimensions
- number of outlets
- duct dimensions
- distributing box

8. DISTRIBUTING BOX SRP-4



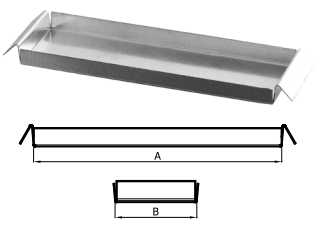
Duct dimensions A x B [mm]	150 x 50	200 x 50		200 x 90	
CxD	150 x 50	150 x 50	200 x 50	150 x 50	200 x 90
Weight [kg]	1.38	1.55	1.70	1.78	1.94

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

SRP-4 AxB / 4x CxD - OC

- material
- duct dimensions
- number of outlets
- duct dimensions
- distributing box

9. PLUG TO DISTRIBUTING BOXES ZSP



Duct dimensions A x B [mm]	150 x 50	200 x 50	200 x 90
Weight [kg]	0.06	0.10	0.11

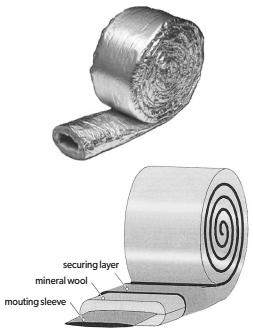
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

ZSP AxB - OC

- material
- duct dimensions
- plug

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1. RECTANGULAR DUCTS INSULATING SLEEVE REKP



Duct dimensions A x B [mm]	150 x 50	200 x 90
Weight [kg]	2.65	3.97

REKP x - AL

- material
- duct dimensions
- rectangular ducts insulating sleeve

How to install? - Take a look into our Youtube channel

Destination	W	W - ventilation
	O	O - air heating
Material	AL	AL - aluminium foil

CAUTION! Remove mounting sleeve after mounting on the duct.

Max working temp.: 140°C

2. RECTANGULAR DUCTS INSULATING WOOL - LAMELLA



Max working temp.	250 [°C]
Nominal density	36 [kg/m³]
Roll dimensions	10 000 x 1000 [mm]
Thickness	20 [mm]
Number of m² in box	10 [m²]
Fire resistance	Non-flammable

WELNA - LAMELLA - 20

- thickness
- type
- insulating wool

Destination	O	O - air heating
Material	M	M - mineral wool

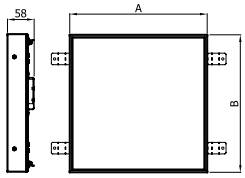
1. DWG - ACCESS DOOR

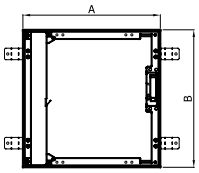


DWG access door provides easy access to the hood, at the same time ensuring continuity of insulation and not affecting the aesthetic values of the fireplace. With most fireplace systems, such access is of great importance; all servicing and maintenance work can be done without dismantling the cladding. This is especially important with water heating fireplace systems, as their hydraulic elements, valves and control electronics require periodic inspections.

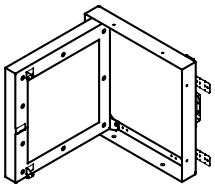
The door is mounted in fireplace cladding with glue and screws (the set includes special mounting tabs that enable mounting the door in cladding walls of 30, 40 or 50 mm). Body of the door is composed of a 30 mm thick vermiculite board, that provides good insulation. What is also important, this surface can be easily covered with decorative materials in the colour of the cladding, what makes the door virtually invisible. Yet another asset is the lack of a handle; door features a click opening system, pushing on the surface causes the mechanism to unlock and door springs open.







Dimensions [mm]	A	B
300 x 300	299	299
400 x 400	399	399
400 x 600	399	599
600 x 800	599	799



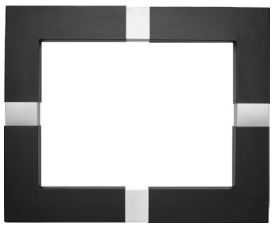
DWG - ...x... - ML - B

- B - olour white
- ML - powder coated
- ...x... - dimensions
- DWG - access door

Destination	W	W - ventilation
	O	O - air heating
Material	ML	ML - mild steel sheet powder coated white color
	W	W - vermiculite

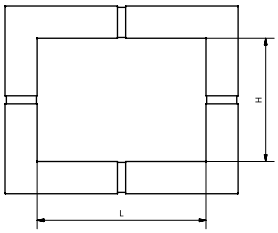
Caution! Max working temp. 150°C

2. UNIVERSAL FIREPLACE FRAME



Universal Fireplace Frame - suits almost all fireplace inserts. Perfect for modern, stylish interior designs. Thanks to an innovative adjusting solution it is possible to fit the frame to almost all fireplace inserts on the market! Adjusting the frame is easy and can be made without any tools needed. You just slide the corners in or out! Mounting the frame to the fireplace cladding is also very easy and unique (placing special bolts on the wall and pressing the frame inside), that way of fitting gives the possibility for quick dismantling (in case of, for example, necessity of cleaning the insert).

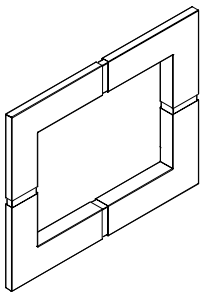


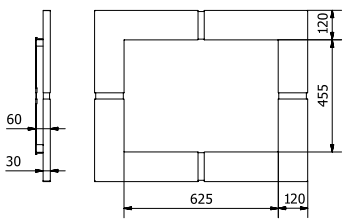


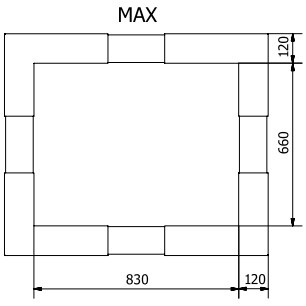
H [mm]	L [mm]	Weight [kg]
445-660	625-830	8

WK-RWKR-1

- WK - universal fireplace frame







3. WOOD RACK "JAS"



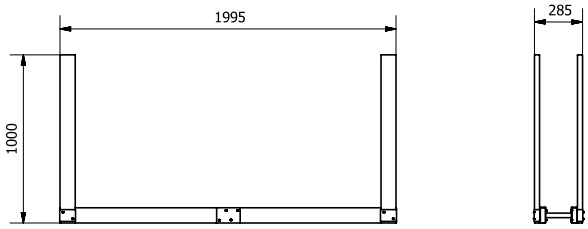
Sold in boxes- „do it yourself" mounting.

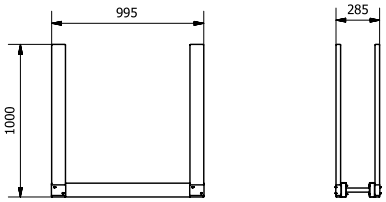
Destination	wood rack
Material	Metal elements made with mild steel 2.0mm powder coated black.

JAS ...

- set (I or II)
- wood rack







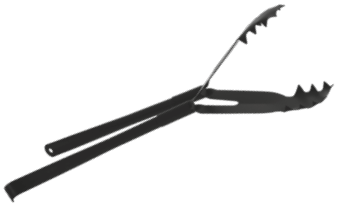
DESCRIPTION OF SET JAS-I:

- 2 x side bracket
- 2 x lateral connector
- 8 x pine painted tree wood board 30 x 90 x 1000 [mm]
- set of fastening screws

DESCRIPTION OF SET JAS-II:

- 2 x side bracket
- 6 x pine painted tree wood board 30 x 90 x 1000 [mm]
- set of fastening screws

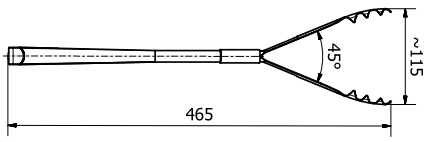
4. "CROCODILE" PLIERS



Crocodile fireplace pliers are a unique accessory, seemingly simple yet very functional. They replace a series of fireplace accessories. They help to load firewood into the fireplace quickly and safely. Thanks to them you can easily collect hot pieces of wood that may fall out of the fireplace.

Material: black spring steel, painted: Senotherm paint
Packed in aestethic blister





SC-01

- "Crocodile" pliers

5. FIREPLACE AIR SUPPLY PREHEATING SET



Air intake set is equipped with a heater that preheats the air, significantly increasing efficiency of the stove and reducing smoke and dust emissions, particularly in the ignition phase. Air intake set also his equipped with a damper, which is used to regulate or close the air flow (which can be done manually, with a decorative knob or using an actuator). Air intake set channel is telescopic, what allows mounting it in walls of various thicknesses. Construction of the air intake allows easy access to the channel (for servicing or cleaning). Air exhaust (element mounted inside the room) is painted in a colour matching the REP / REPI flexible pipes and most free-standing stoves available on the market.



Usage

- Providing combustion air to fireplaces or stoves
- increasing efficiency of the stove
- reducing emission of the fireplace/stove

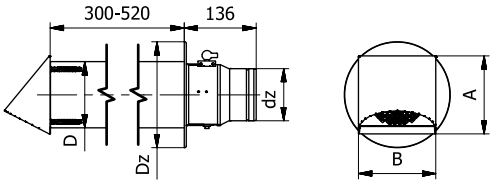
Destination	W	W - supply ventilation
Material	CC	CC - chrome-nickel steel

Diameter	ø100	ø150
A	147	197
B	146	196
D	125	175
Dz	200	250
dz	98.5	148.5
Voltage [V]	230	
Nominal power [W]	270	
Max current [A]	3	3.5
IP protection class	IP 33	
Weight (version with knob) [kg]	7.3	12.0
Weight (version with wire knob) [kg]	8.0	12.5
Weight (version with actuator) [kg]	8.5	13.0

Fireplace air supply preheating set with knob

ZNK x - CC

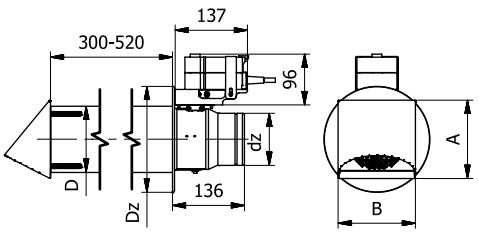
- material
- diameter
- fireplace air supply preheating set



Fireplace air supply preheating set with electric actuator

ZNK x - CC / ...

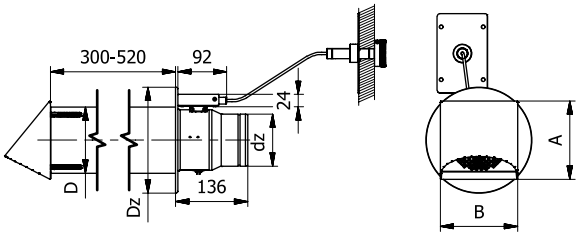
- actuator type (TF230 or TF24)
- material
- diameter
- fireplace air supply preheating set



Fireplace air supply preheating set with wire knob

ZNK x - CC / OS / y - ML - ...

- colour (CZ-black, B-white)
- painted
- wire knob version
- knob type
- material
- diameter
- fireplace air supply preheating set



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Chimney construction:

According to regulations valid in Poland chimney duct should be situated in such way that the length of the connector (duct linking a stove with chimney), is as short as possible and adopted to working conditions of the device, as specified in accordance with the appropriate Norms. Length of the connector cannot exceed a quarter of effective height of the chimney. Slope of the connector must be bigger than 5 % in the direction of the stove, and its length for gas devices should not exceed 2 m.

Chimney duct should be constructed vertically and its diameter shall be equal throughout the whole length of the chimney. An acceptable chimney deviation from perpendicular may be not bigger than 30°, in this sloping part an inspection hole should be mounted.

Chimney ducts may be of round, oval, square and rectangular shape. Cross-section of chimney duct cannot be smaller than the cross-section of fume outlet of the stove. In case of changing from solid fuel burning stove to oil or gas appliance, diameter of chimney duct should be adjusted to new working conditions.

Smallest square dimension or diameter of fume chimney ducts made with bricks and smoke chimney ducts, with natural draught, should be at least 0.14 m. Whenever, a metal sheet chimney liner elements are being used, their smallest diameter should be at least 0.12 m. Chimney duct for natural ventilation should have at least 0.16 m² cross-section and the smallest diameter not smaller than 0.1 m.

Solid fuel burning stoves and fireplaces with open furnace chamber or with fireplace insert, with the smoke outlet up to 0.25 m² can be connected only to a separate chimney duct of the dimensions at least 0.14x0.14 m or 0.15 m diameter.

In case of fireplaces with larger smoke outlets, the necessary dimensions should be at least 0.14x0.27 m or a diameter of 0.18 m. For larger chimney ducts of rectangular shape 3:2 relation of rectangle walls should be kept.

Fume exhaust and smoke chimney ducts should be equipped with tightly closed inspection holes. In case of gas and oil burning stoves where wet fumes are extracted, a condensate drainage system must be used. Inspection hole should be situated below the connector line, in the distance of 0.3 m from the floor, in an easily accessible place.

For gas burning appliances (with power up to 35kW), length of fume chimney duct, measured from the axis of inlet of chimney duct to the edge of its outlet above the roof, must not be smaller than 2 m. In other cases chimneys should be at least 4 m high. For oil burning stoves, effective height of the chimney must be at least 5 m.

Chimney ducts should be built up above the roof line, in accordance with proper norms, so that height of the chimney secures undisturbed chimney draught. Depending on the particular wind zone, local topographical conditions, as well as on the specification of device working conditions, a chimney cowl should be mounted.

Those chimneys mounted in outer walls of the building and in unheated attics or outside placed chimneys must be thermally insulated. Single-walled elements of chimney systems may be mounted only in the inner walls, adjacent to heated rooms of the building.

Please confront these with actual laws and regulations valid in your country.

Designating the proper chimney diameter:

Stove with demand for draught, fumes temperature 130°C

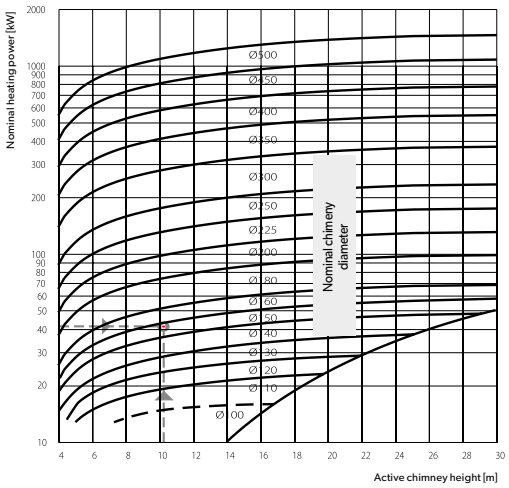


Fig. Diagram of the chimney duct diameter designation for a gas stove with demand for draught

Solid fuel burning stove, fumes temperature 200°C

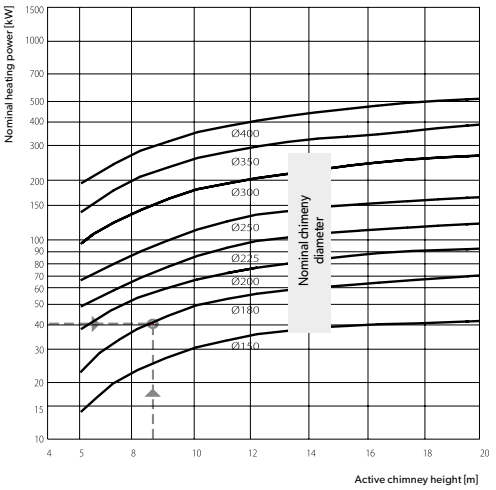


Fig. Diagram of the chimney duct diameter designation for a solid fuel burning stove

Stove with demand for draught, fumes temperature 190°C

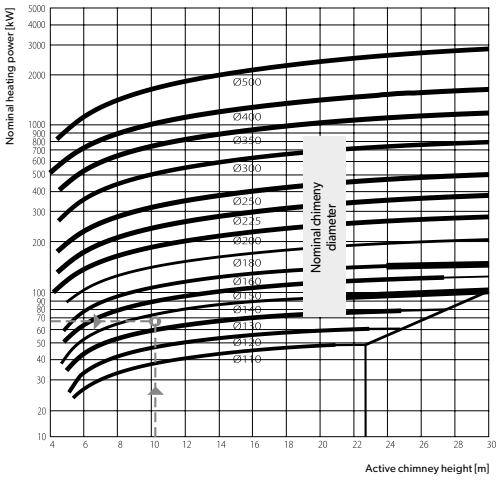


Fig. Diagram of the chimney duct diameter designation for a gas stove with demand for draught

Stove with no demand for draught, fumes temperature 190°C

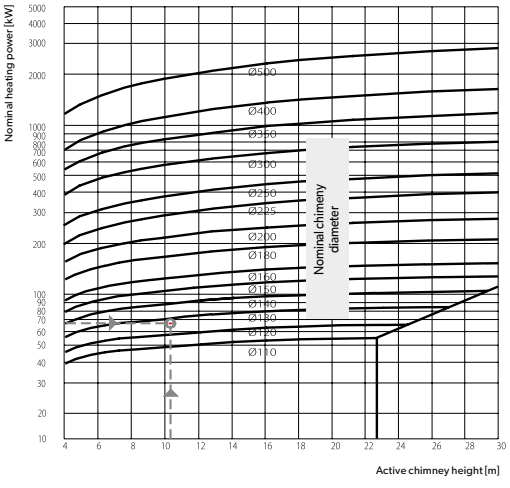


Fig. Diagram of the chimney duct diameter designation for a gas stove with no demand for draught

Placing of the chimney outlets:

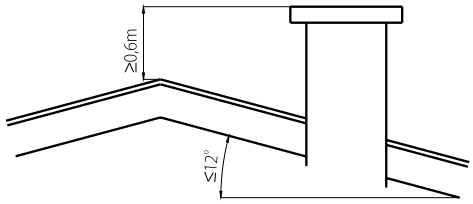


Fig. On flat roofs with the slope angle not bigger than 12°, regardless of roof construction, chimney outlets should be situated in a distance of 0.6 m from ridge level or edges of the building with depressed roofs.

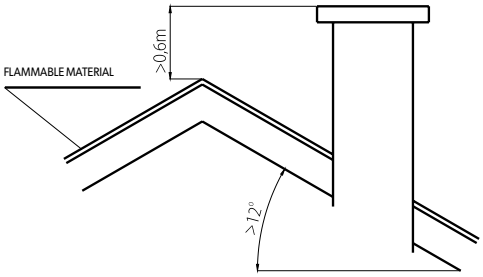


Fig. On steep roofs with the slope angle bigger than 12° or on easy - flammable roofs, chimney outlets should be situated in a distance of at least 0.6 m from the ridge level.

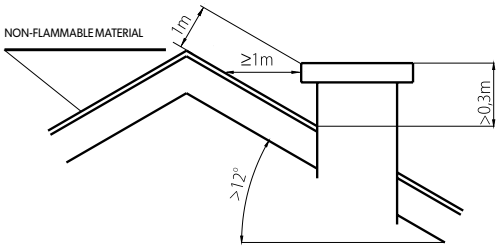


Fig. On steep roofs with the slope angle bigger than 12° and with non-flammable roofs, chimney outlets should be situated in a distance of at least 0.3 m from the roof surface and in a distance of at least 0.1 m measured horizontally from this surface.

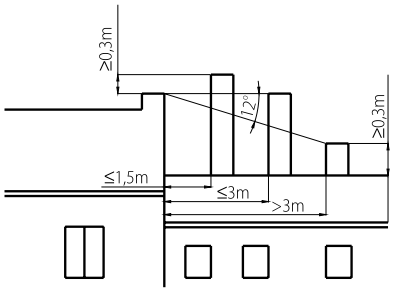
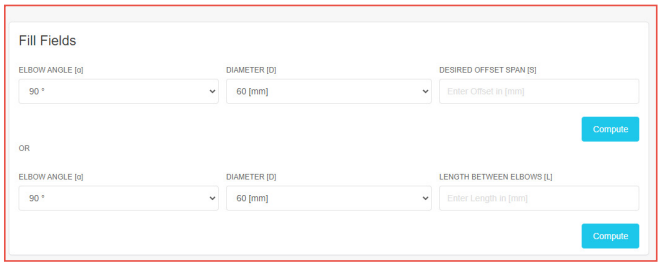
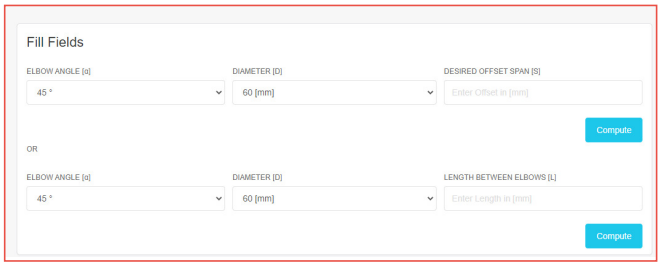


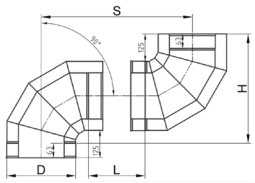
Fig. If the chimney is situated next to a part of a building, that creates an obstacle (cover), for the proper functioning of chimney ducts their outlets should be placed as follows:
- for chimneys situated in a distance between 3-10 m from the obstacle on a steep roof: above the surface built up from an angle of 12° downwards from the level of the highest obstacle
- for chimneys situated in a distance between 1.5-3 m from the obstacle: at least at the level of upper edge of the obstacle
- for chimneys situated in a distance of 1.5 m from the obstacle: at least 0.3 m higher than the upper edge of the obstacle.

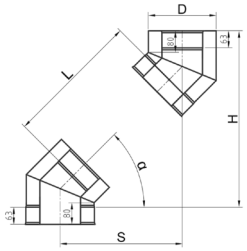
WWW

Offset calculator available at darco.pl









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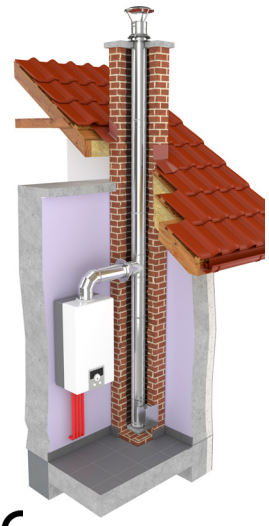
Chimney liners and double walled heat resistant chimneys <SWK>, <SWKow> and <SKD>

Chimney liners are made of acid-resist and chrome-nickel stainless steel sheet (type 1.4404 according to DIN17441) of thickness range from 0.5 to 1.0 mm. TheTheir standard application is fume extraction from gas, oil, wood or pellet fired heating devices working in negative pressure conditions. These types of chimneys are resistant to corrosion created by acid condensate, produced during burning process. Steam condenses on the cold inner walls of chimney, and (as condensate) is removed through a condensate bowl placed at the bottom of chimney. Occurrance of condensation develops mostly at the moment of starting-up the stove as well as during its periodic functioning.
Maximum continuous working temperature: SWK 450°C and 600°C
Maximum continuous working temperature: SWKow 450°C
Maximum continuous working temperature: SKD 600°C

Advantages:

- Acid-resistant, especially against sulphuric acid
- Much lower resistance of fume flow in comparison to traditional brick chimneys, because of small roughness of the surface
- Possibility of applying in case of modernization of already existing, cracked or leaking ceramic chimneys
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities

Double walled systems are also available with the outer wall powder coated (upon request).



CE 1450 <SWK>



<SKD>

DARCO SAUNA- Chimney system for saunas

DARCO SAUNA system is designed for the safe removal of flue gases from wood-fired stoves in saunas.
Made of high-quality materials resistant to high temperatures and moisture, it ensures reliable and durable operation.
The maximum operating temperature is 450 °C - painted coated version
The maximum operating temperature is 600 °C - unpainted version

Advantages:

- Complete set of necessary system components
- Simple and quick installation without the use of specialised tools



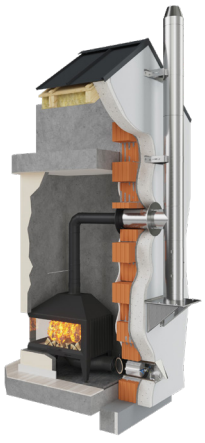


Acid-resistant steel chimney system <SKD-30> and <SKD-30-ML> SLIM

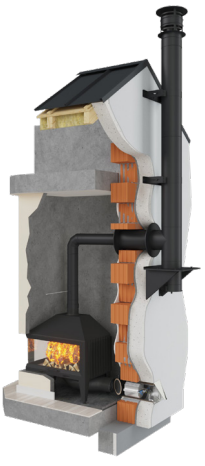
The chimneys are made of acid resistant chrome- nickel steel of grade 1.4404 according to DIN 17441 with a thickness of 0.5 to 0.6 mm. They are mainly used for the discharge of flue gases from heating appliances heated with gas, fuel oil, wood or pellets, operating under negative pressure. The outer wall is made of steel 1.4301-4N polished or painted black in RAL9005. Such chimneys are resistant to the corrosive effect of acidic condensate produced during the combustion process. The water vapour condenses on the cool inner walls of the chimney and, in the form of condensate, is discharged through a bowl at the bottom of the chimney. The condensation phenomenon can occur during start-up or cyclic operation of the boiler.
Maximum continuous operation temperature: 600°C

Advantages:

- High resistance to acids, mainly sulphuric acid
- Significantly lower resistance to flue gas flow than traditional masonry chimneys due to lower surface roughness
- Can be used indoors in newly built chimneys and for renovation of old chimneys
- Very simple and quick installation without demolition work
- Many possible set configurations



CE 1450 <SKD-30>



<SKD-30-ML>

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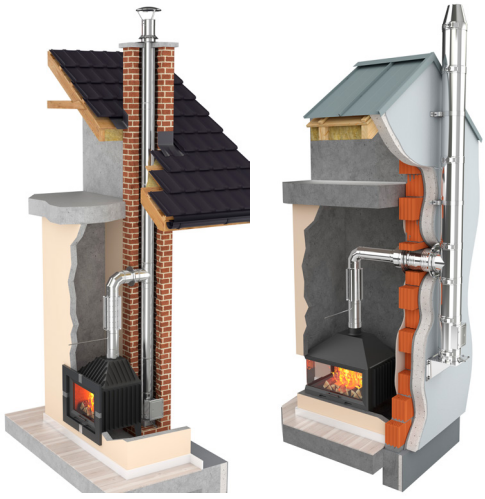
Heat resistant chimney liners and double walled heat resistant chimneys <SWKZ> and <SKDZ>

Heat resistant chimney liners and double walled heat resistant chimneys are made of chrome-nickel heat resistant steel sheet (type 1.4828 according to DIN 17441) of thicknesses of 0.8 and 1.0 mm. Their standard application is fume extraction from wood burning stoves.
Maximum continuous working temperature: 600°C

Advantages:

- Acid-resistant, especially against sulphuric acid
- Heat resistance (resistant to high temperatures of the fumes, which can rise up to 600°C and in the situation of soot fire even up to 1000°C)
- Much lower resistance of fume flow in comparison to traditional brick chimneys, because of small roughness of the surface
- Possibility of applying in case of modernization of already existing, cracked or leaking ceramic chimneys
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities

Double walled heat resistant chimneys ale also available with the outer powder coated (upon request).



CE 1450 <SWKŻ> <SKDŻ>

Vertical Flue System <SPOS>

The vertical flue system consists of SKDZ double-walled chimney components, SPK chimney connections and additional SPOS system elements.
They are mainly used to discharge flue gases from wood-fired heating appliances operating under negative pressure.
The system makes it possible to build a chimney directly above the fireplace's hearth. In this case, the function of the cleanout and condensate removal is performed by the hearth.
When designing this type of chimney, current national regulations must be taken into account.
Maximum continuous operating temperature: 600°C

Advantages:

- aesthetically pleasing and modern design
- any colour from RAL palette
- construction of the chimney directly above the fireplace
- installation on the roof with a pitch of 0-45 degrees
- very simple and quick installation
- various configurations of system components



CE 1450 <SPOS>

System of heat resistant chimney liners of oval shape <SWKZow>

Oval - shaped heat resistant chimney liners are made of chrome-nickel heat resistant steel sheet (type 1.4828 according to DIN 17441) of thicknesses of 0.8 and 1.0 mm. Their standard application is fume extraction from wood burning stoves.
Maximum continuous working temperature: 600°C

Advantages:

- Acid-resistant, especially against sulphuric acid
- Heat resistance (resistant to high temperatures of the fumes, which can rise up to 600°C and in the situation of soot fire even up to 1000°C)
- Much lower resistance of fume flow in comparison to traditional brick chimneys, because of small roughness of the surface
- Exploiting bigger crosswise diameter of the chimney compared to round chimney liners
- Possibility of applying in case of modernization of already existing, cracked or leaking ceramic chimneys
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities

Oval - shaped chimney liners are also available made of chrome - nickel 1.4404 acid resistant steel of thickness 0.6÷1.0 mm. Their application is to exhaust fumes, from stoves where temperature can go up to 450°C.



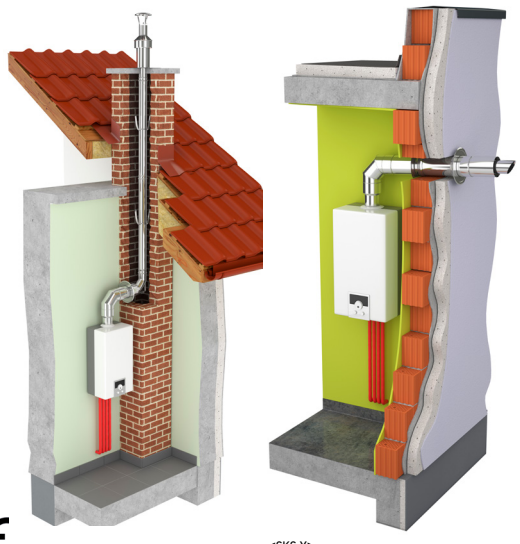
CE 1450 <SWKŻow>

Single walled flue system <SKS-X>

Single walled flue chimneys are made of acid-resistant chrome-nickel stainless steel sheet (type 1.4301 according to DIN 17441) of thicknesses of 0.4÷0.6 mm. Their standard application is fume extraction from modern gas fired boilers with closed combustion chamber or condensing boilers and pellet stoves, where fume temperatures are low. These types of boilers are equipped with a ventilator for fume extraction, what creates positive pressure in the chimney duct.
These types of chimneys consist of single-walled fume duct removing fumes from the boiler. Flue chimneys must be of high tightness, because of their functioning in high pressure conditions. In order to prevent the fumes from escaping outside the duct, special seals are used in the bell joint of the pipe.
Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney



CE 1450

<SKS-X>

Insulated walled flue system <SKS-X-IZ>

Insulated flue system is made of acid-resistant chrome-nickel stainless sheet. Inner pipe application (type 1.4301 acc. to DIN 17441 of thicknesses of 0.4 and 0.6 mm) is fume wet extraction from modern, energy-saving gas, oil boilers and pellet stoves. Outer pipe type is 1.4301 of thicknesses of 0.4 and 0.5 mm. Thermal insulation is made from mineral wool of thickness 30 mm.
Chimney system made of SKS-X-IZ elements is an independent construction. (there is no need to use ceramic materials).
Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities



CE 1450

<SKS-X-IZ>

Double walled air-flue system <SKSP-X>, <SKSP-X-ML>

Inner ducts are made of acid-resistant chrome-nickel stainless steel sheet (type 1.4301 according to DIN 17441) of thicknesses of 0.4÷0.6 mm. Outer ducts are made of chrome-nickel steel sheet (type 1.4301 according to DIN 17441) of thicknesses of 0.4 and 0.6 mm. Their standard application is fume extraction from modern gas fired boilers with closed combustion chamber or condensing boilers and pellet stoves, where fume temperatures are low. Condensing boilers reclaim the heat out of steam contained in the fumes. They are equipped with a ventilator for fume extraction, what creates positive pressure in the chimney duct.
Air-flue chimneys consist of concentric fume duct, extracting fumes through the inner duct, and an outer duct supplying air necessary for burning process.
Inner ducts of the air-flue chimneys must be of great tightness, because of their functioning in high pressure conditions. In order to prevent the fumes from escaping to the outer duct, special silicone seals are used in bell joint of the pipe.
Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney

<SKSP-X-ML> - double walled air-flue system with outer duct powder coated white (RAL 9003).



CE 1450

<SKSP-X>, <SKSP-X-ML>

Insulated air-flue system <SKSPD-X>

Inner duct is made of acid-resistant chrome-nickel stainless sheet, type 1.4301 acc. to DIN 17441 of thicknesses of 0.4÷0.6 mm. Air duct and outer duct is made of chrome-nickel steel sheet, type 1.4301 acc. to DIN 17441 of thicknesses of 0.4 and 0.6 mm. Their standard application is fume extraction from modern gas fired boilers with closed combustion chamber or condensing boilers and pellet stoves, where fume temperatures are low. Condensing boiler reclaims the heat out of steam contained in the fumes. It is equipped with a ventilator for fume extraction, what creates positive pressure in the chimney duct.
Insulated air-flue chimneys consist of concentric fume duct, extracting fumes through the inner duct and an outer duct supplying air necessary for burning process and thermal insulation 50 mm.
Insulated air-flue chimneys must be of great tightness, because of their functioning in high pressure conditions. In order to prevent the fumes from escaping to the outer duct, special silicone seals are used in bell joint of the pipe.
It is used to be mounted outside or in unheated building.
Maximum continuous working temperature: 250°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney



CE 1450 <SKSPD-X>

Chimney connections for accumulation systems <SPKA>

Chimney connections are made of chrome-nickel heat-resistant steel sheet (type 1.4828 according to DIN 17441) of thickness 2.0 mm. Their application is fume extraction from stoves, where fumes temperature can rise up even to 1200°C.
Chimney connections elements <SPKA> can not be used to build a chimney duct.
Elements of system are plasma welded bell pipe joining.

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Exploiting the boiler to its maximum efficiency
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities
- Non-flammable material and high tightness of the chimney



CE 1450 <SPKA>

Chimney connections system <SPK>

Chimney connections are made with DC01 mild steel of 2.0 mm thickness. Their application is smoke extraction from wood burning stoves, where fumes temperature can rise up to 1000°C.
Maximum continuous working temperature: 600°C

Advantages:

- Easy and simple mounting process



CE 1450 <SPK>

Chimney connections for pellet stoves <SPKP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. In order to prevent fumes from escaping the duct, special silicone seals are used in the bell joint of the pipe.
Maximum continuous working temperature: 250°C

Advantages:

- Easy and simple mounting process
- High tightness of the chimney connection
- High aesthetics (structured powder coating)



CE 1450 <SPKP>

Chimney connections for pellets stoves <SPP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. In order to prevent fumes from escaping the duct, special silicone seals are used in the spigot joint of the pipe.
Maximum continuous working temperature: 250°C

Advantages:

- Easy and simple mounting process
- High tightness of the chimney connection
- Invisible bell connections provide high aesthetics



CE 1450 <SPP>

Air-Flue chimney system for gas fireplaces <SGSP>

Air-Flue chimney system for gas fireplaces <SGSP> is a concentric double walled chimney system made of stainless steel: inner pipe - 1.4404, outer pipe - 1.4301. The system is used to exhaust fumes from modern gas fireplaces with closed combustion chamber. Air needed for burning process is taken from outside (through special air intakes) and then flows in the gap between the inner and outer chimney pipes. Smoke gases, from the burning process are taken out from the building using the inner pipe (natural convection). System secures ceramic surfaces of chimney duct from damages that can be caused by destructive influence chemical substances which are part of flue gases.
Maximum continuous working temperature: 600°C

Advantages:

- Resistance to aggressive chemical compounds contained in the fumes
- Long life span of the chimney
- Exploiting the boiler to its maximum efficiency, therefore reducing emission of harmful substances
- Easy and simple mounting process, without necessity of demolition works
- Multiple configuration possibilities



CE 1450 <SGSP>

Chimney liner system <SWK>

Single-walled chimney liner system <SWK>, made of acid-resistant chrome-nickel steel sheet (type 1.4404 according to DIN 17441). It protects inner surfaces of ceramic chimneys (exhausting wet fumes from oil, gas, wood or pellet fired appliances), from destructive effects of acids.
Maximum working temperature: 450°C and 600°C.
Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.
System of single walled chimney liners allows the adjustment of already existing chimney ducts to new specific working conditions.

Chimney liner system <SWK-X>

Round pipes and fittings products are used for building ducts in natural and mechanical ventilation systems, air heating as well as air conditioning installations. System made of acid-resistant chrome-nickel stainless steel, type 1.4031 acc. To DIN 17441. Maximum working temperature: 250°C.

Heat resistant chimney liner system <SWKZ>

Single-walled heat resistant chimney liner system <SWKZ>, made of heat-resistant chrome-nickel steel sheet (type 1.4828 according to DIN 17441). It protects inner surfaces of ceramic chimneys (extracting fumes from wood fired heating devices), from destructive functioning of acids. Maximum working temperature: 600°C.
Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.
System of single walled heat resistant chimney liner allows the adjustment of already existing chimney ducts to new specific working conditions

Application of chimney liners and recommended sheet thicknesses

Diameter DN	W, S, D 1.4404	D 1.4828	W 1.4301
80	0.5	-	0.6
100	0.5	-	0.6
110	0.5	-	0.6
120	0.5	0.8	0.6
130	0.5	0.8	0.6
140	0.6	0.8	0.6
150	0.6	0.8	0.6
160	0.6	0.8	0.6
180	0.6	0.8	0.6
200	0.6	0.8	0.6
225	0.6	0.8	0.6
250	0.8	0.8	0.8
280	0.8	0.8	0.8
300	0.8	0.8	0.8
325	0.8	0.8	0.8
350	0.8	0.8	0.8
400	1.0	0.8	1.0
450	1.0	-	1.0
500	1.0	-	1.0

Destination:
W - ventilation ducts
S - flue ducts (gas, oil)
D - smoke ducts

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
80	250	80.1	79.1	81.1	
100	315	100.8	99.8	101.8	
110	350	111.9	110.9	112.9	0.5
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	0.6
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	
250	790	252.3	250.7	253.3	
260	818	261.2	259.6	262.2	
280	880	280.9	279.3	281.9	0.8
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	
350	1100	350.9	349.3	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	1.0
500	1575	502.3	500.3	503.8	

Measurments:
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]±0.1
Dw - inner diameter of pipe [mm]±0.1
Dk - inner diameter of bell joint [mm]±0.1
s - metal sheet thickness [mm]

Bell joint of the pipe

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part - a bell. Thanks to this type of pipe joining, chimney liner is characterized by very tight and stiff construction. It also assures the proper flow of condensate, along walls of the chimney straight to the condensate drain bowl.

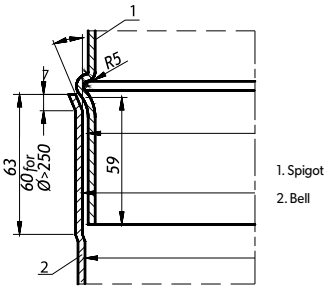
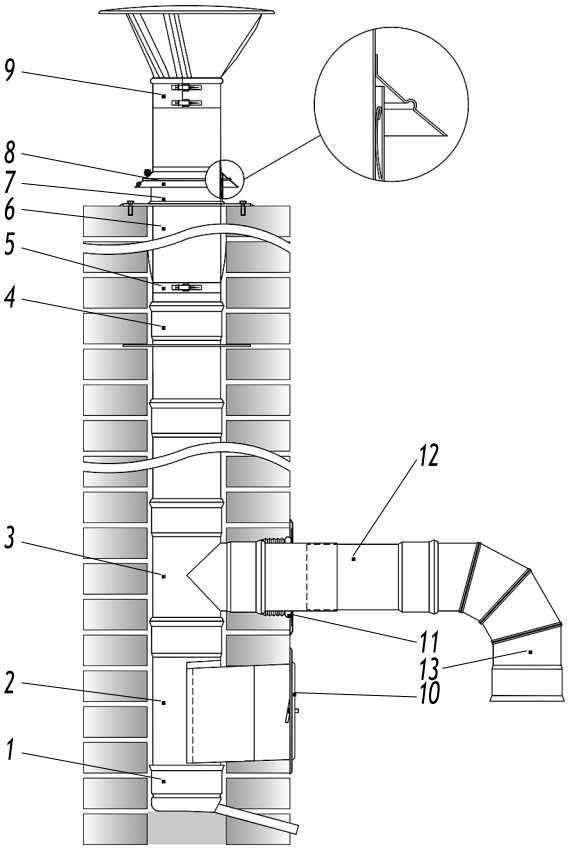


Fig. Method of joining single-walled pipe elements.

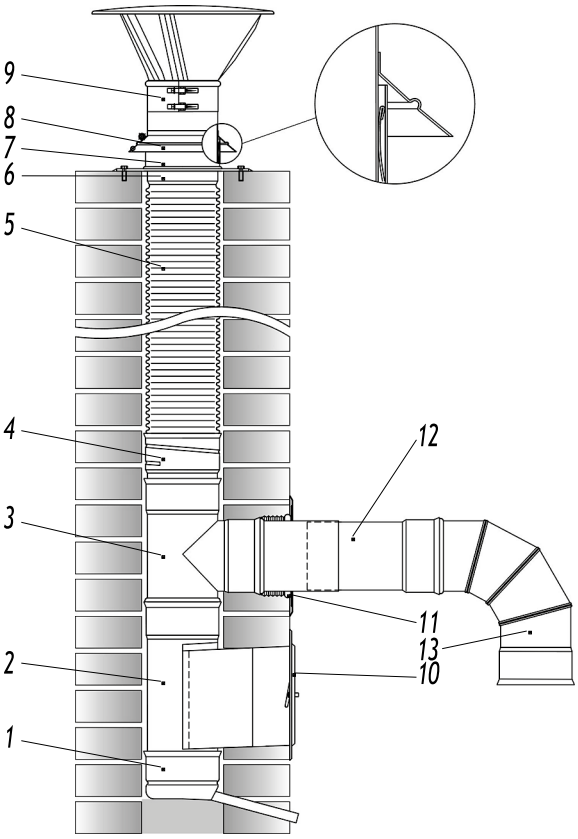
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Model application of elements



No	Name	Destination
1	Condensate drain bowl	MS150-CH
2	Clean out element	WC150-CH6
3	Tee 90°	TR150/90-CH6
4	Intermediate support	PP150-CH6
5	Stabilizing brackets	OU150-CH
6	Straight pipe 1 m	RP150/1000-CH6
7	Roof plate	PD150-X
8	Rain collar	KPD150-X
9	Cap	DK150-CH6
10	Doors	DW1-X
11	Rosette	ROZ150-CH
12	Telescopic pipe	RT150/2X250-CH6
13	Adjustable elbow 0-90°	KN150/90-CH6

Fig. An example of a single walled chimney construction (rigid pipes).

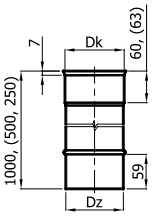


No	Name	Destination
1	Condensate drain bowl	MS150-CH
2	Clean out element	WC150-CH6
3	Tee 90°	TR150/90-CH6
4	Flexible pipe bell-type connector	ZST150-CH6-K
5	Stainless flexible pipe	RESF 150-CH
6	Flexible pipe spigot-type connector	ZST150/150-CH6-N
7	Roof plate	PD150-X
8	Rain collar	KPD150-X
9	Cap	DK150-CH6
10	Doors	DW1-X
11	Rosette	ROZ150-CH
12	Telescopic pipe	RT150/2X250-CH6
13	Adjustable elbow 0-90°	KN150/90-CH6

Fig. An example of a single walled chimney construction (flexible pipes).

1. STRAIGHT PIPE RP





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55	

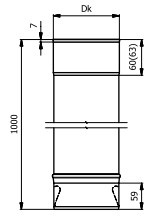
RP m x / L - m s

- s – sheet thickness
- m – material
- L – length [mm]
- x – diameter DN
- m – denotation for heat resistant steel sheet (Z)
- RP – straight pipe

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

2. STRAIGHT PIPE WITH MOUNTING HANDLES RU





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55	

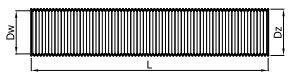
RU m x / 1000 - m s

- s – sheet thickness
- m – material
- 1000 – length [mm]
- x – diameter DN
- m – denotation for heat resistant steel sheet (Z)
- RU – straight pipe RP

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

3. SINGLE WALLED FLEXIBLE STAINLESS PIPE DARCO FLEX RESF





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.12
Dw	80	100	110	120	130	140	150	160	180	200	
Dz	87	107	107	127	137	147	157	167	187	207	
Weight* [kg]	0.70	0.90	1.00	1.10	1.20	1.25	1.35	1.45	1.65	1.80	

*Weight of 1 m of flexible pipe

Maximum length: 15 [m]
Minimal bending radius: 3D
Maximum working temp: 450°C

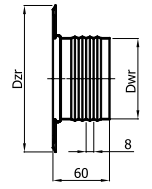
RESF x / L - CH

- CH – material
- L – length [mm]
- x – diameter DN
- RESF – flexible stainless pipe

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	10	10 - sheet thickness 0.10 mm

4. ROSETTE ROZ





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.5
Dwr [mm]	86	106	116	126	136	146	156	166	186	206	231	256	306	356	406	456	506	
Dzr [mm]	157	177	188	207	217	227	247	257	277	297	322	347	398	448	498	548	598	
Weight [kg]	0.12	0.14	0.16	0.18	0.19	0.21	0.23	0.25	0.28	0.30	0.34	0.37	0.44	0.51	0.58	0.65	0.72	

ROZ x - CH

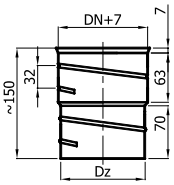
- CH – material
- x – diameter DN
- ROZ – rosette

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - chrome steel H17
Sheet thickness s	5	5 - sheet thickness 0.5 mm

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5. SINGLE WALLED FLEXIBLE PIPE CONNECTOR ZST





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	78	98	108	118	128	138	148	158	178	198	
Weight [kg]	0.18	0.22	0.25	0.27	0.29	0.31	0.34	0.36	0.40	0.44	

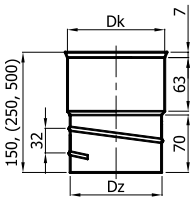
ZST x - m s

- sheet thickness
- material
- diameter DN
- single walled flexible pipe connector

Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

6. SINGLE WALLED FLEXIBLE PIPE CONNECTOR ZST-N





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	78	98	108	118	128	138	148	158	178	198	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	
Weight [kg]	0.18	0.22	0.25	0.27	0.29	0.31	0.34	0.36	0.40	0.44	

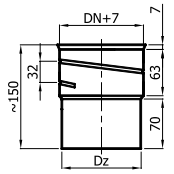
ZST x / L - m s - N

- spigot
- sheet thickness
- material
- length
- diameter DN
- single walled flexible pipe connector

Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

7. SINGLE WALLED FLEXIBLE PIPE BELL-TYPE CONNECTOR ZST-K





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
Weight [kg]	0.18	0.22	0.25	0.27	0.29	0.31	0.34	0.36	0.40	0.44	

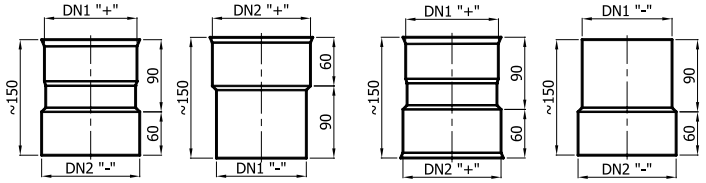
ZST x - m s - K

- bell
- sheet thickness
- material
- diameter DN
- single walled flexible pipe bell-type connector

Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

8. REDUCER (BELL-TYPE) RD-R





Diameter differences range:
DN2-DN1≤20 mm

ex. **RD-200/+180-CH6-R**

„+" bell
„-" spigot

Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Weight [kg]	0.18	0.23	0.25	0.28	0.30	0.32	0.34	0.36	0.41	0.45	0.51	0.57	0.68	0.79	0.90	1.00	1.13	

RD ±x / ±y - m s - R

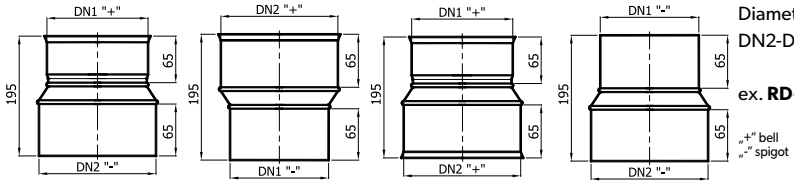
- bell-type
- sheet thickness
- material
- bell or spigot diameter DN1
- bell or spigot diameter DN2
- reducer

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

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9. REDUCER (SEGMENTED-TYPE) RD-S





Diameter differences range:
DN2-DN1>20 mm

ex. **RD-200/+160-CH6-S**

Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Weight [kg]	depends on dimensions																	

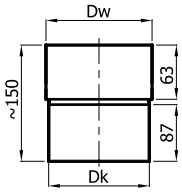
RD ±x / ±y - m s - S

- segmented-type
- sheet thickness
- material
- bell or spigot diameter DN1
- bell or spigot diameter DN2
- reducer

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

10. ADAPTER FOR DUOFLEX FLEXIBLE PIPE ADZ





Diameter DN	ø130	ø150	ø180	ø200	for s=1.0
Dk	133.9	153.0	183.4	202.3	
Dw	138	158	188	208	
Weight [kg]	0.50	0.60	0.70	0.75	

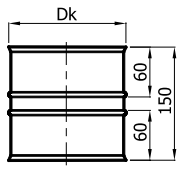
ADZ x - m s

- sheet thickness
- material
- diameter DN
- adapter for duoflex flexible pipe DUOFLEX

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

11. BELL- TYPE ADAPTER ZMU





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.18	0.23	0.25	0.28	0.30	0.32	0.34	0.36	0.41	0.45	0.51	0.57	0.68	0.79	0.90	1.00	1.13	

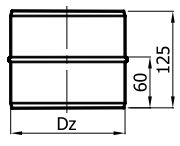
ZMU x - m s

- sheet thickness
- material
- diameter DN
- bell- type adapter

Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. SPIGOT-TYPE ADAPTER ZNY





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Weight [kg]	0.18	0.23	0.25	0.28	0.30	0.32	0.34	0.36	0.41	0.45	0.51	0.57	0.68	0.79	0.90	1.00	1.13	

ZNY x - m s

- sheet thickness
- material
- diameter DN
- spigot-type adapter

Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

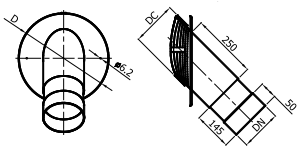
invent. build. enjoy.

13. ANGULAR WALL INSERT WITH ROPE FOR CERAMIC CHIMNEYS WKK-CS



Diameter DN	120	130	140	150	160	180	200	225
DC	140	150	160	170	180	200	220	250
D	280	290	300	310	320	340	360	385
Weight [kg]	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.45

Angular wall insert allows to connect the stove to a chimney at 45° angle.



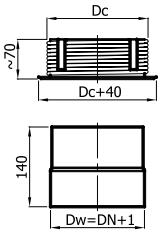
WKK-CS DN / DC / 45 - Z s

- s – sheet thickness
- Z – material
- 45 – angle 45°
- DC – inner diameter of ceramic tee
- DN – nominal diameter
- WKK-CS – angular wall insert with rope for ceramic chimneys

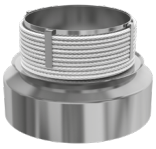
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

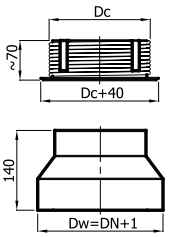
14. WALL INSERT FOR CERAMIC CHIMNEYS WKC





WKC





WKC-S

WKC DN / DC - m s

- s – sheet thickness
- m – material
- DC – inner diameter of ceramic tee DC
- DN – nominal diameter DN
- WKC – wall insert for ceramic chimneys

WKC DN / DC - m s - S

- S – segmented version
- s – sheet thickness
- m – material
- DC – inner diameter of ceramic tee DC
- DN – nominal diameter DN
- WKC – wall insert for ceramic chimneys

DN \ DC	Diameter	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250
	ø120	WKC	WKC	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S	WKC-S
	ø130	WKC-S	WKC	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S	WKC-S
	ø140	WKC-S	WKC-S	WKC	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S
	ø150	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC	WKC-S	WKC-S	WKC-S
	ø160	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC	WKC-S	WKC-S
	ø180	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC	WKC-S
	ø200	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC	WKC-S
	ø225	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC	WKC
	ø250	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC-S	WKC

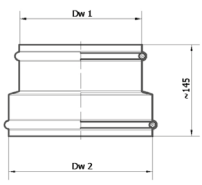
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

This wall insert protects tees of ceramic chimneys from damages caused by thermal expansion of metal elements of the chimney connection.

15. ADAPTER FOR CERAMIC CHIMNEYS TO A METAL PIPE RDZS



Diameter DN/DC	ø150/ø160	ø160/ø160	ø150/ø180	ø180/ø180	ø150/ø200	ø160/ø200	ø180/ø200	ø200/ø200
Dw1 (DN)	158	168	158	188	158	168	188	208
Dw2 (DC)	200	200	220	220	240	240	240	240
Weight [kg]	0.80	0.80	0.90	0.90	1.07	1.07	1.07	1.07



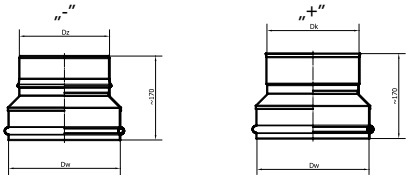
RDZS DN / DC - m s

- s – sheet thickness
- m – material
- DC – ceramic chimney
- DN – metal pipe
- RDZS – adapter for ceramic chimneys to a metal pipe

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

16. ADAPTER WITH ONE ROPE RDZS+1S





Diameter DN/DC	ø180 / ø180	ø200 / ø200
Dw (DC)	220.0	240.0
Dk (DN)	183.0	202.5
Dz (DN)	182.0	201.5
Weight [kg]	1.10	1.20

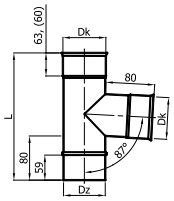
RDZS ± DN / DC + 1S - m s

- sheet thickness
- material
- one rope
- ceramic chimney
- metal pipe
- bell or spigot
- adapter with one rope

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

17. TEE 90° TR/90





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
L [mm]	230	270	270	270	280	300	300	330	350	370	380	420	500	500	600	600	650	
Weight [kg]	0.50	0.65	0.75	0.90	0.95	1.00	1.20	1.30	1.50	1.75	2.10	2.45	3.30	4.20	5.25	6.35	7.65	

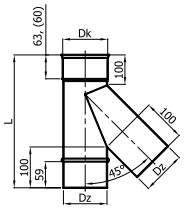
TR m x / 90 - m s

- sheet thickness
- material
- angle 90°
- diameter DN
- denotation for heat resistant steel sheet (Z)
- tee

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

18. TEE 45° TR/45





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
L [mm]	315	340	340	375	385	350	400	425	455	480	520	550	625	695	765	835	910	
Weight [kg]	0.50	0.65	0.75	0.90	0.95	1.00	1.20	1.30	1.50	1.75	2.10	2.45	3.30	4.20	5.25	6.35	7.65	

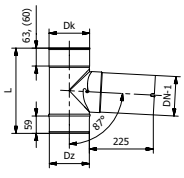
TR m x / 45 - m s

- sheet thickness
- material
- angle 45°
- diameter DN
- denotation for heat resistant steel sheet (Z)
- tee

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

19. SADDLE TEE WITH EXTENDED THROAT





Diameter DN	ø100	ø120	ø130	ø140	ø150	ø160	ø180
Dz	100.8	123	132.6	140.8	151.8	161.4	182
Dk	101.8	124	133.6	141.6	152.8	162.2	182.8
L [mm]	270	280	280	300	300	320	350
Weight [kg]	0.60	0.80	0.85	1.20	1.10	1.40	1.65

TRG x / 90 - m

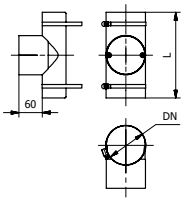
- material
- angle 90°
- diameter DN
- saddle tee with extended throat

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

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20. SADDLE TEE WITH CLAMP





Diameter DN	ø100	ø120	ø130	ø150
L [mm]	220	240	250	250
Weight [kg]	0.35	0.45	0.50	0.55

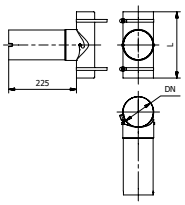
TS DN-m

- material
- diameter DN
- saddle tee with clamp

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	6	6 - sheet thickness 0.6 mm

21. SADDLE TEE WITH EXTENDED THROAT AND CLAMP





Diameter DN	ø100	ø120	ø130	ø150
L [mm]	220	240	250	250
Weight [kg]	0.50	0.65	0.70	0.90

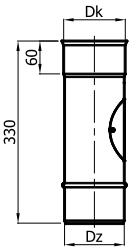
TSII DN-m

- material
- diameter DN
- saddle tee with extended throat and clamp

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	CH	CH - stainless steel 1.4404
Sheet thickness s	6	6 - sheet thickness 0.6 mm

22. STRAIGHT PIPE Z WITH REVISION RPR





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	for s=0.6
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.40	0.50	0.55	0.60	0.66	0.70	0.75	0.80	0.90	1.00	1.13	1.27	1.52	1.76	2.02	2.27	2.52	

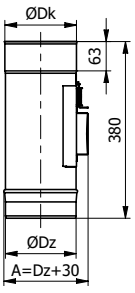
RPR m x - m s

- sheet thickness
- material
- diameter DN
- denotation for heat resistant steel sheet (Z)
- straight pipe z with revision

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

23. CLEAN OUT ELEMENT WCR





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	for s=0.6
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.40	0.50	0.55	0.60	0.66	0.70	0.75	0.80	0.90	1.00	1.13	1.27	1.52	1.76	2.02	2.27	2.52	

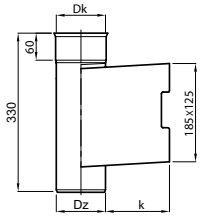
WCR m x - m s

- sheet thickness
- material
- diameter DN
- denotation for heat resistant steel sheet (Z)
- clean out element

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

24. CLEAN OUT OF ELEMENT WC





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
k	170	160	155	150	145	140	135	155	145	135	157	145	145	145	145	145	145	
Weight [kg]	0.90	1.00	1.05	1.10	1.10	1.10	1.15	1.30	1.35	1.40	1.60	1.70	1.95	2.20	2.45	2.70	2.95	

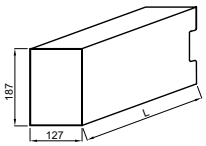
WC m x - m s

- s – sheet thickness
- m – material
- x – diameter DN
- denotation for heat resistant steel sheet (Z)
- WC – clean out of element

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

25. CLEAN OUT ELEMENT EXTENSION PW





Length L [mm]	200	300	500	1000	for s=0.6
Weight [kg]	0.60	0.90	1.50	2.95	

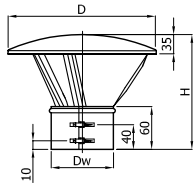
PW / L - m s

- s – sheet thickness
- m – material
- L – length
- PW – clean out element extension

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

26. CHIMNEY CAP DK





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dw	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
D	160	220	220	250	250	290	290	290	290	350	
H	145	180	180	180	180	200	200	200	200	220	
Weight [kg]	0.30	0.33	0.34	0.35	0.36	0.37	0.51	0.52	0.54	0.56	

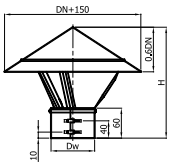
DK m x - m s

- s – sheet thickness
- m – material
- x – diameter DN
- denotation for heat resistant steel sheet (Z)
- DK – chimney cap

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	-	8	8	8 - sheet thickness 0.8 mm
	-	1	1	1 - sheet thickness 1.0 mm

27. CHIMNEY CAP DK





Diameter DN	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dw	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
H	330	360	420	480	540	600	660	
Weight [kg]	1.05	1.25	1.60	2.00	2.45	2.95	3.45	

DK m x - m s

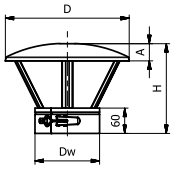
- s – sheet thickness
- m – material
- x – diameter DN
- denotation for heat resistant steel sheet (Z)
- DK – chimney cap

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	-	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

invent. build. enjoy.

28. CHIMNEY CAP WITH CLAMP DK/Z





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dw	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
D	160	220	220	250	250	290	290	290	290	350	
H	145	180	180	180	180	200	200	200	200	220	
Weight [kg]	0.30	0.33	0.34	0.35	0.36	0.37	0.51	0.52	0.54	0.56	

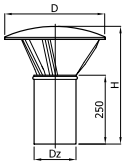
DK/Z m x - m s

- s – sheet thickness
- m – material
- x – diameter DN
- Z – denotation for heat resistant steel sheet (Z)
- DK/Z – chimney cap with clamp

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	-	8	8	8 - sheet thickness 0.8 mm
	-	1	1	1 - sheet thickness 1.0 mm

29. SINGLE WALLED FLEXIBLE PIPE CAP DKST





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	
D	160	220	220	250	290	290	290	290	290	350	
H	365	380	385	390	405	410	415	415	420	450	
Weight [kg]	0.50	0.60	0.65	0.70	0.75	0.80	0.95	1.00	1.05	1.10	

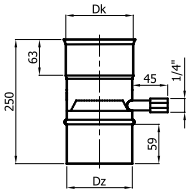
DKST x - CH

- x – material
- CH – diameter DN
- DKST – single walled flexible pipe cap

Destination	W			W - ventilation ducts
	S			S - flue ducts (gas, oil)
Material	CH			CH - stainless steel 1.4404
Sheet thickness s	5			5 - sheet thickness 0.5 mm
	6			6 - sheet thickness 0.6 mm

30. VERTICAL DRAIN BOWL MSP





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.1	101.8	113.0	124.1	133.7	141.7	152.9	162.4	183.1	202.2	227.7	253.2	303.1	352.4	403.4	452.7	503.7	
Weight [kg]	0.35	0.45	0.50	0.50	0.55	0.65	0.70	0.75	0.85	0.90	1.00	1.10	1.30	1.50	1.75	1.95	2.15	

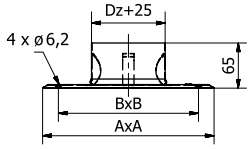
MSP m x - m s

- s – sheet thickness
- m – material
- x – diameter DN
- m – denotation for heat resistant steel sheet (Z)
- MSP – vertical drain bowl

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

31. ROOF PLATE PD





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6 (0.5)
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
A [mm]	250	250	250	250	250	250	300	300	330	330	350	400	450	500	550	600	650	
B [mm]	200	200	200	200	200	200	250	250	280	280	300	350	400	450	500	550	600	
Weight [kg]	0.35	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.60	0.60	0.65	0.80	0.95	1.10	1.25	1.40	1.55	

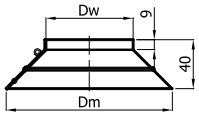
PD x - X

- x – material
- X – diameter DN
- PD – roof plate

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

32. RAIN COLLAR KPD





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	ø550	ø600	for s=0.6 (0.5)
Dw [mm]	79.0	99.7	110.9	122.0	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	279	300.4	349.7	400.7	450.0	501.0	550	600	
Dm [mm]	151	172	183	194	204	212	223	232	253	272	326	350	379	400	450	501	550	601	650	700	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.37	0.36	0.41	0.45	0.50	0.54	0.6	0.65	

KPD x - X

- x – material
- X – diameter DN
- KPD – rain collar

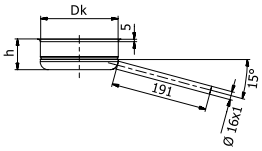
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

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33. CONDENSATE DRAIN BOWL MS







Bowl	I										II						
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk [mm]	81	102	113	124	134	142	153	162	183	202	228	253	303	353	404	453	504
h [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Weight [kg]	0.17	0.20	0.22	0.24	0.26	0.27	0.29	0.31	0.36	0.40	0.60	0.70	0.85	1.05	1.35	1.60	1.85

for s=0.6

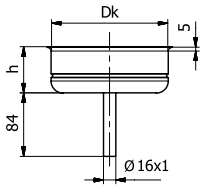
MS x - CH

- material
- diameter DN
- condensate drain bowl

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

34. CONDENSATE DRAIN BOWL MS





Bowl	I										II						
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk [mm]	81	102	113	124	134	142	153	162	183	202	228	253	303	355	404	453	504
h [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Weight [kg]	0.13	0.16	0.18	0.20	0.21	0.23	0.25	0.27	0.32	0.36	0.60	0.70	0.85	1.05	1.35	1.60	1.85

for s=0.6

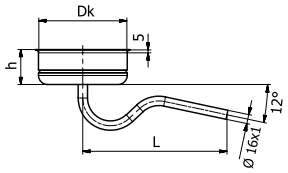
MS x - CH - P

- vertical
- material
- diameter DN
- condensate drain bowl

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

35. CONDENSATE DRAIN BOWL WITH SIPHON MSF





Bowl	I										II						
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dk [mm]	81	102	113	124	134	142	153	162	183	202	228	253	303	353	404	453	504
L [mm]	220	220	220	220	220	220	250	250	250	250	upon individual order						
h [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Weight [kg]	0.11	0.14	0.16	0.18	0.20	0.21	0.23	0.25	0.30	0.34	0.60	0.70	0.85	1.05	1.35	1.60	1.85

for s=0.6

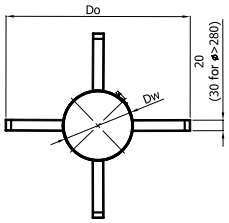
MSF x - CH

- material
- diameter DN
- condensate drain bowl with siphon

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

36. STABILIZING BRACKET OU





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Do [mm]	480	480	500	512	523	532	540	552	561	582	602	626	652	702	752	802	852	902
Dw [mm]	60.4	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.15	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.25

for s=0.6 (0.5)

OU x - X

- material
- diameter DN
- stabilizing bracket

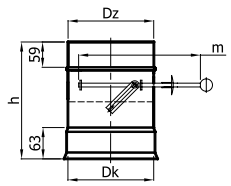
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

invent. build. enjoy.

37. CHIMNEY DAMPER SZK



Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	for s=1.0
Dz	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	
Dk	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	
h [mm]	220	230	240	250	260	280	300	325	350	400	
m [mm]	660	660	660	800	800	800	800	800	800	800	
Weight [kg]	1.45	1.55	1.65	1.80	1.90	2.15	2.45	2.85	3.30	4.30	



SZK m x - m s

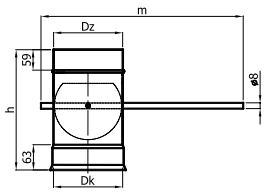
- sheet thickness
- material
- diameter DN
- denotation for heat resistant steel sheet (Z)
- chimney damper

Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

38. SIMPLIFIED CHIMNEY DAMPER SZK-REG



Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	for s=1.0
Dz	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	
Dk	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	
h [mm]	220	230	240	250	260	280	300	325	350	400	
m [mm]	690	690	690	690	690	690	690	690	690	690	
Weight [kg]	1.25	1.35	1.45	1.60	1.70	1.95	2.25	2.65	3.10	4.10	



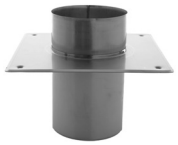
SZK m x - m s - REG

- knob
- sheet thickness
- material
- diameter DN
- denotation for heat resistant steel sheet (Z)
- simplified chimney damper

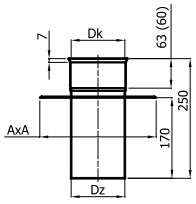
Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Chimney damper knobs - see page 189.

39. INTERMEDIATE SUPPORT PP



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
A [mm]	250	250	250	250	250	250	300	300	300	330	350	400	450	550	550	600	650	
Weight [kg]	0.75	0.80	0.85	0.87	0.90	0.95	1.10	1.15	1.20	1.35	1.50	1.85	2.20	2.55	2.90	3.30	3.70	



PP m x - m s

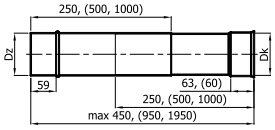
- sheet thickness
- material
- diameter DN
- denotation for heat resistant steel sheet (Z)
- intermediate support

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

40. TELESCOPIC PIPE RT



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6 L=2x 250
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.60	0.76	0.84	0.93	1.00	1.06	1.14	1.21	1.37	1.51	1.70	1.90	2.27	2.64	3.03	3.40	3.78	



RT m x / 2xL - m s

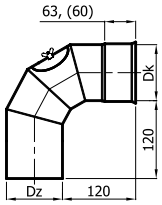
- sheet thickness
- material
- length, for example 2x250
- diameter DN
- denotation for heat resistant steel sheet (Z)
- telescopic pipe

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

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41. SOLID ELBOW 90° WITH REVISION KSR/90





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.32	0.48	0.54	0.62	0.66	0.74	0.80	0.97	1.10	1.21	1.36	1.82	2.27	2.64	3.75	4.55	5.44	

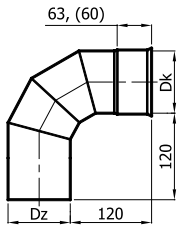
KSr m x / 90 - m s

- s – sheet thickness
- m – material
- x – angle 90°
- / – diameter DN
- 90 – denotation for heat resistant steel sheet (Z)
- KSr – solid elbow with revision

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

42. SOLID ELBOW 90° KS/90





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.32	0.48	0.54	0.62	0.66	0.74	0.80	0.97	1.10	1.21	1.36	1.82	2.27	2.64	3.75	4.55	5.44	

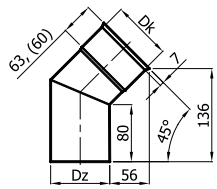
KS m x / 90 - m s

- s – sheet thickness
- m – material
- x – angle 90°
- / – diameter DN
- 90 – denotation for heat resistant steel sheet (Z)
- KS – solid elbow

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

43. SOLID ELBOW 45° KS/45





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.25	0.35	0.40	0.45	0.50	0.50	0.55	0.60	0.70	0.80	0.95	1.10	1.40	1.70	2.10	2.50	2.95	

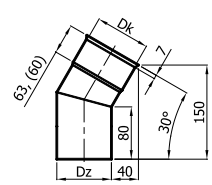
KS m x / 45 - m s

- s – sheet thickness
- m – material
- x – angle 45°
- / – diameter DN
- 45 – denotation for heat resistant steel sheet (Z)
- KS – solid elbow

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

44. SOLID ELBOW 30° KS/30





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.25	0.30	0.35	0.40	0.45	0.45	0.50	0.55	0.65	0.70	0.80	0.95	1.20	1.45	1.75	2.05	2.40	

KS m x / 30 - m s

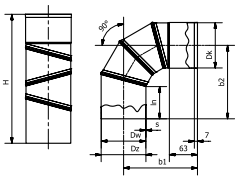
- s – sheet thickness
- m – material
- x – angle 30°
- / – diameter DN
- 30 – denotation for heat resistant steel sheet (Z)
- KS – solid elbow

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

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45. ADJUSTABLE ELBOW 90° KN/90





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.6
Dw [mm]	79.1	99.8	110.9	122	126.1	131.6	139.5	150.6	160.2	180.8	199.9	225.4	250.9	
Dz [mm]	80.1	100.8	111.9	123	127.1	132.6	140.7	151.8	161.4	182	201.1	226.6	252.1	
Dk [mm]	81.1	101.8	112.9	124	128.1	133.6	141.7	152.8	162.4	183	202.1	227.6	253.1	
b1 [mm]	156	166	170	175	177	180	184	190	194	205	214	227	239	
b2 [mm]	155	165	163	166	172	170	181	178	202	205	210	227	244	
H[mm]	274	290	290	297	304	304	317	317	344	354	364	389	414	
In [mm]	73	72	67	64	68	64	70	61	80	74	68	73	78	
Weight [kg]	0.28	0.38	0.42	0.47	0.49	0.52	0.69	0.74	0.85	0.99	1.12	1.35	1.59	

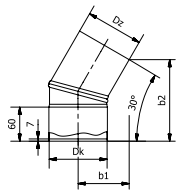
KN x / 90 - m s

- s – sheet thickness
- m – material
- 90 – angle 90°
- x – diameter DN
- KN – adjustable elbow

Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	-	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
	-	-	Z - heat resistant steel 1.4828
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

46. ADJUSTABLE ELBOW 30° KN/30





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.6
b1 [mm]	78	91	97	103	108	113	120	126	142	158	
b2 [mm]	143	152	153	155	157	160	162	169	191	215	
Weight [kg]	0.17	0.23	0.27	0.31	0.35	0.38	0.42	0.46	0.59	0.72	

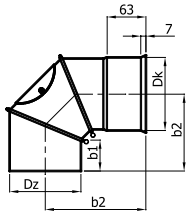
KN x / 30 - m s

- s – sheet thickness
- m – material
- 30 – angle 30°
- x – diameter DN
- KN – adjustable elbow

Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	-	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
	-	-	Z - heat resistant steel 1.4828
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

47. ADJUSTABLE ELBOW WITH FASTENING CLAMPS AND REVISION 90° KNSZR/90-3 SEG





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.6
Dz [mm]	123.2	132.8	151.9	161.4	182.1	201.2	226.7	252.2	
Dk [mm]	124.2	133.8	152.9	162.4	183.1	202.2	227.7	253.0	
b_1 [mm]	70	70	70	70	70	70	70	70	
b_2 [mm]	205	205	210	205	205	220	205	220	
Weight [kg]	0.62	0.66	0.80	0.97	1.10	1.21	1.36	1.82	

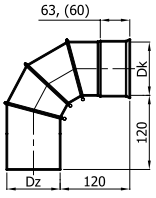
KNS Z r x / 90 - m s -3seg

- s – sheet thickness
- m – material
- 90 – angle 90°
- x – diameter DN
- r – revision
- Z – denotation for heat resistant steel sheet (Z)
- KNS – adjustable elbow with fastening clamps and revision

Destination	W	-	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

48. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 90° KNS/90 (ø120÷ø250)-4 SEG





Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.6
Dz [mm]	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	
Dk [mm]	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.0	
Weight [kg]	0.62	0.66	0.74	0.80	0.97	1.10	1.21	1.36	1.82	

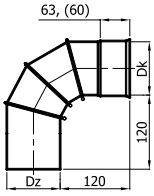
KNS m x / 90 - m s -4seg

- s – sheet thickness
- m – material
- 90 – angle 90°
- x – diameter DN
- Z – denotation for heat resistant steel sheet (Z)
- KNS – adjustable elbow with fastening clamps

Destination	W	W	W - ventilation ducts
	S	-	S - flue ducts (gas, oil)
Material	CH	-	CH - stainless steel 1.4404
	-	X	X - stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	6	6	6 - sheet thickness 0.6 mm

49. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 90° KNS/90 (ø300÷ø500)-4 SEG





Diameter DN	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	2.27	2.64	3.75	4.55	5.44	

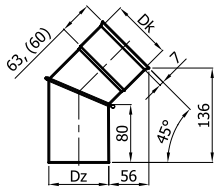
KNS m x/90 - m s -4seg

- m — sheet thickness
- x — material
- 90 — angle 90°
- m — diameter DN
- s — denotation for heat resistant steel sheet (Z)
- 4seg — adjustable elbow with fastening clamps

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

50. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 45° KNSZ/45 (ø120÷ø250)





Diameter DN	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.6
Dz [mm]	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	
Dk [mm]	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	
Weight [kg]	0.45	0.50	0.50	0.55	0.60	0.70	0.80	0.95	1.10	

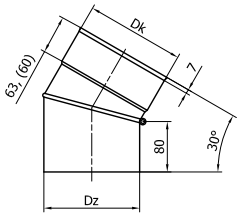
KNS Z x/45 - m s

- Z — sheet thickness
- x — material
- 45 — angle 45°
- m — diameter DN
- s — denotation for heat resistant steel sheet (Z)
- adjustable elbow with fastening clamps

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

51. ADJUSTABLE ELBOW WITH FASTENING CLAMPS 30° KNS/30 (ø100÷ø500)





Diameter DN	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.35	0.4	0.45	0.50	0.50	0.55	0.60	0.70	0.80	0.95	1.10	1.40	1.70	2.10	2.50	2.95	

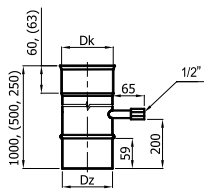
KNS m x/30 - m s

- m — sheet thickness
- x — material
- 30 — angle 30°
- m — diameter DN
- s — denotation for heat resistant steel sheet (Z)
- adjustable elbow

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

52. STRAIGHT PIPE WITH MEASURING OUTLET 1/2" ROP-1/2





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55	

ROP m x/L - m s -1/2

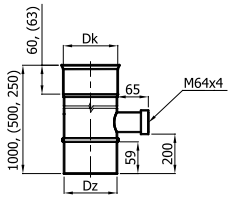
- m — measuring outlet ½"
- x — sheet thickness
- L — material
- m — length [mm]
- s — diameter DN
- 1/2 — denotation for heat resistant steel sheet (Z)
- ROP — straight pipe with measuring outlet

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

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53. STRAIGHT PIPE WITH MEASURING OUTLET M64X4 ROP-64





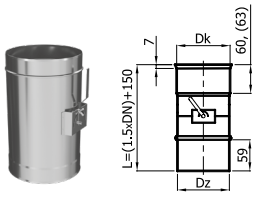
Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	1.20	1.50	1.70	1.85	2.00	2.10	2.30	2.40	2.75	3.00	3.40	3.80	4.55	5.30	6.05	6.80	7.55	

ROP m x/L - m s - 64

- 64 — measuring outlet M64x4
- s — sheet thickness
- m — material
- L — length [mm]
- x — diameter DN
- m — denotation for heat resistant steel sheet (Z)
- ROP — straight pipe with measuring outlet

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

54. STRAIGHT PIPE WITH A DAMPER RPP



Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	132.8	140.7	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	133.8	141.7	152.9	162.4	183.1	202.2	227.7	253.2	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.40	0.50	0.60	0.65	0.75	0.80	0.85	1.00	1.20	1.40	1.70	2.00	2.75	3.60	4.60	5.70	6.90	

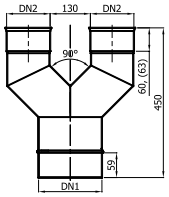
RPP m x/L - m s

- s — sheet thickness
- m — material
- L — length [mm]
- x — diameter DN
- m — denotation for heat resistant steel sheet (Z)
- RPP — straight pipe with a damper

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

55. REDUCING TEE YR





Diameter DN1	ø180	ø200	ø225		
Diameter DN2	ø110	ø120	ø130	ø140	ø150

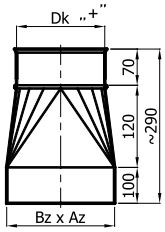
YR m x/2xy - m - s

- s — thickness
- m — material
- y — diameter DN2
- x — inlet diameter DN1
- m — denotation for heat resistant steel sheet (Z)
- YR — reducing tee YR

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

56. SEGMENTED REDUCER RD





Diameter DN	ø150	ø160	ø170	ø180	ø190	ø200	ø210	ø225	ø250	ø300	for s=0.6
Dk [mm]	152.9	162.4	172.0	183.1	192.7	202.2	211.8	227.7	253.2	302.6	
Az [mm]	120	125	135	120	120	120	120	125	135	235	
Bz [mm]	120	130	135	165	180	200	210	230	260	235	
Weight [kg]	0.60	0.63	0.66	0.70	0.73	0.78	0.80	0.87	0.97	1.15	

RD m BxA/+x - m - s K

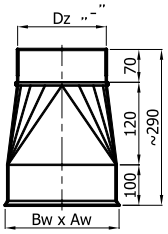
- K — bell connection
- s — thickness
- m — material
- x — inlet diameter w [mm]
- A — duct dimension A in [mm]
- B — duct dimension B in[mm]
- m — denotation for heat resistant steel sheet (Z)
- RD — segmented reducer

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

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57. SEGMENTED REDUCER RD





Diameter DN	ø150	ø160	ø170	ø180	ø190	ø200	ø210	ø225	ø250	ø300	
Dk [mm]	151.9	161.4	171.0	182.1	191.7	201.2	210.8	226.7	252.2	301.6	for s=0.6
Aw [mm]	120	125	135	120	120	120	120	125	135	235	
Bw [mm]	120	130	135	165	180	200	210	230	260	235	
Weight [kg]	0.60	0.63	0.66	0.70	0.73	0.78	0.80	0.87	0.97	1.15	

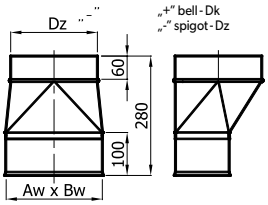
RD m BxA/-x-m-s N

- N – segmented reducer
- B – duct dimension B in [mm]
- A – duct dimension A in [mm]
- x – inlet diameter w [mm]
- m – material
- s – thickness
- spigot-type connection
- (Z) – denotation for heat resistant steel sheet

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

58. SEGMENTED REDUCER RD-NS ASYMMETRICAL





Diameter DN	ø150	ø160	ø170	ø180	ø190	ø200	ø210	ø225	ø250	ø300	
Dk [mm]	151.9	161.4	171.0	182.1	191.7	201.2	210.8	226.7	252.2	301.6	for s=0.6
Aw [mm]	120	125	135	120	120	120	120	125	135	235	
Bw [mm]	120	130	135	165	180	200	210	230	260	235	
Weight [kg]	0.60	0.63	0.66	0.70	0.73	0.78	0.80	0.87	0.97	1.15	

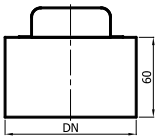
RD m BxA/±x-m-s NS

- NS – segmented reducer
- B – duct dimension B in [mm]
- A – duct dimension A in [mm]
- x – inlet diameter D w [mm]
- m – material
- s – thickness
- asymmetrical
- (Z) – denotation for heat resistant steel sheet

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

59. TEE PLUG ZT-K/N





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Weight [kg]	0.12	0.15	0.17	0.19	0.20	0.22	0.24	0.26	0.30	0.35	0.42	0.48	0.63	0.80	1.00	1.20	1.40	for s=0.6

ZT x-m s-K/N

- ZT – tee plug
- x – diameter DN
- m – material
- s – sheet thickness
- K/N – version spigot or bell

N - for TR 90°
K - for TR 45°

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	5	-	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

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Complete Flue Gas Discharge Set for Sauna Stoves

The DARCO SAUNA system is a modern and aesthetic solution designed specifically for wood-fired stoves in saunas. Each component has been carefully designed to ensure safe flue gas removal.

The maximum operating temperature is 450 °C - painted coated version
The maximum operating temperature is 600 °C - unpainted version

The set includes all the necessary components – from straight pipes and elbows, through insulation, covers and roof passages, to end caps. Each element of the SAUNA system has been designed for easy and quick installation, without the need for specialised tools. It is a ready-to-use, well-thought-out set – just assemble and connect. The high-quality materials are resistant to high temperatures and moisture.



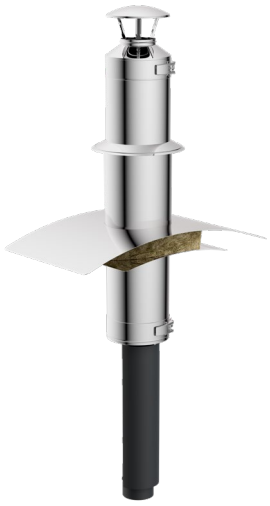


I Model application of elements



No	Denotation	Name
1	RP 115/1,0-CH5	Single wall straight pipe
2	SSE-RP115/1,0-X6	Heat protection
3	KS115/90-CH5	Solid elbow
4	ADD115/120/225-CH5	Adapter single wall>double wall
5	OPIV 225-X	Securing clamp
6	PL/O/225-X6-II	Round masking plate
7	WEL-325/425/500	Mineral wool insulation
8	PL/O/225-X6-II	Round masking plate
9	OPIV 225-X	Securing clamp
10	KSD120/225/90-CH5	Double wall solid elbow 90°
11	OPIV 225-X	Securing clamp
12	RPD120/225/1000-CH	Double wall straight pipe
13	OPIV 225-X	Securing clamp
14	DKD-I-120/225-CH5	Cap
15	OMD-II225-X/5-15	Mounting bracket 225-X/5-15

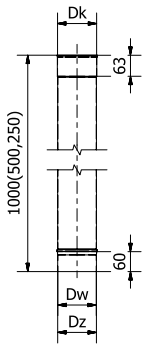
II Model application of elements



No	Denotation	Name
1	RP 115/1,0-CH5	Single wall straight pipe ø115/1m
2	SSE-RP115/1,0-X6	Heat protection
3	ADD115/120/225-CH5	Adapter single wall>double wall
4	OPIV 225-X	Securing clamp
5	PL/O225-X6	Two-piece square masking plate
6	WEL.PIERSCIEN.426X226x30	Mineral wool ring
7	RPD120/225/1,0-CH5	Double wall straight pipe
8	PDK225-XPE	Roof flashing with elastic collar
9	KPD225-X	Rain collar
10	OPIV 225-X	Securing clamp
11	DKD120/225-CH5	Cap

1. SINGLE WALL STRAIGHT PIPE RP





Diameter DN	115
Dz [mm]	116.07
Dw [mm]	115.07
Dk [mm]	117.07
Weight [kg]	1.40

RP 115 / L - CH 5

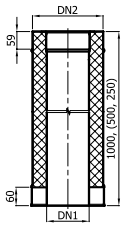
- RP — single wall straight pipe
- 115 — diameter DN
- L — length (1,0 m/0,5m/0,25 m)
- CH — material
- 5 — sheet thickness

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

2. DOUBLE WALL STRAIGHT PIPE RPD





Diameter DN1/DN2	120 225
Weight [kg]	8.10

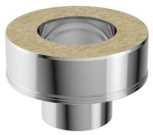
RPD 115 / 225 / L - CH 5

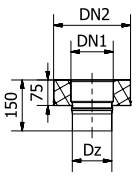
- RPD — double wall straight pipe
- 115 — diameter DN1
- 225 — diameter DN2
- L — length (1,0 m/0,5m/0,25 m)
- CH — material DN1
- 5 — sheet thickness

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

3. ADAPTER SINGLE WALL>DOUBLE WALL ADD





Diameter DN1/DN2	115 225
Dz [mm]	124.2
Weight [kg]	0.50

ADD 115 / 120 / 225 - CH 5

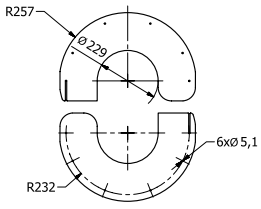
- ADD — adapter single wall>double wall
- 115 — diameter Dz
- 120 — diameter DN1
- 225 — diameter DN2
- CH — material
- 5 — sheet thickness

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

4. ROUND MASKING PLATE PL/O





PL / O / 225 - X 6 - II

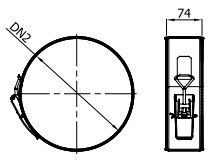
- PL — masking plate
- O — round
- 225 — diameter DN1
- X — material
- 6 — sheet thickness
- II — version

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

5. SECURING CLAMP OPIV





Diameter DN2	225
Weight [kg]	0.35

OPIV 225 - X

- OPIV — securing clamp IV
- 225 — diameter DN2
- X — material

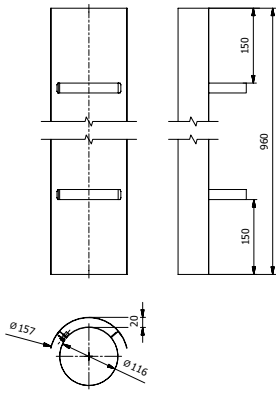
Destination	D	D - smoke ducts
Material	X	stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

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6. HEAT PROTECTION SSE





SSE - RP115 / L - X 6

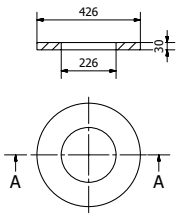
- sheet thickness
- material
- length (1,0 m/0,5m/0,25 m)
- straight pipe (diameter 115 mm)
- heat protection

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

7. MINERAL WOOL RING WEL.PIERSCIEN





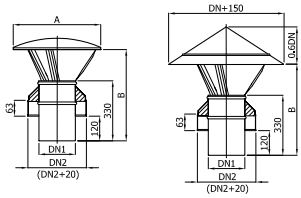
WEL.PIERSCIEN. 426X226x30

- dimensions
- mineral wool ring

Destination	D	D - smoke ducts
Material	W	Mineral wool

8. CAP DKD





DN2+20 - for heat-resistant sheet

Diameter DN1/DN2	120
	225
D [mm]	250
B [mm]	410
Weight [kg]	1.70

DKD 120 / 225 - CH 5

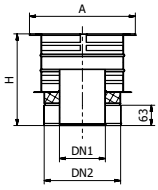
- sheet thickness
- material
- diameter DN2
- diameter DN1
- cap

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

9. CAP DKD-I





Diameter DN1/DN2	120
	225
A [mm]	325
H [mm]	300
Weight [kg]	2.40

DKD-I 120 / 225 - CH 5

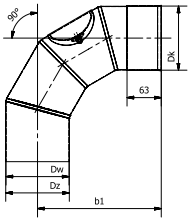
- sheet thickness
- material
- diameter DN2
- diameter DN1
- cap

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

10. SOLID ELBOW WITH REVISION 90° KSr/90





Diameter DN	115
Dz [mm]	116.07
Dw [mm]	115.07
Dk [mm]	117.07
b1	230
Weight [kg]	0.40

KSr 115 / 90 - CH 5

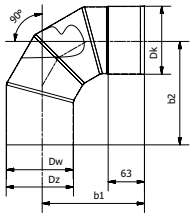
- 5 — sheet thickness
- CH — material
- 90 — angle 90°
- 115 — diameter DN
- KSr — solid elbow with revision

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

11. SOLID ELBOW 90° KS/90





Diameter DN	115
Dz [mm]	116.07
Dw [mm]	115.07
Dk [mm]	117.07
b1, b2	181
Weight [kg]	0.40

KS 115 / 90 - CH 5

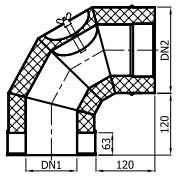
- 5 — sheet thickness
- CH — material
- 90 — angle 90°
- 115 — diameter DN
- KS — solid elbow

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

12. SOLID ELBOW WITH REVISION 90° KSDr/90





Diameter DN1/DN2	120
	225
Weight [kg]	2.70

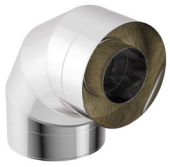
KSDr 120 / 225 / 90 - CH 5

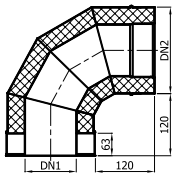
- 5 — sheet thickness
- 120 — material DN1
- 90 — angle 90°
- 225 — diameter DN2
- 120 — diameter DN1
- KSDr — solid elbow with revision

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

13. SOLID ELBOW 90° KSD/90





Diameter DN1/DN2	120
	225
Weight [kg]	2.70

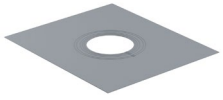
KSD 120 / 225 / 90 - CH 5

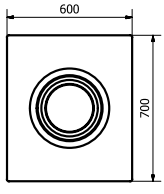
- 5 — sheet thickness
- 120 — material DN1
- 90 — angle 90°
- 225 — diameter DN2
- 120 — diameter DN1
- KSD — solid elbow

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

14. SILICONE SEALING PLATE TK-PLYTA- USZCZ.SIL.





TK-PLYTA- USZCZ.SIL. 100-380MM

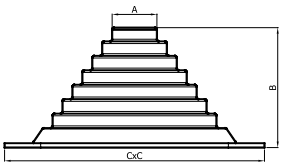
- 100-380MM — diameter
- TK-PLYTA- USZCZ.SIL. — silicon collar

Destination	D	D - smoke ducts
Material	S	S - silicone

invent. build. enjoy.

15. SEALING COLLAR KV





A [mm]	ø 150 - 280
B [mm]	140
CxC [mm]	360x360

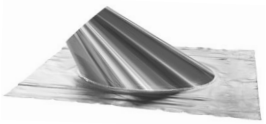
KV 70

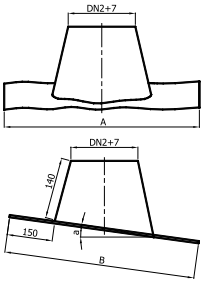
- sealing collar

Destination	Roof flashing

Max. working temperature 100°C.

16. ROOF FLASHING WITH ELASTIC COLLAR PDK





a = 20 → from 0-20°
a = 35 → from 20-35°
a = 50 → from 35-50°

Diameter DN1/DN2		120
		225
α 20	A	1000 (1120 PE version)
	B	632
α 35	A	1000 (1120 PE version)
	B	724
α 50	A	1000 (1120 PE version)
	B	879
Weight [kg]		depends on dimensions

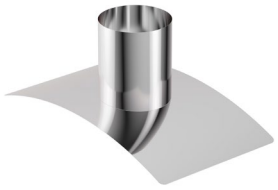
PDK 225 / α - X PE

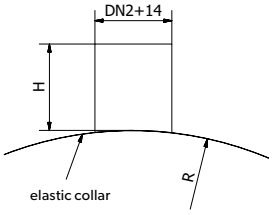
- elastic collar
- material
- angle α
- diameter DN2
- angular roof flashing

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

17. RADIAL ROOF FLASHING WITH ELASTIC COLLAR PDK-R





DN2 [mm]	225
R	as a function of the sauna's outer radius
H	depending on R

PDK 225 / R - X PE

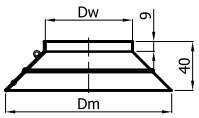
- elastic collar
- material
- recommended log radius
- diameter DN2
- radial roof flashing

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

18. RAIN COLLAR KPD





Diameter DN	ø225
Dw [mm]	225.5
Dm [mm]	326
Weight [kg]	0.29

KPD 225 - X

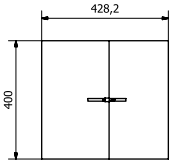
- material
- diameter DN
- rain collar

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

19. INSULATION COVER OPW





OPW 225 - X

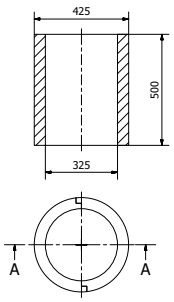
- material
- diameter DN
- Insulation cover

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

20. MINERAL WOOL INSULATION WEL





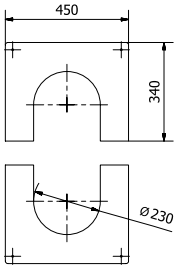
WEL- 325/425/500

- dimensions
- mineral wool insulation

Destination	D	D - smoke ducts
Material	W	Mineral wool

21. TWO-PIECE SQUARE MASKING PLATE PL/O





PL/0 225 - X 6

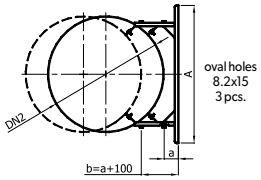
- sheet thickness
- material
- diameter DN
- two-piece square masking plate

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

22. MOUNTING BRACKET OMD-II





Diameter DN2	225
A [mm]	395
Weight [kg]	1.20

OMD-II 225 - X / 5-15

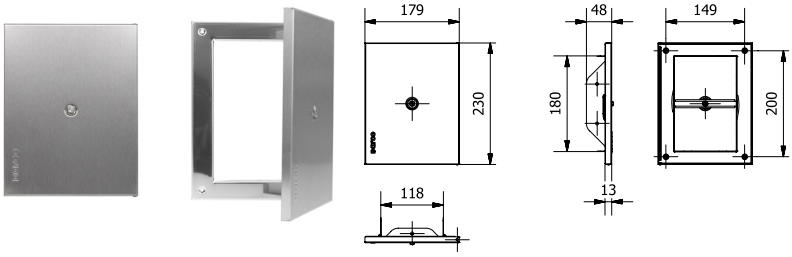
- min. distance from the wall
- material
- diameter DN2
- mounting bracket

Destination	D	D	D - smoke ducts
Material	CH		stainless steel 1.4404
		X	stainless steel 1.4301
Sheet thickness s	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

Available painted coated version (black).

invent. build. enjoy.

1. DOORS DW1



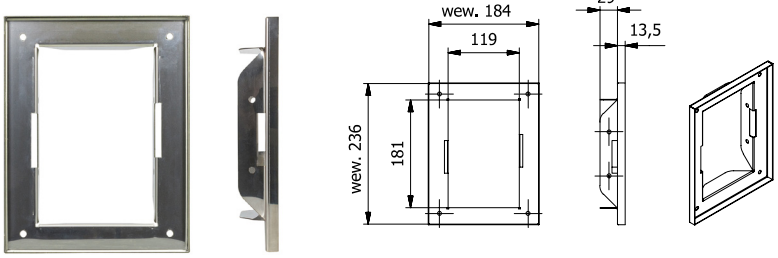
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

Weight [kg]	0.60

DW1 - X ...

- ML powder coated
- material
- doors

2. DOOR FRAME RML-DW1



Waga [kg]	0.35

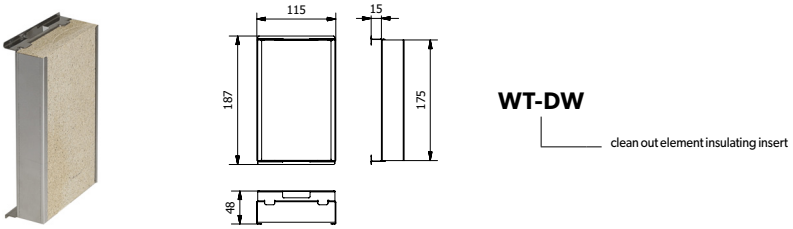
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	1	1 - sheet thickness 1 mm

Weight [kg]	0.35

RML-DW1 - X ...

- ML powder coated
- material
- ramka do drzwiczek licująca

3. CLEAN OUT ELEMENT INSULATING INSERT WT-DW



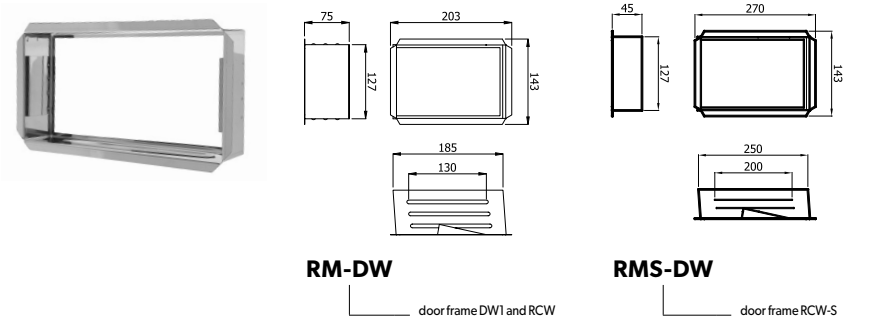
WT-DW

- clean out element insulating insert

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 (vermiculite)
Sheet thickness s	5	5 - sheet thickness 0.5 mm

Weight [kg]	0.60

4. DRAUGHT REGULATOR DOOR FRAME RCW RM-DW / RMS-DW



Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	8	8 - sheet thickness 0.8 mm

Weight [kg]	RM-DW	0.50
	RMS-DW	0.60

RM-DW

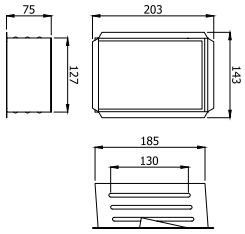
- door frame DW1 and RCW

RMS-DW

- door frame RCW-S

5. DRAUGHT REGULATOR DOOR FRAME WITH CLEAN OUT ELEMENT PLUG RCW RM-DW-ZWC





RM-DW - ZWC

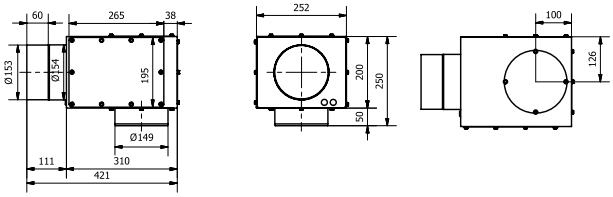
door frame DW1

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	8	8 - sheet thickness 0.8 mm

Weight [kg]	0.64

6. DRAUGHT REGULATOR BOX SRC





Destination	W	W - ventilation ducts
Material	OC	OC - galvanized steel sheet

SRC

draught regulator box

invent. build. enjoy.

Description

Chimney draught regulator decreases too high pressure in smoek chimney duct, which:

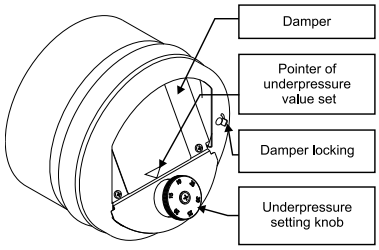
- appears despite correct cross-section of a chimney duct,
- appears if the cross-sectional area of chimney duct is to big,
- is caused by temporary impact of weather conditions for example strong wind.

Device is destined to be mounted:

- a) on the connector which connects stove with the chimney,
- b) over the connector,
- c) under the connector.



Construction



Technical data

Type	RCO / RCO-EX RCW / RCR / RCP		RCO-80	
Group	5		1	
Norm	PN-EN 16475-3		PN-EN 16475-3	
Underpressure range [Pa]	10 ÷ 35		10 ÷ 35	
Max. fumes temp [°C]	400		400	
Max. chimney duct cross-section [cm²]	500 *	750 *	160 *	220 *
Max. diameter of a round chimney duct [cm]	25 *	31 *	14 *	16 *
Insulation clas	I, II	III	I, II	III

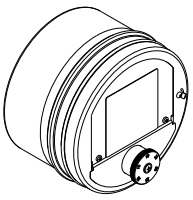
*Chimney parameters (chimney height not bigger than 20m)

Functioning

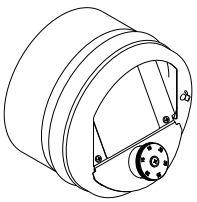
The weight on the damper of draught regulator is balanced. When in a chimney duct the negative pressure rises too high, damper opens and lets fresh air in. Thanks to this, pressure decreases because:

- fumes are cooler and in consequence the draught is smaller
- chimney duct apart from fumes must conduct fresh air supplied by the damper, so there is a substantial increase of the air resistance.

Changing the pressure settings on the draught regulator is made by screwing the damper balance (with its knob). On this knob there is a scale to set the negative pressure value, and on the label on the damper there is a mark showing the actual value set.

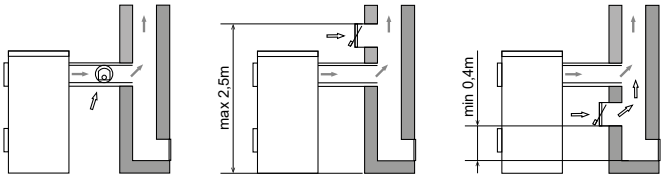


Damper closed



Damper opened

Placing

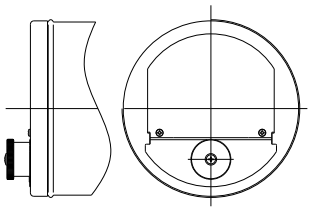


REMARKS

1. Draught regulator must be located in the same room as the heating device.
2. Draught regulator must be mounted in a room where there is a properly functioning natural air supply ventilation (must be an inlet of fresh air).
3. Draught regulator must be at an adequate distance from easy flammable elements:
   - door frames and similar parts made of flammable materials: min. 20 [cm]
   - other parts which are made of or contain flammable materials: min: 40 [cm]
4. It is forbidden to mount the draught regulator in room without natural ventilation!
5. Afterburning in the connector pipe or in chimney ducts is unacceptable!
6. Do not allow to arise a soot fire in the chimney!
7. Draught regulator cannot be installed on the way of the smoke and cannot disturb fumes flow in any other way.

Mounting positions

Regulator will work properly only if placed perfectly horizontal, like shown on the diagram above.

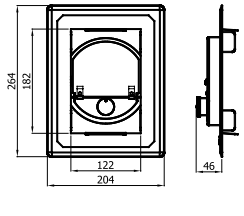


Note! Adjust negative pressure by rotating the knob on the regulator. Knob features "+" and "-" indicators. Turning the knob to the utmost "-" position (until resistance is felt) sets negative pressure at the value of 10 [Pa]. By making a half turn in the opposite direction, negative pressure is increased by 5 [Pa] (so to the value of 15 [Pa]), another half turn gives 20 [Pa] and then 25 [Pa] and 30 [Pa], respectively, up to the value of 35 [Pa], which is achieved by setting the knob to the utmost "+" position.

For reference, see the diagram on the product nameplate.

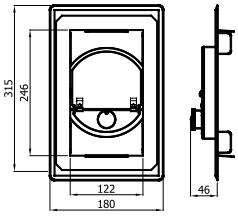
1. DRAUGHT REGULATOR TO DARCO CLEAN OUT ELEMENT RCW / RCW-S





RCW

draught regulator to DARCO clean out element



RCW-S

draught regulator to clean out element of ceramic chimney

Notice! Mounting of the RCW regulator requires usage of the RM-DW door frame

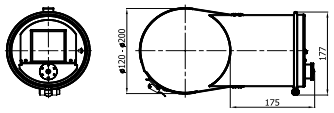
Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	RCW	0.65
	RCWS	0.70

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

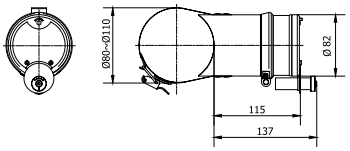
2. ON PIPE MOUNTED DRAUGHT REGULATOR RCR





RCR

on pipe mounted draught regulator



RCR-80

on pipe mounted draught regulator

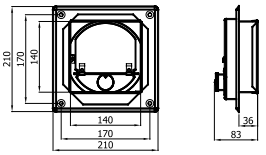
Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	RCR	0.65
	RCR-80	0.40

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

3. RECTANGULAR DRAUGHT REGULATOR RCP





RCP

rectangular draught regulator

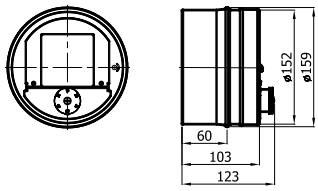
Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.55

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

4. ROUND DRAUGHT REGULATOR RCO





RCO

round draught regulator

Caution! Mounting clamp included

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

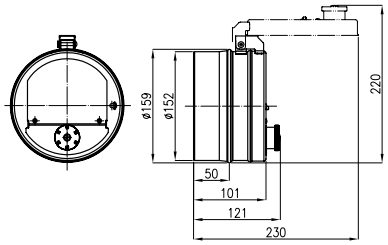
Weight [kg]	0.60

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

invent. build. enjoy.

5. ROUND DRAUGHT REGULATOR WITH ANTI-EXPLOSION SYSTEM RCO-EX





RCO-EX

round draught regulator with anti-explosion system

Caution! Mounting clamp included

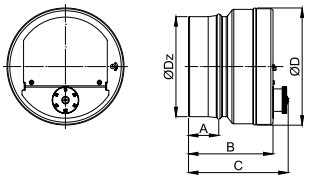
Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.60

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

6. ROUND DRAUGHT REGULATOR WITH REDUCER RCO





DN1/DN1	80/100	150/120	150/130	150/160
DZ	101	123	133	161
D	80	155	155	155
A	60	40	40	45
B	121.5	112	112	102
C	145	132	132	122
Weight [kg]	0.35	0.60	0.60	0.60

RCO x/y

nominal diameter DN2
nominal diameter DN1
draught regulator

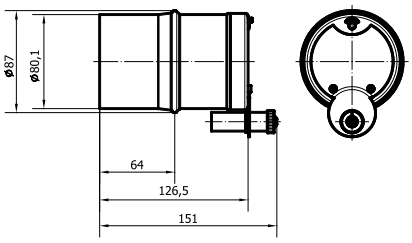
Caution! Mounting clamp included

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
	RCO 80/100		
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	160	14
	III insulation class	220	16
	RCO 150/120, RCO 150/130, RCO 150/160		
5	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

7. ROUND DRAUGHT REGULATOR RCO-80





RCO-80

draught regulator

Caution! Mounting clamp included

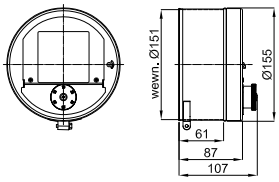
Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.30

No	Name	Value	
1	Group	1	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	160	14
	III insulation class	220	16

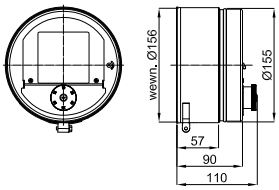
8. ON PIPE MOUNTED DRAUGHT REGULATOR SPK-2MM





RCO-150/+151-SPK

on pipe mounted draught regulator SPK-2mm



RCO-150/+156-SPK

on pipe mounted draught regulator SPK-2mm

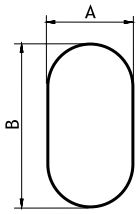
Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

Weight [kg]	0.50

No	Name	Value	
1	Group	5	
2	Underpressure range [Pa]	10 ÷ 35	
3	Max fumes temp. [°C]	400	
4	Chimney parameters (chimney height not bigger than 20 m)	Max chimney duct cross-section [cm²]	Max diameter of a round chimney duct [cm]
	I and II insulation class	500	25
	III insulation class	750	31

invent. build. enjoy.

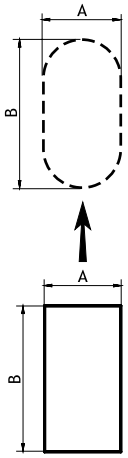
Hydraulic diameter for chimneys of oval shape (for proper diameter designation)
DH =4x(3.14xAxA/4+(B-A)xA)/(3.14xA+2x(B-A))



A \ B	120	130	140	150	160	170	180	185	200	215	230	245	250	255	275	285	300	320	350
110																			
120		126	132	136	141	145	149	151	156	160	164	168	169	170	174	176	179	182	
130			136	142	147	151	156	158	163	168	173	177	178	179	184	186	189	193	
140				146	152	157	162	164	170	176	181	185	187	188	193	196	199	203	
150					156	162	167	169	176	182	188	193	195	196	202	205	208	213	
160						166	172	174	182	189	195	200	202	204	210	213	217	222	
180								183	192	200	207	214	216	218	225	229	234	240	
200										209	217	225	227	230	239	243	248	255	
225											228	237	240	243	253	258	264	273	
250														253	265	270	278	288	
300																			

Hydraulic diameter for an oval shaped chimney duct DH= 4S/O (S - cross-section, O - circumference) is a diameter eqal (measured by the airflow characteristics) to the diameter of a round duct. For example, for an oval duct of 120x170 dimensions, the hydraulic diameter is 145 mm.
In the table above, marked with frames, there are hydraulic diameters of the oval shaped elements, that are considered as typical in DARCO offer.
Other dimensions are made upon individual order.

Hydraulic diameter for chimney of rectangular shape (for proper diameter designation)
DH =2AB/(A+B)



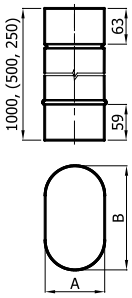
A \ B	120	125	130	135	140	150	160	165	170	180	200	210	230	235	250	260	270	300	350
110																			
120	120	122	125	127	129	133	137	139	141	144	150	153	158	159	162	164	166	171	
125		125	127	130	132	136	140	142	144	148	154	157	162	163	167	169	171	176	
130			130	132	135	139	143	145	147	151	158	161	166	167	171	173	176	181	
135				135	137	142	146	149	150	154	161	164	170	171	175	178	180	186	
140					140	145	149	151	154	158	165	168	174	175	179	182	184	191	
150							155	157	159	164	171	175	182	183	188	190	193	200	
160								162	165	169	178	182	189	190	195	198	201	209	
180										180	189	194	202	204	209	213	216	225	
200											200	205	214	216	222	226	230	240	
225													227	230	237	241	245	257	
235														235	242	247	251	264	
250																255	260	273	
300																			

Hydraulic diameter for a rectangular shaped chimney duct DH= 2AB/(A+B) is a diameter eqal (measured by the airflow characteristics) to the diameter of a round duct. For example, for a rectangular duct of 120x165 cross - section, the hydraulic diameter is 139 mm. Basing on a certain A x B cross-section and matching it with the corresponding hydraulic diameter (for example DH=139 mm) it is possible to calculate the equivalent oval duct dimensions (for example 120x170 mm).
Rectangular chimney ducts system is not in DARCO standard offer. They are made upon individual order.

invent. build. enjoy.

1. STRAIGHT PIPE RP





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Weight [kg]	2.30	2.45	2.60	2.70	2.85	3.00	3.15	3.40	3.40	3.80	

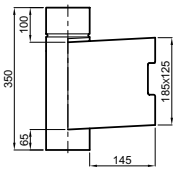
RP m ow AxB/L-m s

- s – sheet thickness
- m – material
- L – length [mm]
- B – dimension B
- A – dimension A
- ow – oval
- Z – denotation for heat resistant steel sheet (Z)
- RP – straight pipe

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

2. CLEAN OUT OF ELEMENT WC





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Weight [kg]	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.75	

WC m ow AxB-m s

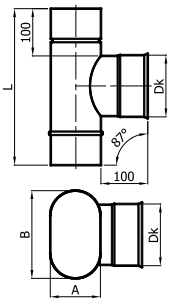
- s – sheet thickness
- m – material
- B – dimension B
- A – dimension A
- ow – oval
- Z – denotation for heat resistant steel sheet (Z)
- WC – clean out of element

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Caution!
Application with outlet on the narrow side- upon individual order.

3. TEE 90° TR/90





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Dk	152.8	162.4	183.0	183.0	202.7	202.1	202.1	227.6	227.6	253.3	
L [mm]	350	360	370	380	390	400	410	425	425	450	
Weight [kg]	0.95	1.00	1.10	1.20	1.25	1.35	1.45	1.60	1.60	1.85	

TR m ow AxB/90-m s

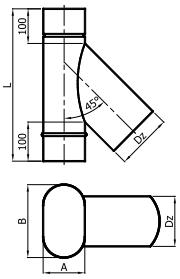
- s – sheet thickness
- m – material
- 90° – angle 90°
- B – dimension B
- A – dimension A
- ow – oval
- Z – denotation for heat resistant steel sheet (Z)
- TR – tee

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Caution!
Application with outlet on the narrow side- upon individual order.

4. TEE 45° TR/45





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Dz	151.8	161.4	182.0	182.0	201.1	201.1	201.1	226.6	226.6	252.3	
L [mm]	415	425	440	455	470	480	495	520	520	555	
Weight [kg]	1.20	1.30	1.40	1.50	1.65	1.75	1.90	2.10	2.10	2.50	

TR m ow AxB/45-m s

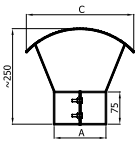
- s – sheet thickness
- m – material
- 45° – angle 45°
- B – dimension B
- A – dimension A
- ow – oval
- Z – denotation for heat resistant steel sheet (Z)
- TR – tee

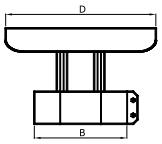
Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Caution!
Application with outlet on the narrow side- upon individual order.

5. CAP DK







Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
C	230	230	230	230	230	230	230	230	230	230	
D	300	315	330	345	360	375	385	415	405	450	
Weight [kg]	0.42	0.44	0.46	0.48	0.50	0.52	0.56	0.57	0.62	0.65	

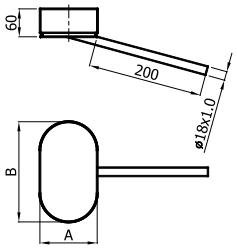
DK m ow AxB - m s

- sheet thickness
- material
- dimension B
- dimension A
- oval
- denotation for heat resistant steel sheet (Z)
- cap

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

6. CONDENSATE DRAIN BOWL MS





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Weight [kg]	0.32	0.34	0.35	0.37	0.39	0.41	0.44	0.45	0.48	0.52	

MS m ow AxB - m s

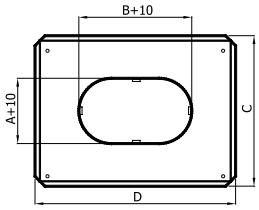
- sheet thickness
- material
- dimension B
- dimension A
- oval
- denotation for heat resistant steel sheet (Z)
- condensate drain bowl

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Caution!
Application with the drain pipe on the narrow side-upon individual order

7. ROOF PLATE PD





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
C	300	300	300	300	300	300	300	300	300	300	
D	360	380	380	400	400	400	400	420	420	470	
Weight [kg]	0.53	0.56	0.56	0.59	0.59	0.58	0.57	0.60	0.60	0.66	

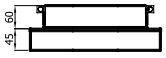
PD ow AxB - X

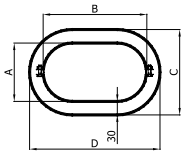
- material
- dimension B
- dimension A
- oval
- roof plate

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

8. RAIN COLLAR KPD







Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
C	180	180	180	180	180	180	180	180	200	190	
D	230	245	260	275	290	305	315	345	335	380	
Weight [kg]	0.42	0.44	0.45	0.47	0.49	0.50	0.53	0.55	0.56	0.60	

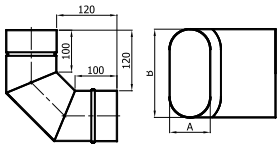
KPD ow AxB - X

- material
- dimension B
- dimension A
- oval
- rain collar

Destination	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

9. SOLID ELBOW 90° KS/90





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Weight [kg]	0.65	0.70	0.75	0.80	0.85	0.87	0.90	1.00	1.00	1.10	

KS m ow AxB/90 - m s

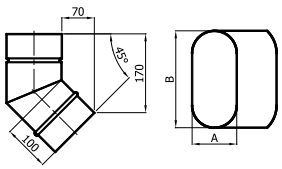
- sheet thickness
- material
- angle 90°
- dimension B
- dimension A
- oval
- denotation for heat resistant steel sheet (Z)
- solid elbow

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Caution!
Application of elbow on the narrow side-upon individual order.

10. SOLID ELBOW 45° KS/45





Dimension A/B	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Weight [kg]	0.45	0.48	0.52	0.55	0.57	0.60	0.63	0.68	0.68	0.75	

KS m ow AxB/45 - m s

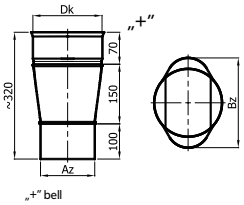
- sheet thickness
- material
- angle 45°
- dimension B
- dimension A
- oval
- denotation for heat resistant steel sheet (Z)
- solid elbow

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Caution!
Application of elbow on the narrow side-upon individual order.

11. REDUCER RD-K





Dimension Az/Bz	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Dk	152.8	162.4	183.0	183.0	202.1	202.1	202.1	227.6	227.6	253.3	
Weight [kg]	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.10	1.25	

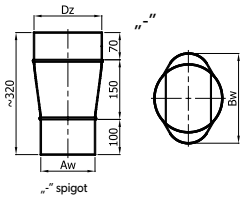
RD m ow AxB /+ D - m s

- sheet thickness
- material
- dimension D
- dimension AxB
- oval
- denotation for heat resistant steel sheet (Z)
- reducer

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. REDUCER RD-N





Wymiar Aw/Bw	120	120	120	120	120	120	130	120	140	130	for s=0.6
	170	185	200	215	230	245	255	285	275	320	
Dz	151.8	161.4	182.0	182.0	201.1	201.1	201.1	226.6	226.6	252.3	
Weight [kg]	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.10	1.25	

RD m ow AxB/-D - m s

- sheet thickness
- material
- dimension B
- dimension A
- oval
- denotation for heat resistant steel sheet (Z)
- reducer

Destination	S	-	S - flue ducts (gas, oil)
	-	D	D - smoke ducts
Material	CH	-	CH - stainless steel 1.4404
	-	Z	Z - heat resistant steel 1.4828
Sheet thickness s	6	-	6 - sheet thickness 0.6 mm
	8	8	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

Chimney connections for accumulation systems <SPKA>

Chimney connections are made of chrome-nickel heat-resistant steel sheet (type 1.4828 according to DIN 17441) of thickness 2.0 mm. Their application is fume extraction from stoves, where fumes temperature can rise up even to 1200°C.
Chimney connection elements <SPKA> can not be used to build a chimney duct. Elements of system are plasma welded, bell pipe joining.

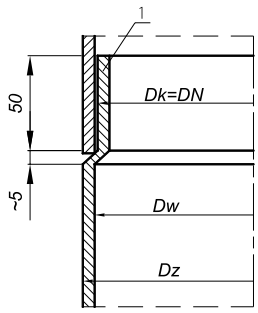
Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow.



CE 1450 <SPKA>

Bell joint pipe connection

Individual elements of the chimney connection system are being joint by the way of pushing one part of the element - specially press-formed (a spigot), into the other, not prefabricated part of the element. Thanks to this type of pipe joining, chimney liner is characterized by very tight and stiff construction. It also assures proper flow of exhaust fumes from stove to the chimney. Elements should be connected with the press-formed (shrinked) part up.



1. Spigot

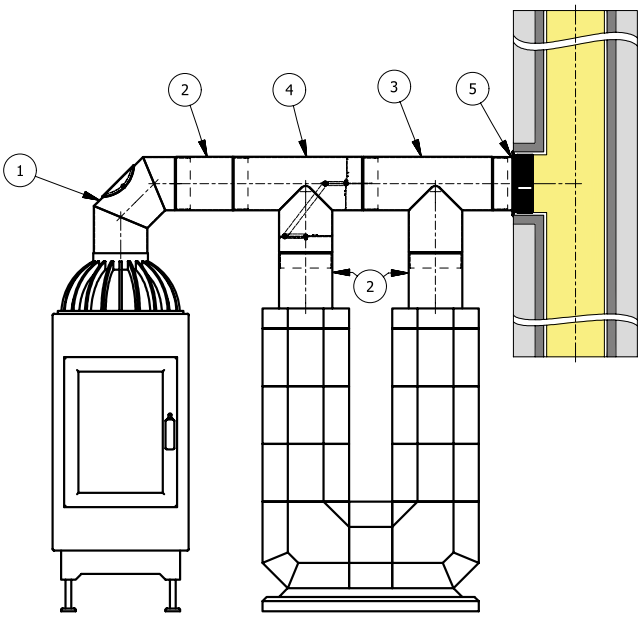
Fig. Method of joining chimney connection pipe elements

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk=DN
150	481	155	151	150
160	512	165	161	160
180	575	185	181	180
200	638	205	201	200

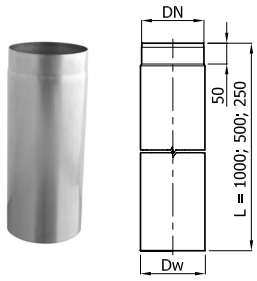
Measurments
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]
Dw - inner diameter of pipe [mm]
Dk - inner diameter of spigot [mm]

Destination
D - smoke ducts



No	Name	Denotation
1	Solid elbow with revision 90°	KSR180/90-Z2
2	Straight pipe 250 [mm]	RP180/250-Z2
3	Tee 90°	TR180/90-Z2
4	Twin-flow tee	TRM180/90-Z2
5	Wall insert to ceramic chimneys	WKC180/200-Z2

1. STRAIGHT PIPE RPZ



Length L	1000				500				250			
Diameter DN	ø150	ø160	ø180	ø200	ø150	ø160	ø180	ø200	ø150	ø160	ø180	ø200
Dw	151.0	161.0	181.0	201.0	151.0	161.0	181.0	201.0	151.0	161.0	181.0	201.0
Weight [kg]	7.80	8.20	9.20	10.40	3.80	4.10	4.60	5.20	1.90	2.10	2.30	2.60

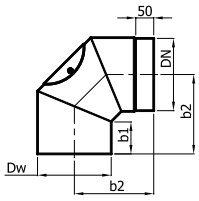
RPZ x/L - Z 2

- sheet thickness
- material
- length [mm]
- nominal diameter DN
- straight pipe

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

2. SOLID ELBOW 90° WITH REVISION KSRZ/90





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
b1 [mm]	95.0	95.0	87.0	84.0
b2 [mm]	235.0	235.0	235.0	235.0
Weight [kg]	3.40	3.60	4.00	4.40

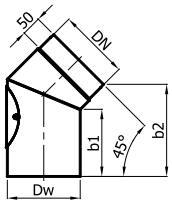
KSRZ x/90 - Z 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow with revision

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

3. SOLID ELBOW 45° WITH REVISION KSRZ/45





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
b1 [mm]	172.0	168.0	168.0	162.0
b2 [mm]	243.0	238.0	233.0	225.0
Weight [kg]	2.80	3.00	3.20	3.40

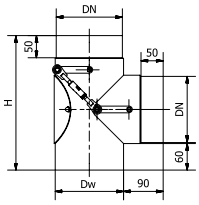
KSRZ x/45 - Z 2

- sheet thickness
- material
- angle 45°
- nominal diameter DN
- solid elbow with revision

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

4. TWIN-FLOW TEE TRZMr/90 WITH REVISION





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
H [mm]	305.0	315.0	335.0	355.0
Weight [kg]	4.00	4.40	5.10	6.00

TRZMr x / 90 - Z 2

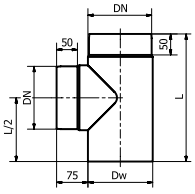
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- twin-flow tee with revision

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

invent. build. enjoy.

5. TEE 90° TRZ/90





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	305.0	315.0	335.0	355.0
Weight [kg]	2.70	3.00	3.50	4.00

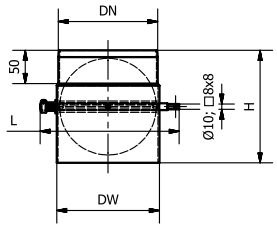
TRZ x / 90 - Z 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- tee

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

6. TIGHT CHIMNEY DAMPER SZKZsz





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	210.0	220.0	240.0	260.0
H [mm]	170.0	180.0	200.0	220.0
Weight [kg]	1.77	1.98	2.45	2.97

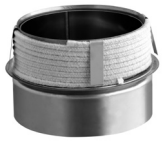
SZKZsz ... - Z2-8x8

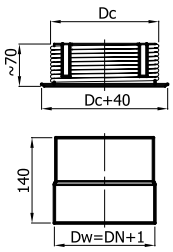
- sheet thickness
- material
- nominal diameter DN
- tight chimney damper

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Additional devices - see page 189.

7. WALL INSERT TO CERAMIC CHIMNEYS WKCZ





Diameters	DN	ø150	ø160	ø180
	DC	ø160	ø180	ø200
Weight [kg]		1.30	1.70	1.90

Caution! Other inserts upon individual order.

WKCZ x / y - Z 2

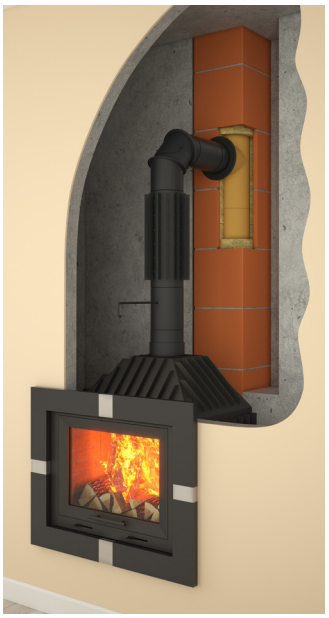
- sheet thickness
- material
- inner diameter of ceramic tee DC
- nominal diameter DN
- wall insert to ceramic chimneys

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Caution! This wall insert protects tees of ceramic chimneys from damages caused by thermal expansion of metal elements of the chimney connection.

Chimney connection system <SPK>

Is used for the construction of chimney connection made entirely of 2mm mild steel DC01 acc. to EN-10130/07. Recommended for fume extraction from fireplaces and solid fuel heating appliances operating without condensation.
The <SPK> chimney connection system can be used as a connection to boilers discharging flue gases whose temperature can briefly reach 1000°C.
The components of the <SPK> system are not allowed to be used to form a chimney or chimney liner.
Maximum continuous operating temperature: 600°C
Certificate of Factory Production Control 1450-CPR-0007 issued by INiG in Cracow.
System components are laser-welded and coated with SENOTHERM odourless, heat resistant paint, bell joints.
Warranty 2 years.

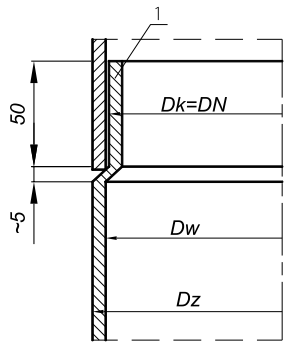




CE 1450

Bell joint pipe connection

The individual components of the SPK chimney connection system are joint by inserting one part of the element (spigot), which is characteristically squeezed, into the other part, which is not compressed. Bell-type connection ensures a tight and rigid connection structure and proper flow of exhaust fumes from the stove to the chimney. Elements should be connected with the spigot part upwards. Possible reversal of the flow of the elements (to prevent the condensate from flowing out of the connection) can be carried out using male connectors. Proper condensate drainage is secured by usage of g a female connector (with anti-condensation protection).



1. Spigot

Fig. Method of joining chimney connection pipe elements

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk=DN
120	386	125	121	120
130	418	135	131	130
150	481	155	151	150
160	512	165	161	160
180	575	185	181	180
200	638	205	201	200
220	700	225	221	220
250	795	255	251	250

Measurments
Lr - metal sheet layout [mm] ±0.1
Dz - outer diameter of pipe [mm]
Dw - inner diameter of pipe [mm]
Dk - inner diameter of spigot [mm]

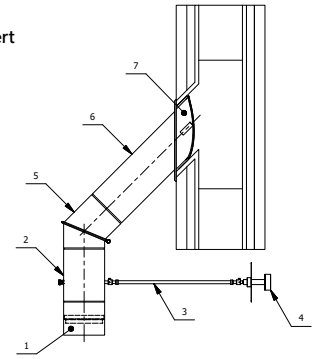
Destination
D - smoke ducts

Model application of elements

Scheme I - Built-in fireplace

Example construction of chimney connection with 45 degree angular insert with rope. Requires cutting the flue pipe to the correct angle.

No	Name	Denotation
1	Female connector	ZZ150-CZ2
2	Chimney damper	SZK150-CZ2-8x8
3	Flexible shaft	SZKZ-REG-WG
4	Chimney damper knob	SZKZV-REG...
5	Adjustable elbow 45°	KNS150/45-CZ2
6	Straight pipe 500 [mm]	RP150/500-CZ2
7	Angular insert 45° with rope	WKK-KS150/150/45-CZ2

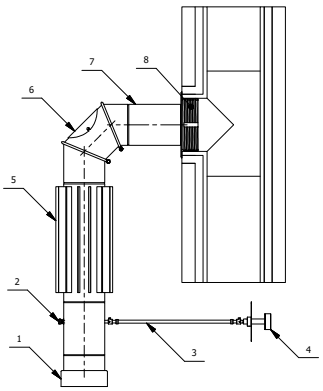


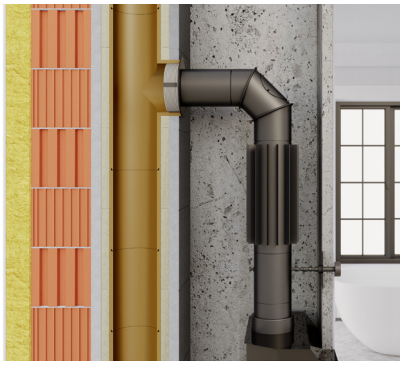


Scheme II - Built-in fireplace

Example construction of a chimney connection with an insert with rope.

No	Name	Denotation
1	Reducer (adaptor)	RD200/180-CZ2-R
2	Chimney damper	SZK180-CZ2-8x8
3	Flexible shaft	SZKZ-REG-WG
4	Chimney damper knob	SZKZV-REG...
5	Radiator pipe	RPZ180/500-CZ2
6	Adjustable elbow 90° with revision	KNSr180/90-CZ2
7	Straight pipe 250 [mm]	RP180/250-CZ2
8	Ceramic chimney wall insert	WKCP180/200-CZ2

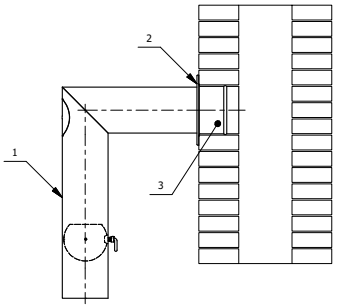




Scheme III - Free-standing fireplace

Example of a chimney connection with double-walled insert for traditional ceramic chimneys.

No	Name	Denotation
1	Solid elbow HIGH, polished, with damper and revision	KSrs-II-150/90-CZ2
2	Rosette	ROZ150-CZ
3	Double-walled wall insert	WD150-CZ

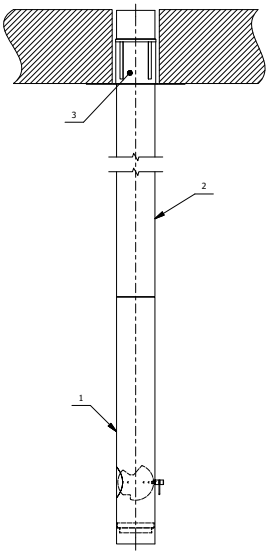




Scheme IV - Free- standing fireplace (centre of room)

Example construction of a chimney connection with a round plate with double-walled insert.

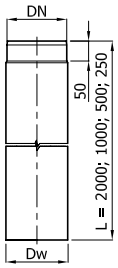
No	Name	Denotation
1	Straight pipe with anti-condencation protection, damper and revision	RPsr/ZA/150/500-CZ2
2	Straight pipe 2000 [mm]	RP150/2000-CZ2
3	Round roof plate with double-walled connection	PLo150-CZ2/WD





1. STRAIGHT PIPE 2000, 1000, 500, 250 [mm] RP





Diameter DN		ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw		121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg]	L=2000	12.40	13.40	15.40	16.40	18.40	20.50	22.40	25.40
	L=1000	6.20	6.70	7.70	8.20	9.20	10.25	11.20	12.70
	L=500	3.10	3.35	3.85	4.20	4.60	5.10	5.60	6.35
	L=250	1.55	1.70	1.95	2.10	2.30	2.55	2.80	3.18

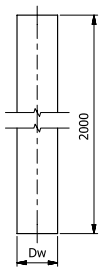
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP x / L - CZ 2

- 2 — sheet thickness
- CZ — material
- L — length [mm]
- x — nominal diameter DN
- RP — straight pipe

2. STRAIGHT PIPE 2000 [mm] FEMALE/FEMALE RP/FF





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg]	12.40	13.40	15.40	16.40	18.40	20.50	22.40	25.40

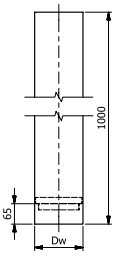
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP x / 2000 - CZ 2 /FF

- FF — female/female
- 2 — sheet thickness
- CZ — material
- 2000 — length [mm]
- x — nominal diameter DN
- RP — straight pipe

3. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION 1000, 500 [mm] RP/ZA





Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Weight [kg] L=1000 mm	6.20	6.70	7.70

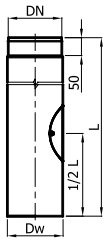
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP / ZA / x / L - CZ 2

- 2 — sheet thickness
- CZ — material
- L — length [mm]
- x — nominal diameter DN
- ZA — anti-condensation protection
- RP — straight pipe

4. STRAIGHT PIPE WITH REVISION 1000, 500, 250 [mm] RPr





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg] L = 1000 mm	1.55	1.70	1.95	2.10	2.30	2.55	2.80	3.18

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

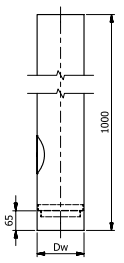
RPr x / L - CZ 2

- 2 — sheet thickness
- CZ — material
- L — length [mm]
- x — nominal diameter DN
- RPr — straight pipe with revision

invent. build. enjoy.

5. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION AND REVISION 1000, 500 [mm] PRr/ZA





Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Weight [kg] L = 1000 mm	6.30	6.80	7.80

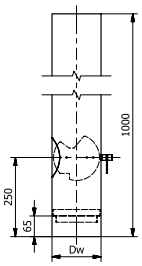
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPr / ZA / x / L - CZ 2

- sheet thickness
- material
- length [mm]
- nominal diameter DN
- anti-condensation protection
- straight pipe with revision

6. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION, DAMPER AND REVISION 1000, 500 [mm] RPrs/ZA





Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Weight [kg] L = 1000 mm	6.50	6.90	7.90

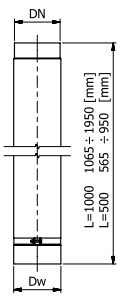
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPrs / ZA / x / L - CZ 2

- sheet thickness
- material
- length [mm]
- nominal diameter DN
- anti-condensation protection
- straight pipe with damper and revision

7. STRAIGHT PIPE RT





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg] for L1000	12.00	13.00	15.00	16.00	18.00	20.00	22.00	25.00
Weight [kg] for L500	6.00	6.50	7.50	8.00	9.00	10.00	11.00	22.50

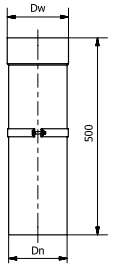
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RT x / 2x L - CZ2

- sheet thickness
- material
- length 1000 or 500 [mm]
- nominal diameter DN
- straight pipe

8. TELESCOPIC INNER PIPE WITH CLAMP 1000, 500 [mm] RT/O





Diameter DN	ø120	ø130	ø150
Dw	121.0	131.0	151.0
Dn	118	128	148
Weight [kg] L = 500 mm	3.00	3.30	3.80

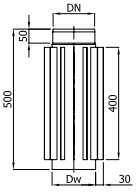
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RT x / L - CZ 2 /O

- clamp
- sheet thickness
- material
- length [mm]
- nominal diameter DN
- telescopic inner pipe

9. RADIATOR PIPE 500 [mm] RPZ





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
Weight [kg]	6.00	6.30	6.55	6.80	7.70	8.60	9.25	10.00

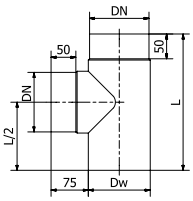
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.00 mm

RPZ x / 500 - CZ 2

- sheet thickness
- material
- length [mm]
- nominal diameter DN
- radiator pipe

10. TEE 90° TR/90





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
L [mm]	275	285	305	315	335	355	375	405
Weight [kg]	2.00	2.20	2.70	3.00	3.50	4.00	4.60	5.60

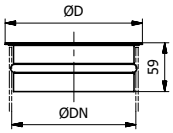
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

TR x / 90 - CZ 2

- 2 — sheet thickness
- CZ — material
- 90 — angle 90°
- x — nominal diameter DN
- TR — tee

11. TEE PLUG (CERAMIC)





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
D	136	146	166	176	196	216	236	266
Weight [kg]	0.54	0.60	0.72	0.78	0.92	1.10	1.22	1.47

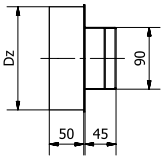
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

ZTSC x - CZ2

- 2 — sheet thickness
- CZ — material
- x — diameter DN
- ZTSC — tee plug (ceramic)

12. TEE PLUG ZT-K/N





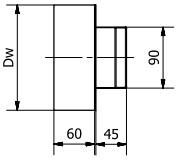
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Weight [kg]	0.54	0.60	0.72	0.78	0.92	1.10	1.22	1.47

ZT x - CZ2 - N

- N — nipple
- 2 — sheet thickness
- CZ — material
- x — diameter DN
- ZT — tee plug

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	ø121	ø131	ø151	ø161	ø181	ø201	ø221	ø251
Weight [kg]	0.61	0.67	0.81	0.87	1.00	1.20	1.30	1.60

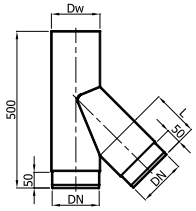
ZT x - CZ2 - K

- K — bell
- 2 — sheet thickness
- CZ — material
- x — diameter DN
- ZT — tee plug

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

13. TEE 45° TR/45





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
L [mm]	150.0	150.0	150.0	150.0	150.0	150.0	180.0	120.0
Weight [kg]	3.10	3.40	3.90	4.20	4.60	5.10	7.55	8.70

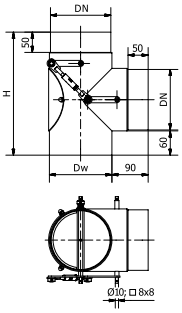
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

TR x / 45 - CZ 2

- 2 — sheet thickness
- CZ — material
- 45 — angle 45°
- x — nominal diameter DN
- TR — tee

14. TWIN-FLOW TEE WITH REVISION TRMr





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121	131	151	161	181	201	221	251
H [mm]	275	285	305	315	335	355	375	405
Weight [kg]	3.10	3.40	4.00	4.40	5.10	6.00	6.80	8.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

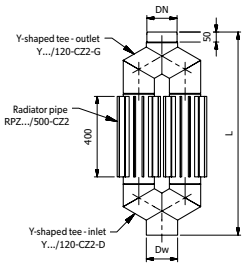
TRMr x / 90 - CZ 2

- 2 — sheet thickness
- CZ — material
- 90 — angle 90°
- x — nominal diameter DN
- TRMr — twin-flow tee with revision

invent. build. enjoy.

15. Y-SHAPED TEE

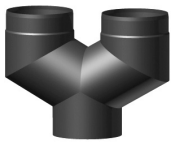


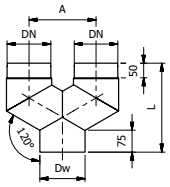


Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	1010	1030	1060	1096
Weight [kg]	21.20	22.50	25.90	29.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

16. Y-SHAPED TEE - INLET





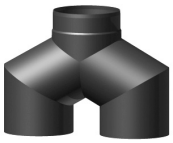
Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	305	315	331	348
Weight [kg]	4.05	4.45	5.25	6.15

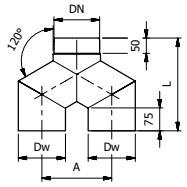
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Y x / 120 - CZ 2 - D

- wlot
- sheet thickness
- material
- angle 120°
- nominal diameter DN
- tee

17. Y-SHAPED TEE - OUTLET





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
L [mm]	305	315	331	348
Weight [kg]	4.05	4.45	5.25	6.15

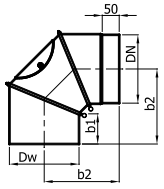
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Y x / 120 - CZ 2 - G

- wylot
- sheet thickness
- material
- angle 120°
- nominal diameter DN
- tee

18. ADJUSTABLE ELBOW 90° WITH REVISION KNSR/90





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	84.0	86.0	85.0	85.0	82.0	73.0	83.0	83.0
b2 [mm]	220.0	220.0	224.5	220.0	219.0	221.0	273.0	270.0
Weight [kg]	2.80	3.00	3.40	3.80	4.10	4.50	6.0	6.80

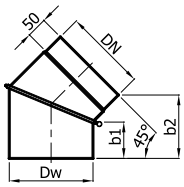
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KNSR x / 90 - CZ 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- adjustable elbow with revision

19. ADJUSTABLE ELBOW 45° KNS/45





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	84.0	86.0	85.0	85.0	82.0	73.0	83.0	83.0
b2 [mm]	172.0	170.0	162.0	158.0	151.0	144.0	165.0	165.0
Weight [kg]	1.80	1.90	2.10	2.20	2.35	2.50	3.30	3.30

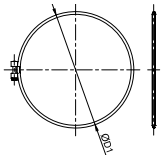
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KNS x / 45 - CZ 2

- sheet thickness
- material
- angle 45°
- nominal diameter DN
- adjustable elbow

20. ADJUSTABLE ELBOW REPLACEMENT CLAMP; ADJUSTABLE ELBOW REPLACEMENT CERAMIC SEAL







Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
D1	152	162	184	196	217	240	260	300
Weight [kg]	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Caution! Sold in sets of 2 pcs.

KNSR-OPASKA x - CZ 2

- SPK system
- material
- nominal diameter DN
- adjustable elbow replacement clamp

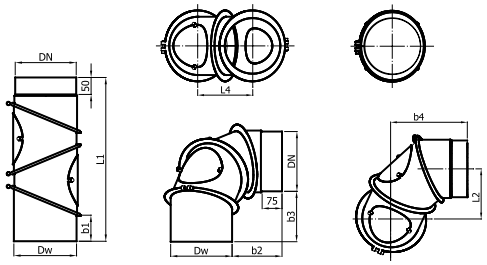
KNSR-USZCZELKA - CZ2

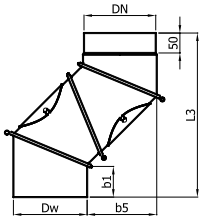
- SPK system
- seal

21. ADJUSTABLE ELBOW WITH REVISION - 4 SEGMENTS KNSR/UNI



Available configurations





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	84.0	86.0	85.0	85.0	82.0	73.0	83.0	83.0
b2 [mm]	205.0	190.0	180.0	160.0	160.0	145.0	220.0	200.0
b3 [mm]	205.0	190.0	180.0	160.0	160.0	145.0	220.0	200.0
b4 [mm]	265.0	285.0	275.0	280.0	290.0	300.0	335.0	330.0
b5 [mm]	225.0	220.0	200.0	200.0	200.0	200.0	280.0	260.0
L1 [mm]	535.0	535.0	525.0	500.0	515.0	505.0	650.0	640.0
L2 [mm]	200.0	200.0	190.0	160.0	180.0	200.0	240.0	230.0
L3 [mm]	440.0	440.0	440.0	415.0	430.0	420.0	540.0	535.0
L4 [mm]	225.0	220.0	200.0	200.0	200.0	200.0	280.0	260.0
Weight [kg]	3.90	4.30	4.80	5.20	5.70	6.30	8.80	9.60

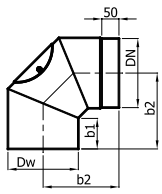
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KNSR x / UNI - CZ 2 - 4seg

- 4 segments
- sheet thickness
- material
- universal
- nominal diameter DN
- adjustable elbow with revisions

22. SOLID ELBOW 90° WITH REVISION KSr/90





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96.0	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	243.0	243.0	241.0	240.0	242.0	241.0	271.0	292.0
Weight [kg]	2.80	3.00	3.40	3.60	4.10	4.50	6.0	6.80

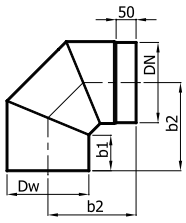
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x / 90 - CZ 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow with revision

23. SOLID ELBOW 90° KS/90





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96.0	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	243.0	243.0	241.0	240.0	242.0	241.0	271.0	292.0
Weight [kg]	2.80	3.00	3.40	3.60	4.10	4.50	6.00	6.80

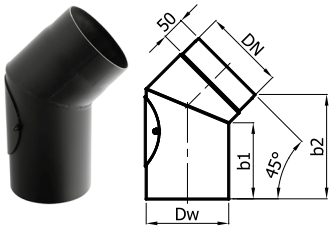
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x / 90 - CZ 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

invent. build. enjoy.

24. SOLID ELBOW 45° WITH REVISION KSr/45



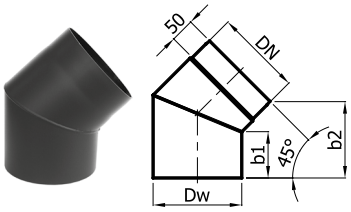
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	187.0	184.0	174.0	170.0	170.0	165.0	145.0	132.0
b2 [mm]	258.0	254.0	245.0	241.0	235.0	228.0	216.0	204.0
Weight [kg]	2.10	2.30	2.60	2.80	3.10	3.50	3.80	4.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/45 - CZ 2

- 2 — sheet thickness
- CZ — material
- 45 — angle 45°
- x — nominal diameter DN
- KSr — solid elbow with revision

25. SOLID ELBOW 45° KS/45



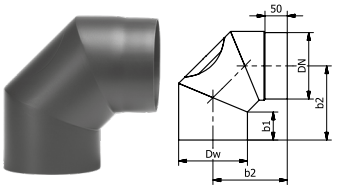
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	172.0	170.0	162.0	158.0	151.0	144.0	165.0	165.0
Weight [kg]	1.80	1.90	2.10	2.20	2.35	2.50	3.33	3.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x/45 - CZ 2

- 2 — sheet thickness
- CZ — material
- 45 — angle 45°
- x — nominal diameter DN
- KS — solid elbow

26. SOLID ELBOW 90° 3-SEGMENTS, POLISHED WITH REVISION, SHORT VERSION KSr/KR



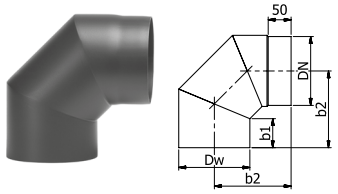
KSr x/90 - SzL - CZ2 / KR

- KR — short
- 2 — sheet thickness
- CZ — material
- SzL — polished
- 90 — angle 90°
- x — nominal diameter DN
- KSr — solid elbow with revision

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	61	62	63.5
b2 [mm]	167.5	167.5	167.5
Weight [kg]	1.90	2.00	2.30

27. SOLID POLISHED ELBOW 90° 3-SEGMENTS, SHORT VERSION KS/KR



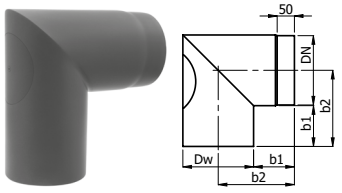
Diameter DN	ø120	ø130	ø150
Dw [mm]	121	131	151
b1 [mm]	61	62	63,5
b2 [mm]	167.5	167.5	167.5
Weight [kg]	1.75	1.95	2.20

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x/90 - SzL - CZ2 / KR

- KR — short
- 2 — sheet thickness
- CZ — material
- SzL — polished
- 90 — angle 90°
- x — nominal diameter DN
- KS — solid elbow with revision

28. SOLID POLISHED ELBOW 90° WITH REVISION KSr/90



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	145	145	145	145	145	145	145	145
b2 [mm]	207.5	212.5	222.5	227.5	237.5	247.5	257.5	272.5
Weight [kg]	2.60	2.90	3.50	3.80	4.40	5.10	5.80	6.90

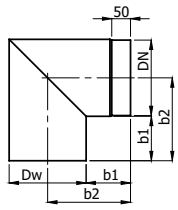
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/90 - SzL - CZ 2-2SEG

- 2-2SEG — sheet thickness
- CZ — material
- SzL — polished
- 90 — angle 90°
- x — nominal diameter DN
- KSr — solid elbow with revision

29. SOLID POLISHED ELBOW 90° KS/90





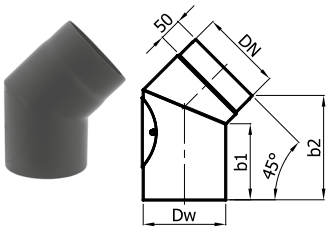
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	145	145	145	145	145	145	145	145
b2 [mm]	207.5	212.5	222.5	227.5	237.5	247.5	257.5	272.5
Weight [kg]	2.60	2.90	3.50	3.80	4.40	5.10	5.80	6.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x/90 - SzL - CZ 2 - 2SEG

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

30. SOLID POLISHED ELBOW 45° WITH REVISION KSr/45



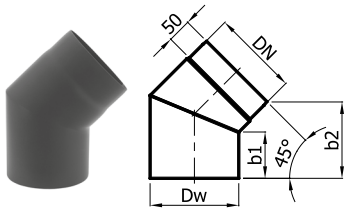
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	187.0	184.0	174.0	170.0	170.0	165.0	145.0	132.0
b2 [mm]	258.0	254.0	245.0	241.0	235.0	228.0	216.0	204.0
Weight [kg]	2.10	2.30	2.60	2.80	3.10	3.50	3.80	4.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KSr x/45 - SzL - CZ 2

- sheet thickness
- material
- angle 45°
- nominal diameter DN
- solid elbow with revision

31. SOLID POLISHED ELBOW 45° KS/45



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
b1 [mm]	96	94.0	95.0	95.0	87.0	84.0	95.0	95.0
b2 [mm]	172.0	170.0	162.0	158.0	151.0	144.0	165.0	165.0
Weight [kg]	1.80	1.90	2.10	2.20	2.35	2.50	3.33	3.90

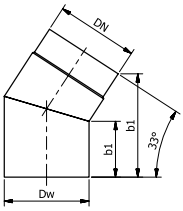
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

KS x/45 - SzL - CZ 2

- sheet thickness
- material
- polished
- angle 45°
- nominal diameter DN
- solid elbow

32. SOLID POLISHED ELBOW 33° KS/33





KS x/33 - SzL - CZ 2

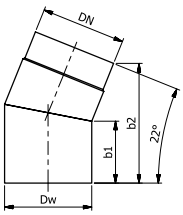
- sheet thickness
- material
- polished
- angle
- nominal diameter DN
- solid elbow

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	106.5	105	102
b2 [mm]	197	195	189
Weight [kg]	1.50	1.70	1.90

33. SOLID POLISHED ELBOW 22° KS/22





KS x/22 - SzL - CZ 2

- sheet thickness
- material
- polished
- angle
- nominal diameter DN
- solid elbow

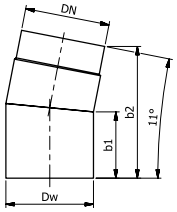
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	113	112	110
b2 [mm]	219	217	213
Weight [kg]	1.50	1.70	1.90

invent. build. enjoy.

34. SOLID POLISHED ELBOW 11° KS/11





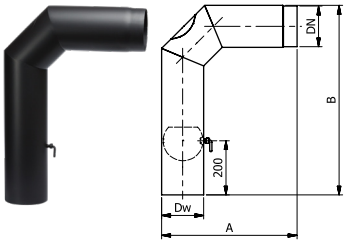
KS x / 11 - SzL - CZ 2

- sheet thickness
- material
- polished
- angle
- nominal diameter DN
- solid elbow

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
b1 [mm]	119	118.5	117.5
b2 [mm]	236	235	233
Weight [kg]	1.50	1.70	1.90

35. SOLID ELBOW HIGH 90° 3-SEGMENTS, POLISHED WITH DAMPER AND REVISION KSrs - III



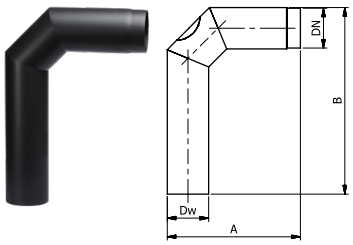
KSrs-III-x / 90 - CZ 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- 3-segments
- solid elbow high polished with damper and revision

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
A [mm]	500	500	500
B [mm]	700	700	700
Weight [kg]	6.50	7.00	8.00

36. SOLID ELBOW HIGH 90° 3-SEGMENTS, POLISHED WITH REVISION KSr - III



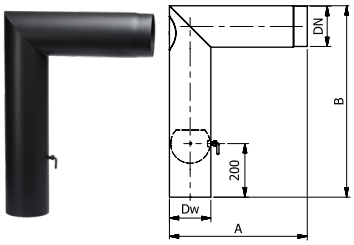
KSr-III-x / 90 - CZ 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- 3-segments
- solid elbow high polished with revision

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
A [mm]	500	500	500
B [mm]	700	700	700
Weight [kg]	6.00	6.50	7.50

37. SOLID ELBOW HIGH 90° 2-SEGMENTS, POLISHED WITH DAMPER AND REVISION KSrs - II



KSrs-II-x / 90 - CZ 2

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- 2-segments
- solid elbow high polished with damper and revision

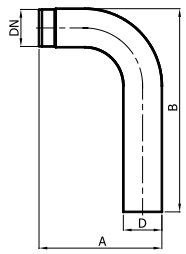
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
A [mm]	500	505	515
B [mm]	700	705	715
Weight [kg]	7.00	7.50	9.50

38. BENT ELBOW - HIGH, HIGH-SHORT KG



W WK



Version	W (high)			WK (high-short)		
Diameter DN	ø120	ø130	ø150	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0	120.0	130.0	150.0
A [mm]	398.0	420.0	460.0	318.0	340.0	380.0
B [mm]	645.0	640.0	645.0	645.0	640.0	645.0
Weight [kg]	5.10	5.50	6.60	4.70	5.00	6.00

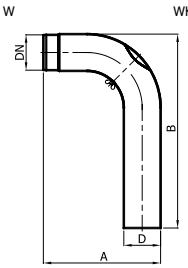
KG x / 90 - CZ 2 / ...

- version (W or WK)
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- bent elbow

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

39. BENT ELBOW - HIGH, HIGH-SHORT WITH REVISION





Version	W (high)			WK (high-short)		
Diameter DN	ø120	ø130	ø150	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0	120.0	130.0	150.0
A [mm]	398.0	420.0	460.0	318.0	340.0	380.0
B [mm]	645.0	640.0	645.0	645.0	640.0	645.0
Weight [kg]	5.20	5.60	6.70	4.70	5.00	6.10

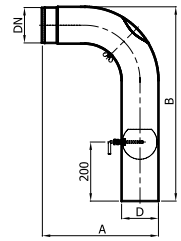
KGr x / 90 - CZ 2 / ...

- ... version (W or WK)
- 2 sheet thickness
- CZ material
- 90 angle 90°
- x nominal diameter DN
- KGr bent elbow with revision

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

40. BENT ELBOW - HIGH, HIGH-SHORT WITH REVISION AND CHIMNEY DAMPER KGSR





Version	W (high)			WK (high-short)		
Diameter DN	ø120	ø130	ø150	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0	120.0	130.0	150.0
A [mm]	398.0	420.0	460.0	318.0	340.0	380.0
B [mm]	645.0	640.0	645.0	645.0	640.0	645.0
Weight [kg]	5.50	5.80	7.00	5.00	5.30	6.40

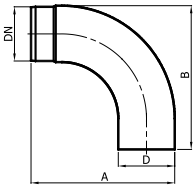
KGsr x / 90 - CZ 2 / ...

- ... version (W or WK)
- 2 sheet thickness
- CZ material
- 90 angle 90°
- x nominal diameter DN
- KGsr bent elbow with revision and chimney damper

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

41. BENT ELBOW LOW KG





KG x / 90 - CZ 2 / N

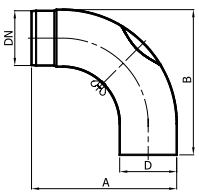
- N low
- 2 sheet thickness
- CZ material
- 90 angle 90°
- x nominal diameter DN
- KG bent elbow

Diameter DN	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0
A [mm]	318.0	340.0	380.0
B [mm]	318.0	340.0	380.0
Weight [kg]	2.60	3.00	3.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

42. BENT ELBOW LOW WITH REVISION KGR





KGr x / 90 - CZ 2 / N

- N low
- 2 sheet thickness
- CZ material
- 90 angle 90°
- x nominal diameter DN
- KGr bent elbow with revision

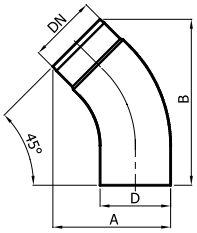
Diameter DN	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0
A [mm]	318.0	340.0	380.0
B [mm]	318.0	340.0	380.0
Weight [kg]	2.70	3.10	3.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

invent. build. enjoy.

43. BENT ELBOW 45° KG





KG x/45 - CZ 2

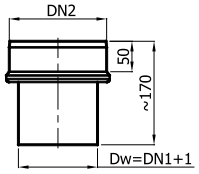
- 2 — sheet thickness
- CZ — material
- 45 — angle 45°
- x — nominal diameter DN
- KG — bent elbow

Diameter DN	ø120	ø130	ø150
øD [mm]	125.0	135.0	155.0
øDk [mm]	120.0	130.0	150.0
A [mm]	208.0	222.0	248.0
B [mm]	294.0	308.0	336.0
Weight [kg]	1.70	1.90	2.40

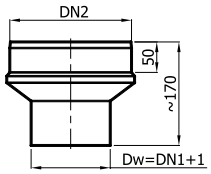
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

44. REDUCERS RD









RD x/y - CZ 2

- 2 — sheet thickness
- CZ — material
- y — nominal diameter DN2
- x — nominal diameter DN1
- RD — reducer

RD x/y - CZ 2 - S

- S — segmented version
- 2 — sheet thickness
- CZ — material
- y — nominal diameter DN2
- x — nominal diameter DN1
- RD — reducer

Table of versions and available diameters

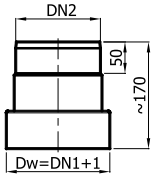
Diameter DN1 \ Diameter DN2	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
ø120		R	R	R	S	S	S	S
ø130	R		R	R	R	S	S	S
ø150	R	R		R	R	R	S	S
ø160	R	R	R		R	R	S	S
ø180	S	R	R	R		R	R	S
ø200	S	S	R	R	R		R	R
ø220	S	S	S	S	R	R		R
ø250	S	S	S	S	S	R	R	
ø300	S	S	S	S	S	S	S	S

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

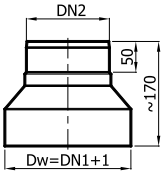
ex: RD130/120-CZ2, RD120/130-CZ2,
RD120/200-CZ2-S
S - redukcje segmentowe
R - redukcje rozpęczane

45. REDUCERS RD









RD x/y - CZ 2

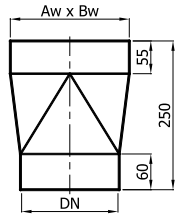
- 2 — sheet thickness
- CZ — material
- y — nominal diameter DN2
- x — nominal diameter DN1
- RD — reducer

RD x/y - CZ 2 - S

- S — segmented version
- 2 — sheet thickness
- CZ — material
- y — nominal diameter DN2
- x — nominal diameter DN1
- RD — reducer

46. REDUCER RDKW





Measurements Aw x Bw [mm]		122 x 122	135 x 189	142 x 142	142 x 162	152 x 152	162 x 162	171 x 171	180 x 180	192 x 192	200 x 200
Diameter DN	ø120	1.80 kg	-	-	-	-	-	-	-	-	-
	ø130	1.85 kg	-	2.00 kg	-	2.05 kg	-	-	-	-	-
	ø150	1.95 kg	-	2.10 kg	-	2.10 kg	2.30 kg	2.35 kg	2.40 kg	-	-
	ø160	-	-	2.15 kg	-	2.15 kg	2.40 kg	2.45 kg	2.50 kg	2.60 kg	2.70 kg
	ø180	-	2.70 kg	2.25 kg	2.40 kg	2.30 kg	2.50 kg	2.55 kg	2.60 kg	2.70 kg	2.80 kg
	ø200	-	2.90 kg	2.35 kg	-	2.45 kg	2.60 kg	2.65 kg	2.70 kg	2.80 kg	2.90 kg

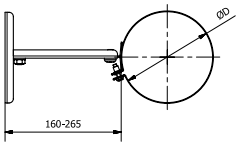
RD kw AxB / x - CZ 2

- sheet thickness
- material
- nominal diameter DN
- measurements
- square
- reducer

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

47. MOUNTING BRACKET





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
D [mm]	125	135	155	165	185	205	225	255
Weight [kg]	0.44	0.45	0.47	0.48	0.50	0.52	0.54	0.57

OMD-I .../ 15-25 - CZ 2

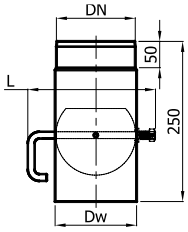
- sheet thickness
- material
- adjustable 15-25 cm
- nominal diameter DN
- mounting bracket

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Not to use with flammable materials.

48. CHIMNEY DAMPER WITH SHORT HANDLE SZK





Chimney dampers are produced in versions:

- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160

SZK x - CZ 2

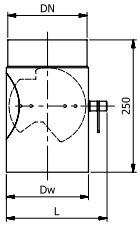
- sheet thickness
- material
- nominal diameter DN
- chimney damper

Diameter DN	ø120	ø130	ø150	ø160
Dw [mm]	121.0	131.0	151.0	161.0
L [mm]	193.0	203.0	223.0	223.0
Weight [kg]	1.90	2.05	2.40	2.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

49. CHIMENY DAMPER WITH REVISION SZKr





SZKr x - CZ 2

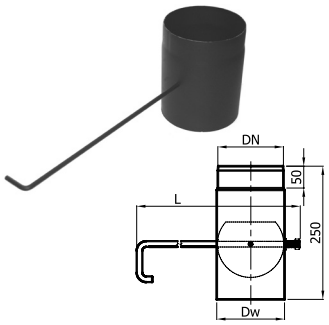
- sheet thickness
- material
- nominal diameter DN
- pipe with damper and revision

Diameter DN	ø120	ø130	ø150
Dw [mm]	121.0	131.0	151.0
L [mm]	160	170	190
Weight [kg]	1.65	1.95	2.25

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

invent. build. enjoy.

50. CHIMNEY DAMPER WITH LONG HANDLE SZK



Chimney dampers are produced in versions:
- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160

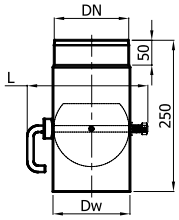
SZK x - CZ 2
- 2 – sheet thickness
- CZ – material
- x – nominal diameter DN
- SZK – chimney damper

Diameter DN	ø180	ø200	ø220	ø250
Dw [mm]	181.0	201.0	221.0	251.0
L [mm]	690.0	710.0	730.0	760.0
Weight [kg]	3.40	3.60	3.90	4.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

51. CHIMNEY DAMPER WITH BLOCKADE SZKB





In standard version damper is produced with short handle.

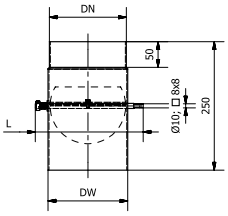
SZKB x - CZ 2
- 2 – sheet thickness
- CZ – material
- x – nominal diameter DN
- SZKB – chimney damper with bockade

Diameter DN	ø120	ø130	ø150	ø160
Dw [mm]	121.0	131.0	151.0	161.0
L [mm]	193.0	203.0	223.0	223.0
Weight [kg]	1.90	2.10	2.40	2.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

52. CHIMNEY DAMPER SZK 8x8



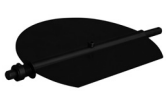


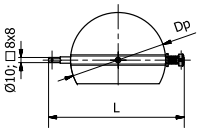
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	121.0	131.0	151.0	161.0	181.0	201.0	221.0	251.0
L [mm]	180	190	210	220	240	260	280	310
Weight [kg]	1.65	1.95	2.25	2.41	2.76	3.10	3.47	4.00

SZK x - CZ 2 - 8x8
- 8x8 – type
- 2 – sheet thickness
- CZ – material
- x – nominal diameter DN
- SZK – chimney damper

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

53. CHIMNEY DAMPER SET SZK-SET 8x8





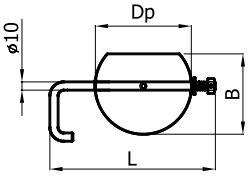
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dp [mm]	117	127	147	157	177	197	217	247
L [mm]	180	190	210	220	240	260	280	310
Weight [kg]	0.28	0.32	0.37	0.41	0.51	0.59	0.73	0.91

SZK-SET x - 8x8
- 8x8 – type
- x – nominal diameter DN
- SZK-SET – chimney damper set

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

54. CHIMNEY DAMPER „DO IT YOURSELF" SET WITH SHORT HANDLE SZK-SET





Chimney dampers are produced in versions:
- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160

SZK-SET x - K - CZ 2
- 2 – sheet thickness
- CZ – material
- K – short handle version
- x – nominal diameter DN
- SZK-SET – chimney damper set

Diameter DN	ø120	ø130	ø150	ø160
B [mm]	97.5	105.0	110.0	118.0
Dp [mm]	117.0	127.0	147.0	157.0
L [mm]	193.0	203.0	223.0	223.0
Weight [kg]	1.65	1.80	2.00	2.20

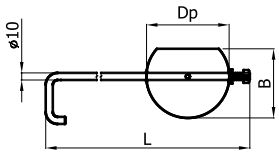
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

55. CHIMNEY DAMPER „DO IT YOURSELF" SET WITH LONG HANDLE SZK-SET



Chimney dampers are produced in versions:

- with long handle for diameters 180, 200, 220 and 250
- with short handle 120, 130, 150 and 160



SZK-SET x - D - CZ 2

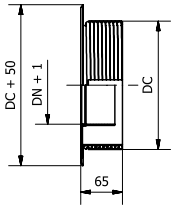
- 2 — sheet thickness
- CZ — material
- D — long handle version
- x — nominal diameter DN
- SZK-SET — chimney damper set

Diameter DN	ø180	ø200
B [mm]	142.5	154.5
Dp [mm]	177.0	197.0
L [mm]	690.0	710.0
Weight [kg]	2.70	3.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

56. WALL INSERT TO CERAMIC CHIMNEYS WKCP





Diameter DC / Diameter DN	ø150	ø160	ø180	ø200	ø220	ø250
ø120	WKCP	WKCP	WKCP	WKCP	WKCP	WKCP
ø130	-	WKCP	WKCP	WKCP	WKCP	WKCP
ø150	-	-	WKCP	WKCP	WKCP	WKCP
ø160	-	-	-	WKCP	WKCP	WKCP
ø180	-	-	-	-	WKCP	WKCP
ø200	-	-	-	-	-	WKCP
ø220	-	-	-	-	-	WKCP

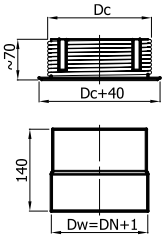
WKCP x/y - CZ 2

- 2 — segmented version
- CZ — material
- y — chimney diameter DC
- x — chimney connection diameter DN
- WKCP — wall insert to ceramic chimneys

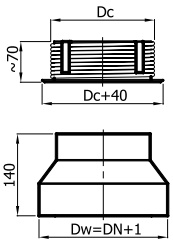
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

57. WALL INSERTS TO CERAMIC CHIMNEYS WKC; WKC-S









WKC x/y - CZ 2

- 2 — sheet thickness
- CZ — material
- y — inner diameter of ceramic tee Dc
- x — nominal diameter DN
- WKC — wall insert to ceramic chimneys

WKC x/y - CZ 2 - S

- S — segmented version
- 2 — sheet thickness
- CZ — material
- y — inner diameter of ceramic tee Dc
- x — nominal diameter DN
- WKC — wall insert to ceramic chimneys

This wall insert protects tees of ceramic chimneys from damages caused by thermal expansion of metal elements of the chimney connection.

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

Table of versions and available sets

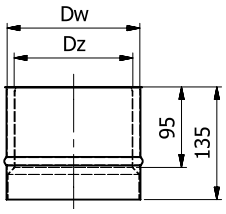
Diameter DN	Diameter DC ø120 Version	ø120 Weight [kg]	ø130 Version	ø130 Weight [kg]	ø140 Version	ø140 Weight [kg]	ø150 Version	ø150 Weight [kg]	ø160 Version	ø160 Weight [kg]	ø180 Version	ø180 Weight [kg]	ø200 Version	ø200 Weight [kg]	ø220 Version	ø220 Weight [kg]	ø250 Version	ø250 Weight [kg]
ø120	R	1.10	R	1.15	R	1.30	R	1.30	R	1.40	R	1.60	S	1.85	S	-	S	-
ø130	R	1.15	R	1.20	R	1.35	R	1.35	R	1.50	R	1.60	R	1.65	S	-	S	-
ø150	R	1.25	R	1.30	R	1.40	R	1.50	R	1.60	R	1.65	R	1.70	R	1.90	S	-
ø160	S	1.70	S	1.75	R	1.50	R	1.60	R	1.65	R	1.70	R	1.75	R	1.90	R	1.95
ø180	S	1.85	S	1.90	S	1.95	S	2.00	R	1.75	R	1.80	R	1.85	R	2.00	R	2.00
ø200	S	1.95	S	2.00	S	2.05	S	2.10	S	2.15	R	1.90	R	1.95	R	2.05	R	2.05
ø220	S	-	S	-	S	-	S	-	S	-	R	2.00	R	2.05	R	2.10	R	2.20
ø250	S	-	S	-	S	-	S	-	S	-	S	-	S	2.35	R	2.20	R	2.30

S - segmented version
R - redukcje rozpęczane

invent. build. enjoy.

58. DOUBLE - WALLED WALL INSERT WD





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz [mm]	110.0	120.0	140.0	150.0	170.0	190.0	210.0	240.0
Dw [mm]	128.0	138.0	158.0	168.0	188.0	208.0	228.0	258.0
Weight [kg]	0.65	0.70	0.85	0.90	1.00	1.10	1.20	1.25

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	8	8 - sheet thickness 0.8 mm

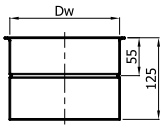
WD x - CZ

- material
- nominal diameter DN
- double-walled insert

Caution!
Double-walled insert is used to secure connection of the SPK element to chimney duct with metal insert.

59. SINGLE-WALLED WALL INSERT WJ





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	128.0	138.0	158.0	168.0	188.0	208.0	228.0	258.0
Weight [kg]	0.30	0.35	0.40	0.42	0.45	0.50	0.55	0.60

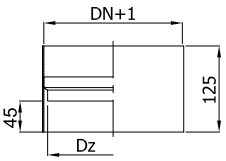
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	8	8 - sheet thickness 0.8 mm

WJ x - CZ

- material
- nominal diameter DN
- single-walled wall insert

60. FEMALE CONNECTOR WITH ANTI-CONDENSATION PROTECTION ZZ





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dz [mm]	110.0	120.0	140.0	150.0	170.0	190.0	210.0	240.0
Weight [kg]	0.95	1.10	1.20	1.30	1.45	1.60	1.75	1.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

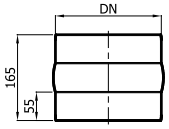
ZZ x - CZ 2

- sheet thickness
- material
- nominal diameter DN
- female connector with anti-condensation protection

Caution!
Female connector allows to connect two press-formed elements to each other and divert the connection schema.

61. MALE CONNECTOR ZM





Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Weight [kg]	0.40	0.45	0.50	0.55	0.60	0.70	0.80	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

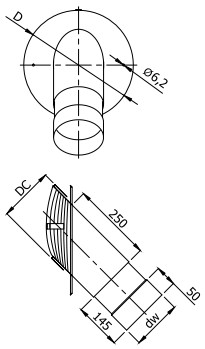
ZM x - CZ 2

- sheet thickness
- material
- nominal diameter DN
- male connector

Caution!
Male connector allows to connect the on site cut pipe elements to other elements of the SPK system.

62. TELESCOPIC WALL INSERT WITH CERAMIC ROPE TO CERAMIC CHIMNEY WKK-CS





Diameter DN	ø150	ø150	ø180
DC	180.0	200.0	200.0
D	340.0	360.0	360.0
dw	151	151	181
Weight [kg]	2.95	3.20	3.20

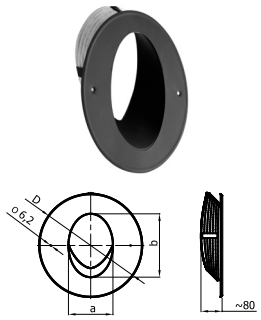
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

WKK-CS x/y/45 - CZ 2

- sheet thickness
- material
- angle 45°
- inner diameter of ceramic tee Dc
- nominal diameter DN
- telescopic wall insert with ceramic rope to ceramic chimney

Telescopic wall insert allows to connect the stove/fireplace to the chimney at 45° angle
Caution!
Other inserts upon individual order

63. ANGULAR WALL INSERT WITH CERAMIC ROPE WKK-KS (TO BE BUILT IN)



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
a [mm]	130.0	140.0	160.0	170.0	190.0	210.0	230.0	260.0
b [mm]	184.0	198.0	226.0	240.0	269.0	297.0	325.0	368.0
Diameter D	280	290	310	320	340	360	380	410
Weight [kg]	0.95	1.10	1.20	1.35	1.45	1.60	1.75	2.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

WKK-KS x/45 - CZ 2

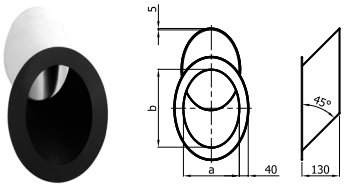
- 2 — sheet thickness
- CZ — material
- 45 — angle 45°
- x — nominal diameter DN
- WKK-KS — angular wall insert with ceramic rope

Angular insert allows to connect the stove/ fireplace to the chimney at 45° angle.

Caution!

Pipe element ending that is put into the WKK-KS wall insert shoud be cut at the proper angle, so the pipe does not go into chimney duct causing an obstruction.

64. ANGULAR WALL INSERT WITH INSULATION WKK (TO BE BUILT IN)



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
a [mm]	130.0	140.0	160.0	170.0	190.0	210.0	230.0	260.0
b [mm]	184.0	198.0	226.0	240.0	269.0	297.0	325.0	368.0
Weight [kg]	0.95	1.10	1.20	1.35	1.45	1.60	1.75	1.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

WKK x/45 - CZ 2

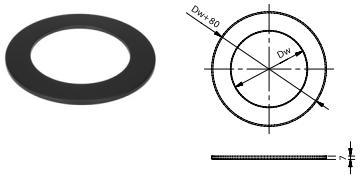
- 2 — sheet thickness
- CZ — material
- 45 — angle 45°
- x — nominal diameter DN
- WKK — angular wall insert with insulation

Angular wall insert allows to connect the stove to a chimney at 45° angle. Thermal insulation protects ceramic chimneys from damages caused by thermal expansion of metal elements.

Caution!

Pipe element ending that is put into the WKK wall insert shoud be cut at the proper angle, so the pipe does not go into chimney duct causing an obstruction.

65. ROSETTE ROZ



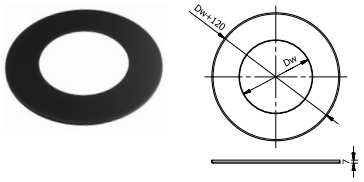
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	127	137	157	167	187	207	227	257
Weight [kg]	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	6	6 - sheet thickness 0.6 mm

ROZ x - CZ

- CZ — material
- x — nominal diameter DN
- ROZ — rosette

66. WIDE ROSETTE ROZ-II



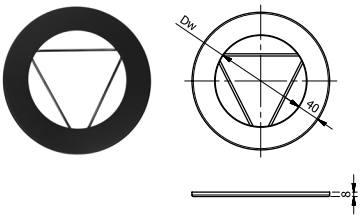
Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200
Dw [mm]	127	137	157	167	187	207
Weight [kg]	0.19	0.20	0.22	0.23	0.25	0.27

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	5	5 - sheet thickness 0.5 mm

ROZ x - II - CZ

- CZ — material
- II — type
- x — nominal diameter DN
- ROZ — rosette

67. ROSETTE WITH SPRINGS ROZ/S



Diameter DN	ø120	ø130	ø150	ø160	ø180	ø200	ø220	ø250
Dw [mm]	127	137	157	167	187	207	227	257
Weight [kg]	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21

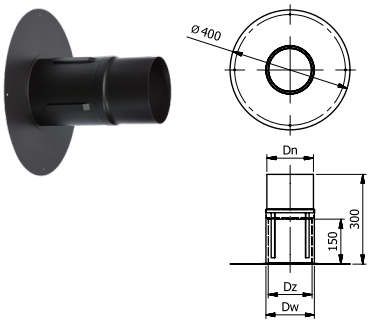
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	6	6 - sheet thickness 0,6 mm

ROZ/S x - CZ

- CZ — material
- x — nominal diameter DN
- S — with springs
- ROZ — rosette

invent. build. enjoy.

68. ROUND MASKING PLATE Ø400 WITH DOUBLE-WALLED INSERT PLo/WD



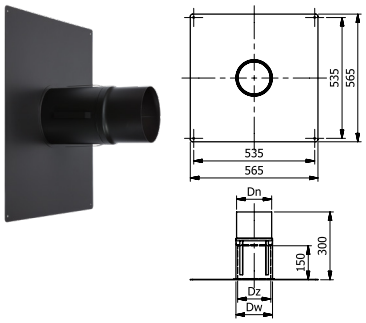
Diameter DN	ø120	ø130	ø150
Dz [mm]	117	127	147
Dw [mm]	130	140	160
Dn [mm]	125	135	155
Weight [kg]	4.90	5.00	5.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

PLo x - CZ 2 / WD

- x — nominal diameter DN
- 2 — sheet thickness
- WD — double-walled insert

69. SQUARE MASKING PLATE #565x565 WITH DOUBLE-WALLED INSERT PLkw/WD



Diameter DN	ø120	ø130	ø150
Dz [mm]	117	127	147
Dw [mm]	130	140	160
Dn [mm]	125	135	155
Weight [kg]	4.90	5.00	5.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

PLkw x - CZ 2 / WD

- x — nominal diameter DN
- 2 — sheet thickness
- WD — double-walled insert

Chimney connections for pellet stoves <SPKP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm.
Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C.
Maximum working temperature: 250°C.



Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, chimney connection is characterized by very tight and stiff construction. It also assures proper flow of condensate. In order to prevent fumes from leaking out, special silicone seals are used in the bell joint of the pipe. Elements are powder coated with special high temperature paint (400°C) in black matt colour.

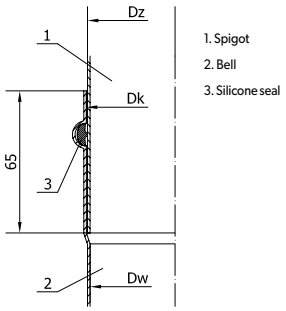


Fig. Method of joining chimney connection pipe elements <SPKP>

CE 1450

Table of layouts and sizes

Diameter DN	Dz	Dw	Dk
80	80.1	77.7	81.1
100	100.2	97.8	101.2

Measurments
Dz - outer diameter of pipe [mm]
Dw - inner diameter of pipe [mm]
Dk - outer diameter of spigot [mm]

Destination
D - smoke ducts

Model of application of elements

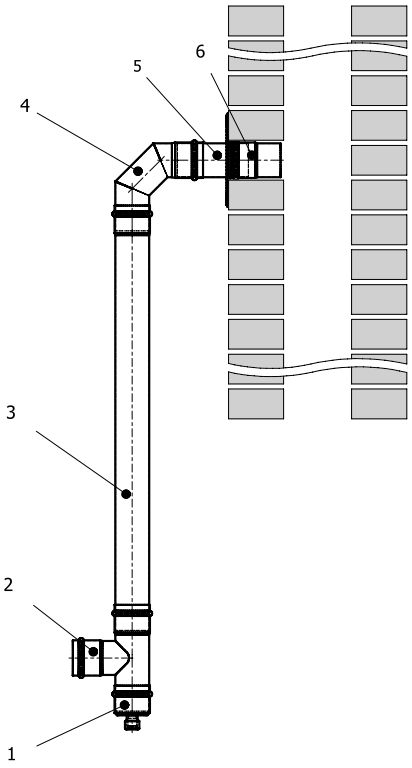
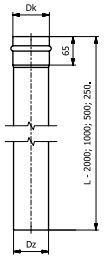


Fig. Example of chimney connection SPKP system

No	Name	Denotation
1	Drain bowl	MS80-CZ1,2P
2	Tee 90°	TR80/90-CZ1,2P
3	Straight pipe 1000 [mm]	RP80/100-CZ1,2P
4	Solid elbow 90°	KS80/90-CZ1,2P
5	Male connector	ZM80-CZ1,2P
6	Rosette	ROZ80-CZ1,2P

1. STRAIGHT PIPE 1000, 500, 250 [mm] RP





Length L	1000		500		250	
Diameter DN	ø80	ø100	ø80	ø100	ø80	ø100
Dz	80.1	100.2	80.1	100.2	80.1	100.2
Dk	81.1	101.2	81.1	101.2	81.1	101.2
Weight [kg]	2.40	2.95	1.20	1.50	0.60	0.75

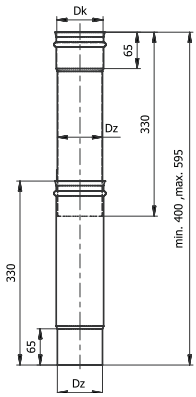
RP x / L - CZ 1,2P

- sheet thickness
- material
- length [mm]
- nominal diameter DN
- straight pipe

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

2. TELESCOPIC PIPE RT





RT x / 2x0,33 - CZ 1,2P

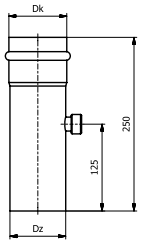
- sheet thickness
- material
- length
- nominal diameter DN
- straight pipe

Diameter DN	ø80	ø100
Dz	80.1	100.2
Dk	81.1	101.2
Weight [kg]	1.7	2.1

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

3. STRAIGHT PIPE WITH MEASURING OUTLET ROP





ROP x / 0,25 - CZ 1,2P

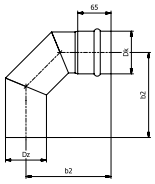
- sheet thickness
- material
- length
- nominal diameter DN
- straight pipe

Diameter DN	ø80	ø100
Dz	80.1	100.2
Dk	81.1	101.2
Weight [kg]	0.7	0.9

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

4. SOLID ELBOW 90° KS/90





KS x / 90 - CZ 1,2P

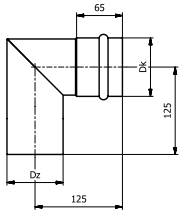
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	83.0	79.0
b2 [mm]	166.0	165.0
Weight [kg]	0.70	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

5. SOLID ELBOW 90° - 2SEG





KS x / 90 - CZ 1,2P-2SEG

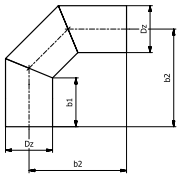
- two-segment
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
Weight [kg]	0.6	0.75

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

6. SOLID ELBOW 90° SPIGOT - SPIGOT





KS x / 90 - CZ 1,2P N/N

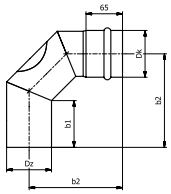
- spigot-spigot
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
b1 [mm]	83	79
b2 [mm]	166	165
Weight [kg]	0.70	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

7. SOLID ELBOW 90° WITH REVISION KSR/90





KSR x / 90 - CZ 1,2P

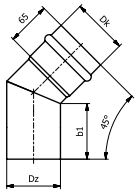
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow with revision

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	83.0	79.0
Weight [kg]	0.80	1.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

8. SOLID ELBOW 45° KS/45





KS x / 45 - CZ 1,2P

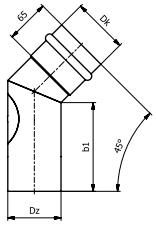
- sheet thickness
- material
- angle 45°
- nominal diameter DN
- solid elbow

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	83.0	79.0
Weight [kg]	0.50	0.65

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

9. SOLID ELBOW 45° WITH REVISION KSR/45





KSR x / 45 - CZ 1,2P

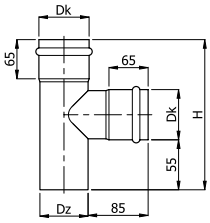
- sheet thickness
- material
- angle 45°
- nominal diameter DN
- solid elbow with revision

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
b1 [mm]	133	129
Weight [kg]	1.0	1.2

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

10. TEE 90° TR/90





TR x / 90 - CZ 1,2P

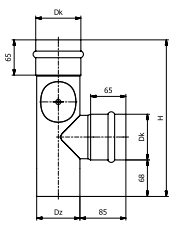
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- tee

Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
H [mm]	220	290
Weight [kg]	0.85	1.15

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

11. TEE WITH REVISION TRR





TRR x - CZ 1,2P

- sheet thickness
- material
- nominal diameter DN
- tee with revision

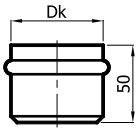
Diameter DN	ø80	ø100
Dz [mm]	80.1	100.2
Dk [mm]	81.1	101.2
H [mm]	220	290
Weight [kg]	0.95	1.25

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

invent. build. enjoy.

12. BOWL/PLUG MS





MS/Z x - CZ 1,2P

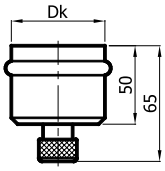
- sheet thickness
- material
- nominal diameter DN
- bowl/plug

Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.25	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

13. DRAIN BOWL MS





MS x - CZ 1,2P

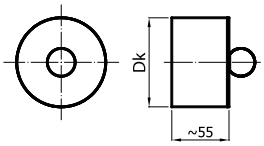
- sheet thickness
- material
- nominal diameter DN
- bowl

Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.40	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

14. TEE PLUG ZT





ZT x - CZ 1,2P

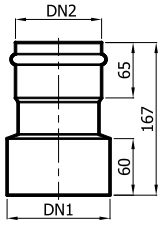
- sheet thickness
- material
- nominal diameter DN
- plug

Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.40	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

15. REDUCER RD





RD x/y - CZ 1,2P

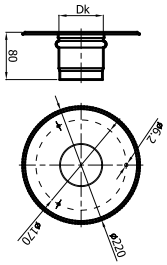
- sheet thickness
- material
- nominal diameter DN2
- nominal diameter DN1
- reducer

Diameter DN1/DN2	80/100	100/80
Weight [kg]	0.50	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

16. ROSETTE ROZ





ROZ x - CZ 1,2P

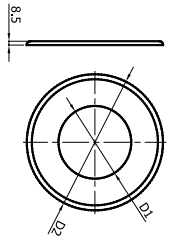
- sheet thickness
- material
- nominal diameter DN
- rosette

Diameter DN	ø80	ø100
Dk [mm]	80.6	100.7
Weight [kg]	0.60	0.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

17. ROSETTE ROZII





ROZII x - CZ 1,2P

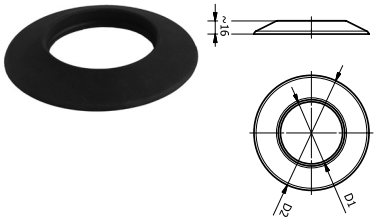
- sheet thickness
- material
- nominal diameter DN
- rosette II

Diameter DN	ø80	ø100
D1 [mm]	80.8	100.8
D2 [mm]	150	170
Weight [kg]	0.12	0.14

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

invent. build. enjoy.

18. SILICONE ROSETTE ROZIII



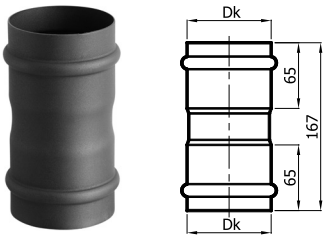
ROZIII x - CZ 1,2P / SILIKON

- material
- SPKP system
- nominal diameter DN
- rosette III

Diameter DN	ø80	ø100
D1 [mm]	79.5	99.5
D2 [mm]	138	158
Weight [kg]	0.05	0.08

Destination	D	D - smoke ducts
Material	S	S - silicone

19. FEMALE CONNECTOR ZZ



ZZ x - CZ 1,2P

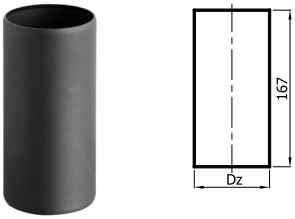
- sheet thickness
- material
- nominal diameter DN
- female connector

Caution!
Female connector allows to connect two spigot sided elements of the system for example due to a cut-to-size necessity.

Diameter DN	ø80	ø100
Dk	81.1	101.2
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

20. MALE CONNECTOR ZM



ZM x - CZ 1,2P

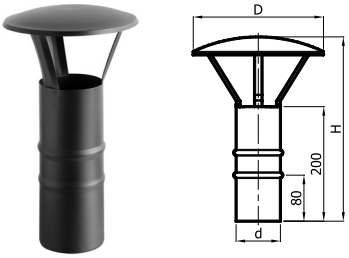
- sheet thickness
- material
- nominal diameter DN
- male connector

Caution!
Male connector allows to connect elements of the system with two bell-ended sides and divert the connection schema.

Diameter DN	ø80	ø100
Dz	80.1	100.2
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

21. CAP DK



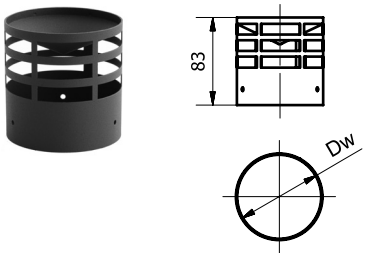
DK x - CZ 1,2P

- SPKP system
- material
- nominal diameter DN
- chimney cap

Diameter DN	ø80	ø100
d [mm]	77.2	96.9
D[mm]	160	220
H [mm]	285	220
Weight [kg]	0.31	1.44

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

22. TERMINAL WB



WB x - CZ 1,2P / TERMINAL

- SPKP system
- material
- nominal diameter DN
- terminal

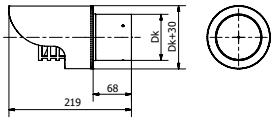
Diameter DN	ø80	ø100
Dw	82	102
Weight [kg]	0.15	0.20

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

invent. build. enjoy.

23. TERMINAL WITH COVER





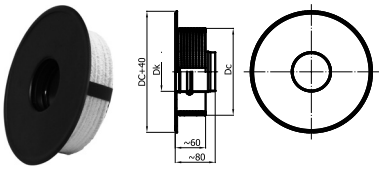
WBZ x - CZ 1,2P

- SPKP system
- material
- nominal diameter DN
- terminal with cover

Diameter DN	ø80	ø100
Dk	81	101
Weight [kg]	0.4	0.45

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

24. WALL INSERT TO CERAMIC CHIMNEYS WKCP



WKCP DN/DC - CZ 1,2P

- sheet thickness
- material
- nominal diameter DN/DC
- wall insert to ceramic chimneys

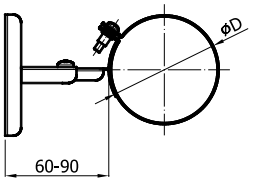
DC - chimney diameter
DN - chimney connection diameter

Diameter DN	ø80	ø100
Dk [mm]	81.1	101.2
Weight [kg]	0.71	0.77

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

25. MOUNTING BRACKET OMD-I





OMD-I x - CZ 1,2P

- SPKP system
- material
- nominal diameter DN
- mounting bracket

Diameter DN	ø80	ø100
øD [mm]	80	100
Weight [kg]	0.16	0.17

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

26. REVISION REPLACEMENT SEAL



KSR-USZCZELKA - CZ1,2P

- SPKP/SPP system
- seal for elbow with revision

Caution! Sold in sets of 2 pcs.

27. SILICONE SEAL



M-PROF-LARKI- x -KS

- diameter
- silicone seal

28. MOUNTING SILICONE PASTE



PASTA-30

- mounting silicone paste

capacity 30 g

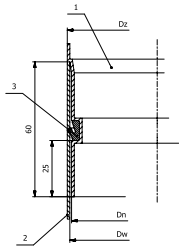
Chimney connections for pellet stoves <SPP>

Chimney connections for pellet stoves are made of mild steel sheet type DC01, thickness 1.2 mm. Their application is smoke extraction from pellet stoves, where fumes temperature can rise to 250°C. Maximum working temperature: 250°C.



Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, chimney connection is characterized by very tight and stiff construction. It also assures proper flow of condensate. In order to prevent fumes from leaking out, special silicone seals are used in the bell joint of the pipe. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.



1. Spigot
2. Bell
3. Silicone seal

Fig. Method of joining chimney connection pipe elements

CE 1450

Table of layouts and sizes

Diameter DN	Dz	Dw	Dn
80	80.1	77.7	76
100	100.2	97.8	96

Measurments

Dz - outer diameter of pipe [mm]
Dw - inner diameter of pipe [mm]
Dn - inner diameter of spigot [mm]

Destination

D - smoke ducts

Model of application of elements

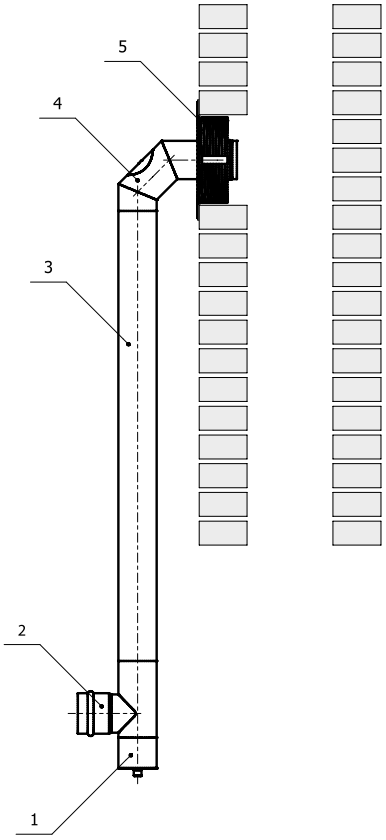
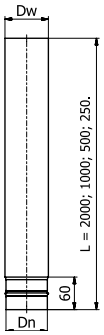


Fig. Example of chimney connection SPP system

No	Name	Denotation
1	Drain bowl	MS80-CZ1,2SP
2	Tee 90°	TR80/90-CZ1,2SP
3	Straight pipe 1000 [mm]	RP80/100-CZ1,2SP
4	Solid elbow 90°	KS80/90-CZ1,2SP
5	Rosette	ROZ80-CZ1,2SP

1. STRAIGHT PIPE 2000, 1000, 500, 250 [mm] RP





Length L	2000		1000		500		250	
Diameter DN	ø80	ø100	ø80	ø100	ø80	ø100	ø80	ø100
Dw	77.7	97.8	77.7	97.8	77.7	97.8	77.7	97.8
Dn	76.0	96.1	76.0	96.1	76.0	96.1	76.0	96.1
Weight [kg]	4.80	5.90	2.40	2.95	1.20	1.50	0.60	0.75

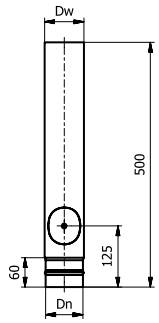
RP x/L - CZ 1,2SP

- sheet thickness
- material
- length w [m]
- nominal diameter DN
- straight pipe

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

2. STRAIGHT PIPE WITH REVISION RPR





RPR x/0,50 - CZ 1,2SP

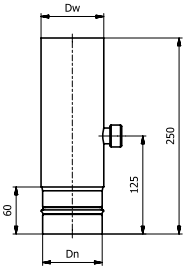
- sheet thickness
- material
- length
- nominal diameter DN
- straight pipe

Diameter DN	ø80	ø100
Dw	77.7	97.8
Dn	76.0	96.1
Weight [kg]	1.30	1.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

3. STRAIGHT PIPE WITH MEASURING OUTLET ROP





ROP x/0,25 - CZ 1,2SP

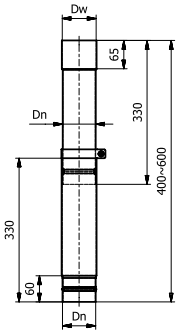
- sheet thickness
- material
- length
- nominal diameter DN
- straight pipe

Diameter DN	ø80	ø100
Dw	77.7	97.8
Dn	76.0	96.1
Weight [kg]	0.70	0.85

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

4. TELESCOPIC PIPE RT





RT x/2x0,33 - CZ 1,2SP

- sheet thickness
- material
- length
- nominal diameter DN
- straight pipe

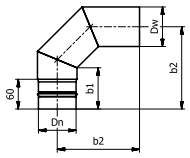
Diameter DN	ø80	ø100
Dw	77.7	97.8
Dn	76.0	96.1
Weight [kg]	1.70	2.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

invent. build. enjoy.

5. SOLID ELBOW 90° KS/90, WITH REVISION KSR/90





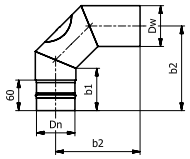
KS x / 90 - CZ 1,2SP

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

Diameter DN		ø80	ø100
Dw [mm]		77.7	97.8
Dn [mm]		76	96.1
b1 [mm]		83	79
b2 [mm]		167	165
Weight [kg]	KS	0.70	0.90
	KSR	0.80	1.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm



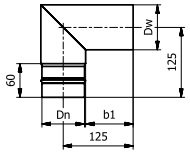


KSR x / 90 - CZ 1,2SP

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow with revision

6. SOLID ELBOW 90° - 2 SEG. KS/90-2SEG, WITH REVISION/90-2SEG





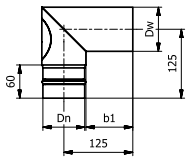
KS x / 90 - CZ 1,2SP -2SEG

- two-segment
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow

Diameter DN		ø80	ø100
Dw [mm]		77.7	97.8
Dn [mm]		76	96.1
b1 [mm]		85	75
Weight [kg]	KS	0.60	0.75
	KSR	0.70	0.85

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm



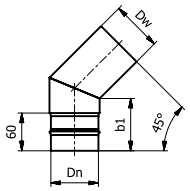


KSR x / 90 - CZ 1,2SP -2SEG

- two-segment
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- solid elbow with revision

7. SOLID ELBOW 45° KS/45, WITH REVISION KSR/45





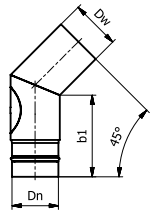
KS x / 45 - CZ 1,2SP

- sheet thickness
- material
- angle 45°
- nominal diameter DN
- solid elbow

Diameter DN		ø80	ø100
Dw [mm]		77.7	97.8
Dn [mm]		76	96.1
b1 [mm]	KS	83	79
	KSR	133	129
Weight [kg]	KS	0.70	0.90
	KSR	0.90	1.10

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm





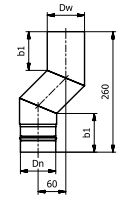
KSR x / 45 - CZ 1,2SP

- sheet thickness
- material
- angle 45°
- nominal diameter DN
- solid elbow with revision

invent. build. enjoy.

8. SOLID ELBOW S60, S80

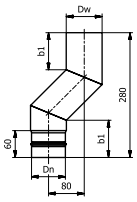




KS x / S60 - CZ 1,2SP

- sheet thickness
- material
- version
- nominal diameter DN
- solid elbow





KS x / S80 - CZ 1,2SP

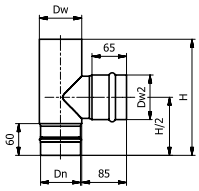
- sheet thickness
- material
- version
- nominal diameter DN
- solid elbow

Diameter DN		ø80	ø100
Dw [mm]		77.7	97.8
Dn [mm]		76	96
b1 [mm]		83	79
Weight [kg]	KS	0.70	0.85
	KSR	0.75	0.90

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

9. TEE 90° TR/90, WITH REVISION TRR/90

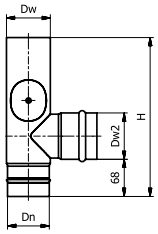




TR x / 90 - CZ 1,2SP

- sheet thickness
- material
- angle 90°
- nominal diameter DN
- tee





TRR x / 90 - CZ 1,2SP

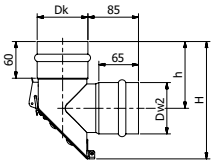
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- tee with revision

Diameter DN		ø80	ø100
Dw [mm]		77.7	97.8
Dn [mm]		76	96.1
Dw2		81	101
H [mm]	TR	220	240
	TRR	290	305
Weight [kg]	TR	0.85	1.15
	TRR	1.00	1.30

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

10. TEE WITH INSPECTION DOOR





TRZ x / 90 - CZ 1,2SP

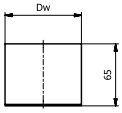
- sheet thickness
- material
- angle 90°
- nominal diameter DN
- tee with inspection door

Diameter DN	ø80	ø100
Dw	77.7	97.8
Dw2	81	101
H	195	210
h	110	120
Weight [kg]	0.70	1.00

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

11. BOWL/PLUG MS/Z





MS/Z x - CZ 1,2SP

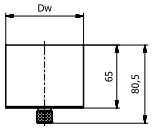
- sheet thickness
- material
- nominal diameter DN
- bowl/plug

Diameter DN	ø80	ø100
Dw	77.7	97.8
Weight [kg]	0.25	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

12. CONDENSATE DRAIN BOWL MS





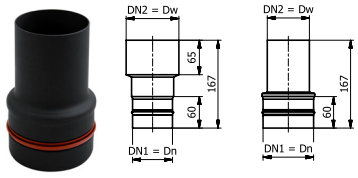
MS x - CZ 1,2SP

- sheet thickness
- material
- nominal diameter DN
- bowl

Diameter DN	ø80	ø100
Dw	77.7	97.8
Weight [kg]	0.40	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

13. REDUCER RD



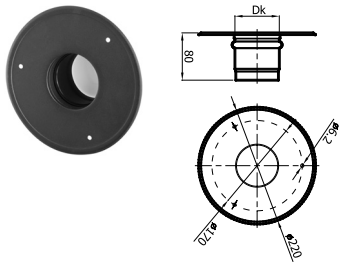
RD x/y - CZ 1,2SP

- sheet thickness
- material
- nominal diameter DN2
- nominal diameter DN1
- reducer

Diameter DN1/DN2	80/100	100/80
Weight [kg]	0.50	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

14. ROSETTE ROZ



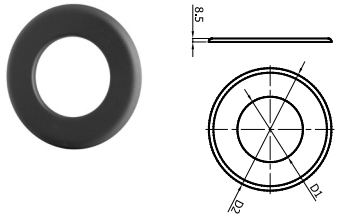
ROZ x - CZ 1,2SP

- sheet thickness
- material
- nominal diameter DN
- rosette

Diameter DN	ø80	ø100
Dk [mm]	80.6	100.7
Weight [kg]	0.60	0.80

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

15. ROSETTE ROZII



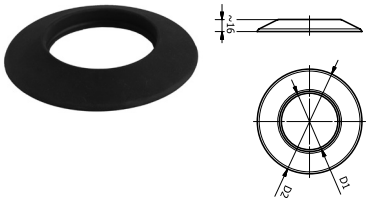
ROZII x - CZ 1,2SP

- SPP system
- material
- nominal diameter DN
- rosette II

Diameter DN	ø80	ø100
D1 [mm]	80.8	100.8
D2 [mm]	150	170
Weight [kg]	0.12	0.14

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

16. SILICONE ROSETTE ROZIII



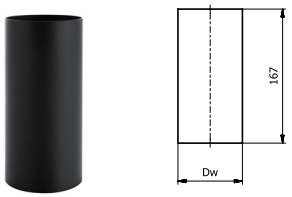
ROZIII x - CZ 1,2P/ SILIKON

- material
- system
- nominal diameter DN
- rosette III

Diameter DN	ø80	ø100
D1 [mm]	79.5	99.5
D2 [mm]	138	158
Weight [kg]	0.05	0.08

Destination	D	D - smoke ducts
Material	S	S - silicone

17. FEMALE CONNECTOR ZZ



ZZ x - CZ 1,2SP

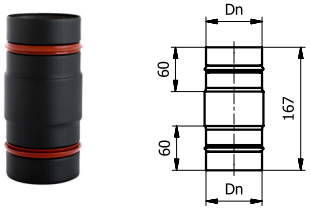
- sheet thickness
- material
- nominal diameter DN
- female connector

Caution!
Female connector allows to connect two spigot sided elements of the system and divert connection schema.

Diameter DN	ø80	ø100
Dw	77.7	97.8
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

18. MALE CONNECTOR ZM



ZM x - CZ 1,2SP

- sheet thickness
- material
- nominal diameter DN
- male connector

Caution!
Male connector allows to connect two parts of pipe when there is a cut-to-size necessity.

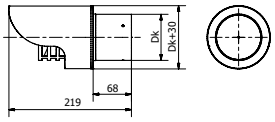
Diameter DN	ø80	ø100
Dn	76.0	96.1
Weight [kg]	0.45	0.55

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

invent. build. enjoy.

19. TERMINAL WITH COVER





WBZ x - CZ 1,2P

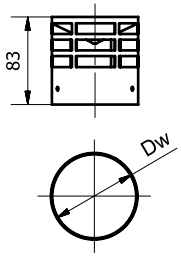
- WBZ — terminal with cover
- x — nominal diameter DN
- CZ — material
- 1,2P — SPP/SPKP system

Diameter DN	ø80	ø100
Dk	81	101
Weight [kg]	0.40	0.45

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

20. TERMINAL WB





WB x - CZ 1,2P /TERMINAL

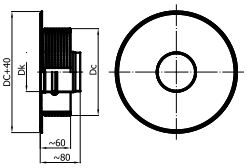
- WB — terminal
- x — nominal diameter DN
- CZ — material
- 1,2P — SPP/SPKP system

Diameter DN	ø80	ø100
Dw	82	102
Weight [kg]	0.15	0.20

Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301 powder coated black colour
Sheet thickness	0.5	0.5 - sheet thickness 0.5 mm

21. WALL INSERT TO CERAMIC CHIMNEYS WKCP





WKCP DN/DC - CZ 1,2SP

- WKCP — wall insert to ceramic chimneys
- DN/DC — nominal diameter DN/DC
- CZ — material
- 1,2SP — sheet thickness

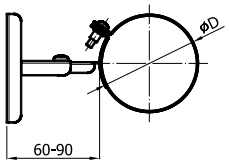
DC - chimney diameter
DN - chimney connection diameter

Diameter DN	ø80	ø100
Dk [mm]	81.1	101.2
Weight [kg]	0.71	0.77

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness	1.2	1.2 - sheet thickness 1.2 mm

22. MOUNTING BRACKET OMD-I





OMD-I x - CZ 1,2SP

- OMD-I — mounting bracket
- x — nominal diameter DN
- CZ — material
- 1,2SP — SPP system

Diameter DN	ø80	ø100
øD [mm]	80	100
Weight [kg]	0.16	0.17

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

23. REVISION REPLACEMENT SEAL



KSR-USZCZELKA - CZ1,2SP

- KSR-USZCZELKA — elbow with revision replacement seal
- CZ1,2SP — SPP/SPKP system

Caution! Sold in sets of 2 pcs.

24. TRZ TEE REVISION REPLACEMENT SEAL

TRZ x -USZCZELKA-CZ1,2SP

- TRZ — TRZ ree revision replacement seal
- x — diameter

Caution! Sold in sets of 2 pcs.
Material: ceramic paper

25. SILICONE SEAL



M-PROF-LARKI- x -KS

- x — diameter
- silicone seal

26. SILICONE SEAL



M-PROF-LARKI- x -SPP

- x — diameter
- silicone seal

27. MOUNTING SILICONE PASTE



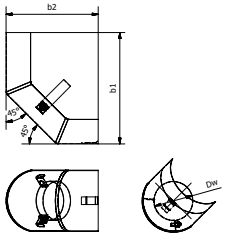
PASTA-30

- mounting silicone paste

capacity 30 g

28. ELBOW HEAT PROTECTION SSE





SSE - KS x / 90 - CZ

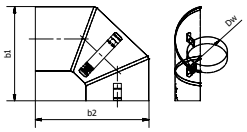
- material
- angle 90°
- nominal diameter Dw
- solid elbow
- heat protection

Diameter Dw	ø80	ø100
b1	231.5	240
b2	191.5	200
Weight [kg]	0.45	0.50

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

29. ELBOW HEAT PROTECTION SSE-B





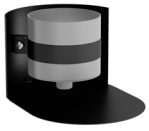
SSE - KS x / 90 / B - y - CZ

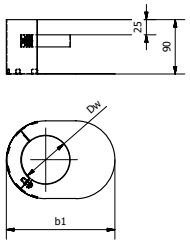
- material
- l - left; p - right
- side
- angle 90°
- nominal diameter Dw
- solid elbow
- heat protection

Diameter Dw	ø80	ø100
b1	190	200
b2	230	240
Weight [kg]	0.35	0.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

30. DRAIN BOWL HEAT PROTECTION SSE-MS





SSE - MS x / 90 - CZ

- material
- angle 90°
- nominal diameter Dw
- drain bowl
- heat protection

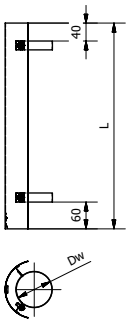
Diameter Dw	ø80	ø100
b1	180	200
Weight [kg]	0.30	0.35

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

invent. build. enjoy.

31. PIPE HEAT PROTECTION 1000, 500, 250 [mm]





Pipe length	1000		500		250	
Diameter Dw	ø80	ø100	ø80	ø100	ø80	ø100
Lenght	960		460		210	
Weight [kg]	1.15	1.35	0.60	0.70	0.30	0.35

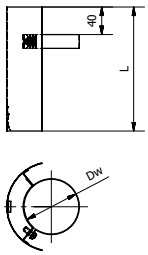
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

SSE - RP x / y - CZ

- material
- lenght
- nominal diameter Dw
- straight pipe
- heat protection

32. TEE 90° TR/90, TEE 90° WITH REVISION TRR/90 HEAT PROTECTION





SSE - TR x / 90 - CZ

- material
- angle 90°
- nominal diameter Dw
- tee
- heat protection

Diameter Dw		ø80	ø100
Lenght L [mm]	TR	180	210
	TRR	250	250
Weight [kg]	TR	0.25	0.30
	TRR	0.30	0.40

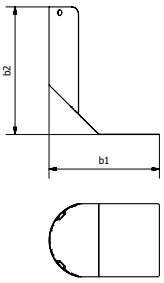
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

SSE - TRR x / 90 - CZ

- material
- angle 90°
- nominal diameter Dw
- tee with revision
- heat protection

33. TEE WITH INSPECTION DOOR





SSE - TRZ x / 90 - CZ

- material
- angle 90°
- nominal diameter Dw
- tee with inspection door
- heat protection

Diameter Dw	ø80	ø100
b1	191	210
b2	220	235
Weight [kg]	0.30	0.40

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01

Air-Flue chimney system for gas fireplaces <SGSP>

Air-Flue chimney system for gas fireplaces <SGSP> is a concentric double walled chimney system made of stainless steel: inner pipe - 1.4404, outer pipe - 1.4301. The system is used to exhaust fumes from modern gas fireplaces with closed combustion chamber. Air needed for burning process is taken from outside (through special air intakes) and then flows in the gap between the inner and outer chimney pipes. Smoke gases from the burning process are taken out from the building using the inner pipe (natural convection). System secures ceramic surfaces of chimney duct from damages that can be caused by destructive influence chemical substances which are part of flue gases.
Max working temperature: 600°C

Certificate od Factory Production Cotrol 1450-CPR-0007 issued by INiG Cracow.
Marked with CE sign.

CE 1450



Application of chimney liners and recommended sheet thicknesses

Diameter DN	S 1.4404	*) 1.4301
100	0.5	-
130	0.5	-
150	-	0.5
200	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
100	315	100.8	99.8	101.8	0.5
130	415	132.6	131.6	133.6	0.5
150	475	151.8	150.8	152.8	0.5
200	630	201.1	199.9	202.1	0.5

Measurments

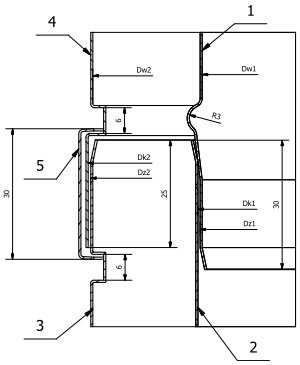
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]±0.1
Dw - inner diameter of pipe [mm]±0.1
Dk - inner diameter of bell [mm]±0.1
s - metal sheet thickness [mm]

Destination

S - flue ducts (gas, oil)
*) - air ducts

Bell joint of the pipe

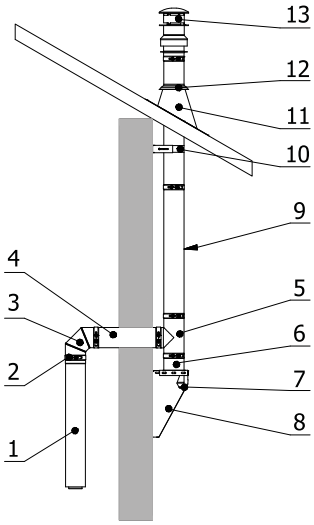
Individual elements of the chimney system are being joint by the way of pushing one part of the element- a spigot, into the other press-formed part- a bell. Thanks to this pipe joining, chimney liner is characterized by very tight and stiff construction. It also allows for proper flow of condensate, along the walls of chimney. The outer layer is to be connected in direction "bell down", what secures the duct from rainwater. Special mounting clamps are used to secure connection.



1. Spigot - inner pipe
2. Bell - inner pipe
3. Spigot - outer pipe
4. Bell - outer pipe
5. Mounting clamp

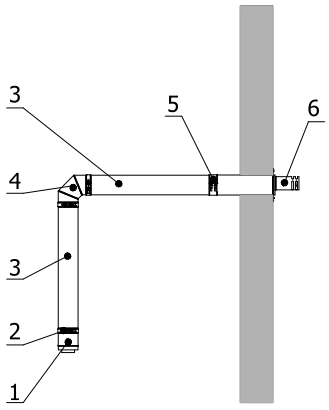
Fig. Method of joining double- walled pipe elements

Model application of elements: SGSP



No	Name	Denotation
1	Adaptor 3 100/150	ADD.../.../1,0-SGSP
2	Clamp 1 fi 150	OPI...-SGSP
3	Solid elbow 100/150-90	KSD.../.../90-SGSP
4	Pipe 100/150-0.5 m	RPD.../.../500-SGSP
5	Tee 100/150	TRD.../.../90-SGSP
6	Intermediate support	PPD.../...-SGSP
7	Tee plug	ZTD.../...-SGSP
8	Supporting console	KWD.../...5-15-SGSP
9	Pipe 100/150-1 m	RPD.../.../1000-SGSP
10	Mounting bracket OMD	OMD-II...X/5-15
11	Angular roof flashing	PDK.../20-X
12	Rain collar	KPD...-X
13	Vertical terminal	WGD.../...PION-SGSP

Fig. Example of a flue chimney construction - vertical fume exhaust



No	Name	Denotation
1	Adaptor 1 100/150	ADD.../...-SGSP-1
2	Clamp 1 fi 150	OPI...-SGSP
3	Pipe 100/150-1 m	RPD.../...1000-SGSP
4	Solid elbow 100/150-90	KSD.../...90-SGSP
5	Clamp 2	OPII...-SGSP
6	Horizontal terminal 100/150	WB.../...Horizontal-II-SGSP

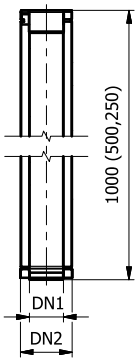
Fig. Example of a flue chimney construction - horizontal fume exhaust (through the wall) Air-Flue chimney system for gas fireplaces <SGSP>

WWW

Offset calculator available at darco.pl

1. STRAIGHT PIPE 1000, 500, 250 [mm] RPD





Diameter DN1	100	100	100	130	130	130
Diameter DN2	150	150	150	200	200	200
L [mm]	1000	500	250	1000	500	250
Weight [kg]	3.20	1.60	0.80	4.20	2.10	1.00

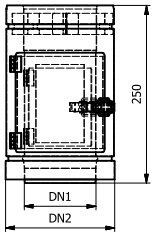
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RPD DN1 / DN2 / L - SGSP

- SGSP system
- length [mm]
- diameter DN2
- diameter DN1
- straight pipe

2. STRAIGHT PIPE WITH REVISION 250 [mm] RPDR





Diameter DN1	100	130
Diameter DN2	150	200
L [mm]	250	250
Weight [kg]	0.80	1.00

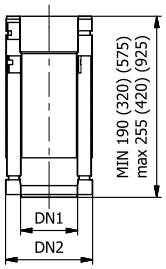
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RPDr DN1 / DN2 / 250 - SGSP

- SGSP system
- length [mm]
- diameter DN2
- diameter DN1
- straight pipe with revision

3. TELESCOPIC PIPE RTD





Diameter DN1	100	100	100	130	130	130
Diameter DN2	150	150	150	200	200	200
L [mm]	500	250	150	500	250	150
Weight [kg]	3.20	1.70	1.00	4.20	2.20	1.40

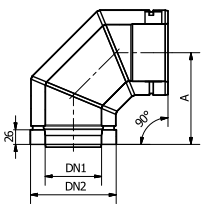
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RTD DN1 / DN2 / 2x L - SGSP

- SGSP system
- length [mm]
- diameter DN2
- diameter DN1
- telescopic pipe

4. SOLID ELBOW 90° KSD 90





Diameter DN1	100	130
Diameter DN2	150	200
A [mm]	165	175
Weight [kg]	1.10	1.50

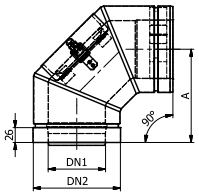
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

KSD DN1 / DN2 / 90 - SGSP

- SGSP system
- angle 90°
- diameter DN2
- diameter DN1
- solid elbow

5. SOLID ELBOW 90° WITH REVISION KSDR 90





Diameter DN1	100	130
Diameter DN2	150	200
A [mm]	170	180
Weight [kg]	1.10	1.50

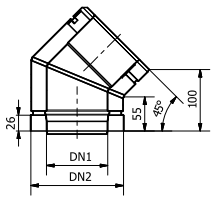
KSDr DN1 / DN2 / 90 - SGSP

- SGSP system
- angle 90°
- diameter DN2
- diameter DN1
- solid elbow with revision

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

6. SOLID ELBOW 45° KSD 45





Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	0.70	1.00

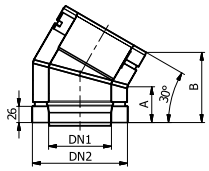
KSD DN1 / DN2 / 45 - SGSP

- SGSP system
- angle 45°
- diameter DN2
- diameter DN1
- solid elbow

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

7. SOLID ELBOW 30° KSD 30





Diameter DN1	100	130
Diameter DN2	150	200
A [mm]	58	62
B [mm]	110	120
Weight [kg]	0.65	0.90

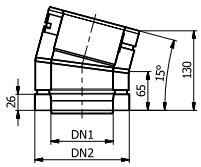
KSD DN1 / DN2 / 30 - SGSP

- SGSP system
- angle 30°
- diameter DN2
- diameter DN1
- solid elbow

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

8. SOLID ELBOW 15° KSD 15





Diameter DN1 Diameter DN2	100 150	130 200
Weight [kg]	0.60	0.80

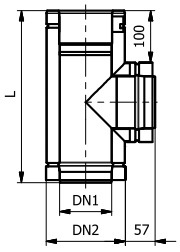
KSD DN1 / DN2 / 15 - SGSP

- SGSP system
- angle 15°
- diameter DN2
- diameter DN1
- solid elbow

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

9. TEE 90° TRD 90





Diameter DN1	100	130
Diameter DN2	150	200
L [mm]	332	332
Weight [kg]	1.20	1.70

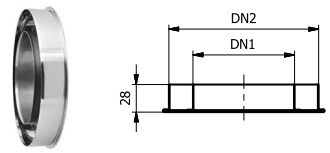
TRD DN1 / DN2 / 90 - SGSP

- SGSP system
- angle 90°
- diameter DN2
- diameter DN1
- tee

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

invent. build. enjoy.

10. TEE PLUG ZTD



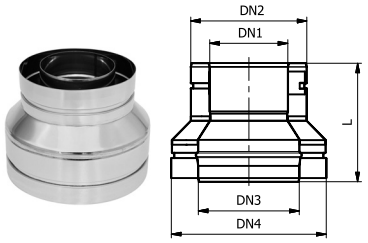
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	0.30	0.50

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404
Sheet thickness	5	5 - sheet thickness 0.5 mm

ZTD DN1 / DN2 - SGSP

- SGSP system
- diameter DN2
- diameter DN1
- tee plug

11. REDUCER RDD



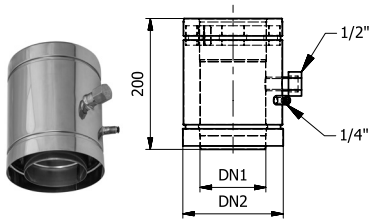
Diameter DN1	100	100
Diameter DN2	150	150
Diameter DN3	130	130
Diameter DN4	200	200
L [mm]	155	155
Weight [kg]	0.70	0.75

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

RDD DN1 / DN2 / DN3 / DN4 - SGSP

- SGSP system
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- reducer

12. STRAIGHT PIPE WITH MEASURING OUTLET ROPD



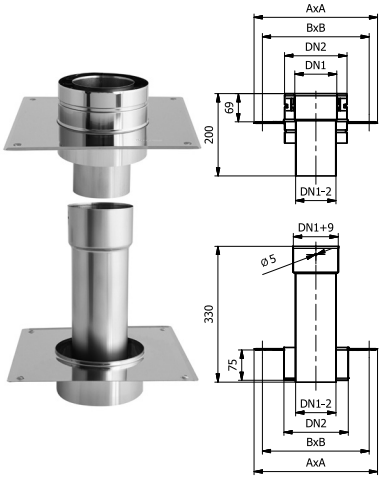
Diameter DN1 Diameter DN2	100 150	130 200
Weight [kg]	0.85	1.10

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

ROPD DN1 / DN2 - SGSP

- SGSP system
- diameter DN2
- diameter DN1
- straight pipe with measuring outlet

13. RENOVATION SET PPDR



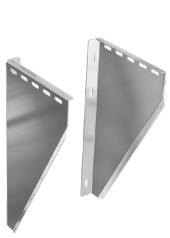
Diameter DN1 Diameter DN2	100 150	130 200
AxA	300	300
BxB	260	260
Weight [kg]	1.75	2.05

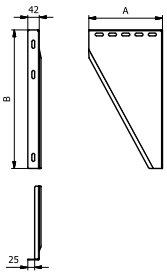
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

PPDR DN1 / DN2 - SGSP

- SGSP system
- diameter DN2
- diameter DN1
- renovation set

14. SUPPORTING CONSOLE KWD





Diameter DN1/DN2	100/150	130/200
A	267	267
B	502	502
Weight [kg]	3.50	3.50

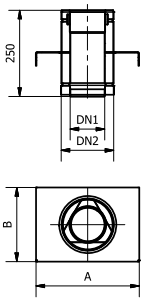
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	2	2 - sheet thickness 2 mm

KWD DN1 / DN2 / 5-15 - SGSP

- SGSP system
- min. distance from the wall
- diameter DN2
- diameter DN1
- supporting console

15. INTERMEDIATE SUPPORT PPD





Diameter DN1/DN2	100/150	130/200
A	300	300
B	215	255
Weight [kg]	2.00	2.30

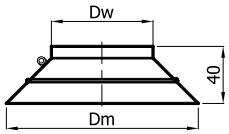
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

PPD DN1 / DN2 - SGSP

- SGSP system
- diameter DN2
- diameter DN1
- intermediate support

16. RAIN COLLAR KPD





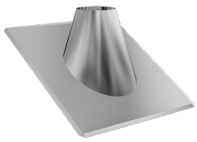
Diameter DN2	ø150	ø200
Dw [mm]	150.7	200.0
Dm [mm]	223	272
Weight [kg]	0.21	0.25

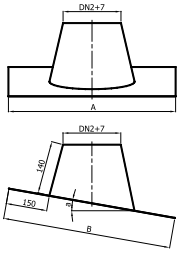
Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

KPD DN2 - X

- material
- diameter DN2
- rain collar

17. ANGULAR ROOF FLASHING PDK





α = 20 → from 0-20°
α = 35 → from 20-35°
α = 50 → from 35-50°

Diameter DN2		150	200
α 20	A	560	605
	B	600	610
α 35	A	605	645
	B	685	715
α 50	A	640	670
	B	800	867

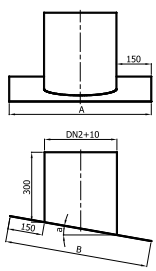
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

PDK DN2 / α - X

- material
- angle α
- diameter DN2
- angular roof flashing

18. ANGULAR ROOF FLASHING PDK II





Diameter DN2		150	200
α 20	A	470	510
	B	485	525
α 35	A	470	510
	B	515	560
α 50	A	470	510
	B	555	600

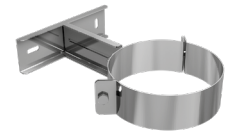
Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

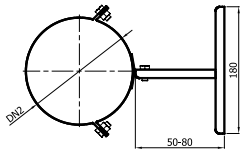
PDK II DN2 / α - X

- material
- angle α
- diameter DN2
- angular roof flashing

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19. MOUNTING BRACKET OMD-I





Diameter DN2	150	200
Weight [kg]	0.75	0.85

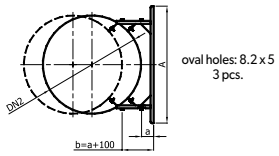
OMD-I DN2 - X/ 5-8

- distance to wall
- material
- diameter DN2
- mounting bracket

Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301

20. MOUNTING BRACKET OMD-II





oval holes: 8.2 x 5
3 pcs.

Diameter DN2	150	200
A	345	380
a	50	50
b	b = a+100	b = a+100
Weight [kg]	1.05	1.1

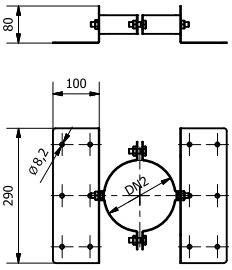
OMD-II DN2 - X/ 5-15

- distance to wall
- material
- diameter DN2
- mounting bracket

Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	X	X - stainless steel 1.4301

21. ROOF SUPPORT OMD-III





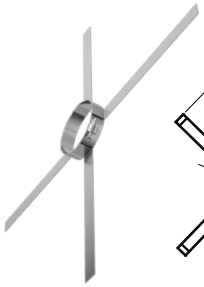
Diameter DN2	150	200
Weight [kg]	1.60	1.65

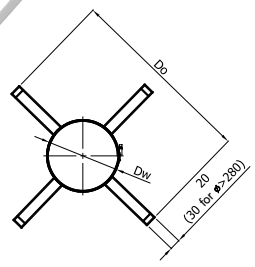
OMD-III DN2 - OC

- material
- diameter DN2
- roof support

Destination	W	W - ventilation ducts
	S	S - flue ducts
Material	OC	OC - galvanised steel sheet

22. STABILIZING BRACKET OU





Diameter DN	ø100	ø130
Do [mm]	500	530
Dw [mm]	100.9	132.8
Weight [kg]	0.10	0.10

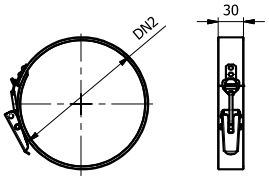
OU DN - X

- material
- diameter DN
- stabilizing bracket

Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

23. FASTENING CLAMP 30 MM OPI





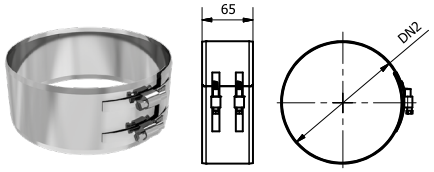
Diameter DN2	ø150	ø200
Weight [kg]	0.10	0.15

OPI DN2 - SGSP

- material
- diameter DN
- fastening clamp

Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

24. FASTENING CLAMP 65 MM OPII



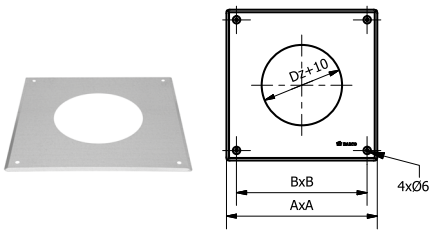
Diameter DN2	ø150	ø200
Weight [kg]	0.18	0.20

OPII DN2 - SGSP

- material
- diameter DN
- fastening clamp

Destination	S	S - flue ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

25. COVER PL



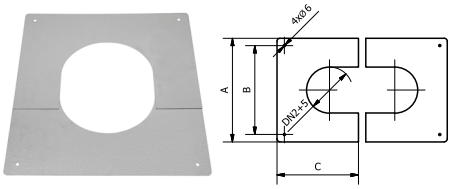
Diameter DN	150	200
AxA	300	350
BxB	260	310
Weight [kg]	0.30	0.35

PL DN2 - OC

- material
- diameter DN
- cover

Destination	S	S - flue ducts
Material	OC	OC - galvanised steel sheet

26. COVER PL/O



Diameter DN	150	200
AxA	350	400
BxB	300	350
C	275	300
Weight [kg]	1.15	1.35

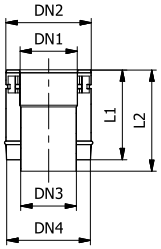
PL/O DN2 - OC

- material
- diameter DN
- cover

Destination	S	S - flue ducts
Material	OC	OC - galvanised steel sheet

27. ADAPTOR (SHORT) ADD





Diameter DN1	100	130
Diameter DN2	150	200
Diameter DN3	Dz*	Dz*
Diameter DN4	Dz*	Dz*
L1 [mm]	160	160
L2 [mm]	180	180
Weight [kg]	0.60	0.80

* Dimensions are made upon individual order

ADD DN1 / DN2 - SGSP - x

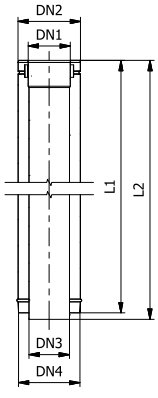
- version
- SGSP system
- diameter DN2
- diameter DN1
- short adaptor

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

When ordering the adaptor fireplace type or exact measurement should be given.

28. ADAPTOR (LONG) ADD 1,0





Diameter DN1	100	130
Diameter DN2	150	200
Diameter DN3	Dz*	Dz*
Diameter DN4	Dz*	Dz*
L1 [mm]	985	985
L2 [mm]	1000	1000
Weight [kg]	4.20	4.20

* Dimensions are made upon individual order

ADD DN1 / DN2 / 1,0 - SGSP - x

- version
- SGSP system
- version
- diameter DN2
- diameter DN1
- long adaptor

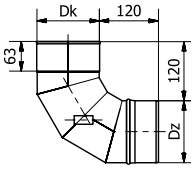
Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

When ordering the adaptor fireplace type or exact measurement should be given.

invent. build. enjoy.

29. SOLID ELBOW WITH SUPPORT KSW 90





Diameter DN1	100	130
Diameter Dz	100.9	132.8
Diameter Dk	101.9	133.8
Weight [kg]	0.50	0.70

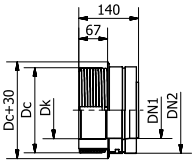
KSW DN / 90 - x - II

- material
- angle 90°
- diameter DN
- solid elbow with support

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404
Sheet thickness	6	6 - sheet thickness 0.6 mm

30. WALL INSERT TO CERAMIC CHIMNEYS WKC





Diameter DN1	100	130
Diameter DN2	150	200
Diameter Dc	200	200
Diameter Dk	101.9	133.7
Weight [kg]	1.10	1.20

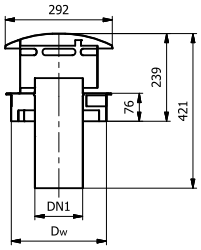
WKC DN1 / DN2 / DC - SGSP

- SGSP system
- ceramic chimney diameter
- diameter DN2
- diameter DN1
- wall insert to ceramic chimneys

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

31. VERTICAL TERMINAL WG





Diameter DN1	100	130
Diameter Dw	209	259
Weight [kg]	1.45	1.75

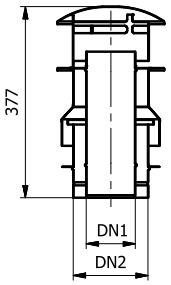
WG DN1 / DN2 PION - SGSP

- SGSP system
- vertical
- diameter DN2
- diameter DN1
- vertical terminal

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

32. VERTICAL TERMINAL WGD





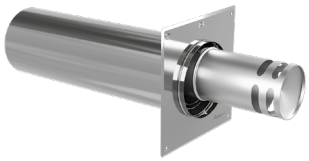
Diameter DN1	100	130
Diameter DN2	150	200
Weight [kg]	1.65	1.95

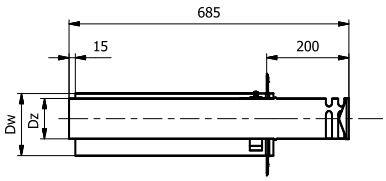
WGD DN1 / DN2 PION - SGSP

- SGSP system
- vertical
- diameter DN2
- diameter DN1
- vertical terminal

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/ 1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

33. HORIZONTAL TERMINAL WB II





Diameter DN1/DN2	100/150	130/200
Diameter Dw	152	201.5
Diameter Dz	98.8	130.6
Weight [kg]	2.10	2.90

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

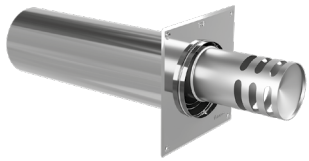
WB DN1/DN2 POZIOM-II - SGSP

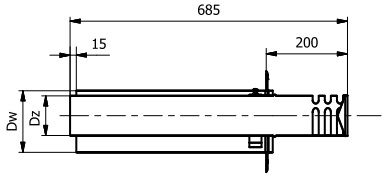
- SGSP system
- horizontal
- diameter DN2
- diameter DN1
- horizontal terminal

WB DN1/DN2 POZIOM-II - SGSP - ML.CZ

- powder coated (black color)
- SGSP system
- horizontal
- diameter DN2
- diameter DN1
- horizontal terminal

34. HORIZONTAL TERMINAL WB III





Diameter DN1/DN2	100/150	130/200
Diameter Dw	152	201.5
Diameter Dz	98.8	130.6
Weight [kg]	2.10	2.85

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

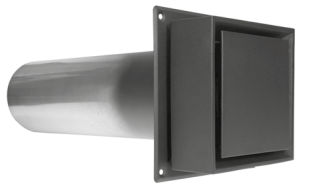
WB DN1/DN2 POZIOM-III - SGSP

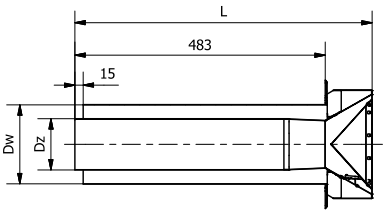
- SGSP system
- horizontal
- diameter DN2
- diameter DN1
- horizontal terminal

WB DN1/DN2 POZIOM-III - SGSP - ML.CZ

- powder coated (black color)
- SGSP system
- horizontal
- diameter DN2
- diameter DN1
- horizontal terminal

35. HORIZONTAL TERMINAL (LATERAL, OPENABLE)





Diameter DN1/DN2	100/150	130/200
Diameter Dw	152	201.5
Diameter Dz	98.8	130.6
L	573	577
Weight [kg]	2.63	3.60

Destination	S	S - flue ducts
Material	CH	CH - stainless steel 1.4404/1.4301
Sheet thickness	5	5 - sheet thickness 0.5 mm

WBK DN1/DN2 POZIOM - SGSP

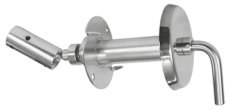
- SGSP system
- horizontal
- diameter DN2
- diameter DN1
- horizontal terminal (lateral, openable)

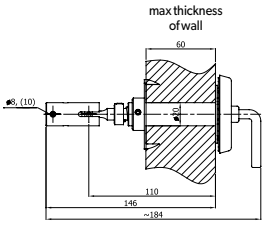
WBK DN1/DN2 POZIOM - SGSP - ML.CZ

- powder coated (black color)
- SGSP system
- horizontal
- diameter DN2
- diameter DN1
- horizontal terminal (lateral, openable)

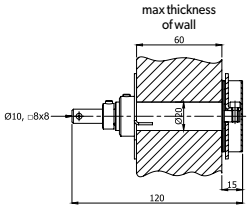
invent. build. enjoy.

1. CHIMNEY DAMPER KNOB SZKZ-REG, SZKZ-REG-LIGHT









SZKZ - REG

knob
chimney damper

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CH	CH	CH - stainless steel 1.4301
	ML	ML	ML - stainless steel 1.4301 powder coated

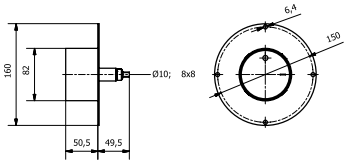
SZKZ - REG-LIGHT - ...

colour
knob
chimney damper

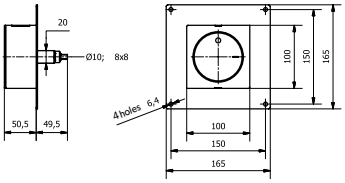
Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CZ	CZ	CZ - steel sheet (black)
Colour	B	B	B - white
	CZ	CZ	CZ - black

2. ROUND AND RECTANGULAR UNDER SURFACE CHIMNEY DAMPER KNOBS









SZKZ - REG-OK - ML ...

colour
powder coated
round knob
chimney damper

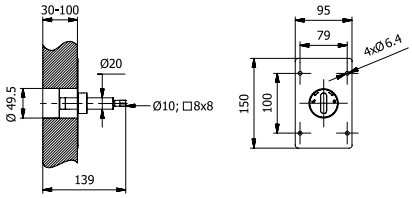
Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CZ	CZ	CZ - steel sheet (black)
Colour	B	B	B - white
	CZ	CZ	CZ - black

SZKZ - REG-KW - ML ...

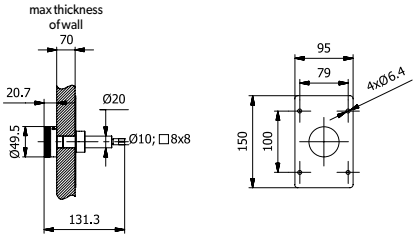
colour
powder coated
rectangular knob
chimney damper

3. CHIMNEY DAMPER ... OS (ON SURFACE AND UNDER SURFACE VERSION)









SZKZ - REG-OS / P - ML - ...

colour
material
under surface version
knob
chimney damper

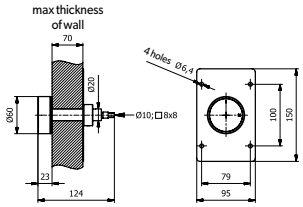
Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	ML	ML	ML - aluminium powder coated
Colour	B	B	B - white
	CZ	CZ	CZ - black

SZKZ - REG-OS / N - ML - ...

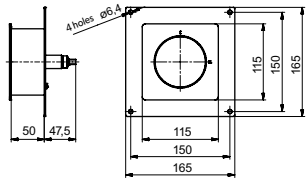
colour
material
on surface version
knob
chimney damper

4. CHIMNEY DAMPER KNOB









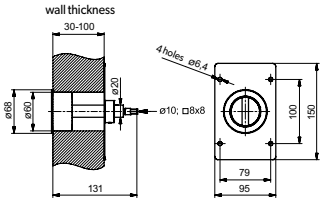
SZKZV - REG1-OS / N - ML - ...

- colour
- material
- on surface version
- knob
- chimney damper

SZKZV - REG2-KW / P - ML - ...

- colour
- material
- under surface version
- knob
- chimney damper



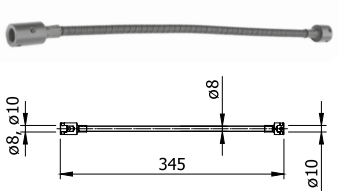


SZKZV - REG3-LIGHT - ML - ...

- colour
- material
- knob
- chimney damper

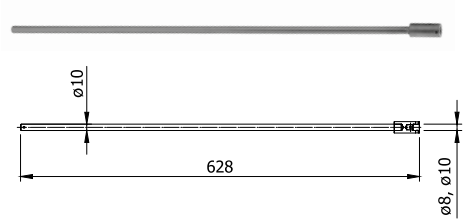
Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	ML	ML	ML - aluminium powder coated
Colour	B	B	B - white
	CZ	CZ	CZ - black

5. FLEXIBLE SHAFT SZK-REG-WG, SZKZ-REG-WGSZ, EXTENSION OF FLEXIBLE SHAFT SZKZ-REG-PW600



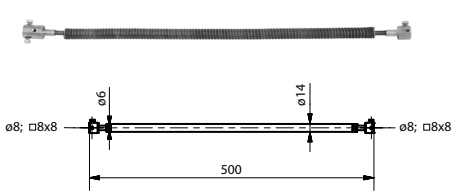
SZK-REG-WG

- flexible shaft



SZKZ-REG-PW600

- extension of flexible shaft



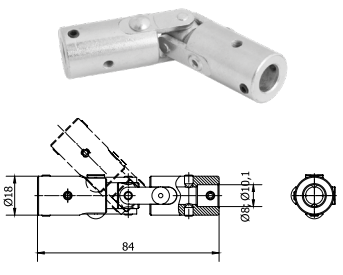
SZKZ-REG-WGSZ

- flexible shaft with cover

Destination	S	-	S - flue ducts
	-	D	D - smoke ducts
Material	CZ	CZ	CZ - steel sheet (black)

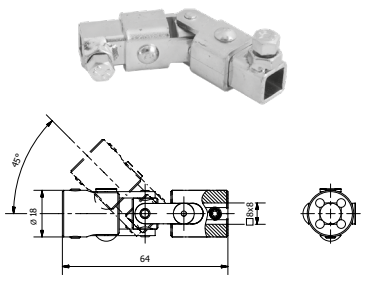
Compatible with chimney dampers with rod diameters ø8 and ø10 mm and knobs produced by DARCO.

6. ROUND, SQUARE JOINT



SZKZ-REG-PGO

- round joint



SZKZ-REG-PGK

- square joint

<SKD>

Double-walled chimney system <SKD> is used to construct chimneys and flue ducts made entirely of acid-resistant steel. The inner pipe discharging wet exhaust gases from modern energy-efficient heating devices fired by gas, fuel oil, wood or pellets, grade 1.4404 according to DNIN17441, outer pipe 1.4301 according to DN17441, thermal insulation - mineral wool, thickness 50 mm.
Maximum operating temperature of the <SKD> system 600°C
The chimney made of system components is a self-standing construction that does not require the use of conventional ceramic materials.

<SKDZ>

Double-Walled Heat-Resistant Chimney System <SKDZ> is designed for the construction of chimneys and flue ducts made entirely of heat-resistant chromium-nickel steel, intended for discharging flue gases from wood-fired heating appliances. The inner pipe is made of material grade 1.4828 according to DIN 17441, the outer wall – grade 1.4301 according to DIN 17441, and the thermal insulation consists of a ceramic fiber mat with a thickness of 50 mm.
The maximum operating temperature of the <SKDZ> system is 600°C.
A chimney built from system components is a self-supporting structure that does not require the use of conventional ceramic materials.

<SKDX>

Steel pipes and fittings with circular cross-section are used for the construction of ventilation ducts in forced or gravity ventilation systems, warm-air heating, and air conditioning. Both inner and outer pipe are made of material grade 1.4301 according to DIN 17441, while the thermal insulation consists of mineral wool with a thickness of 50 mm.
The maximum operating temperature is 250°C.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG Cracow

CE 1450

Application of chimneys and recommended sheet thicknesses

Diameter DN	W,S 1.4404	D 1.4828	W 1.4301	*) 1.4301
60	0.5	-	0.6	0.5
80	0.5	-	0.6	0.5
90	0.5	-	0.6	0.5
100	0.5	-	0.6	0.5
110	0.5	-	0.6	0.5
120	0.5	0.8	0.6	0.5
130	0.5	0.8	0.6	0.5
140	0.6	0.8	0.6	0.5
150	0.6	0.8	0.6	0.5
160	0.6	0.8	0.6	0.5
180	0.6	0.8	0.6	0.5
200	0.6	0.8	0.6	0.5
225	0.6	0.8	0.6	0.5
240	0.6	0.8	0.6	0.5
250	0.8	0.8	0.6	0.5
260	0.8	0.8	0.6	0.5
300	0.8	0.8	0.6	0.5
325	0.8	0.8	0.6	0.6
350	0.8	0.8	0.6	0.6
400	1.0	0.8	0.6	0.6
450	1.0	-	0.6	0.6
500	1.0	-	0.6	0.6
550	-	-	0.6	0.6
600	-	-	0.6	0.6

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.4	59.4	61.4	
80	250	80.1	79.1	81.1	
90	285	91.2	90.2	92.2	
100	315	100.8	99.8	101.8	0.5
110	350	111.9	110.9	112.9	
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	
180	570	182.0	180.8	183.0	0.6
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	
240	753	240.3	239.1	241.3	
250	790	252.3	250.7	253.3	
260	818	261.2	259.6	262.2	
280	880	280.9	279.3	281.9	0.8
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	
350	1100	350.9	349.4	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	
500	1575	502.3	500.3	503.8	1.0
550	1728	551.0	549.0	552.5	
600	1885	601.0	599.0	602.5	

Destination

W - ventilation ducts
S - flue ducts (gas, oil)
D - smoke ducts
*) - outer pipe

Measurments

Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]±0.1
Dw - inner diameter of pipe [mm]±0.1
Dk - inner diameter of bell [mm]±0.1
s - metal sheet thickness [mm]

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, metal chimney is characterized by very tight and stiff construction. It also assures proper flow of condensate, along walls of the chimney straight to condensate drain bowl. Outer elements are connected "bell down" what prevents chimney insulation from rain water. Outer casings of the chimney elements should be riveted together with couple of stainless steel rivets before placing a fastening clamp.

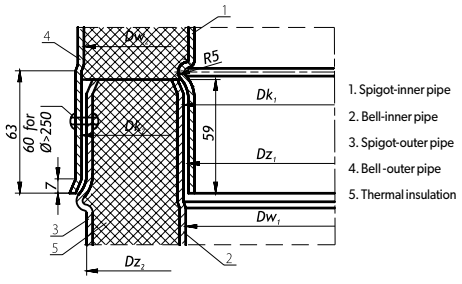
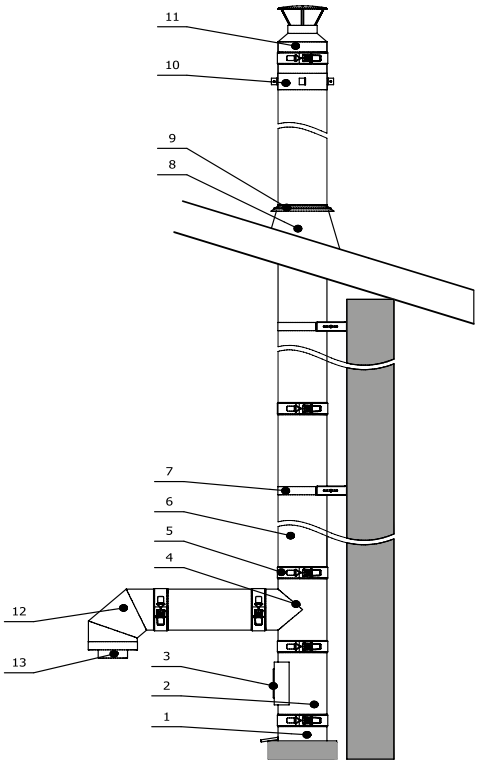


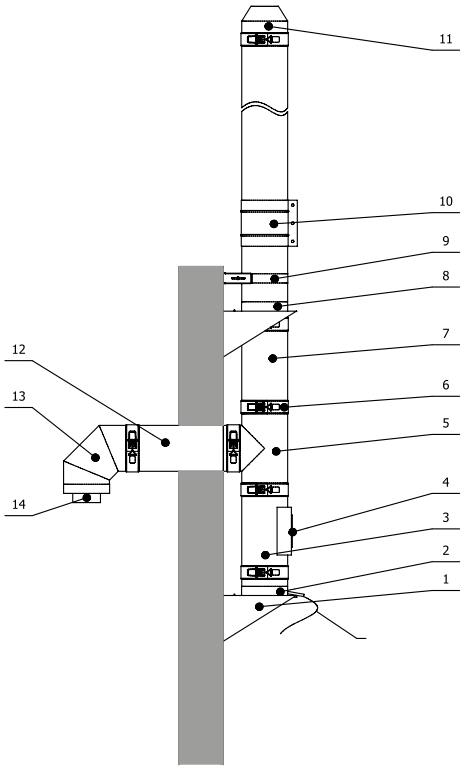
Fig. Method of joining double-walled pipe elements.

Model application of elements



No	Name	Denotation
1	Condensate drain bowl	MSD150/250-CH
2	Clean out element	WCD150/250-CH6
3	Doors	DW125x185
4	Tee 90°	TRD150/250/90-CH6
5	Fastening clamp IV	OPIV250-X
6	Straight pipe 1 m	RPD150/250/1000-CH6
7	Mounting bracket	OMD-II-250-X/...
8	Angular roof flashing	PDK250/20-X
9	Rain collar	KPD250-X
10	Bracket for stabilizing cords	OPO250-X
11	Cap	DKD150/250-CH6
12	Solid elbow 90°	KSD150/250/90-CH6
13	Tee plug	ZTD150/250-CH6-K

Fig. An example of a double walled chimney construction - a chimney inside the building.



No	Name	Denotation
1	Supporting console	KWD250-X/...
2	Condensate drain bowl	MSD150/250-CH
3	Clean out element	WCD150/250-CH6
4	Doors	DW125x185
5	Tee 90°	TRD150/250/90-CH6
6	Fastening clamp IV	OPIV250-X
7	Straight pipe 1 m	RPD150/250/1000-CH6
8	Intermediate support	PPD150/250-CH
9	Mounting bracket	OMD-II-250-X/...
10	Fastening clamp III	OPIII250-X
11	Mouthpiece	USD150/250-CH6
12	Straight pipe 0.25 m	RPD150/250/250-CH6
13	Solid elbow 90°	KSD150/250/90-CH6
14	Tee plug	ZTD150/250-CH6-K

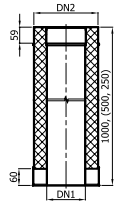
Fig. An example of a double walled chimney construction - a chimney outside the building.



Offset calculator available at darco.pl

1. STRAIGHT PIPE RPD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	7.00	7.20	8.10	8.25	8.75	9.25	9.35	10.50	11.35	12.40	13.45	15.60	17.75	19.90	22.00	24.15	

RPD m DN1 / DN2 / L - m s

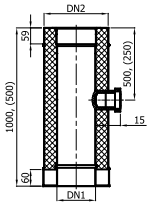
- sheet thickness DN1
- material
- length [mm]
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- straight pipe

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	-	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

2. STRAIGHT PIPE WITH MEASURING OUTLET M64X4 ROPD-64





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	7.00	7.20	8.10	8.25	8.75	9.25	9.35	10.50	11.35	12.40	13.45	15.60	17.75	19.90	22.00	24.15	

ROPD m DN1 / DN2 / L - m s - 64

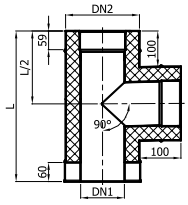
- measuring outlet M64x4
- sheet thickness DN1
- material
- length [mm]
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- pipe with measuring outlet

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

3. TEE 90° TRD/90





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
L [mm]	400	400	425	425	440	450	450	480	500	525	550	600	650	700	750	800	
Weight [kg]	3.60	3.70	4.35	4.40	4.80	5.20	5.30	6.20	6.95	7.90	8.95	11.15	13.55	16.25	19.00	22.10	

TRD m DN1 / DN2 / 90 - m s

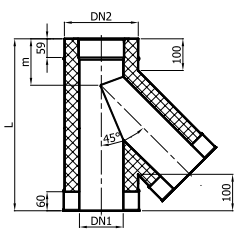
- sheet thickness DN1
- material DN1
- angle 90°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- tee

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

4. TEE 45° TRD/45





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
L [mm]	485	485	520	520	540	555	555	600	625	660	695	770	840	910	980	1050	
m [mm]	120	120	125	125	130	130	135	140	140	145	150	165	170	180	190	205	
Weight [kg]	4.10	4.20	5.00	5.10	5.55	6.00	6.10	7.30	8.15	9.35	10.70	13.50	16.55	20.00	23.65	27.60	

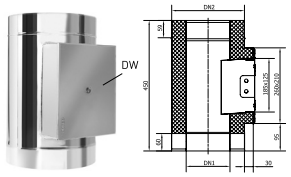
TRD m DN1 / DN2 / 45 - m s

- sheet thickness DN1
- material DN1
- angle 45°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- tee

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

5. CLEAN OUT ELEMENT WCD + DOORS DW2-X



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	3.80	3.90	4.30	4.35	4.60	4.80	4.85	5.35	5.75	6.20	6.70	7.70	8.60	9.60	10.55	11.50	

WCD m DN1 / DN2 - m s

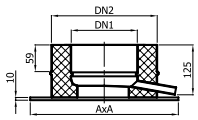
- s – sheet thickness DN1
- m – material DN1
- DN2 – diameter DN2
- DN1 – diameter DN1
- Z – denotation for heat resistant steel sheet (Z)
- WCD – clean out element

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

6. CONDENSATE DRAIN BOWL MSD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.15	2.20	2.50	2.55	2.70	2.90	3.00	3.50	3.90	4.20	4.65	5.60	6.70	7.90	9.15	10.40	

MSD m DN1 / DN2 - m s

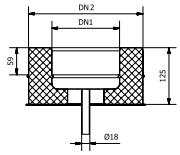
- s – sheet thickness DN1
- m – material DN1
- DN2 – diameter DN2
- DN1 – diameter DN1
- Z – denotation for heat resistant steel sheet (Z)
- MSD – condensate drain bowl

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

7. BOWL WITH BOTTOM OUTLET MSDD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	1.07	1.06	1.21	1.20	1.29	1.34	1.40	1.52	1.65	1.82	2.00	2.38	2.80	3.25	3.75	4.27	

MSDD m DN1 / DN2 - m s

- s – sheet thickness DN1
- m – material DN1
- DN2 – diameter DN2
- DN1 – diameter DN1
- Z – denotation for heat resistant steel sheet (Z)
- MSDD – bowl with bottom outlet

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

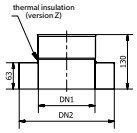
8. TEE PLUG ZTD-K (N)

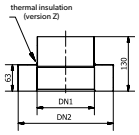


K-bell-type for TRD/90



N-spigot-type for TRD/45





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.40	0.40	0.45	0.45	0.50	0.55	0.55	0.60	0.70	0.75	0.80	1.00	1.10	1.25	1.40	1.55	

ZTD m DN1 / DN2 - m s - K/N

- K/N – version spigot or bell
- s – sheet thickness DN1
- m – material DN1
- DN2 – diameter DN2
- DN1 – diameter DN1
- Z – denotation for heat resistant steel sheet (Z)
- ZTD – tee plug

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

invent. build. enjoy.

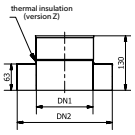
9. TEE PLUG SPK 2.0 SYSTEM ZTDZ

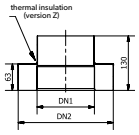


K-bell-type for TRD/90



N-spigot-type for TRD/45





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.40	0.40	0.45	0.45	0.50	0.55	0.55	0.60	0.70	0.75	0.80	1.00	1.10	1.25	1.40	1.55	

ZTDZ DN1/DN2 - Z s - K/N/Dw/Dz /CZ2

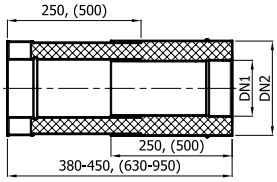
- SPK system
- outer diameter
- inner diameter
- version spigot or bell
- sheet thickness
- material
- diameter DN2
- diameter DN1
- tee plug

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

10. TELESCOPIC PIPE RTD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	6.90	7.05	7.90	8.05	8.75	9.00	9.15	10.25	11.10	12.15	13.20	15.30	17.35	19.50	21.60	23.70	

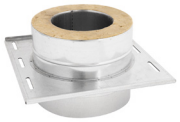
RTD m DN1 / DN2 / 2xL - m s

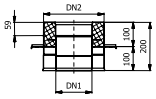
- sheet thickness DN1
- material DN1
- example 2x250, length
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- telescopic pipe

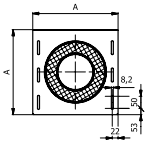
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

11. INTERMEDIATE SUPPORT PPD







Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.35	2.30	2.60	2.60	2.75	2.90	2.90	3.30	3.40	3.90	4.25	4.95	5.65	6.40	7.10	7.85	

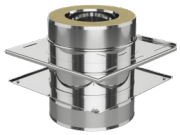
PPD DN1 / DN2 - m s

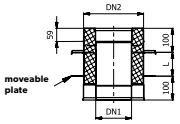
- sheet thickness DN1
- material
- diameter DN2
- diameter DN1
- intermediate support

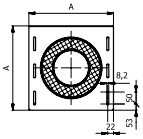
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

12. CEILING INTERMEDIATE SUPPORT PPDSZ







Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700
Weight [kg]	depends on dimensions															

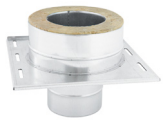
PPDS Z DN1 / DN2 - s / L

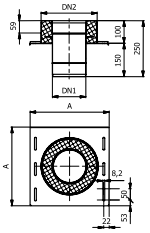
- ceiling thickness
- sheet thickness DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- intermediate support

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant steel 1.4828
Sheet thickness	8	8 - sheet thickness 0.8 mm
	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

13. INTERMEDIATE SUPPORT PJD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.00	2.00	2.35	2.35	2.50	2.70	2.70	3.15	3.50	3.90	4.35	5.20	6.20	7.20	8.30	9.30	

PJD m DN1 / DN2 - m s

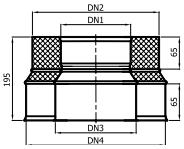
- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- intermediate support

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

14. REDUCER RDD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	depends on dimensions																

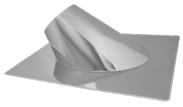
RDD m DN1 / DN2 / DN3 / DN4 - m s

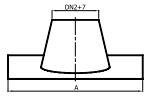
- sheet thickness DN1
- material DN1
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- reducer

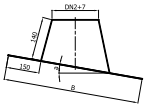
Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

15. ANGULAR ROOF FLASHING PDK







a = 20 → from 0-20°
a = 35 → from 20-35°
a = 50 → from 35-50°

Diameter DN1/DN2		100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0.6
		200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
α 20	A	605	605	628	628	628	685	685	710	748	804	781	802	865	915	971	1022	
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035	
α 35	A	645	645	665	665	665	694	694	708	746	778	806	867	917	974	1031	1088	
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211	
α 50	A	670	670	700	700	700	735	735	769	795	797	821	908	970	1032	1094	1156	
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433	1522	
Weight [kg]		depends on dimensions																

PDK DN2 / α - X

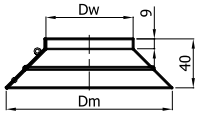
- material
- angle α
- diameter DN2
- angular roof flashing

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

16. RAIN COLLAR KPD





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	ø550	ø600	for s=0.6 (0.5)
Dw [mm]	79.0	99.7	110.9	122.0	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	279	300.4	349.7	400.7	450.0	501.0	550	600	
Dm [mm]	151	172	183	194	204	212	223	232	253	272	326	350	379	400	450	501	550	601	650	700	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.37	0.36	0.41	0.45	0.50	0.54	0.6	0.65	

KPD x - X

- material
- diameter DN
- rain collar

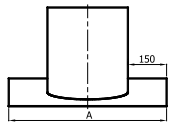
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

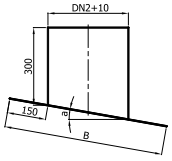
* Available painted coated version (black). Other colors upon request.

invent. build. enjoy.

17. ANGULAR ROOF FLASHING PDK II







Diameter DN1/DN2		100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0.6
		200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
α 20	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910	
	B	525	525	550	550	570	580	590	610	630	655	685	735	790	840	895	950	
α 35	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910	
	B	560	560	590	590	605	620	630	655	680	710	740	800	860	920	985	1045	
α 50	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910	
	B	600	600	635	635	690	705	720	750	785	825	860	940	1015	1095	1170	1250	
Weight [kg]		depends on dimensions																

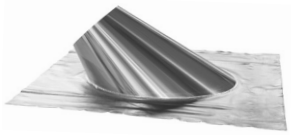
PDK II DN2 / α - X

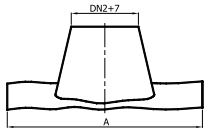
- material
- angle α
- diameter DN2
- angular roof flashing

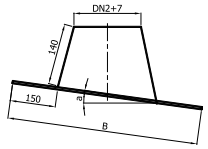
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

18. ANGULAR ROOF FLASHING WITH COLLAR PDK







a = 20 → 0-20°
a = 35 → 20-35°
a = 50 → 35-50°

Diameter DN1/DN2		100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0.6
		200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
α 20	A	1000 (1120 PE version)																
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035	
α 35	A	1000 (1120 PE version)																
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211	
α 50	A	1000 (1120 PE version)																
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433	1522	
Weight [kg]		depends on dimensions																

PDK DN2 / α - X Pb

- lead collar
- material
- angle α
- diameter DN2
- angular roof flashing

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

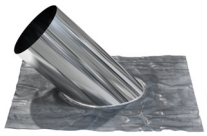
* Available painted coated version (black). Other colors upon request.

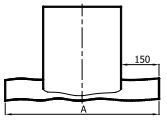
PDK DN2 / α - X PE (ML-...)

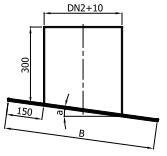
- painted (ML-CZ/ML-GR)
- elastic collar
- material
- angle α
- diameter DN2
- angular roof flashing

ML-CZ: painted - black colour (RAL 9011)
ML-GR: painted - grey colour (RAL 7043)

19. ANGULAR ROOF FLASHING WITH COLLAR PDK II







Diameter DN1/DN2		100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0.6
		200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
α 20	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910	
	B	525	525	550	550	570	580	590	610	630	655	685	735	790	840	895	950	
α 35	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910	
	B	560	560	590	590	605	620	630	655	680	710	740	800	860	920	985	1045	
α 50	A	510	510	535	535	550	560	570	590	610	635	660	710	760	810	860	910	
	B	600	600	635	635	690	705	720	750	785	825	860	940	1015	1095	1170	1250	
Weight [kg]		depends on dimensions																

PDK II DN2 / α - X Pb

- lead collar
- material
- angle α
- diameter DN2
- angular roof flashing

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

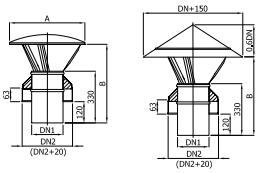
PDK II DN2 / α - X PE (ML-...)

- painted (ML-CZ/ML-GR)
- elastic collar
- material
- angle α
- diameter DN2
- angular roof flashing

ML-CZ: painted - black colour (RAL 9011)
ML-GR: painted - grey colour (RAL 7043)

20. CAP DKD





DN2+20 - for heat-resistant sheet

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600
D [mm]	220	220	250	250	290	290	290	290	350	400	400	450	550	550	650	650
B [mm]	410	410	410	410	430	430	430	430	450	600	630	690	750	810	870	930
Weight [kg]	1.55	1.60	1.70	1.75	1.90	2.05	2.10	2.25	2.40	3.15	3.60	4.00	4.80	5.55	6.65	7.00

for s 0.6/0.6

DKD m DN1 / DN2 - m s

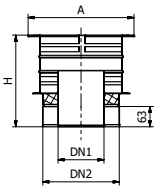
- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- cap

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

21. CAP DKD-I





Diameter DN1/DN2	100	130	150	150	160	180	200	200	225	250	300
	200	225	250	210	260	280	300	260	325	350	400
A [mm]	300	325	350	310	360	380	400	360	425	450	500
H [mm]	300	300	300	300	300	300	300	300	300	300	300
Weight [kg]	2.00	2.40	2.70	2.50	3.30	3.39	3.40	3.40	3.50	3.70	4.00

for s 0.6/0.6

DKD-I m DN1 / DN2 - m s

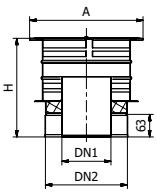
- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- cap

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

22. CAP WITH OPENABLE TOP DKD-II





Diameter DN1/DN2	100	130	150	150	160	180	200	200	225	250	300
	200	225	250	210	260	280	300	260	325	350	400
A [mm]	300	325	350	310	360	380	400	360	425	450	500
H [mm]	300	300	300	300	300	300	300	300	300	300	300
Weight [kg]	2.00	2.40	2.70	2.50	3.30	3.39	3.40	3.40	3.50	3.70	4.00

for s 0.6/0.6

DKD-II m DN1 / DN2 - m s

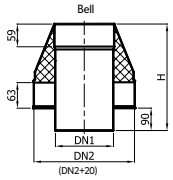
- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- cap with openable top

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

23. MOUTHPIECE USD





DN2+20 - for heat-resistant sheet

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600
H [mm]	330	330	330	330	330	330	330	330	330	330	330	330	400	420	420	420
Weight [kg]	1.00	1.05	1.15	1.20	1.35	1.50	1.60	1.80	2.00	3.80	4.20	4.90	7.10	8.00	10.70	11.80

for s 0.6/0.6

USD m DN1 / DN2 - m s

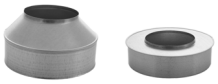
- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- mouthpiece

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

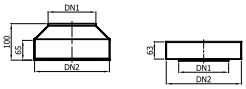
* Available painted coated version (black). Other colors upon request.

invent. build. enjoy.

24. INSULATION CLOSING COLLAR NKD-G (D)



G-top D-bottom



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.25	0.28	0.31	0.34	0.40	0.46	0.52	0.58	0.64	

NKD DN1 / DN2 - m

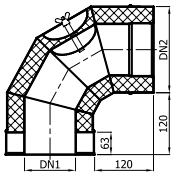
- version: G or D
- diameter DN2
- diameter DN1
- insulation closing collar

Destination	W	W	W - ventilation ducts
	S	S	S - flue ducts (gas, oil)
	D	D	D - smoke ducts
Material	-	X	X - stainless steel 1.4301
	Z	-	Z - heat resistant steel 1.4828
Sheet thickness	5	-	5 - sheet thickness 0.5 mm
	-	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

25. SOLID ELBOW 90° WITH REVISION KSDR/90





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	2.35	2.40	2.70	2.75	3.35	3.70	3.75	4.20	4.50	4.95	6.45	7.80	8.85	12.35	14.75	17.40	

KSDr m DN1 / DN2 / 90 - m s

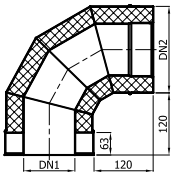
- sheet thickness DN1
- material DN1
- angle 90°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- solid elbow with revision 90°

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

26. SOLID ELBOW 90° KSD/90





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	2.35	2.40	2.70	2.75	3.35	3.70	3.75	4.20	4.50	4.95	6.45	7.80	8.85	12.35	14.75	17.40	

KSD m DN1 / DN2 / 90 - m s

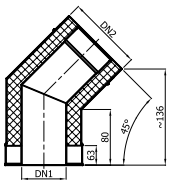
- sheet thickness DN1
- material DN1
- angle 90°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- solid elbow

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

27. SOLID ELBOW 45° KSD/45





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	1.55	1.60	1.85	1.95	2.10	2.25	2.30	2.65	3.00	3.40	3.80	4.75	5.65	6.85	8.15	9.40	

KSD m DN1 / DN2 / 45 - m s

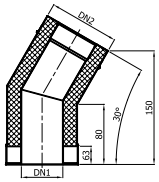
- sheet thickness DN1
- material DN1
- angle 45°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- solid elbow

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

28. SOLID ELBOW 30° KSD/30





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	1.45	1.50	1.75	1.75	1.90	2.00	2.10	2.40	2.65	3.00	3.35	4.05	4.85	5.75	6.60	7.60	

KSD m DN1 / DN2 / 30 - m s

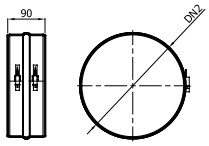
- KSD — solid elbow
- m — denotation for heat resistant steel sheet (Z)
- DN1 — diameter DN1
- DN2 — diameter DN2
- 30 — angle 30°
- m — material DN1
- s — sheet thickness DN1

Destination	W	W	-	W - ventilation ducts
	S	-	-	S - flue ducts (gas, oil)
	-	-	D	D - smoke ducts
Material	CH	-	-	CH - stainless steel 1.4404
	-	X	-	X - stainless steel 1.4301
	-	-	Z	Z - heat resistant steel 1.4828
Sheet thickness	5	5	-	5 - sheet thickness 0.5 mm
	6	6	-	6 - sheet thickness 0.6 mm
	8	8	8	8 - sheet thickness 0.8 mm
	1	1	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

29. FASTENING CLAMP OP I





Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 0.6/0.6
Weight [kg]	0.25	0.30	0.34	0.35	0.36	0.38	0.40	0.45	0.50	0.55	0.60	0.70	0.75	0.80	

OPI DN2 - X

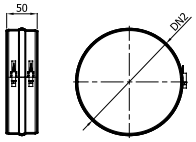
- OPI — fastening clamp I
- DN2 — diameter DN2
- X — material

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

30. FASTENING CLAMP OP II





Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 0.6/0.6
Weight [kg]	0.17	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.29	0.33	0.37	0.42	0.46	0.50	

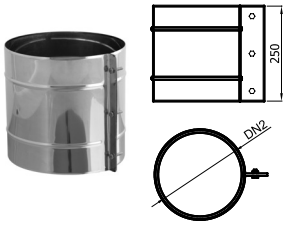
OPII DN2 - X

- OPII — fastening clamp II
- DN2 — diameter DN2
- X — material

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

31. FASTENING CLAMP OP III



Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s=1.0
Weight [kg]	2.10	2.35	2.35	2.65	2.65	2.90	3.15	3.40	3.65	4.15	4.65	5.25	5.75	6.25	

OPIII DN2 - X

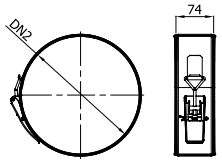
- OPIII — fastening clamp III
- DN2 — diameter DN2
- X — material

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	1	1 - sheet thickness 1.0 mm

* Available painted coated version (black). Other colors upon request.

32. FASTENING CLAMP OP IV





Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	for s 0.6/0.6
Weight [kg]	0.35	0.35	0.35	0.40	0.40	0.40	0.45	0.45	0.50	0.55	0.60	0.65	

OPIV DN2 - X

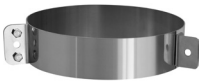
- OPIV — fastening clamp IV
- DN2 — diameter DN2
- X — material

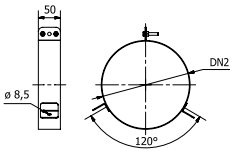
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

* Available painted coated version (black). Other colors upon request.

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33. BRACKET FOR STABILIZING CORDS OPO





Diameter DN2	200	225	240	250	260	280	300	325	350	400	450	500	550	600	for s 1.5/2.0)
Weight [kg]	0.50	0.54	0.57	0.59	0.61	0.65	0.69	0.73	0.78	0.87	0.97	1.06	1.16	1.25	

OPO DN2 - X

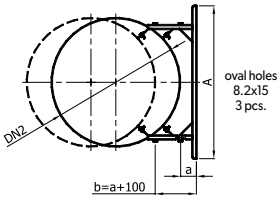
- material
- diameter DN2
- bracket for stabilizing cords

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	1.5	1.5 - sheet thickness 1.5 mm
	2	2 - sheet thickness 2.0 mm

* Available painted coated version (black). Other colors upon request.

34. MOUNTING BRACKET OMD-II





Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	3600	310	3325	350	400	450	500	550	600
A [mm]	322	327	339	354	380	380	395	395	409	409	415	424	433	433	445	456	476	556	580	608	634
Weight [kg]	1.00	1.00	1.04	1.08	1.14	1.15	1.20	1.20	1.23	1.24	1.26	1.29	1.33	1.35	1.37	1.41	1.49	1.98	2.10	2.60	2.71

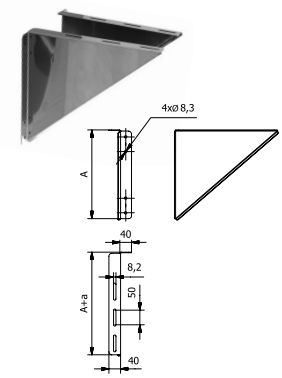
OMD-II DN2 - X / 5-15

- min. distance from the wall
- material
- diameter DN2
- mounting bracket

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301

* Available painted coated version (black). Other colors upon request.

35. SUPPORTING CONSOLE KWD



Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	300	310	325	350	400	450	500	550	600	for s=2.0
A [mm]	231	231	254	254	304	304	304	304	354	354	354	384	404	404	429	454	504	552	604	654	701	
Weight [kg]	1.70	1.70	2.00	2.00	2.60	2.60	2.70	2.70	3.25	3.25	3.25	3.70	4.20	4.20	4.65	5.10	6.05	7.10	8.20	9.40	10.65	

KWD DN2 - X/a-(a+100)

- min. distance from the wall
- material
- diameter DN2
- supporting console

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	2	2 - sheet thickness 2.0 mm

* Available painted coated version (black). Other colors upon request.

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The Double Wall Chimney System <SKD-30> is used for the construction of chimneys and flue ducts.
The inner pipe used for the discharge of wet flue gases from modern energy-saving oil, gas, pellet and wood-fired heating appliances is made of the material grade 1.4404 to DIN17441, outer wall - 1.4301 to DIN17441, or galvanized steel painted black, thermal insulation - mineral wool, thickness 30mm.
Maximum working temperature of <SKD-30> system: 600°C
A chimney made of the system elements is a self-contained structure that does not require the use of conventional ceramic materials.

Certificate of Factory Production Control 1450-CPR-0007 issued by INiG in Crakow.



Application of chimney liners and recommended sheet thicknesses

Diameter DN	S, D* 1.4404	** 1.4301 / OC-MLCZ
100	0.5	-
130	0.5	-
150	0.5	-
160		0.5
180	0.6	
190		0.5
200	0.6	-
210		0.5
240	-	0.5
260	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	Ds	s
100	315	100.8	99.9	101.8		0.5
130	415	132.6	131.6	133.6		0.5
150	475	151.7	150.7	152.7		0.5
160	505	161.2	160.2		158.9	0.5
180	570	182	180.8	183		0.6
190	595	189.9	188.9		187.5	0.5
200	630	201.1	199.9	202.1		0.6
210	660	210.6	209.6		208.2	0.5
240	753	240.3	239.1		237.8	0.5
260	818	261.2	259.6		258.5	0.5

Destination

S - flue ducts (gas, oil)
D* - smoke ducts (wood and pellets)
** - outer pipe

Measurments

Lr - metal sheet layout [mm]±0,1
Dz - outer diameter of pipe [mm]±0,1
Dw - inner diameter of pipe [mm]±0,1
Dk - inner diameter of bell joint [mm]±0,1
Ds - outer diameter of nipple pipe part [mm]±0,1
s - metal sheet thickness [mm]

Bell- joint connection

The individual elements of the chimney system are connected by inserting one part of the element - the spigot - into the other part of the element - the bell.
The bell connection results in a tight and rigid chimney construction. The way in which the elements are connected allows for the proper flow of condensate down the walls of the chimney liner into the drain bowl. The outer wall is connected upwards which protects the chimney against rainwater.
The elements of the outer jacket should be riveted in place with a few chrome-nickel rivets

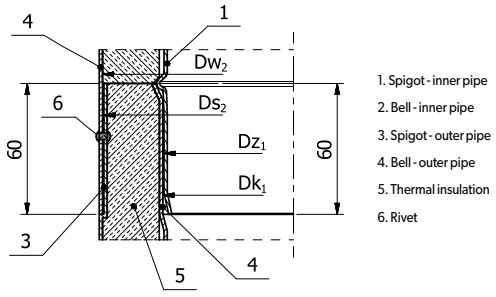


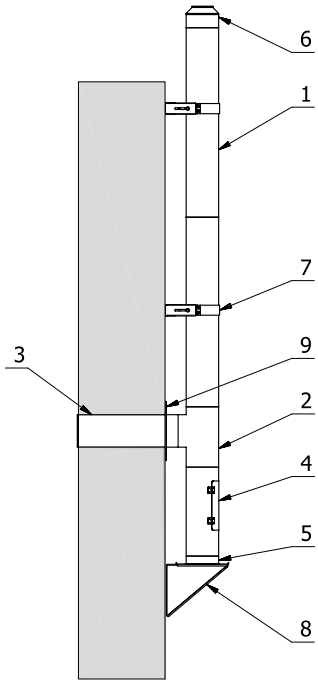
Fig. Method of joining acid-resistant steel chimney system elements <SKD-30-SLIM>

Model application of elements

Scheme I

Stainless steel brushed outer wall.

No	Name	Denotation
1	Straight pipe 1m	RPD.../.../1,0-CH/X.SZ
2	Tee 90°	TRD.../.../90-CH/X.SZ
3	Straight pipe with double wall adapter	RPD.../.../1,0-CH/X.SZ/WD
4	Clean out element (incl.doors)	WCD.../...-CH/X.SZ
5	Condensare drain bowl	MSD.../...-CH/X.SZ
6	Mouthpiece	USD.../...-CH/X.SZ
7	Mounting bracket	OMD-II...-X.SZ/5-15
8	Supporting console	KWD...-X.SZ/5-15
9	Rossette	ROZ...-X.SZ

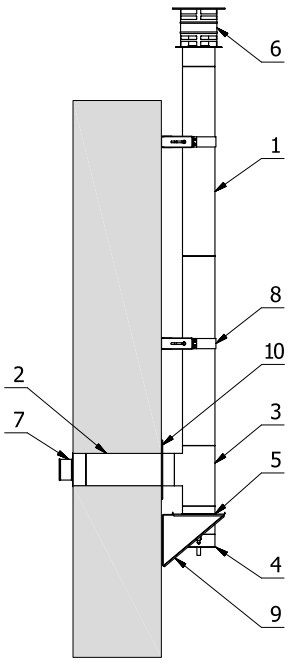


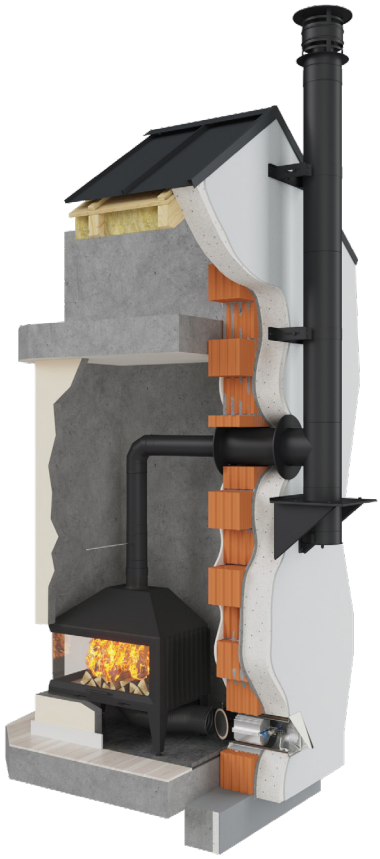


Scheme II

Black painted outer wall.

No	Name	Denotation
1	Straight pipe 1 m	RPD.../.../1,0-CH/OC-ML.CZ
2	Straigh pipe 0,5 m	RPD.../.../0,5-CH/OC-ML.CZ
3	Tee 90°	TRD.../.../90-CH/OC-ML.CZ
4	Condensate drain bowl with the bottom outlet	MSDD/.../...-CH/OC-ML.CZ
5	Intermediate support	PPD.../...CH/OC-ML.CZ
6	Chimney cap	DKD-I.../....-CH-ML.CZ
7	Tee plug bell type	ZTD.../...-CH/OC-ML.CZ-K
8	Mounting bracket	OMD-II...-OC-ML.CZ/5-15
9	Supporting console	KWD...-OC-ML.CZ/5-15
10	Rossette	ROZ...OC-ML .CZ

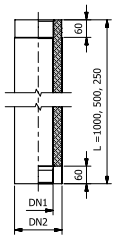




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1. STRAIGHT PIPE RPD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
L [mm]	1000	1000	1000	1000	1000
Weight [kg]	7.10	8.50	9.65	11.60	12.90

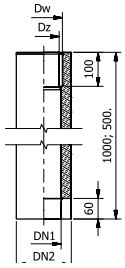
RPD DN1 / DN2 / L - m / mp

- straight pipe
- diameter DN1
- diameter DN2
- length [mm]
- flue pipe material
- outer wall material

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

2. STRAIGHT PIPE WITH DOUBLE WALL ADAPTER RPD-WD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Dz [mm]	90	120	140	170	190
Dw [mm]	109	139	159	189	209
Weight [kg]	7.75	9.30	10.57	12.65	14.00

RPD DN1 / DN2 / L - m / mp / WD

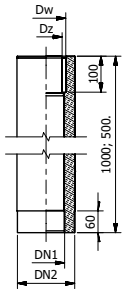
- straight pipe
- diameter DN1
- diameter DN2
- length [mm]
- flue pipe material
- outer wall material
- double wall insert WD

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Installation on the inlet to a T-piece TRD/90

3. STRAIGHT PIPE WITH DOUBLE WALL ADAPTER RPD-WD-II





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Dz [mm]	90	120	140	170	190
Dw [mm]	109	139	159	189	209
Weight [kg]	7.75	9.30	10.57	12.65	14.00

RPD DN1 / DN2 / L - m / mp / WD-II

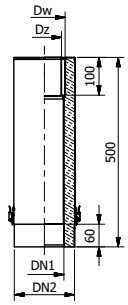
- straight pipe
- diameter DN1
- diameter DN2
- length [mm]
- flue pipe material
- outer wall material
- double wall insert WD

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Installation on the inlet to a T-Piece TRD/45 or RPD pipe in vertical flue gases discharge constructions

4. STRAIGHT PIPE WITH DOUBLE WALL ADAPTER AND FASTENER (COMPATIBLE WITH PPD) RPDz-WD-II





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Dz [mm]	90	120	140	170	190
Dw [mm]	109	139	159	189	209
Weight [kg]	7.75	9.30	10.57	12.65	14.00

RPDz DN1 / DN2 / L - m / mp / WD-II

- straight pipe
- diameter DN1
- diameter DN2
- length [mm]
- flue pipe material
- outer wall material
- double wall insert WD

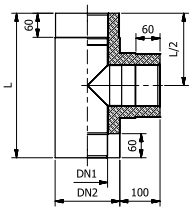
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Installation on the inlet to PPD base

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5. TEE 90° TRD/90





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
L [mm]	360	390	410	440	460
Weight [kg]	2.45	3.15	3.70	4.80	5.50

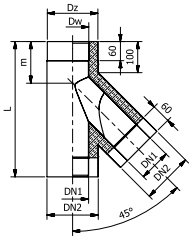
TRD DN1 / DN2 / 90 - m / mp

- outer wall material
- flue pipe material
- angle 90°
- diameter DN2
- diameter DN1
- tee

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

6. TEE 45° TRD/45





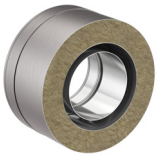
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
L [mm]	425	470	500	540	570
m [mm]	130	140	145	160	155
Weight [kg]	4.00	5.30	6.45	8.42	9.85

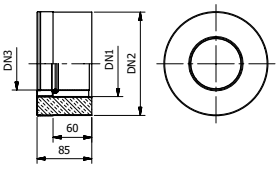
TRD DN1 / DN2 / 45 - m / mp

- outer wall material
- flue pipe material
- angle 45°
- diameter DN2
- diameter DN1
- tee

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

7. TEE PLUG FOR PELLET STOVES ZTDp DN3/DN1/DN2-M/MP-N (SPIGOT TYPE)





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
DN3	80 or 100*				
Weight [kg]	0.55	0.68	0.77	0.94	1.04

* - except for 100/160 diameter

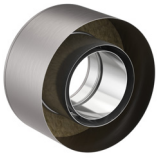
ZTDp DN3 / DN1 / DN2 - m / mp - N

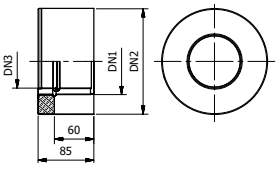
- version - spigot
- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- diameter DN3
- tee plug for pellet stoves

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Max working temperature 250°C

8. TEE PLUG FOR PELLET STOVES ZTDp DN3/DN1/DN2-M/MP-K (BELL TYPE)





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
DN3	80 or 100*				
Weight [kg]	0.48	0.61	0.68	0.84	0.92

* - except for 100/160 diameter

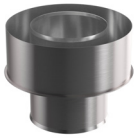
ZTDp DN3 / DN1 / DN2 - m / mp - K

- version - bell
- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- diameter DN3
- tee plug for pellet stoves

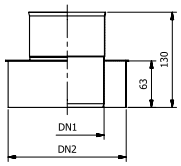
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Max working temperature 250°C

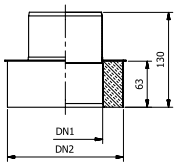
9. TEE PLUG ZTD (K-BELL TYPE / N-SPIGOT TYPE)







K - bell
for TR90



N - spigot
for TR45

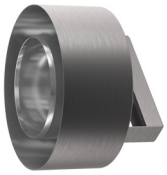
Diameter DN1/DN2		100	130	150	180	200
		160	190	210	240	260
Weight [kg]	ZTD-K	0.37	0.45	0.51	0.65	0.72
	ZTD-N	0.62	0.75	0.85	1.05	1.18

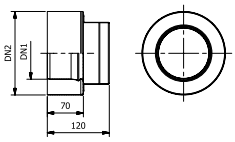
ZTD DN1 / DN2 - m / mp - K/N

- version spigot or bell
- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- tee plug

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

10. TEE PLUG, FULLY COVERED WITH HANDLE ZTDr





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	0.45	0.55	0.62	0.78	0.88

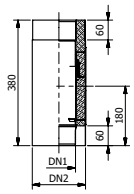
ZTDr DN1 / DN2 / m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- clean out element

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

11. CLEAN OUT ELEMENT WCD WITH DOORS





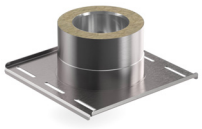
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	2.80	3.35	3.75	4.50	5.00

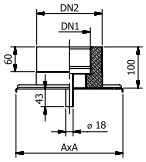
WCD DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- clean uot element

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

12. CONDENSATE DRAIN BOWL WITH PLATE MSD





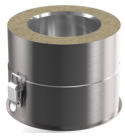
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
A [mm]	260	290	310	340	360
Weight [kg]	2.00	2.45	2.85	3.40	3.85

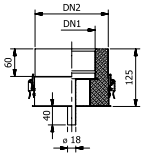
MSD DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- condensate drain with plate

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

13. CONDENSATE DRAIN BOWL WITH THE BOTTOM OUTLET MSDD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	1.20	1.50	1.80	2.20	2.50

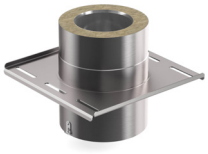
MSDD DN1 / DN2 - m / mp

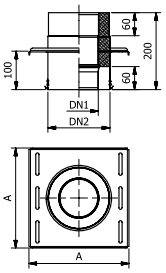
- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- bowl with the bottom outlet

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

invent. build. enjoy.

14. INTERMEDIATE SUPPORT PPD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
A [mm]	260	290	310	340	360
Weight [kg]	2.25	2.65	3.00	3.55	3.90

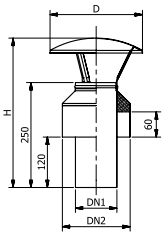
PPD DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- intermediate support

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

15. CHIMNEY CAP DKD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
D [mm]	220	250	290	290	350
H [mm]	355	359	360	360	360
Weight [kg]	0.90	1.15	1.40	1.68	1.90

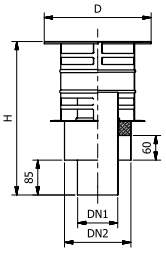
DKD DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- cap

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

16. CHIMNEY CAP DKD-I - CYLINDRIC





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
D [mm]	260	290	310	340	360
H [mm]	375	375	375	375	375
Weight [kg]	1.88	2.27	2.55	3.05	3.35

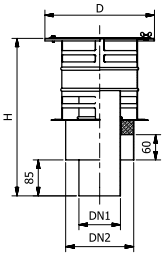
DKD-I DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- cap

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

17. CHIMNEY CAP DKD-II - CYLINDRIC, OPENABLE





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
D [mm]	260	290	310	340	360
H [mm]	375	375	375	375	375
Weight [kg]	2.00	2.40	2.70	3.20	3.50

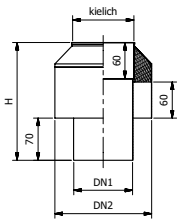
DKD-II DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- openable cap

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

18. MOUTHPIECE USD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
H [mm]	195	195	195	195	195
Weight [kg]	0.65	0.80	0.90	1.15	1.25

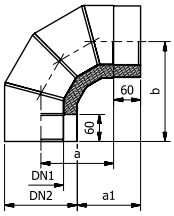
USD DN1 / DN2 - m / mp

- outer wall material
- flue pipe material
- diameter DN2
- diameter DN1
- mouthpiece

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	steel sheet grade 1.4301-4N painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

19. SOLID ELBOW 90° KSD/90





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
a [mm]	162	174	180	199	206
a1 [mm]	141	139	135	139	135
b [mm]	222	234	240	259	266
Weight [kg]	2.58	3.25	3.82	4.96	5.65

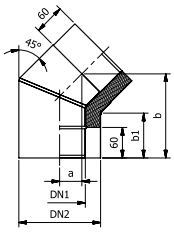
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

KSD DN1 / DN2 / 90 - m / mp

- outer wall material
- flue pipe material
- angle 90°
- diameter DN2
- diameter DN1
- solid elbow

20. SOLID ELBOW 45° KSD/45





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
a [mm]	44	44	49	49	62
a1 [mm]	88	82	85	79	93
b [mm]	166	166	179	179	209
Weight [kg]	1.56	1.87	2.28	2.76	3.53

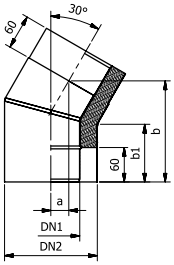
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

KSD DN1 / DN2 / 45 - m / mp

- outer wall material
- flue pipe material
- angle 45°
- diameter DN2
- diameter DN1
- solid elbow

21. SOLID ELBOW 30° KSD/30





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
a [mm]	31	31	31	31	31
a1 [mm]	100	96	94	90	87
b [mm]	176	176	176	176	176
Weight [kg]	1.56	1.87	2.15	2.58	2.75

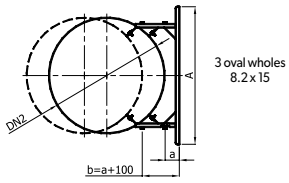
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	CH	CH - stainless steel 1.4404
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

KSD DN1 / DN2 / 30 - m / mp

- outer wall material
- flue pipe material
- angle 30°
- diameter DN2
- diameter DN1
- solid elbow

22. MOUNTING BRACKET OMD-II





Diameter DN2	160	190	210	240	260
A [mm]	354	380	380	409	416
Weight [kg]	1.08	1.14	1.15	1.23	1.26

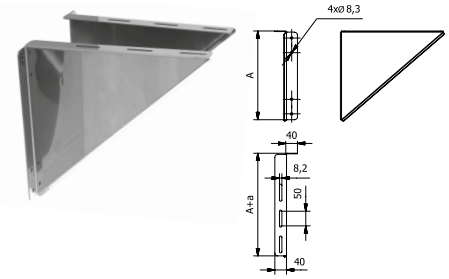
Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	X.SZ-ML.CZ	X.SZ-ML.CZ - steel sheet grade 1.4301-4N painted black as standard

OMD-II DN2 - m / 5-15

- minimal wall distance
- material
- diameter DN2
- mounting bracket

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23. SUPPORTING CONSOLE KWD



Diameter DN2	160	190	210	240	260
A [mm]	254	304	304	354	354
Weight [kg]	2.00	2.60	2.60	3.25	3.25

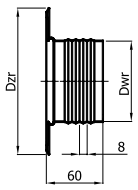
KWD DN2 - m / a-(a+100)

- minimal wall distance
- material
- diameter DN2
- supporting console

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

24. ROSETTE ROZ





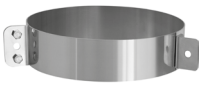
Diameter DN2	160	190	210	240	260
Dwr [mm]	166	196	216	246	266
Dzr [mm]	257	287	307	337	357
Weight [kg]	0.25	0.29	0.32	0.36	0.39

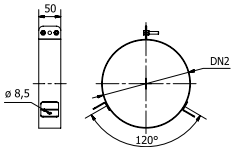
ROZ x - m

- material
- diameter DN
- rosette

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard
Sheet thickness	5	5 - sheet thickness 0.5 mm

25. BRACKET FOR STABILIZING CORDS OPO





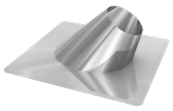
Diameter DN2	160	190	210	240	260
Weight [kg]	0.31	0.48	0.52	0.57	0.61

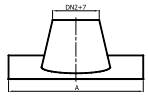
OPO DN2 - mp

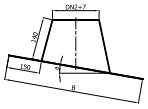
- outer wall material
- diameter DN2
- bracket for stabilizing cords

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

26. ANGULAR ROOF FLASHING PDK







a =20 → 0-20°
a = 35 → 20-35°
a = 50 → 35-50°

Diameter DN1/DN2		100	130	150	180	200
		160	190	210	240	260
α 20	A	575	605	625	640	680
	B	575	605	625	640	680
α 35	A	595	630	650	690	720
	B	630	675	700	740	765
α 35	A	640	680	710	750	770
	B	760	810	850	910	950

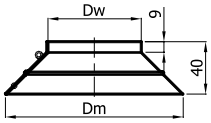
PDK DN2 / α - m

- material
- angle α
- diameter DN2
- angular roof flashing

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

27. RAIN COLLAR KPD





Diameter DN	ø160	ø190	ø210	ø240	ø260	
Dw [mm]	160.2	190.5	210.5	240.5	260.5	for s=0.5
Dm [mm]	232	263	283	313	333	
Weight [kg]	0.21	0.25	0.27	0.30	0.33	

KPD x - m

- material
- diameter DN
- rain collar

Destination	S	S - flue ducts (gas, oil)
	D*	D* - smoke ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC-ML.CZ	OC-ML.CZ - galvanised steel painted black as standard

Vertical Flue System <SPOS>

The vertical flue system allows the chimney to be built directly above the fireplace's hearth. In this case, the function of the cleanout and condensate removal is fulfilled by the hearth. The SPOS system uses typical elements of double-walled chimneys SKDZ and chimney connections SPK. When designing this type of chimney, current national regulations must be taken into account.

Application: In newly built or modernised buildings where there is no free smoke chimney
Caution! In particular, the distances from combustible parts must be kept and suitable roof flashings must be used at the roof crossing points.
Distances from combustible elements:
· SKDZ system elements - 100 mm
· Chimney connection elements SPK - 500 mm

Model application of elements

Scheme I - Version with passage through several storeys
The chimney passes through the timber ceiling and the next storey. Roof insulated with rock wool and ceiling lined with plasterboard on the inside.

No	Denotation	Name	Chimney System
1	DKD-II-.../....-Z8 lub /ML	Cap with openable top	SKDZ
2	RPDZ.../.../...-Z8 lub /ML	Straight pipe	SKDZ
3	WPDT/Z8 lub /ML	Roof base	SPOS
4	PPD.../...-Z8	Intermediate support	SKDZ
5	KWD-II-...-X	Supporting console	SKDZ
6	ZTDZ.../...-Z8-N-II	Tee plug	SPOS
7	ROZ.../.../WPDT-ML	Rosette	SPOS
8	OP-IV-...-X lub /ML	Fastening clamp	SKDZ
9	RP.../...-CZ2	Straight pipe	SPK
10	ZZ...-CZ2	Female connector	SPK



Scheme II - Version with passage directly through the roof.
The chimney goes directly through the rock wool insulated roof and the ceiling is lined with wood panels on the inside.

No	Denotation	Name	Chimney System
1	DKD-II-.../....-Z8 lub /ML	Cap with openable top	SKDZ
2	RPDZ.../.../...-Z8 lub /ML	Straight pipe	SKDZ
3	WPDT/Z8 lub /ML	Roof base	SPOS
4	ZTDZ.../...-Z8-N-II	Tee plug	SPOS
5	ROZ.../...-CZ2/WPDT/...st/ML	Angular rosette	SPOS
6	OP-IV-...-X lub/ML	Fastening clamp	SKDZ
7	RP.../2,0-CZ2	Straight pipe	SPK
8	RP/ZA.../1,0-CZ2 RPr/ZA.../1,0-CZ2 RPrs/ZA.../1,0-CZ2	Straight pipe with anti-condensation protection, damper and revision	SPK



Scheme III - Version with 90 degrees tee with passage through roof and ceiling.
The chimney passes through the timber ceiling and the next storey. The roof is insulated with rock wool and the ceiling is lined with plasterboard on the inside.
A connection to the chimney via a 90 degrees tee was used in this case.
A chimney with a cleanout and a condensate drain bowl ensures that soot and any condensate will not flow directly into the fireplace.

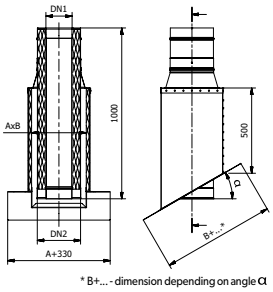
No	Denotation	Name	Chimney System
1	DKD-II-.../....-Z8 lub /ML	Cap with openable top	SKDZ
2	RPDZ.../.../...-Z8 lub /ML	Straight pipe	SKDZ
3	WPDT/Z8 lub /ML	Roof base	SPOS
4	TRDZ.../...-Z8-II	Tee	SPOS
5	WCDZ.../...-Z8	Clean out element with doors	SKDZ
6	MSDZ.../...-Z8	Condensate drain bowl	SKDZ
7	KSDZ.../.../90-Z8	Solid elbow	SKDZ
8	PPD.../...-Z8	Intermediate support	SKDZ
9	KWD-II-...-X	Supporting console	SKDZ
10	ZTDZ.../...-Z8-N-II	Tee plug	SPOS
11	ROZ.../.../WPDT-ML	Rosette	SPOS
12	OP-IV-...-X	Fastening clamp	SKDZ
13	RP.../1,0-CZ2	Straight pipe	SPK
14	ZZ...-CZ2	Female connector	SPK



TECHNICAL DATA OF VERTICAL FLUE SYSTEM <SPOS> ELEMENTS

1. ROOF BASE WPDT/Z8





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
A [mm]	320	320	370	370
B [mm]	320	320	370	370
Weight [kg]	weight depends on the roof angle			

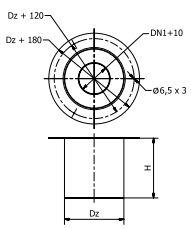
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

WPDT AxB / DN1 / DN2 / ...st-X/Ż8-ML.CZ

- powder painted (black)
- material DN1
- material A, B, DN2
- roof angle
- diameter DN2
- diameter DN1
- dimension
- roof base

2. ROSETTE ROZ/WPDT





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
H [mm]	300	300	300	300
Dz [mm]	310	320	340	360
Weight [kg]	3.60	3.70	3.95	4.15

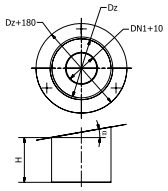
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	1	1 - sheet thickness 1 mm

ROZ DN1 / DN2 / WPDT - ML.CZ

- powder painted (black)
- roof base
- diameter DN2
- diameter DN1
- rosette

3. ANGULAR ROSETTE ROZ/WPDT/...st





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
H	dimensions depends on the roof angle			
Dz				
Weight [kg]	weight depends on the roof angle			

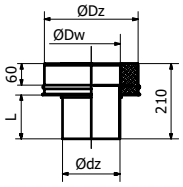
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

ROZ DN1 / DN2 / WPDT / ...st - ML.CZ

- powder painted (black)
- roof angle
- roof base
- diameter DN2
- diameter DN1
- rosette

4. TEE PLUG ZTDZ-N-II





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
Dw [mm]	152.7	162.2	182.9	202
dz [mm]	150	160	180	200
Dz [mm]	252.1	261.2	280.9	301.6
Weight [kg]	0.90	0.95	1.00	1.15

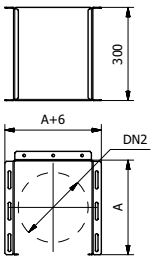
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

ZTDZ DN1 / DN2 - Z8 - N - II /dz=... (L=120)

- version
- spigot
- material DN1
- diameter DN2
- diameter DN1
- tee plug

5. SUPPORTING CONSOLE KWD-II-...-X





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
A [mm]	330	330	360	380
Weight [kg]	5.10	5.10	5.60	5.90

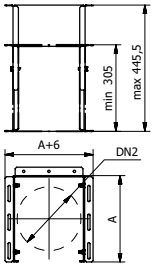
Destination	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	2	2 - sheet thickness 2 mm

KWD - II - DN2 - X

- material
- diameter DN2
- wersion
- supporting console

6. TELESCOPIC SUPPORTING CONSOLE KWDT-II-...-X





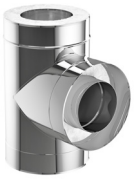
Diameter DN1/DN2	150	160	180	200
	250	260	280	300
A [mm]	330	330	360	380
Weight [kg]	9.60	9.60	10.60	11.10

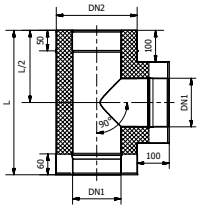
Przeznaczenie elementu	D	D - przewody dymowe
Materiał	X	X - blacha kwasoodporna 1.4301
Grubość blachy s	2	2 - grubość 2 mm

KWDT - II - DN2 - X

- material
- diameter DN2
- wersion
- supporting console

7. TEE 90° TRD/90-II





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
L [mm]	450	450	480	500
Weight [kg]	5.50	5.60	7.30	7.70

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

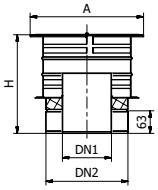
TRD m DN1 / DN2 / 90 - m s - II

- sheet thickness DN1
- material DN1
- angle 90°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- tee

TECHNICAL DATA OF DOUBLE WALLED CHIMNEY SYSTEM <SKDZ> ELEMENTS

1. CAP WITH OPENABLE TOP DKD-II





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
A [mm]	350	360	380	400
H [mm]	300	300	300	300
Weight [kg]	2.70	3.30	3.39	3.40

Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

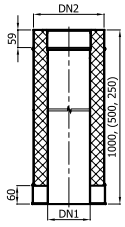
DKD-II m DN1 / DN2 - m s

- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- cap with openable top

invent. build. enjoy.

2. STRAIGHT PIPE RPD





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
Weight [kg]	10.00	10.20	11.40	12.40

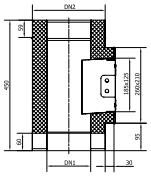
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

RPD m DN1 / DN2 / L - m s

- sheet thickness DN1
- material
- length [mm]
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- straight pipe

3. CLEAN OUT ELEMENT WCD + DOORS DW2-X





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
Weight [kg]	5.20	5.30	5.80	6.30

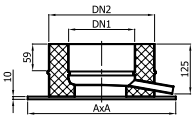
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

WCD m DN1 / DN2 - m s

- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- clean out element

4. CONDENSATE DRAIN BOWL MSD





Diameter DN1/DN2	150	160	180	200
	250	260	280	300
A [mm]	350	350	380	400
Weight [kg]	2.90	3.00	3.50	3.90

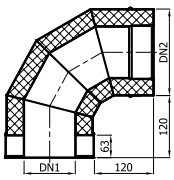
Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

MSD DN1 / DN2 - CH

- material DN1
- diameter DN2
- diameter DN1
- condensate drain bowl

5. SOLID ELBOW 90° KSD/90





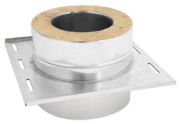
Diameter DN1/DN2	150	160	180	200
	250	260	280	300
Weight [kg]	3.90	4.00	4.50	4.90

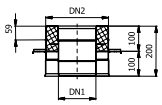
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

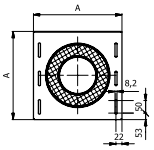
KSD m DN1 / DN2 / 90 - m s

- sheet thickness DN1
- material DN1
- angle 90°
- diameter DN2
- diameter DN1
- denotation for heat resistant steel sheet (Z)
- solid elbow

6. INTERMEDIATE SUPPORT PPD







Diameter DN1/DN2	150	160	180	200
	250	260	280	300
A [mm]	350	350	380	400
Weight [kg]	2.90	2.90	3.30	3.40

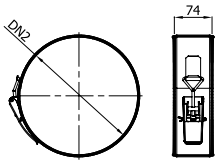
Destination	D	D - smoke ducts
Material	Z	Z - heat resistant sheet 1.4828
Sheet thickness s	8	8 - sheet thickness 0.8 mm

PPD DN1 / DN2 - m s

- s — sheet thickness DN1
- m — material
- DN2 — diameter DN2
- DN1 — diameter DN1
- PPD — intermediate support

7. FASTENING CLAMP OP IV





Diameter DN2	250	260	280	300
Weight [kg]	0.40	0.40	0.40	0.45

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	6	6 - sheet thickness 0.6 mm

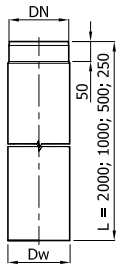
OPIV DN2 - X

- X — material
- DN2 — diameter DN2
- OPIV — fastening clamp IV

TECHNICAL DATA OF CHIMNEY CONNECTION SYSTEM <SPK 2.0> ELEMENTS

1. STRAIGHT PIPE 2000, 1000, 500, 250 [mm] RP





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L=2000	15.40	16.40	18.40	20.50
Weight [kg] L=1000	7.70	8.20	9.20	10.25
Weight [kg] L=500	3.85	4.20	4.60	5.10
Weight [kg] L=250	1.95	2.10	2.30	2.55

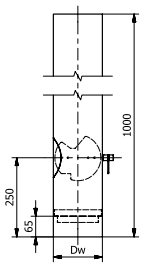
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RP x / L - CZ 2

- x — sheet thickness
- CZ — material
- L — length [mm]
- RP — nominal diameter DN
- 2 — straight pipe

2. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION, DAMPER AND REVISION 1000, 500 [mm] RPrs/ZA





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L = 1000 mm	7.90	8.50	9.60	10.60

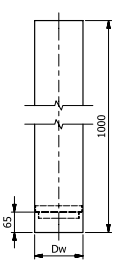
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPrs / ZA / x / L - CZ 2

- x — sheet thickness
- CZ — material
- L — length [mm]
- ZA — nominal diameter DN
- RPrs — anti-condensation protection
- 2 — straight pipe with damper and revision

3. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION 1000, 500 [mm] RP/ZA





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L = 1000 mm	7.80	8.30	9.60	10.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

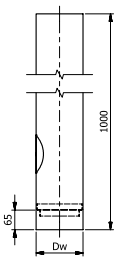
RP / ZA / x / L - CZ 2

- x — sheet thickness
- CZ — material
- L — length [mm]
- ZA — nominal diameter DN
- RP — anti-condensation protection
- 2 — straight pipe

invent. build. enjoy.

4. STRAIGHT PIPE WITH ANTI-CONDENSATION PROTECTION AND REVISION 1000, 500 [mm] PRr/ZA





Diameter DN	ø150	ø160	ø180	ø200
Dw [mm]	151.0	161.0	181.0	201.0
Weight [kg] L = 1000 mm	7.80	8.30	9.60	10.60

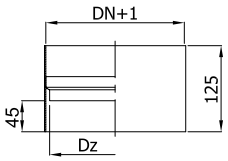
Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

RPr / ZA / x / L - CZ 2

- sheet thickness
- material
- length [mm]
- nominal diameter DN
- anti-condensation protection
- straight pipe with revision

5. FEMALE CONNECTOR WITH ANTI-CONDENSATION PROTECTION ZZ





Diameter DN	ø150	ø160	ø180	ø200
Dz [mm]	140.0	150.0	170.0	190.0
Weight [kg]	1.20	1.30	1.45	1.60

Destination	D	D - smoke ducts
Material	CZ	CZ - mild steel DC01
Sheet thickness s	2	2 - sheet thickness 2.0 mm

ZZ x - CZ 2

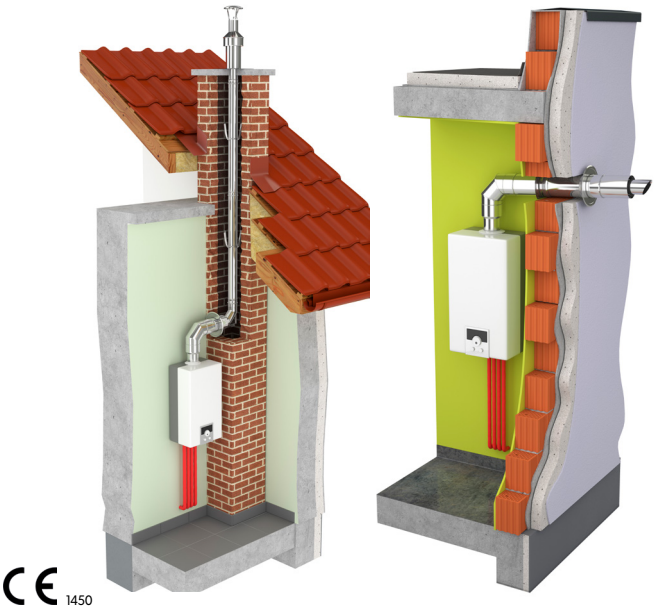
- sheet thickness
- material
- nominal diameter DN
- female connector with anti-condensation protection

Caution!

Female connector allows to connect two press-formed elements to each other and divert the connection schema.

Single Walled Flue System <SKS-X>

Single Walled Flue System <SKS-X> is single walled chimney duct made of stainless steel 1.4301 acc. to DIN17441. IT is used to exhaust fumes from modern condensing boilers which use the effect of water vapour condensation in the combustion process or from "Turbo" type of boilers with closed combustion chamber, that use a ventilator to exhaust fumes (positive pressure chimney duct) as well as stoves for pellets. In this system, air necessary for combustion process is taken directly from the boiler room or from outside with the usage of a separate pipe. This system secure inner surface of ceramic chimney ducts from destructive influence of chemical substances which are part of the fumes.
Maximum working temperature: 250°C.
Single walled flue system <SKS-X> allows old, existing chimney ducts to be used with new and modern type of boilers.
Certificate of Factory Production Control 1450-CPD-0030 issued by INiG Cracow.



CE 1450

Application of chimneys and recommended sheet thickness

Diameter DN	S,D* 1.4301
60	0.4
80	0.4
100	0.4
110	0.4
120	0.4
130	0.4
140	0.4
150	0.5
160	0.5
180	0.5
200	0.5
225	0.6
250	0.6

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.0	
100	315	100.7	99.9	101.7	
110	350	111.8	111.0	112.8	
120	385	122.9	122.1	123.9	
130	415	132.5	131.7	133.5	
140	440	140.5	139.7	141.5	
150	475	151.7	150.7	152.7	0.5
160	505	161.2	160.2	162.2	
180	570	181.9	180.9	182.9	
200	630	201.0	200.0	202.0	
225	710	226.6	225.4	227.6	0.6
250	790	252.1	250.9	253.1	

Destination

S - flue ducts (gas, oil)
D* - smoke ducts from pellets burning devices

Measurments

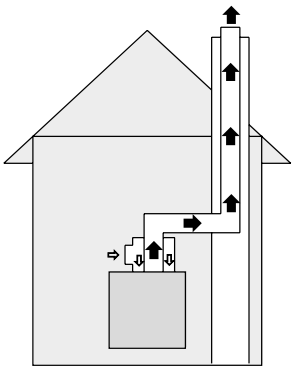
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]±0.1
Dw - inner diameter of pipe [mm]±0.1
Dk - inner diameter of bell [mm]±0.1
s - metal sheet thickness [mm]

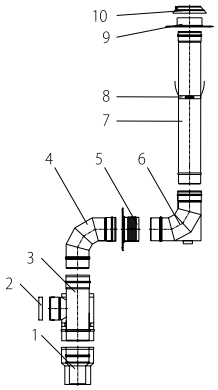
Example application of elements

I.

Fume exhaust through an existing chimney with chimney liner

Air for combustion process supplied from the boiler room



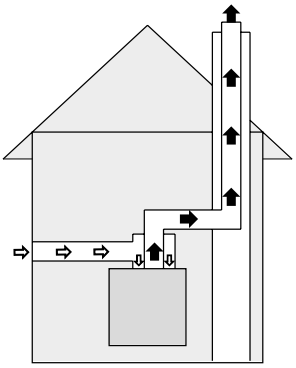


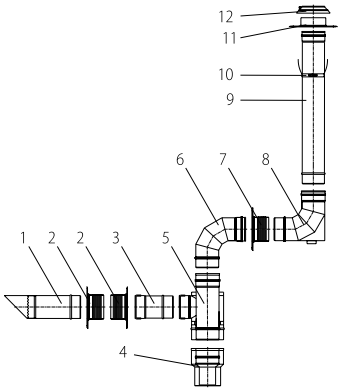
No	Denotation
1	RDD60/80/100/125-KSP-X
2	ZTS120-KSP-X
3	TRD80/125/90-DB-KSP-X
4	KS80/90-KS-X
5	ROZ80-H17
6	KSW80/90-KS-X
7	RP80/1000-KS-X
8	OU80-X
9	PD80-X
10	KPD80-X

II.

Fume exhaust through an existing chimney with chimney liner

Air for combustion process supplied through a pipe from outside the buiiiding



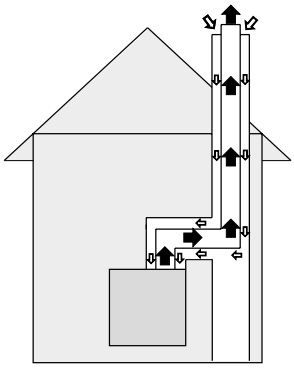


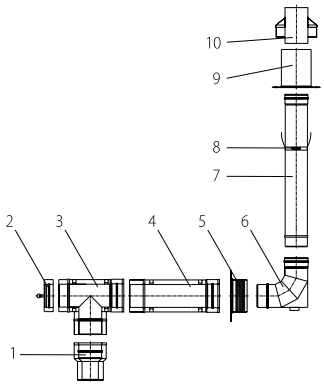
No	Denotation
1	WB125/500-X
2	ROZ125-H17
3	RP125/250-X
4	RDD60/80/100/125-KSP-X
5	TRD80/125/90-DB-KSP-X
6	KS80/90-KS-X
7	ROZ80-H17
8	KSW80/90-KS-X
9	RP80/1000-KS-X
10	OU80-X
11	PD80-X
12	KPD80-X

III.

Fume exhaust through an existing chimney with chimney liner

Air for combustion process supplied through an existing chimney using space between chimney and chimney liner



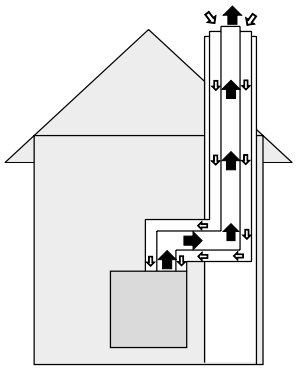


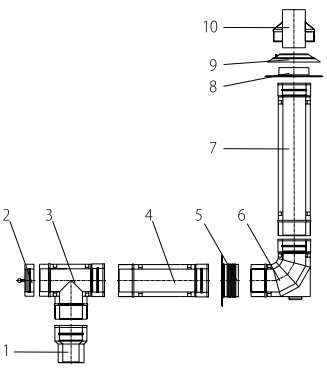
No	Denotation
1	RDD60/80/100/125-KSP-X
2	MSD80/125-KSP-X
3	TRD80/125/90-KSP-X
4	RPD80/125/500-KSP-X
5	ROZ125-H17
6	KSW80/90-KS-X
7	RP80/1000-KS-X
8	OU80-X
9	PDP80-KS-X
10	USD80/125-KSP-X

IV.

Fume exhaust through inner pipe of the concentric chimney

Air for combustion process supplied through outer pipe of concentric chimney





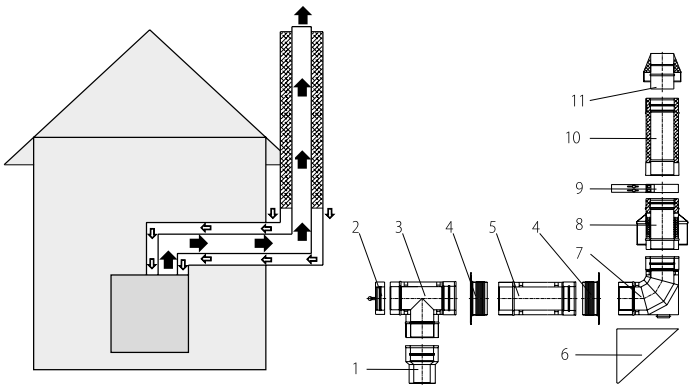
No	Denotation
1	RDD80/60-KSP-X
2	MSD80/125-KSP-X
3	TRD80/125/90-KSP-X
4	RPD80/125/500-KSP-X
5	ROZ125-H17
6	KSDW80/125/90-KSP-X
7	RPD80/125/1000-KSP-X
8	PD125-KSP-X
9	KPD125-KSP-X
10	USD80/125-KSP-X

invent. build. enjoy.

V.

Fume exhaust through inner pipe of the concentric chimney

Air for combustion process supplied through outer pipe

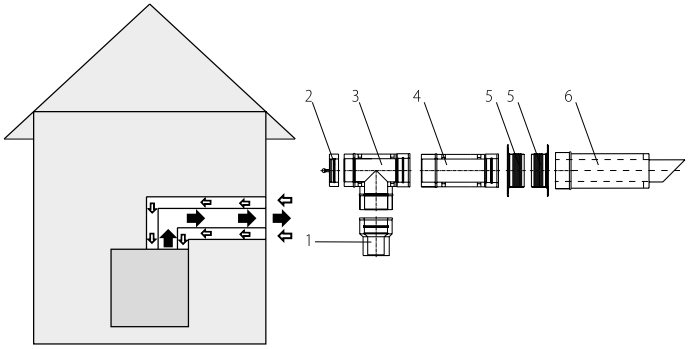


No	Denotation
1	RDD60/80/100/125-KSP-X4
2	MSD80/125-KSP-X4
3	TRD80/125/90-KSP-X4
4	ROZ125-CH
5	RPD80/125/500-KSP-X4
6	KWD125-X-60
7	KSDW80/125/90-KSP-X4
8	RP80/125-DB-KSP-X4
9	OMD-II125-X
10	RPD80/125/1000-KS-X4-IZ
11	USD80/125-X4-IZ

VI.

Fume exhaust through inner pipe of the concentric chimney - horizontally through the wall

Air for combustion process supplied through outer pipe

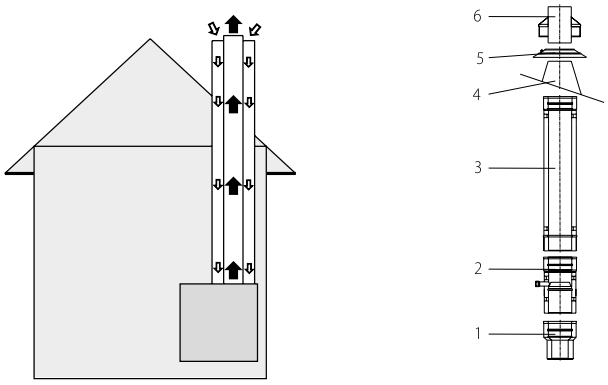


No	Denotation
1	RDD60/80/100/125-KSP-X4
2	MSD80/125-KSP-X4
3	TRD80/125/90-KSP-X4
4	RPD80/125-KSP-X4
5	ROZ125-CH
6	WBD80/125-KSP-X4

VII.

Fume exhaust through inner pipe of the concentric chimney

Air for combustion process supplied through outer pipe of concentric chimney

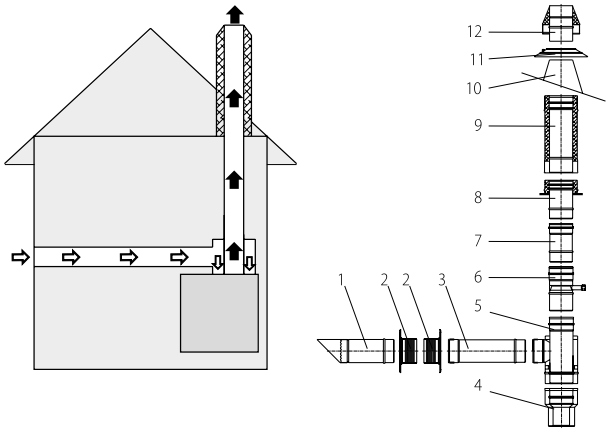


No	Denotation
1	RDD60/80/100/125-KSP-X4
2	MSPD80/125-KSP-X4
3	RPD80/125/1000-KSP-X4
4	PDK125/10-X
5	KPDI25-X
6	USD80/125-KSP-X4

VIII.

Fume exhaust above the roof through the chimney pipe

Air for combustion process supplied through horizontal pipe coming through the wall

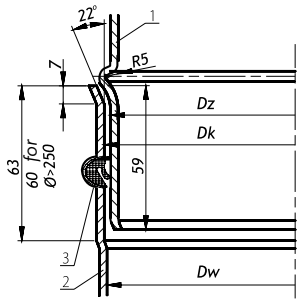


No	Denotation
1	WB125/500-X4
2	ROZ125-CH
3	RP125/250-X4
4	RDD60/80/100/125-KSP-X4
5	TRD80/125/90-DB-KSP-X4
6	MSP80-KS-X4
7	RP80/500-KS-X4
8	PJD80/125-KS-X4-IZ
9	RPD80/125/1000-KS-X4-IZ
10	PDK125/10-X
11	KPDI25-X
12	USD80/125-X4-IZ

invent. build. enjoy.

Bell joint pipe connection

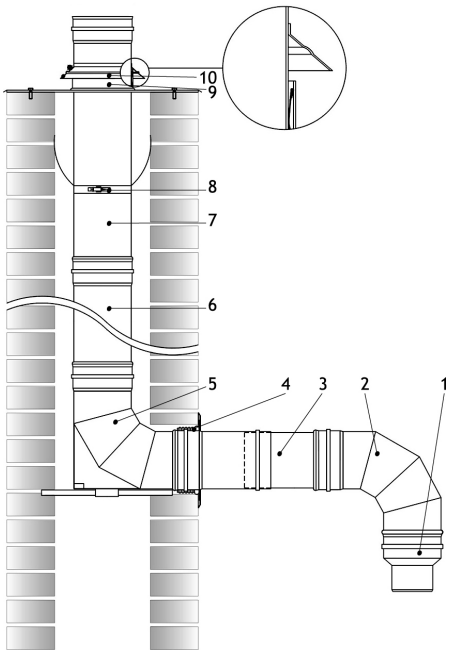
Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, chimney is characterized by very tight and stiff construction. It also allows proper flow of condensate, along the walls of the chimney. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.



1. Spigot
2. Bell
3. Silicone seal

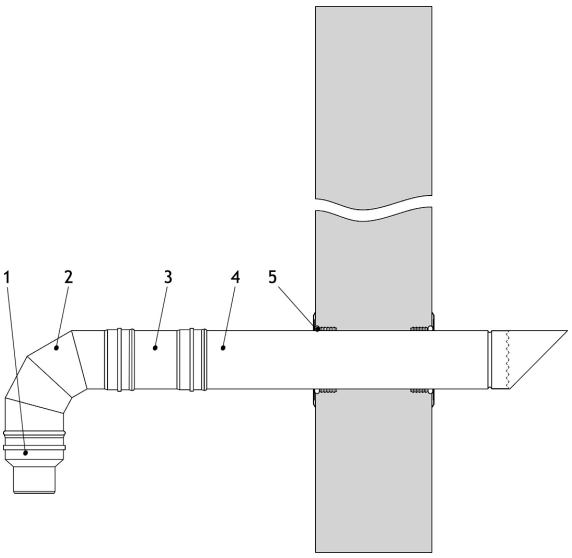
Fig. Method of joining single-walled pipe elements.

Model application of elements: SKS-X



No	Name	Denotation
1	Reducer (adaptor)	RD80/60-KS-X4
2	Solid elbow 90°	KS80/90-KS-X4
3	Telescopic pipe	RT80/2X250-KS-X4
4	Rosette	ROZ80-CH
5	Solid elbow 90° with support	KSW80/90-KS-X4
6	Straight pipe 250 mm	RP80/250-KS-X4
7	Straight pipe 1000 mm	RP80/1000-KS-X4
8	Stabilizing brackets	OU80-X
9	Roof plate	PD80-X
10	Rain collar	KPD80-X

Fig. Example of a flue chimney construction - vertical fume exhaust.

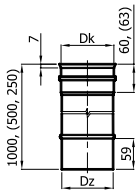


No	Name	Denotation
1	Reducer (adaptor)	RD80/60-KS-X4
2	Solid elbow 90°	KS80/90-KS-X4
3	Straight pipe 250 mm	RP80/250-KS-X4
4	Horizontal terminal 1000 mm	WB80/1000-KS-X4
5	Rosette	ROZ80-CH

Fig. Example of a flue chimney construction - horizontal fume exhaust (through the wall)

1. STRAIGHT PIPE RP-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.60	0.80	1.00	1.10	1.20	1.30	1.40	1.90	2.00	2.30	2.50	3.40	3.80	

RP x / L - KS - X ...

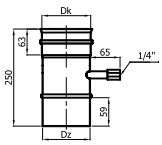
- sheet thickness
- material
- flue system
- length [mm]
- diameter DN
- straight pipe

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

2. STRAIGHT PIPE WITH MEASURING OUTLET 1/4" ROP-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.25	0.30	0.35	0.40	0.40	0.45	0.45	0.60	0.60	0.70	0.75	0.85	1.00	

ROP x / 250 - KS - X ...

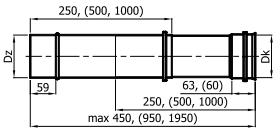
- sheet thickness
- material
- flue system
- length [mm]
- diameter DN
- straight pipe with measuring outlet 1/4"

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

3. TELESCOPIC PIPE RT-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6 L=2x 250
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.30	0.40	0.50	0.55	0.60	0.65	0.70	0.95	1.00	1.15	1.25	1.70	1.90	

RT x / 2xL - KS - X ...

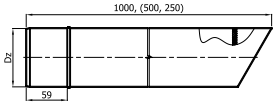
- sheet thickness
- material
- flue system
- example 2x250, length
- diameter DN
- telescopic pipe

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

4. LATERAL OUTLET WITH WIRE MESH WB-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Weight [kg]	0.60	0.80	1.00	1.10	1.20	1.30	1.40	1.90	2.00	2.30	2.50	3.00	3.30	

WB x / L - KS - X ...

- sheet thickness
- material
- flue system
- length [mm]
- diameter DN
- lateral outlet

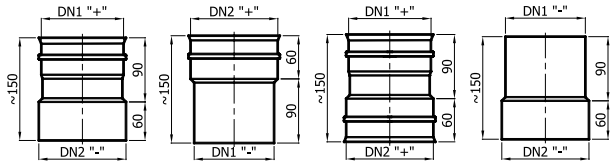
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

invent. build. enjoy.

5. REDUCER RD-KS-X





ex. **RD+80/-60-KS**

„+" bell
„-" spigot

Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Weight [kg]	0.10	0.15	0.19	0.21	0.23	0.25	0.32	0.34	0.36	0.41	0.45	0.51	0.57	

RD ±x / ±y - KS - X ...

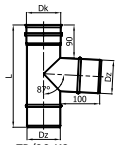
- sheet thickness
- material
- flue system
- diameter DN2
- diameter DN1
- telescopic pipe

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

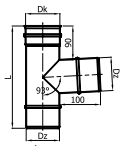
* from pellet stoves

6. TEE 87° TR/90-KS, TEE 93° TR/90-KS-X-TURBO





TR/90-KS



TR/90-KS-TURBO

Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.7	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
L [mm]	240	260	280	290	300	310	320	330	340	360	380	405	430	
Weight [kg]	0.20	0.30	0.40	0.45	0.50	0.55	0.60	0.80	0.90	1.10	1.20	1.75	2.00	

TR x / 90 - KS - X ... - TURBO

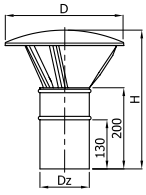
- for TURBO boilers
- sheet thickness
- material
- flue system
- angle 90°
- diameter DN
- tee

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

7. CHIMNEY CAP DK-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	for s=0.4÷0.6
Dz	59.0	78.7	99.4	110.5	121.7	131.2	139.0	150.1	159.7	180.4	199.5	
D	160	160	220	220	250	250	290	290	290	290	350	
H	315	315	330	335	340	355	360	365	365	365	400	
Weight [kg]	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.85	0.90	1.00	1.10	

DK x - KS - X ...

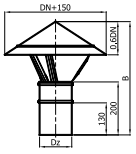
- sheet thickness
- material
- flue system
- diameter DN
- chimney cap

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

8. CHIMNEY CAP DK-KS-X





Diameter DN	ø225	ø250	for s=0.6
Dz	224.5	250.2	
B	470	500	
Weight [kg]	1.75	2.00	

DK x - KS - X ...

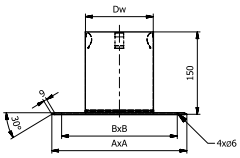
- sheet thickness
- material
- flue system
- diameter DN
- chimney cap

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. ROOF PLATE-LENGHTENED PDP-KS





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	
Dw [mm]	99.8	125.2	150.7	160.3	181.0	200.1	225.5	225.5	250.9	300.3	300.3	324.2	324.2	for s=0.4≠0.6
A [mm]	250	250	300	300	300	300	350	350	400	450	450	450	450	
B [mm]	210	210	260	260	260	290	310	310	360	410	410	410	410	
Weight [kg]	0.60	0.65	0.80	0.80	0.85	0.95	1.20	1.25	1.45	1.65	1.70	1.85	1.90	

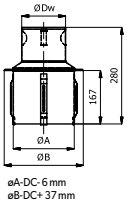
PDP x - KS - X ...

- sheet thickness
- material
- flue system
- diameter DN
- roof plate-lenghtened

Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

10. FORCE-IN MOUNTING BASE PRT-KS





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	
øDw [mm]	99.8	125.2	150.7	160.3	181.0	200.1	225.5	225.5	250.9	300.3	324.2	324.2	324.2	for s=0.4≠0.6
Weight [kg]	0.60	0.65	0.80	0.80	0.85	0.95	1.20	1.25	1.45	1.65	1.70	1.85	1.90	

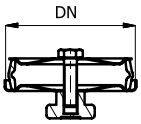
PRT DN / DC - KS - X ...

- sheet thickness
- material
- flue system
- chimney diameter
- chimney diameter
- base

Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

11. TEE PLUG ZTR-KS





ZTR x - KS - X ...

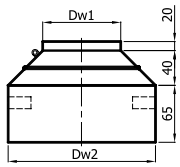
- sheet thickness
- material
- flue system
- diameter DN
- tee plug

Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

Diameter DN	ø60	ø80	
Weight [kg]	0.16	0.18	for s=0.4≠0.6

12. RAIN COLLAR WITH AIR INLET KPD-KS





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	
Dw1	60.1	80.1	100.8	111.9	123.0	132.6	140.6	151.8	161.3	182.0	201.1	226.7	252.2	for s=0.4≠0.6
Dw2	160	180	210	220	240	260	280	280	310	360	360	410	140	
Weight [kg]	0.20	0.25	0.25	0.30	0.30	0.35	0.45	0.45	0.50	0.55	0.55	0.60	0.60	

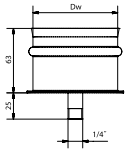
KPD x - KS - X ...

- sheet thickness
- material
- flue system
- diameter DN
- rain collar

Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

13. CONDENSATE BOWL/PLUG MS-KS-X





Diameter DN	ø60	ø80	ø90	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	
Dw [mm]	59.6	79.2	99.9	111.0	122.1	131.7	139.7	150.7	160.2	180.9	200.0	225.4	250.9	251.0	for s=0.4≠0.6
Weight [kg]	0.16	0.18	0.20	0.21	0.23	0.24	0.26	0.30	0.33	0.35	0.40	0.45	0.50	0.60	

MS x - KS - X ...

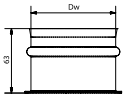
- sheet thickness
- material
- flue system
- diameter DN
- bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

14. CONDENSATE BOWL/PLUG ZT-KS-X





Diameter DN	ø60	ø80	ø90	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dw [mm]	59.6	79.2	99.9	111.0	122.1	131.7	139.7	150.7	160.2	180.9	200.0	225.4	250.9	251.0	
Weight [kg]	0.14	0.16	0.18	0.19	0.21	0.22	0.24	0.28	0.31	0.32	0.38	0.43	0.48	0.58	

ZT x - KS - X ...

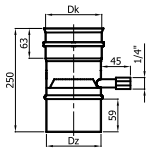
- sheet thickness
- material
- flue system
- diameter DN
- bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

15. VERTICAL BOWL MSP-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.25	0.30	0.35	0.40	0.40	0.45	0.45	0.60	0.60	0.70	0.75	0.85	1.00	

MSP x - KS - X ...

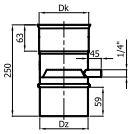
- sheet thickness
- material
- flue system
- diameter DN
- vertical bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

16. VERTICAL BOWL MSP-X





Diameter DN	ø100	ø125	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	for s=0.4÷0.6
Dz	100.8	124.6	151.9	161.4	182.1	201.2	226.7	252.2	301.6	350.9	
Dk	101.8	125.6	152.9	162.4	183.1	202.2	227.7	253.2	303.1	352.4	
Weight [kg]	0.45	0.50	0.70	0.75	0.85	0.90	1.00	1.10	1.30	1.50	

MSP x - X ...

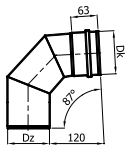
- sheet thickness
- material
- diameter DN
- vertical bowl

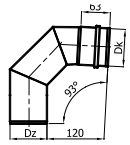
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

17. SOLID ELBOW 87° KS/90-KS, SOLID ELBOW 93° KS/90-KS-X-TURBO







Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz [mm]	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk [mm]	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.19	0.24	0.36	0.40	0.44	0.48	0.60	0.70	0.85	0.90	1.05	1.40	1.85	

KS x / 90 - KS - X ... - TURBO

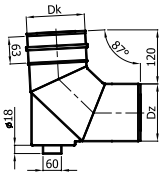
- for TURBO boilers
- sheet thickness
- material
- flue system
- angle 90°
- diameter DN
- solid elbow

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

18. SOLID ELBOW 87° WITH SUPPORT KSW/90-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz [mm]	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk [mm]	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.19	0.24	0.36	0.40	0.44	0.48	0.60	0.70	0.85	0.90	1.05	1.40	1.85	

KS x / 90 - KS - X ...

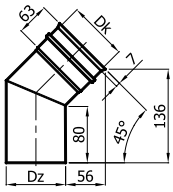
- sheet thickness
- material
- flue system
- angle 90°
- diameter DN
- solid elbow with support

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

19. SOLID ELBOW 45° KS/45-KS-X





Diameter DN	ø60	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.4÷0.6
Dz	60.2	80.0	100.7	111.8	122.9	132.5	140.5	151.7	161.2	181.9	201.0	226.6	252.1	
Dk	60.5	81.0	101.7	112.8	123.9	133.5	141.5	152.7	162.2	182.9	202.0	227.6	253.1	
Weight [kg]	0.12	0.16	0.24	0.24	0.28	0.32	0.40	0.42	0.50	0.60	0.66	0.95	1.10	

KS x / 45 - KS - X ...

- sheet thickness
- material
- flue system
- angle 45°
- diameter DN
- solid elbow

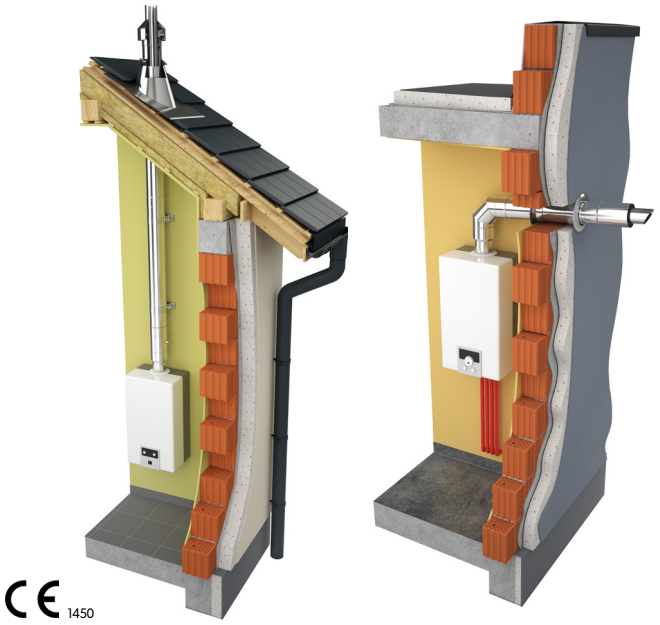
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

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Double - walled air - flue system

Double - walled air - flue system <SKSP-X> - double walled chimney elements made of stainless steel: inner pipe - 1.4301, outer pipe - 1.4301. This is used to exhaust fumes from modern condensing boilers, which use the effect of water vapour condensing in the combustion process or from "Turbo" type boilers with closed combustion chamber, that use a ventilator to exhaust fumes (positive pressure chimney duct) as well as from pellet stoves. SKSP-X system is built with double walled elements (two pipes axially placed). Construction of the system allows fume exhaustion to be made through inner duct while air supply is made through the gap between inner and outer duct.
Maximum working temperature: 250°C
In DARCO offer there is also double walled air - flue system powder coated <SKSP-X-ML> chimney systems, in which outer pipe is powder coated in RAL 9003 colour.
Certificate of Factory Production Control 1450-CPD-0030 issued by INiG Cracow.



Appliction of chimneys and recommended sheet thicknesses

Diameter DN	S,D* 1.4301	** 1.4301
60	0.4	0.4
80	0.4	0.4
100	0.4	0.4
110	0.4	0.4
120	0.4	0.4
125	0.4	0.4
130	0.4	0.4
140	0.4	0.4
150	0.5	0.5
160	0.5	0.5
180	0.5	0.5
200	0.5	0.5
225	0.6	0.5
250	0.6	0.5
280	-	0.6
300	-	0.6
350	-	0.6

Destination
S - flue ducts (gas, oil)
D* - smoke ducts from pellets burning devices
** -

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.0	
100	315	100.7	99.9	101.7	
110	350	111.8	110.0	112.8	
120	385	122.9	122.1	123.9	
125	390	124.5	123.7	125.5	
130	415	132.5	131.7	133.5	
140	440	140.5	139.7	141.5	
150	475	151.7	150.7	152.7	0.5
160	505	161.2	160.2	162.2	
180	570	181.9	180.9	182.9	
200	630	201.0	200.0	202.0	
225	710	226.6	225.4	227.6	0.6
250	790	252.1	250.9	253.1	
280	880	280.7	279.5	281.7	
300	945	301.4	300.2	302.4	
350	1100	350.9	349.4	352.4	

Measurments
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]
Dw - inner diameter of pipe [mm]
Dk - inner diameter of bell [mm]
s - metal sheet thickness [mm]

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part - a spigot, into the other press-formed part - a bell. Thanks to this type of pipe joining, chimney is characterized by very tight and stiff construction. It also allows proper flow of condensate, along walls of the chimney. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.

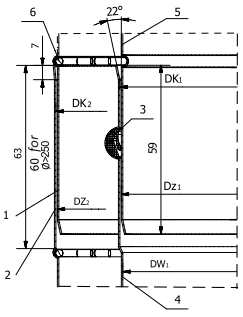
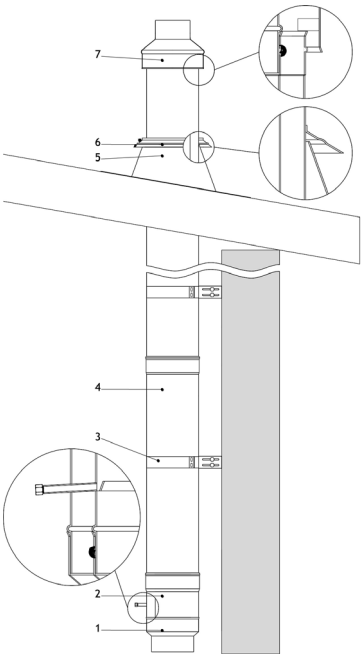


Fig. Method of joining double - walled pipe elements.

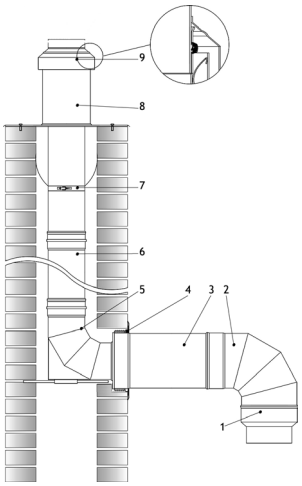
1. Spigot - outer pipe
2. Bell - outer pipe
3. Silicone seal
4. Bell - inner pipe
5. Spigot - inner pipe
6. Stabilizing wire

Model application of elements: SKSP-X



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Bowl vertical	MSPD80/125-KSP-X4
3	Mounting bracket	OMD-I-125-X/5-8
4	Straight pipe 1000 mm	RPD80/125/1000-KSP-X4
5	Roof flashing 0°-20°	PDK80/125/20-X
6	Rain collar	KPD125-X
7	Mouthpiece	USD80/125-KSP-X4

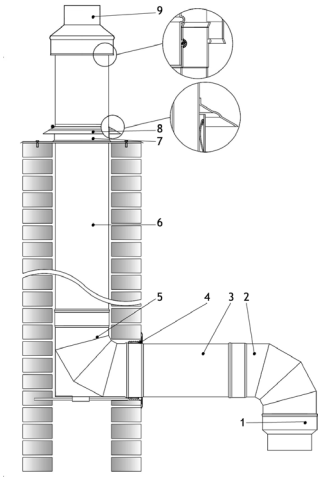
Fig. Example of a double walled air - flue chimney construction (chimney inside the building).



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Solid elbow 90°	KSD80/125/90-KSP-X4
3	Straight pipe 250 mm	RPD80/125/250-KSP-X4
4	Rosette	ROZ125-CH
5	Solid elbow 90° with support	KSW80/90-KS-X
6	Straight pipe 1000 mm	RP80/1000-KS-X4
7	Stabilizing brackets	OU80-X
8	Roof plate lengthened	PDP80-X4
9	Rain collar with air inlet	KPD125-KS-X

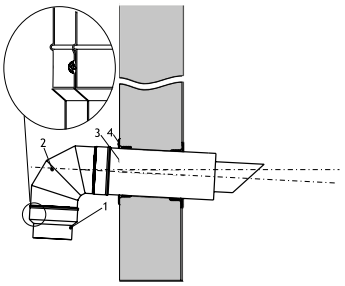
Fig. Example of a double walled air - flue chimney and a single walled flue chimney construction (chimney inside the existing ceramic chimney duct)

Model application of elements: SKSP-X



No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Solid elbow 90°	KSD80/12590-KSP-X4
3	Straight pipe 250 mm	RPD80/125/250-KSP-X4
4	Rosette	ROZ125-CH
5	Solid elbow 90° ze wspornikiem	KSDW80/125/90-KSP-X4
6	Straight pipe 1000 mm	RPD80/125/1000-KSP-X4
7	Roof plate	PD125-X
8	Rain collar	KPD125-X
9	Mouthpiece	USD80/125-KSP-X4

Fig. Example of a double walled air-flue chimney constructionvertical fume exhaust



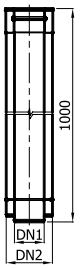
No	Name	Denotation
1	Reducer (adaptor)	RDD80/60/125/100-KSP-X4
2	Solid elbow 90°	KSD80/125/90-KSP-X4-TURBO
3	Horizontal terminal	WBD80/125-KSP-X4
4	Rosette	ROZ125-CH

Fig. Example of a double walled air - flue chimney constructionhorizontal fume exhaust (through the wall).

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1. STRAIGHT PIPE RPDS-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	1.60	2.05	2.90	3.15	3.50	3.85	4.75	5.15	6.05	6.30	8.20	

RPDS DN1 / DN2 / 1000 - KSP - X ...

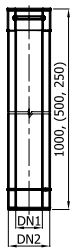
- sheet thickness
- material
- air-flue system
- length [mm]
- diameter DN2
- diameter DN1
- straight pipe

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

2. TRAIGHT PIPE RPD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	1.60	2.05	2.90	3.15	3.50	3.85	4.75	5.15	6.05	6.30	8.20	

RPD DN1 / DN2 / L - KSP - X ...

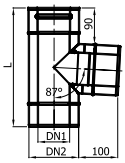
- sheet thickness
- material
- air-flue system
- length [mm]
- diameter DN2
- diameter DN1
- straight pipe double-walled

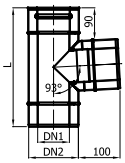
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

3. TEE 87° TRD-KSP, TEE 93° TRD-KSP-X-TURBO







TRD-KSP-TURBO

Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
L [mm]	280	300	330	340	360	380	405	430	480	480	530	
Weight [kg]	0.65	0.85	1.30	1.40	1.60	1.85	2.45	2.75	3.50	3.65	5.15	

TRD DN1 / DN2 / 90 - KSP - X ... - TURBO

- for TURBO boilers
- sheet thickness
- material
- air-flue system
- angle 90°
- diameter DN2
- diameter DN1
- double-walled tee

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

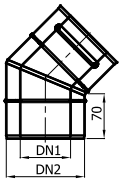
* from pellet stoves

Usage:

TRD/90-KSP - for boilers with closed combustion chamber where flow of condensate can be carried out through the boiler.
TRD/90-KSP-TURBO - for boilers with closed combustion chamber (TURBO) where flow of condensate can not be carried out through the boiler.

4. SOLID ELBOW 45° KSD/45-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.35	0.50	0.70	0.80	0.90	1.10	1.40	1.60	2.10	2.20	3.20	

KSD DN1 / DN2 / 45 - KSP - X ...

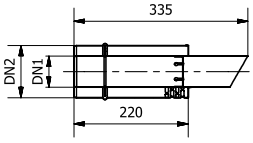
- sheet thickness
- material
- air-flue system
- angle 45°
- diameter DN2
- diameter DN1
- double-walled solid elbow

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

5. LATERAL OUTLET WITH AIR INTAKE [0.22 m] WBD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.46	0.58	0.80	0.87	0.98	1.10	1.37	1.63	1.96	2.01	2.50	

WBD DN1 / DN2 - KSP - X ...

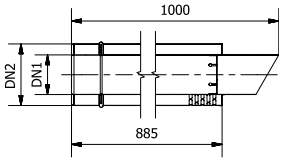
- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled lateral outlet

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

6. LATERAL OUTLET WITH AIR INTAKE [1 m] WBD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	
Weight [kg]	1.52	1.95	2.76	2.99	3.33	3.66	4.51	4.89	5.75	5.99	

WBD DN1 / DN2 / 1000 - KSP - X ...

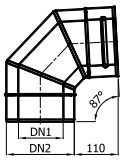
- sheet thickness
- material
- air-flue system
- length 1 m
- diameter DN2
- diameter DN1
- double-walled lateral outlet

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

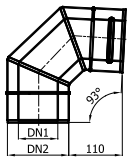
* from pellet stoves

7. SOLID ELBOW 87° KSD/90-KSP, SOLID ELBOW 93° KSD/90-KSP-TURBO-X





KSD/90-KSP



KSD/90-KSP-TURBO

Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.46	0.64	0.96	1.07	1.24	1.43	1.84	2.11	2.73	2.84	4.02	

KSD DN1 / DN2 / 90 - KSP - X ... - TURBO

- for TURBO boilers
- sheet thickness
- material
- air-flue system
- angle 90°
- diameter DN2
- diameter DN1
- double-walled solid elbow

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

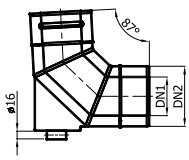
* from pellet stoves

Usage:

TRD/90-KSP - for boilers with closed combustion chamber where flow of condensate can be carried out through the boiler.
TRD/90-KSP-TURBO - for boilers with closed combustion chamber (TURBO) where flow of condensate can not be carried out through the boiler.

8. SOLID ELBOW 87° WITH SUPPORT KSDW/90-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.66	0.84	1.16	1.27	1.44	1.63	2.04	2.31	2.93	3.04	4.22	

KSDW DN1 / DN2 / 90 - KSP - X ...

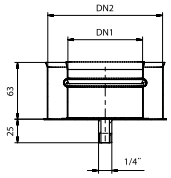
- sheet thickness
- material
- air-flue system
- angle 90°
- diameter DN2
- diameter DN1
- double-walled solid elbow with support

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. BOWL/PLUG MSD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	300	
Weight [kg]	0.30	0.35	0.45	0.50	0.55	0.60	0.75	0.80	1.00	1.10	1.20	

MSD DN1 / DN2 - KSP - X

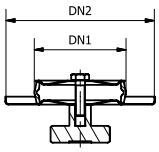
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

10. TEE PLUG ZTRD-KSP-X





Diameter DN1/DN2	60	80	for s 0.4÷0.6
	100	125	
Weight [kg]	0.30	0.35	

ZTRD DN1 / DN2 - KSP - X

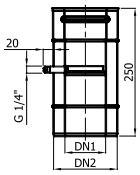
- material
- air-flue system
- diameter DN2
- diameter DN1
- plug

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

11. VERTICAL BOWL ON THE FLUE DUCT MSPD-KSP-I-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.55	0.66	0.88	0.94	1.03	1.11	1.34	1.44	1.66	1.73	2.20	

MSPD DN1 / DN2 - KSP-I - X ...

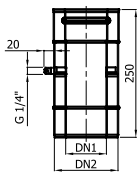
- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled vertical bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

12. VERTICAL BOWL ON THE AIR DUCT MSPD-KSP-II-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.55	0.66	0.88	0.94	1.03	1.11	1.34	1.44	1.66	1.73	2.20	

MSPD DN1 / DN2 - KSP-II - X ...

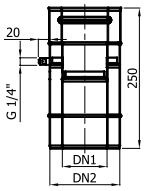
- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled vertical bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

13. VERTICAL BOWL ON AIR-FLUE DUCT MSPD-KSP-III-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.70	0.81	1.03	1.09	1.18	1.26	1.49	1.59	1.81	1.88	2.35	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

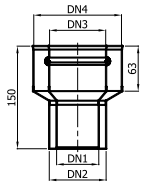
* from pellet stoves

MSPD DN1 / DN2 - KSP-III - X ...

- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled vertical bowl

14. REDUCER RDD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	300	
Weight [kg]	0.24	0.31	0.44	0.47	0.53	0.58	0.71	0.77	0.91	0.95	1.23	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

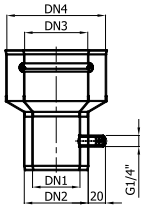
* from pellet stoves

RDD DN1 / DN2 / DN3 / DN4 - KSP - X ...

- sheet thickness
- material
- air-flue system
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- double-walled reducer

15. REDUCER WITH MEASURING OUTLET 1/4"- S RDDP-KSP-I-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	300	
Weight [kg]	0.34	0.41	0.54	0.57	0.63	0.68	0.81	0.87	1.01	1.05	1.33	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

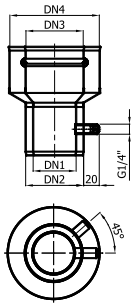
* from pellet stoves

RDDP DN1 / DN2 / DN3 / DN4 - KSP-I - X ...

- sheet thickness
- material
- air-flue system
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- double-walled reducer with measuring outlet

16. REDUCER WITH MEASURING OUTLET 1/4"-SP RDDP-KSP-II-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	300	
Weight [kg]	0.34	0.41	0.54	0.57	0.63	0.68	0.81	0.87	1.01	1.05	1.33	

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

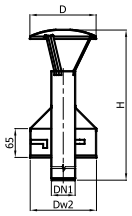
RDDP DN1 / DN2 / DN3 / DN4 - KSP-II - X ...

- sheet thickness
- material
- air-flue system
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- double-walled reducer with measuring outlet

invent. build. enjoy.

17. CAP DKD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
	100	125	150	160	180	200	225	250	300	300	350
Dw2 [mm]	160	180	210	220	240	260	280	310	360	360	410
D	160	160	220	220	250	250	290	290	290	350	400
H	410	410	410	410	410	410	430	430	430	450	630
Weight [kg]	0.65	0.75	0.90	0.95	1.05	1.10	1.35	1.65	1.85	2.05	3.60

for s 0.4÷0.6

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

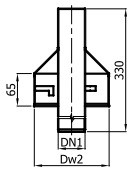
* from pellet stoves

DKD DN1 / DN2 - KSP - X ...

- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled cap

18. MOUTHPIECE WITH AIR INLET USD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
	100	125	150	160	180	200	225	250	300	300	350
Dw2 [mm]	160	180	210	220	240	260	280	310	360	360	410
Weight [kg]	0.40	0.45	0.55	0.60	0.70	0.75	0.85	1.10	1.30	1.55	1.60

for s 0.4÷0.6

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

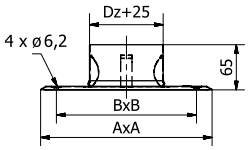
* from pellet stoves

USD DN1 / DN2 - KSP - X ...

- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- double-walled mouthpiece

19. ROOF PLATE PD-X





Diameter DN2	100	125	150	160	180	200	225	250	300	300
Dz [mm]	100.9	124.6	151.9	161.4	182.1	201.2	226.7	252.2	301.6	301.6
A [mm]	250	250	300	300	330	330	350	400	450	450
B [mm]	200	200	250	250	280	280	300	350	400	400
Weight [kg]	0.35	0.35	0.50	0.50	0.60	0.60	0.60	0.80	0.90	1.10

for s 0.4÷0.6

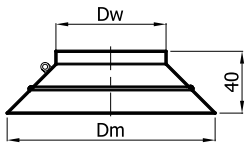
Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

PD x - X

- material
- diameter DN2
- roof plate

20. RAIN COLLAR KPD-X





Diameter DN2	100	125	130	150	160	180	200	225	250	300	350
Dw [mm]	99.7	124	131.6	150.7	160.2	180.9	200.0	225.5	251.0	300.4	349.7
Dm [mm]	172	196	204	223	232	253	272	326	350	400	450
Weight [kg]	0.15	0.20	0.20	0.20	0.25	0.25	0.30	0.30	0.35	0.35	0.40

for s 0.4÷0.6

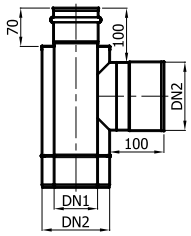
Destination	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

KPD x - X

- material
- diameter DN2
- rain collar

21. TEE 90° WITH LATERAL INLET TRD-DB-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
	100	125	150	160	180	200	225	250	300	300	350
L [mm]	280	300	330	340	360	380	405	430	480	480	510
Weight [kg]	0.65	0.85	1.30	1.40	1.60	1.85	2.45	2.75	3.50	3.65	5.15

for s 0.4≠0.6

TRD DN1 / DN2 / 90 - DB - KSP - X ...

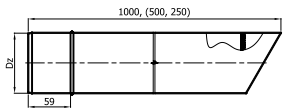
- sheet thickness
- material
- air-flue system
- lateral inlet
- angle 90°
- diameter DN2
- diameter DN1
- double-walled tee

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

22. LETERAL OUTLET WITH WIRE MESH (AIR INTAKE) WB-X





Diameter DN	100	120	125	130	150	160	180	200	225	250	300
Dz	100.9	123.2	124.6	132.8	151.8	161.4	182.0	201.1	226.6	252.2	301.6
Weight [kg]	1.00	1.20	1.25	1.30	1.90	2.00	2.30	2.50	3.00	3.30	3.60

for s 0.4≠0.6

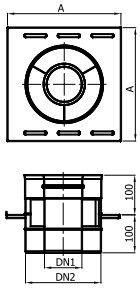
WB x / L - X ...

- sheet thickness
- material
- length [mm]
- diameter DN
- lateral outlet

Destination	W	W - ventilation ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

23. INTERMEDIATE SUPPORT PPD-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
	100	125	150	160	180	200	225	250	300	300	350
A [mm]	300	300	325	325	325	350	350	380	400	425	450
Weight [kg]	0.60	0.75	0.90	1.00	1.10	1.20	1.50	1.60	1.85	1.95	2.35

for s 0.4≠0.6

PPD DN1 / DN2 - KSP - X ...

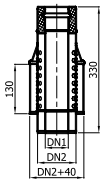
- sheet thickness
- material
- air-flue system
- diameter DN2
- diameter DN1
- intermediate support

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

24. STRAIGHT PIPE WITH LATERAL INLET RP-DB-KSP-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250
	100	125	150	160	180	200	225	250	300	300	350
Weight [kg]	1.20	1.50	1.80	1.95	2.15	2.35	3.05	3.30	3.55	3.65	4.00

for s 0.4≠0.6

RP DN1 / DN2 - DB - KSP - X ...

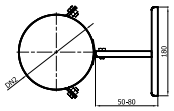
- sheet thickness
- material
- air-flue system
- lateral inlet
- diameter DN2
- diameter DN1
- straight pipe

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

25. MOUNTING BRACKET WITH ADJUSTMENT OMD-I-X





Diameter DN2	100	125	150	160	180	200	225	250	300	350	for s 0.4÷0.6
Weight [kg]	0.55	0.70	0.75	0.80	0.85	0.85	0.90	0.95	1.00	1.10	

OMD-I-DN2 - X/ 5-8

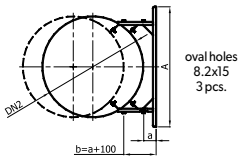
- 5-8 — min. distance from the wall
- X — material
- DN2 — diameter DN2
- OMD-I — mounting bracket I

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

Caution! Bracket should be applied inside buildings.

26. MOUNTING BRACKET WITH ADJUSTMENT OMD-II-X





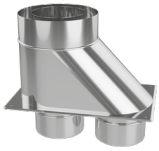
Diameter DN2	100	125	150	160	180	200	225	250	300	350	for s 0.4÷0.6
A [mm]	300	327	346	354	368	380	395	409	433	456	
Weight [kg]	0.80	1.00	1.05	1.05	1.10	1.10	1.15	1.20	1.30	1.40	

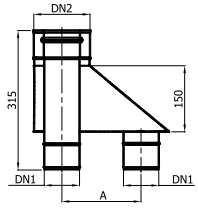
OMD-II-DN2 - X/a

- a — min. distance from the wall
- X — material
- DN2 — diameter DN2
- OMD-II — mounting bracket

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

27. ADAPTER 2 ADAP2-KSP-BUT-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	depends on dimensions											

ADAP2 DN1 / DN2 - KSP - BUT/ A - X ...

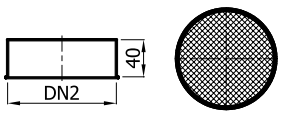
- X — sheet thickness
- A — material
- but — spacing
- KSP — air-flue system
- DN2 — diameter DN2
- DN1 — diameter DN1
- ADAP2 — adapter 2

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

28. TEE PLUG WITH WIRE MESH (AIR INTAKE) ZTS-KSP





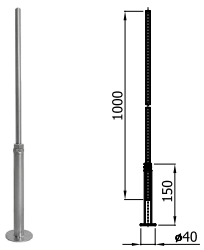
Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
Weight [kg]	0.06	0.08	0.10	0.11	0.13	0.14	0.17	0.20	0.25	0.25	0.30	

ZTS DN2 - KSP - X ...

- X — sheet thickness
- A — material
- KSP — air-flue system
- DN2 — diameter DN2
- ZTS — tee plug with wire mesh

Destination	W	W - ventilation ducts
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

29. SUPPORT KW-KSP



KW - KSP - X

- X — material
- KSP — air-flue system
- KW — support

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

Insulated flue system <SKS-X-IZ>

Insulated flue system is made of acid-resistant chrome-nickel stainless sheet. Inner pipe application (type 1.4301 acc. to DIN 17441 of thicknesses of 0.4 and 0.6 mm) is fume wet extraction from modern, energy-saving gas, oil boilers and pellet stoves. Outer pipe type is 1.4301 of thicknesses of 0.4 and 0.5 mm. Thermal insulation is made from mineral wool of thickness 30 mm.
Chimney system made of SKS-X-IZ elements is an independent construction. (there is no need to use ceramic materials).
Maximum working temperature: 250°C



CE 1450

Appliction of chimneys and recommended sheet thicknesses

Diameter DN	S, D* 1.4301	** 1.4301
60	0.4	-
80	0.4	-
100	0.4	-
120	0.4	0.4
130	0.4	-
140	0.4	0.4
150	0.5	-
160	0.5	0.5
180	0.5	0.5
190	0.5	0.5
200	0.5	-
210	0.5	0.5
220	-	0.5
240	-	0.5
250	0.6	-
260	-	0.5
310	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.0	
100	315	100.7	99.9	101.7	
120	385	122.9	122.1	123.9	
130	415	132.5	131.7	133.5	
140	440	140.5	139.7	141.5	
150	475	151.7	150.7	152.7	0.5
160	505	161.2	160.2	162.2	
180	570	181.9	180.9	182.9	
190	595	189.9	188.9	190.9	
200	630	201.0	200.0	202.0	
210	660	210.6	209.6	211.6	
220	690	220.2	219.0	221.0	
240	753	240.3	239.1	241.3	0.6
250	790	252.1	250.9	253.1	
260	818	261.2	259.6	262.2	
310	974	310.6	309.4	311.6	

Destination

S - flue ducts (gas, oil)
D* - outer pipe
** -

Measurments

Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm] ±0.1
Dw - inner diameter of pipe [mm] ±0.1
Dk - inner diameter of bell [mm] ±0.1
s - metal sheet thickness [mm]

Bell joint pipe connection

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of pipe joining, metal chimney is characterized by very tight and stiff construction. It also assures proper flow of condensate, along walls of the chimney straight to condensate drain bowl. Outer elements are connected "bell down" what prevents chimney insulation from rain water. Outer casings of the chimney elements should be riveted together with couple of stainless steel rivets before placing a fastening clamp. Usage of a special seal made of silicone, which is applied in the middle of the bell, secures tightness of the system by positive pressure of fumes up to 200Pa.

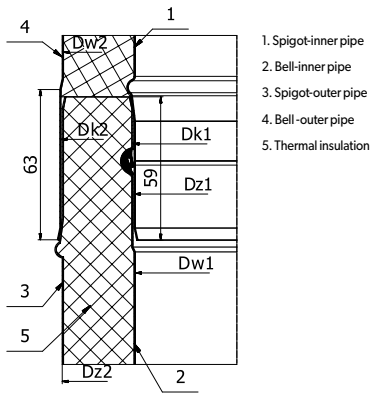
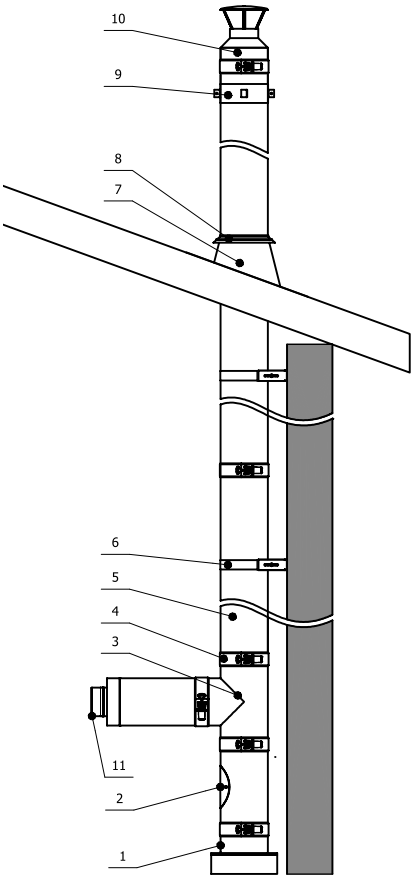


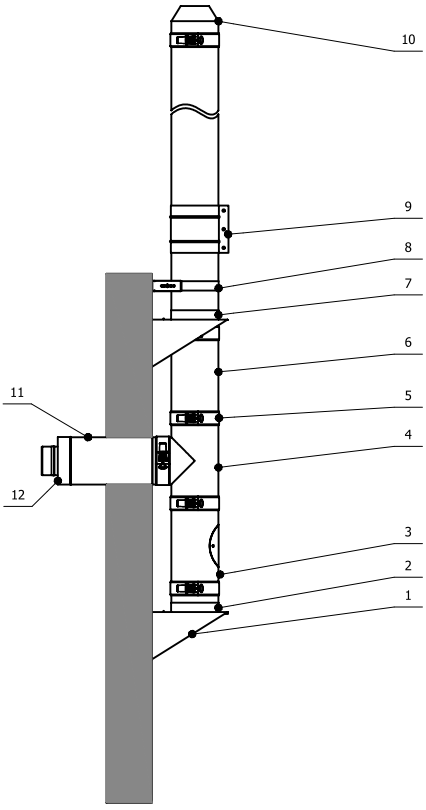
Fig. Method of joining double-walled pipe elements.

invent. build. enjoy.

Model application of elements

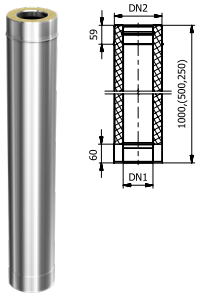


No	Name	Denotation
1	Bowl	MSD100/160-KS-X4-IZ
2	Straight pipe with revision	RPDr100/160-KS-X4-IZ
3	Tee	TRD100/160/90-KS-X4-IZ
4	Clamp	OPIV160-X
5	Straight pipe	RPD100/160/1000-KS-X4-IZ
6	Mounting bracket	OMD-II-160-X/50-150
7	Angular roof flashing	PDK160/20-X
8	Rain collar	KPD160-X
9	Bracket for stabilizing cords	OPO160-X
10	Cap	DKD100/160-KS-X4-IZ
11	Tee plug	ZTD100/160-KS-X4-IZ



No	Name	Denotation
1	Supporting console	KWD160-X/50-150
2	Bowl	MSD100/160-KS-X4-IZ
3	Straight pipe with revision	RPDr100/160/250-KS-X4-IZ
4	Tee	TRD100/160/90-KS-X4-IZ
5	Clamp	OPIV160-X
6	Straight pipe	RPD100/160/500-KS-X4-IZ
7	Intermediate support	PPD100/160-KS-X4-IZ
8	Mounting bracket	OMD-II-160-X/50-150
9	Fastening clamp	OPIII100/160-KS-X-IZ
10	Mouthpiece	USD100/160-KS-X4-IZ
11	Straight pipe	RPD100/160/500-KS-X4-IZ
12	Tee plug	ZTD100/160-KS-X4-IZ

1. STRAIGHT PIPE RPD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	2.60	3.10	4.10	5.20	6.20	6.55	7.10	7.90	10.20

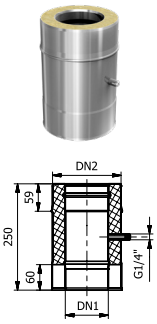
RPD DN1 / DN2 / L - KS-X ... - IZ

- sheet thickness
- SKS-X-IZ chimney system
- length (1000, 500, 250 [mm])
- diameter DN2
- diameter DN1
- straight pipe

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

2. PIPE WITH MEASURING OUTLET ROPD



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.75	0.90	1.10	1.40	1.60	1.70	1.90	2.10	2.60

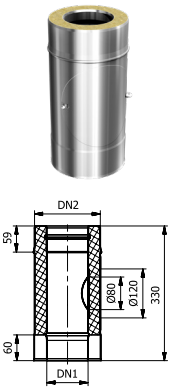
ROPD DN1 / DN2 / 250 - KS-X ... - IZ

- sheet thickness
- SKS-X-IZ chimney system
- length [mm]
- diameter DN2
- diameter DN1
- pipe with measuring outlet

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

3. PIPE WITH REVISION RPDR



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	1.00	1.10	1.50	1.80	2.10	2.20	2.50	2.70	3.50

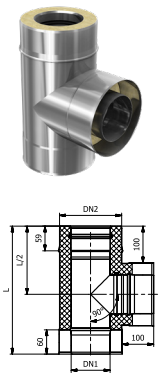
RPDr DN1 / DN2 - KS-X ... - IZ

- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- straight pipe with revision

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

4. TEE 90° TRD/90



Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
L [mm]	320	340	360	390	410	420	440	460	510
Weight	1.10	1.40	1.90	2.50	3.10	3.40	3.80	4.40	6.30

TRD DN1 / DN2 / 90 - KS-X ... - IZ

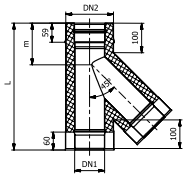
- sheet thickness
- SKS-X-IZ chimney system
- angle 90°
- diameter DN2
- diameter DN1
- tee

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

5. TEE 45° TRD/45





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
L [mm]	370	420	425	470	500	510	540	570	640
m [mm]	125	129	133	140	145	147	150	155	166
Weight	1.20	1.60	2.10	2.90	3.70	4.00	4.60	5.30	7.50

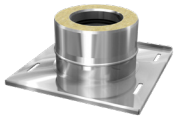
TRD DN1 / DN2 / 45 - KS-X ... - IZ

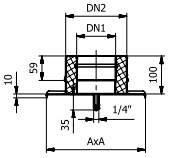
- sheet thickness
- SKS-X-IZ chimney system
- angle 45°
- diameter DN2
- diameter DN1
- tee

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

6. CONDENSATE DRAIN BOWL MSD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
A [mm]	210	240	260	300	300	325	325	350	400
Weight	1.00	1.20	1.50	2.00	2.20	2.40	2.90	3.00	4.00

MSD DN1 / DN2 - KS-X ... - IZ

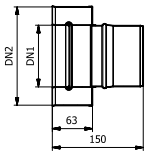
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- condensate drain bowl

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

7. TEE PLUG ZTD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.30	0.35	0.38	0.40	0.40	0.45	0.50	0.55	0.70

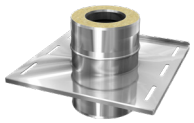
ZTD DN1 / DN2 - KS-X ... - IZ

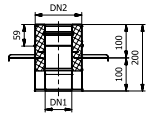
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- tee plug

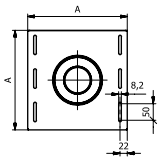
Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

8. INTERMEDIATE SUPPORT PPD







Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	1.50	1.80	2.10	2.10	2.60	2.90	3.00	3.60	4.45

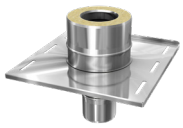
PPD DN1 / DN2 - KS-X ... - IZ

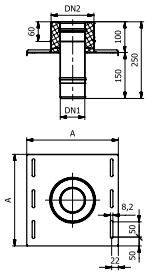
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- intermediate support

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. INTERMEDIATE SUPPORT PJD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	1.30	1.60	1.80	2.00	2.40	2.60	2.70	3.30	4.10

PJD DN1 / DN2 - KS-X ... - IZ

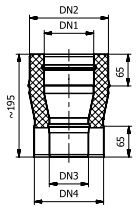
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- intermediate support

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

10. REDUCER RDD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.40	0.50	0.60	0.80	1.00	1.00	1.10	1.20	1.60

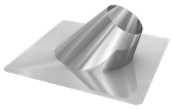
RDD DN1 / DN2 / DN3 / DN4 - KS-X ... - IZ

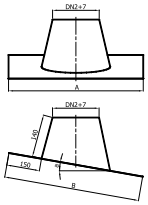
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- reducer

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

11. ANGULAR ROOF FLASHING PDK





a = 20 → 0-20°
a = 35 → 20-35°
a = 50 → 35-50°

Diameter DN1/DN2		60	80	100	130	150	160	180	200	250
		120	140	160	190	210	220	240	260	310
α 20	A	525	555	575	605	625	635	640	680	735
	B	525	555	575	605	625	635	640	680	735
α 35	A	545	575	595	630	650	670	690	720	775
	B	580	610	630	675	700	715	740	765	835
α 35	A	580	610	640	680	710	715	750	770	835
	B	690	725	760	810	850	870	910	950	1000

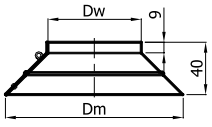
PDK DN2 / α - X

- material
- angle α
- diameter DN2
- angular roof flashing

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	6	6 - sheet thickness 0.6 mm

12. RAIN COLLAR KPD





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.5
Dw [mm]	79.0	99.7	110.9	122.0	126	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	300.4	349.7	400.7	450.0	501.0	
Dm [mm]	151	172	183	194	200	204	212	223	232	253	272	326	350	400	450	501	550	601	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.36	0.41	0.45	0.50	0.54	

KPD x - m

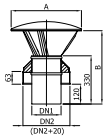
- material
- diameter DN
- rain collar

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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13. CAP DKD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
D [mm]	160	160	220	250	290	290	290	350	400
B [mm]	410	410	410	410	430	430	430	450	630
Weight	1.10	1.30	1.50	1.70	1.90	2.00	2.20	2.30	3.60

DKD DN1 / DN2 - KS-X ... - IZ

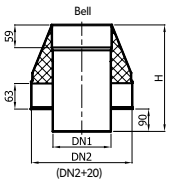
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- cap

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

14. MOUTHPIECE USD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
H [mm]	250	250	250	250	250	250	250	250	250
Weight	0.60	0.70	0.80	0.90	1.10	1.20	1.30	1.40	1.90

USD DN1 / DN2 - KS-X ... - IZ

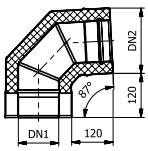
- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- mouthpiece

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

15. SOLID ELBOW 90° KSD/90





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.90	1.20	1.50	2.00	2.50	2.70	3.10	3.60	4.90

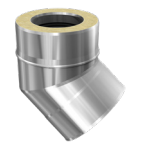
KSD DN1 / DN2 / 90 - KS-X ... - IZ

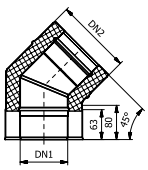
- sheet thickness
- SKS-X-IZ chimney system
- angle 90°
- diameter DN2
- diameter DN1
- solid elbow

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

16. SOLID ELBOW 45° KSD/45





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.50	0.70	0.90	1.20	1.50	1.60	1.80	2.10	2.90

KSD DN1 / DN2 / 45 - KS-X ... - IZ

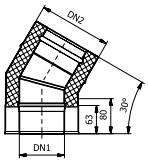
- sheet thickness
- SKS-X-IZ chimney system
- angle 45°
- diameter DN2
- diameter DN1
- solid elbow

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

17. SOLID ELBOW 30° KSD/30





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.50	0.70	0.90	1.20	1.50	1.60	1.80	2.10	2.90

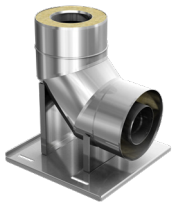
KSD DN1 / DN2 / 30 - KS-X ... - IZ

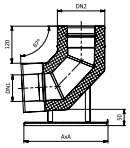
- sheet thickness
- SKS-X-IZ chimney system
- angle 30°
- diameter DN2
- diameter DN1
- solid elbow

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

18. SOLID ELBOW 90° WITH SUPPORT KSDW/90





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
A [mm]	240	240	260	300	300	325	325	350	400
Weight	1.20	1.40	1.50	2.30	2.80	3.00	3.40	3.90	5.20

KSDW DN1 / DN2 / 90 - KS-X ... - IZ

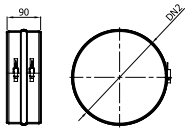
- sheet thickness
- SKS-X-IZ chimney system
- angle 90°
- diameter DN2
- diameter DN1
- solid elbow with support

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

19. FASTENING CLAMP OP I





Diameter DN2	120	140	160	190	210	220	240	260	310
Weight [kg]	0.20	0.21	0.22	0.24	0.25	0.30	0.34	0.36	0.41

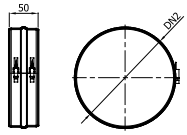
OPI DN2 - X

- material
- diameter DN2
- fastening clamp I

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	6	6 - sheet thickness 0.6 mm

20. FASTENING CLAMP OP II





Diameter DN2	120	140	160	190	210	220	240	260	310
Weight [kg]	0.13	0.14	0.15	0.16	0.17	0.19	0.20	0.22	0.26

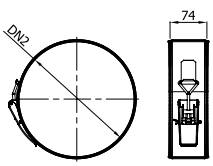
OPII DN2 - X

- material
- diameter DN2
- fastening clamp II

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	6	6 - sheet thickness 0.6 mm

21. FASTENING CLAMP OP IV





Diameter DN2	120	140	160	190	210	220	240	260	310
Weight [kg]	0.25	0.30	0.30	0.35	0.35	0.40	0.40	0.40	0.50

OPIV DN2 - X

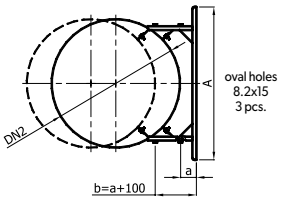
- material
- diameter DN2
- fastening clamp IV

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness	4	4 - sheet thickness 0.4 mm
	6	6 - sheet thickness 0.6 mm

invent. build. enjoy.

22. MOUNTING BRACKET OMD-II





Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	3600	310	3325	350	400	450	500	550	600
A [mm]	322	327	339	354	380	380	395	395	409	409	415	424	433	433	445	456	476	556	580	608	634
Weight [kg]	1.00	1.00	1.04	1.08	1.14	1.15	1.20	1.20	1.23	1.24	1.26	1.29	1.33	1.35	1.37	1.41	1.49	1.98	2.10	2.60	2.71

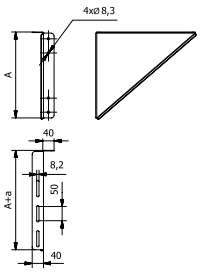
OMD-II DN2 - X / 5-15

- min. distance from the wall
- material
- diameter DN2
- mounting bracket

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301

23. SUPPORTING CONSOLE KWD





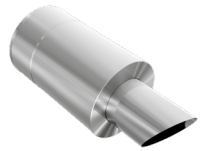
Diameter DN2	120	125	140	160	190	210	220	225	240	250	260	280	300	310	325	350	400	450	500	550	600
A [mm]	231	231	254	254	304	304	304	304	354	354	354	384	404	404	429	454	504	552	604	654	701
Weight [kg]	1.70	1.70	2.00	2.00	2.60	2.60	2.70	2.70	3.25	3.25	3.25	3.70	4.20	4.20	4.65	5.10	6.05	7.10	8.20	9.40	10.65

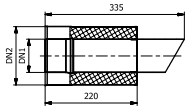
KWD DN2 - X / a - (a+100)

- min. distance from the wall
- material
- diameter DN2
- supporting console

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness	2	2 - sheet thickness 2.0 mm

24. LATERAL OUTLET 0.22 [m] WBD





Diameter DN1/DN2	60	80	100	130	150	160	180	200	250
	120	140	160	190	210	220	240	260	310
Weight	0.60	0.80	1.00	1.20	1.60	1.70	1.90	2.00	2.50

WBD DN1 / DN2 - KS-X ... - IZ

- sheet thickness
- SKS-X-IZ chimney system
- diameter DN2
- diameter DN1
- lateral outlet

Destination	D	D - smoke ducts
	S	S - flue ducts (gas, oil)
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

invent. build. enjoy.

Insulated air-flue system <SKSPD-X>

Insulated air - flue system is used to exhaust fumes from modern condensing boilers, which use the effect of vapor condensation in the combustion process or from "Turbo" type of boilers with closed combustion chamber, that use a ventilator to exhaust fumes (positive pressure chimney duct) as well as pellet stoves. It is used for building self-standing chimneys that are resistant to destructive influence of chemical substances which are part of the fumes. In this system, air necessary for combustion process is taken from outside with the usage of the outer pipe - that is why SKSPD-X system is built with triple walled elements (two pipes axially placed and thermal insulation of 50 mm with outer casing).
Construction of the system allows fume exhaustion to be made through inner duct while air supply is made through the gap between inner and outer duct.
Triple walled air - flue system element is made of stainless steel: inner pipe - 1.4301 thickness 0.4÷0.6 mm, outer pipe - 1.4301 thickness 0.4÷0.6 mm, thermal insulation 50 mm and outer casing - 1.4301.
Maximum working temperature: 250°C
Certificate of Factory Production Control 1450-CPR-0030 issued by INiG Cracow.



CE 1450

Appliction of chimneys and recommended sheet thicknesses

Diameter DN	S,D* 1.4301	** 1.4301
60	0.4	0.4
80	0.4	0.4
100	0.4	0.4
110	0.4	0.4
120	0.4	0.4
125	0.4	0.4
130	0.4	0.4
140	0.4	0.4
150	0.5	0.5
160	0.5	0.5
180	0.5	0.5
200	0.5	0.5
225	0.6	0.5
250	0.6	0.5
280	-	0.6
300	-	0.6
350	-	0.6

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
60	188	60.2	59.4	60.5	0.4
80	250	80.0	79.2	81.1	
100	315	100.7	99.9	101.8	
110	350	111.8	110.0	112.9	
120	385	122.9	122.1	124.0	
125	390	124.5	123.7	125.6	
130	415	132.5	131.7	133.6	
140	440	140.5	139.7	141.7	
150	475	151.7	150.7	152.8	0.5
160	505	161.2	160.2	162.4	
180	570	181.9	180.9	183.0	
200	630	201.0	200.0	202.1	
225	710	226.6	225.4	227.6	0.6
250	790	252.1	250.9	253.1	
280	880	280.7	279.5	281.7	
300	945	301.4	300.2	302.4	
350	1100	350.9	349.4	352.4	

Destination

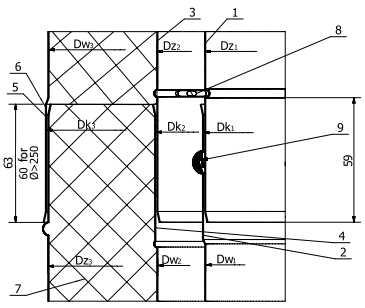
S - flue ducts
D* - smoke ducts from pellets burning devices
** - air pipe, outer wall

Measurments

Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]
Dw - inner diameter of pipe [mm]
Dk - inner diameter of bell [mm]
s - metal sheet thickness [mm]

Bell joint pipe connection

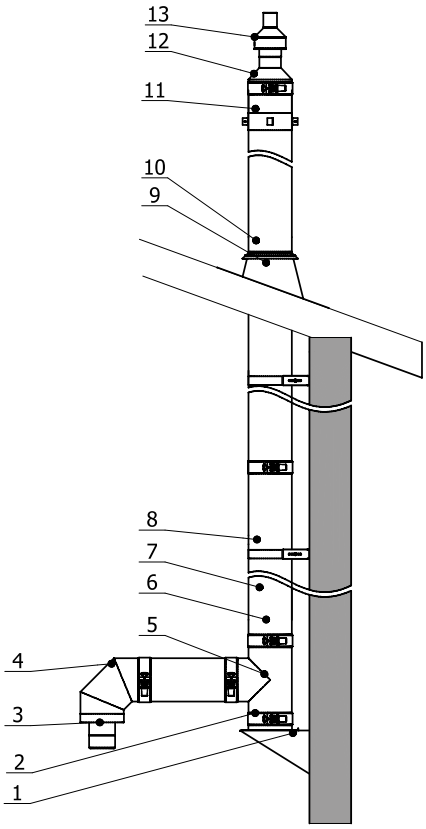
Individual elements of the chimney system are being joint by the way of pushing one part - a spigot, into the other press-formed part - a bell. Thanks to this type of pipe joining, chimney is characterized by very tight and stiff construction. It also allows proper flow of condensate, along walls of the chimney. In order to prevent chimney from rain water, outer pipe is connected bell in down. Before placing mounting bracket the elements of outer pipe should be secured with screws or rivets.



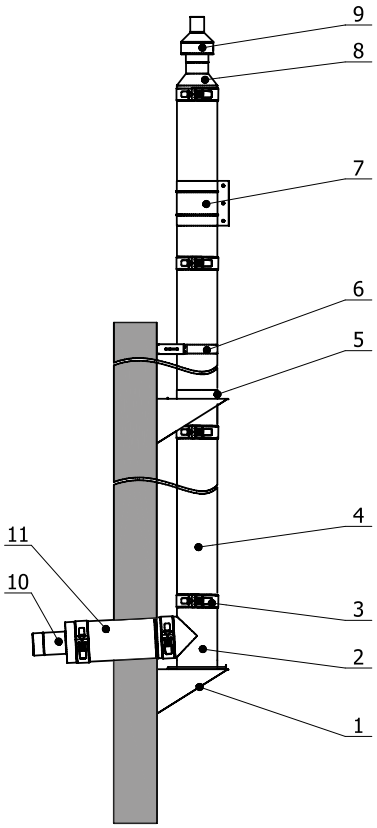
1. Spigot - fume exhaust pipe
2. Bell - fume exhaust pipe
3. Spigot - air pipe
4. Bell - air pipe
5. Spigot - outer pipe
6. Bell - outer pipe
7. Thermal insulation
8. Stabilizing wire
9. Silicone seal

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Model application of elements



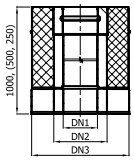
No	Name	Denotation
1	Supporting console	KWD225-X/50-150
2	Bowl	MSD80/125/225-KSPD-X4
3	Bottom insulation closing	ZTD80/125/225-D-KSPD-X4
4	Elbow 90°	KSD80/125/225/90-KSPD-X4
5	Tee	TRD/80/125/225-KSPD-X4
6	Fastening clamp	OPIV225-X
7	Straight pipe 1000 mm	RPD80/125/225/1000-KSPD-X4
8	Mounting bracket	OMD-II-225-X/50-150
9	Angular roof flashing	PDK225/20-X
10	Rain collar	KPD250-X
11	Bracket for stabilizing cords	OPO225-X
12	Top insulation closing	ZTD80/125/225-G-KSPD-X4
13	Mouthpiece	USD80/125-KSP-X4



No	Name	Denotation
1	Supporting console	KWD225-X/50-150
2	Elbow with support	KSWD80/125/225/90-KSPD-X4
3	Fastening clamp	OPIV225-X
4	Straight pipe 1000 mm	RPD80/125/225/1000-KSPD-X4
5	Intermediate support	PPD80/125/225-KSPD-X4
6	Mounting bracket	OMD-II-225-X/50-150
7	Fastening clamp	OPIII225-X
8	Top insulation closing	ZTD80/125/225-G-KSPD-X4
9	Mouthpiece	USD80/125-KSP-X4
10	Bottom insulation closing	ZTD80/125/225-D-KSPD-X4
11	Straight pipe 500 mm	RPD80/125/225/500-KSPD-X4

1. STRAIGHT PIPE RPD-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4+0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

RPD DN1 / DN2 / DN3 / L - KSPD - X ...

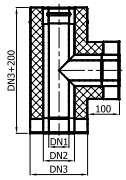
- sheet thickness
- material
- insulated air-flue system
- length [mm]
- diameter DN3
- diameter DN2
- diameter DN1
- straight pipe

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

2. TEE TRD/90-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4+0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

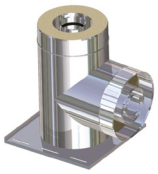
TRD DN1 / DN2 / DN3 / 90 - KSPD - X ...

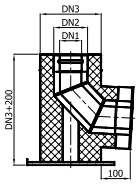
- sheet thickness
- material
- insulated air-flue system
- angle 90°
- diameter DN3
- diameter DN2
- diameter DN1
- tee

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

3. ELBOW WITH SUPPORT KSDW-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4+0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

KSDW DN1 / DN2 / DN3 / 90 - KSPD - X ...

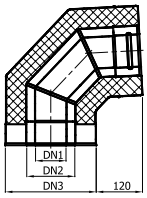
- sheet thickness
- material
- insulated air-flue system
- angle 90°
- diameter DN3
- diameter DN2
- diameter DN1
- elbow with support

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

4. ELBOW 90° KSD/90-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4+0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

KSD DN1 / DN2 / DN3 / 90 - KSPD - X ...

- sheet thickness
- material
- insulated air-flue system
- angle 90°
- diameter DN3
- diameter DN2
- diameter DN1
- elbow

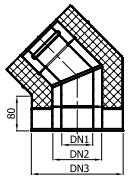
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

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5. ELBOW 45° KSD/45-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

KSD DN1 / DN2 / DN3 / 45 - KSPD - X ...

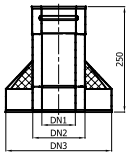
- sheet thickness
- material
- air-flue
- angle 45°
- diameter DN3
- diameter DN2
- diameter DN1
- elbow

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

6. PIPE / TOP INSULATION CLOSING ZTD-G-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

ZTD DN1 / DN2 / DN3 / G - KSPD - X ...

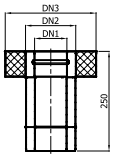
- sheet thickness
- material
- insulated air-flue system
- top closing
- diameter DN3
- diameter DN2
- diameter DN1
- pipe/insulation closing

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

7. PIPE / BOTTOM INSULATION CLOSING ZTD-D-KSPD-X





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

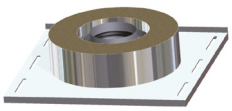
ZTD DN1 / DN2 / DN3 / D - KSPD - X ...

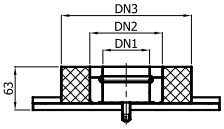
- sheet thickness
- material
- insulated air-flue system
- bottom closing
- diameter DN3
- diameter DN2
- diameter DN1
- pipe/insulation closing

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

8. BOWL MSD-KSPD





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4÷0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

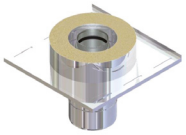
MSD DN1 / DN2 / DN3 - KSPD - X ...

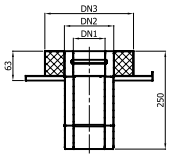
- sheet thickness
- material
- insulated air-flue system
- diameter DN3
- diameter DN2
- diameter DN1
- bowl

Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

9. INTERMEDIATE SUPPORT PJD-KSPD





Diameter DN1/DN2	60	80	100	110	120	130	150	160	180	200	250	for s 0.4+0.6
	100	125	150	160	180	200	225	250	300	300	350	
DN3	200	225	250	260	280	300	325	350	400	400	450	

PJD DN1 / DN2 / DN3 - KSPD - X ...

- sheet thickness
- material
- insulated air-flue system
- diameter DN3
- diameter DN2
- diameter DN1
- intermediate support

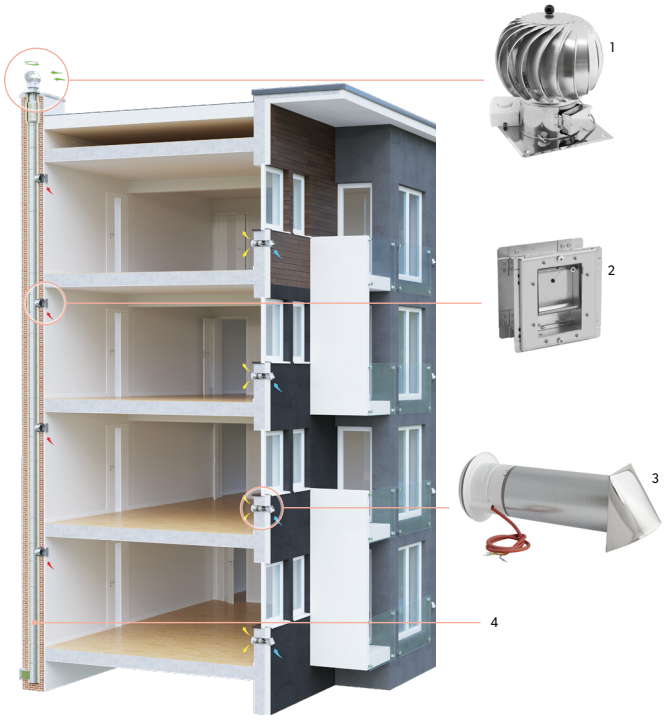
Destination	S	S - flue ducts (gas, oil)
	*	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	4	4 - sheet thickness 0.4 mm
	5	5 - sheet thickness 0.5 mm
	6	6 - sheet thickness 0.6 mm

* from pellet stoves

Proper ventilation in the building can be provided by air exchange caused by natural or mechanical measures. Also hybrid ventilation system can here be an option. Regardless of the choice, it is necessary to have a set of devices assuring proper air flow: air ducts, intake and exhaust appliances etc. Elements of hybrid ventilation system include: shield grates, flap valves, air intakes, stabilizers, ducts and fittings as well as terminals - mounted outside the building.

We recommend to take a closer look at the Hybrid Ventilation System.
Thanks to proper selection of devices supporting natural ventilation, a truly hybrid ventilation arises. It works just like natural ventilation, when weather conditions are favorable and when they are not - it is mechanically supported. Installation is based on natural ventilation ducts and use advantages of this system in the most complex way, this means low noise level and minimal exploitation costs. Devices that are of mechanical support begin their work only when installation does not achieve parameters set. Regulators and devices improving the air flow are designed to stabilize working of the system and to keep proper level of ventilation efficiency in every room.

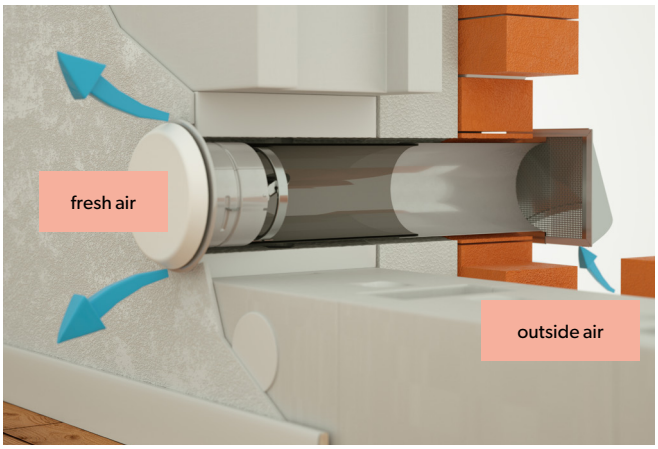
Elements of Hybrid Ventilation System

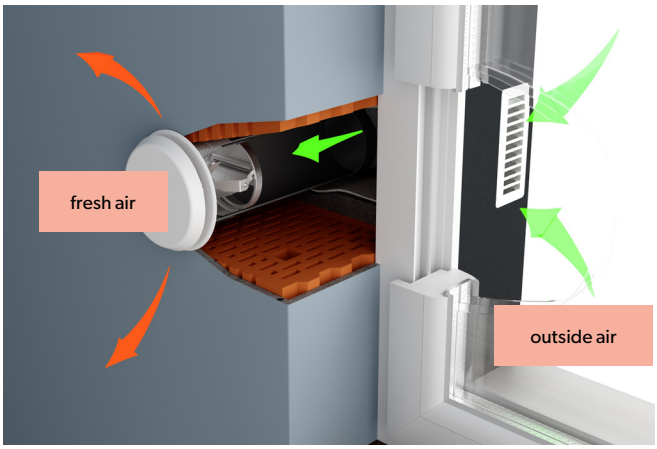


1. Hybrid Turbowent	Rotary chimney cowl is a device providing proper efficiency of ventilation system. Precise information about different versions, sizes, efficiency parameters and available types is available in chapter titled "CHIMNEY COWLS".
2. Draught Stabilizer	This device is to be mounted behind the shield grate, its main purpose is to limit the amount of air exhausted out of the building. It works in mechanical way, with no electricity used. Damper is closing when increased airflow through the ventilation channel is recognized, when the airflow is falling down, the damper opens again. For detailed information please go to the page 238.
3. Air intake sets	Air supply is the key issue for proper ventilation system working. Good parameters as well as high comfort can be provided by special devices mounted in the walls. Darco air intake sets, thanks to their special construction and additional equipment (like air heating module), make the supply ventilation imperceptible and efficient at the same time.
4. Single-pipe system	Darco offers wide variety of elements allowing to make a complete ventilation duct. Fittings are compatible with key system devices (stabilizers, chimney cowls etc) what allows easy and quick mounting. Tightness is ensured by special seals in each element connection.

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ROUND AIR INTAKE SET; WINDOW RECESS AIR INTAKE SET





Air intake set provides fresh air into the building. It is to be mounted above or next to the window, in the wall. Basic version is equipped with an air intake that assures proper air supply from outside. It is constructed in a way that protects from rainwater and is also equipped with wire mesh against rodents. On the side mounted inside the building air intake set is equipped with a flap valve with insulation, that prevents from water vapor condensation in winter as well as reduces noise. Valve allows to regulate the airflow precisely.

Positioning of the air intake in accordance with PN-83/B-03430/Az3

Air volume flow rate with the air intake open:

Requirement for mechanical exhaust ventilation: 20-30 [m³/h]

Requirement for gravity ventilation: 20-50 [m³/h]

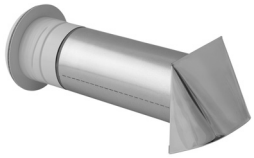
Air volume flow rate with air intake closed:

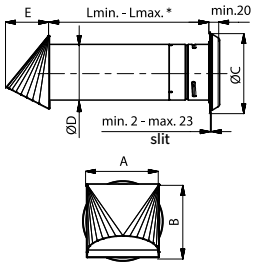
20% to 30% of the flow at its nominal opening

Air intakes NAP included in the National Technical Assessment can be installed in the external partitions of the residential buildings, collective residence (including hotels), public, office and business buildings. The design of the installation must take into account the flow characteristics, the tightness to rainwater penetration and the use in specific categories of corrosivity of the atmosphere.

Air intake set can be additionally equipped with airflow stabilizer. It controls the airflow: limits the air supply to certain limits as well as protects from backflow. Each air intake set includes a filter (separately in the box, to be mounted by the user). Filter enables effective capturing of dust and other particles carried by the air.

ROUND AIR INTAKE SET NO





Diameter	Dimensions [mm]					
	A	B	C	D	E	F
80	104	105	121	77	62	-
110	146	147	161	112	87	-
150	196	197	211	162	116	-

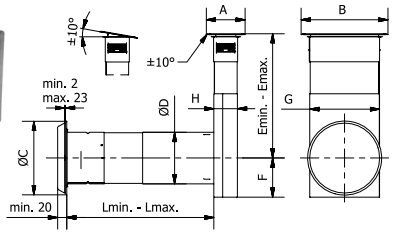
* L_{min}-L_{max} - in next tables with technical datas

NO a x - A - b

- b — air intake material
- A — flap valve
- x — nominal diameter
- a — S - version with stabilizer (e.g. NOS)
- NO — round air intake set with flap valve and filter

WINDOW RECESS AIR INTAKE SET NL





Diameter	Dimensions [mm]							
	A	B	C	D	E	F	G	H
80	85	189	121	77	200÷270	65	152	52
110	85	189	161	112	200÷270	85	152	52
150	125	238	211	162	240÷310	110	202	92

NL a x - A - b

- b — air intake material
- A — flap valve
- x — nominal diameter
- a — S - version with stabilizer (e.g. NLS)
- NL — window recess air intake set with flap valve and filter

Additional equipment:

- basic filter
- stabilizer

Destination	W	W	W	W - air supply ventilation
Air intake material	OC	-	-	OC - galvanised steel sheet
	-	CC	-	CC - chrome-nickel steel sheet
	-	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	P	PP - pipe

Flap valve material-mild steel powder coated (white)

Technical data

Version	Channel cross-section [cm²]	Channel dimensions ** L_{min}-L_{max} [mm]	Mounting hole diameter [mm]	Efficiency at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - flap valve opening Dn,e,w [dB]		Weight [kg]
					2 mm	23 mm	
NO080A	38	320÷550	90	37	37 (-1,-3)	31 (-1,-1)	0.8
NO110A	87	320÷550	120	60	38 (-1,-3)	29 (0,0)	1.3
NO150A	177	350÷580	170	124	36 (-1,-3)	27 (0,-1)	2.3
NOS080A	38	320÷550	90	27	37 (-1,-3)	31 (-1,-1)	0.9
NOS110A	87	320÷550	120	45	38 (0,-3)	29 (0,-1)	1.5
NOS150A	177	350÷580	170	83	37 (-1,-3)	27 (0,-1)	2.6

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NO080A	4,7	2	20	23
NO110A	6,1	2	28,8	22
NO150A	7,8	1	29,1	6
NOS080A	5,6	3	19	23
NOS110A	6,3	3	30	28
NOS150A	8,7	1	29,3	7

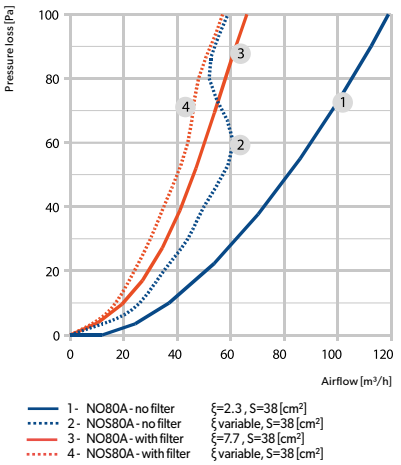
Version	Channel cross-section [cm²]	Channel dimensions ** L_{min}-L_{max} [mm]	Mounting hole diameter [mm]	Efficiency at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - flap valve opening Dn,e,w [dB]		Weight [kg]
					2 mm	23 mm	
NL080A	38	150*÷450	90	27	44 (-1,-4)	40 (-1,-2)	1.3
NL110A	87	150*÷450	120	30	40 (-1,-2)	34 (-1,-1)	1.4
NL150A	177	150*÷450	170	64	42 (-1,-3)	30 (0,0)	2.7
NLS080A	38	150*÷450	90	22	44 (-1,-4)	40 (-1,-3)	1.4
NLS110A	87	150*÷450	120	25	40 (-1,-2)	34 (-1,-1)	1.7
NLS150A	177	150*÷450	170	60	41 (-1,-3)	30 (0,0)	3.0

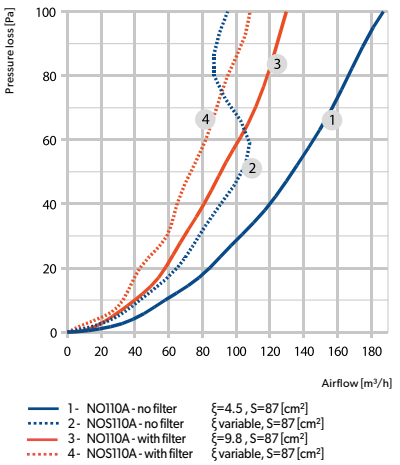
Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NL080A	4,4	2	20,3	24
NL110A	7	1	23,8	25
NL150A	8	1	26	14
NLS080A	5,5	1	19,9	23
NLS110A	6,2	2	24	29
NLS150A	7,5	1	29,3	21

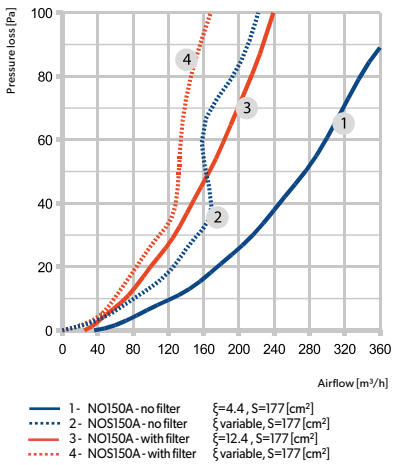
* dimensions to be reached after duct cutting

** see technical drawing on page 248

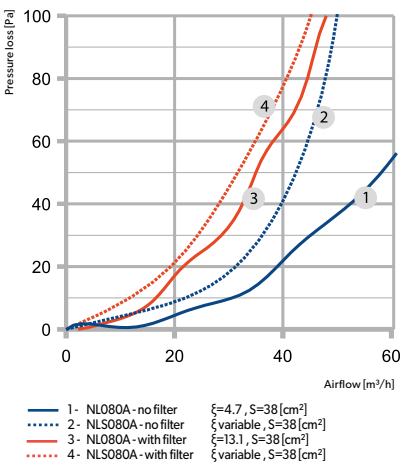
Airflow charts (round air intake set)

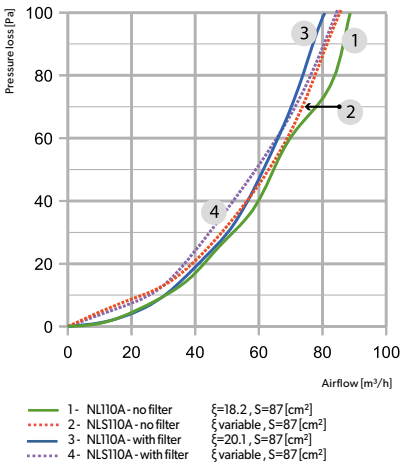


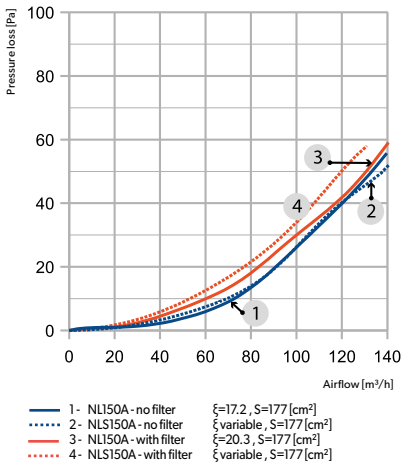




Airflow charts (window recess air intake set)

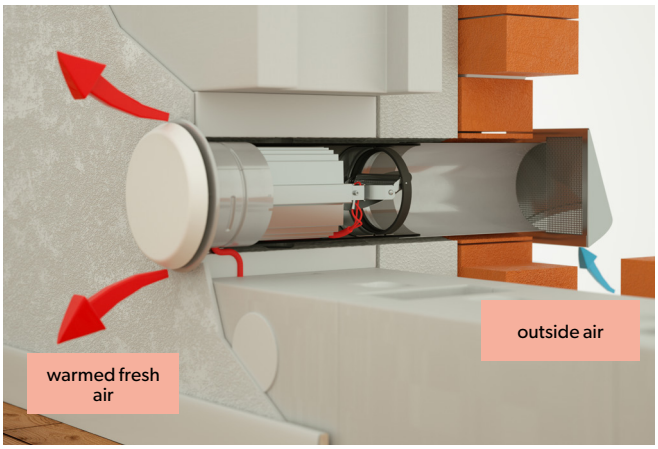


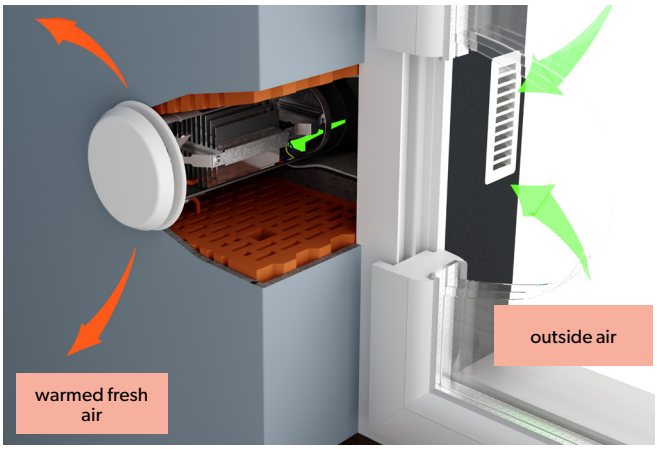




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AIR INTAKE SET WITH HEATER



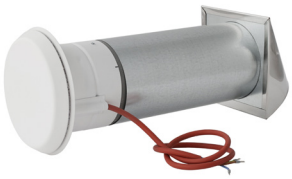


Air intake set with heater provides fresh and preheated air into the building. Thermostat turns the heating module on when temperature falls below 3°C and switches it off when temperature rises above 10-15°C. Semiconductor heating elements automatically regulate power consumption in relation to the amount and temperature of flowing air.
Basic version is equipped with a flap valve. Optionally a version with stabilizer is available. Airflow stabilizer controls the airflow: limits the air supply to certain limits as well as protects from backflow. Each air intake set includes a filter (separately in the box, to be mounted by the user). Filter enables effective capturing of dust and other particles carried by the air.

Destination	W	W	W - air supply ventilation
Air intake and flap valve material	CC	-	CC - chrome-nickel steel sheet
	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	PP - pipe

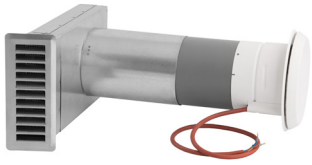
Additional equipment:
- basic filter
- stabilizer

ROUND AIR INTAKE SET WITH HEATER NOG



NOG a x - A - b
- air intake material
- flap valve
- nominal diameter
- S - version with stabilizer (e.g. NOGS)
- round air intake set with heater, flap valve and filter

WINDOW RECESS AIR INTAKE SET WITH HEATER NLG



NLG a x - A - b
- air intake material
- flap valve
- nominal diameter
- S - version with stabilizer (e.g. NLGS)
- window recess air intake set with heater, flap valve and filter

Technical data

Version	Channel cross-section [cm²]	Channel dimensions ** L_{min}-L_{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - Flap valve opening Dn,e,w [dB]		Weight [kg]
					2 mm	23 mm	
NOG080A	38	320÷550	90	28	38 (-1-3)	32 (0,-2)	1.3
NOG110A	87	320÷550	120	49	38 (0,-3)	30 (0,-1)	2.4
NOG150A	177	350÷580	170	97	36 (0,-2)	28 (-1,-2)	4.1
NOGS080A	38	320÷550	90	22	38 (-1-3)	32 (0,-1)	1.4
NOGS110A	87	320÷550	120	40	38 (-1-3)	30 (0,-1)	2.6
NOGS150A	177	350÷580	170	74	37 (-1-3)	28 (0,-1)	4.4

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NOG080A	5,2	2	20,4	24
NOG110A	5,8	3	26,3	24
NOG150A	8,1	2	33	8
NOGS080A	5,2	3	13,4	24
NOGS110A	7,8	3	28,9	25
NOGS150A	7,6	1	27,8	7

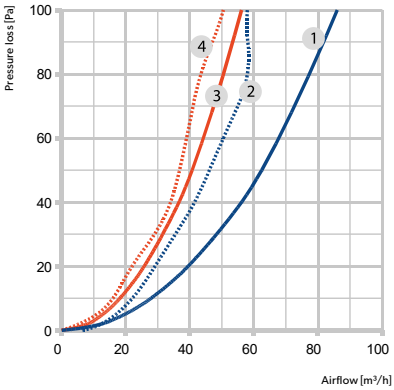
Version	Channel cross-section [cm²]	Channel dimensions ** L_{min}-L_{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - Flap valve opening Dn,e,w [dB]		Weight [kg]
					2 mm	23 mm	
NLG080A	38	200*÷450	90	23	44 (-1,-4)	40 (-1-3)	1.8
NLG110A	87	200*÷450	120	33	40 (-1,-2)	34 (0,0)	2.8
NLG150A	177	200*÷450	170	76	42 (-1,-4)	30 (0,0)	4.8
NLGS080A	38	320÷450	90	20	44 (-1,-4)	40 (-1-3)	1.9
NLGS110A	87	320÷450	120	23	40 (-1,-2)	34 (-1,-1)	2.9
NLGS150A	177	320÷450	170	55	41 (-1-3)	31 (0,0)	5.1

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NLG080A	6,3	1	11,1	24
NLG110A	6,8	1	22,9	25
NLG150A	8	1	29,1	15
NLGS080A	4,4	2	20,6	23
NLGS110A	6,3	2	22,8	21
NLGS150A	7,6	2	26,2	23

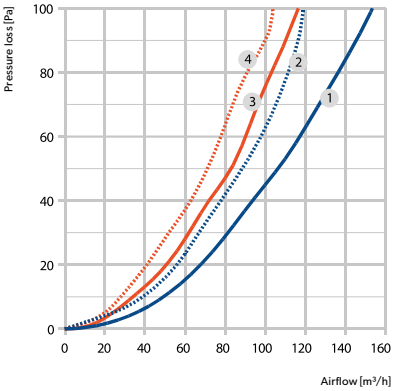
* dimensions to be reached after duct cutting
** see technical drawing on page 248

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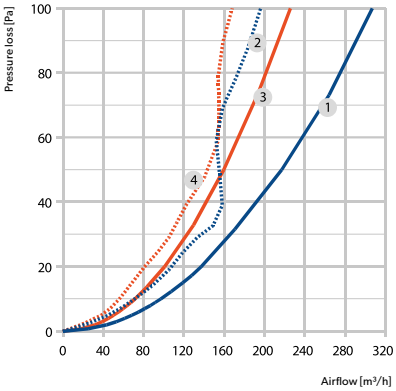
Airflow charts - round air intake set with heater



1- NOG80A - no filter ξ=4.0 , S=38 [cm²]
2- NOGS80A - no filter ξ variable, S=38 [cm²]
3- NOG80A - with filter ξ=9.4 , S=38 [cm²]
4- NOGS80A - with filter ξ variable, S=38 [cm²]

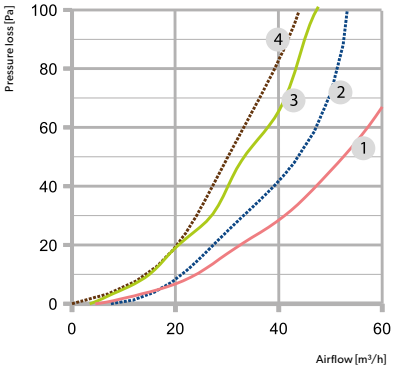


1- NOG110A - no filter ξ=6.9, S=87 [cm²]
2- NOGS110A - no filter ξ variable, S=87 [cm²]
3- NOG110A - with filter ξ=12.4 , S=87 [cm²]
4- NOGS110A - with filter ξ variable, S=87 [cm²]

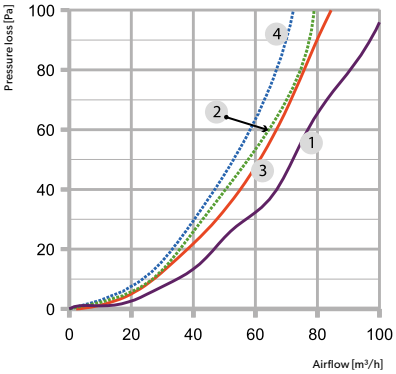


1- NOG150A - no filter ξ=7.2 , S=177 [cm²]
2- NOGS150A - no filter ξ variable, S=177 [cm²]
3- NOG150A - with filter ξ=13.3 , S=177 [cm²]
4- NOGS150A - with filter ξ variable , S=177 [cm²]

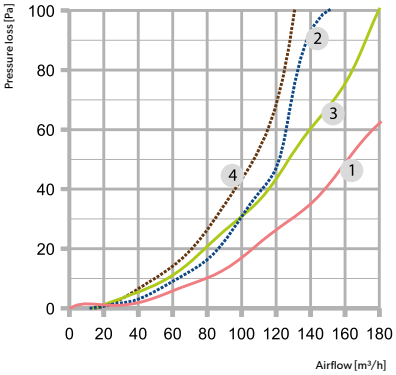
Airflow charts - window recess air intake set with heater



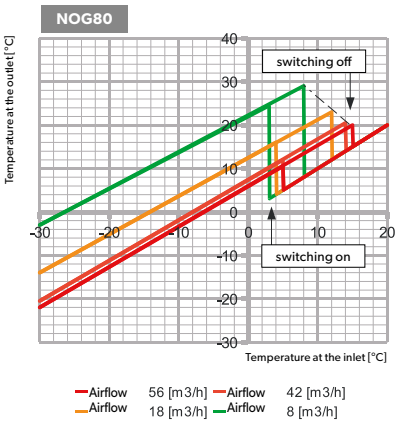
1- NLG080A no filter ξ=6.2 , S=38[cm²]
2- NLGS080A no filter ξ variable , S=38[cm²]
3- NLG080A with filter ξ=15.2 , S=38[cm²]
4- NLGS080A with filter ξ variable , S=38[cm²]



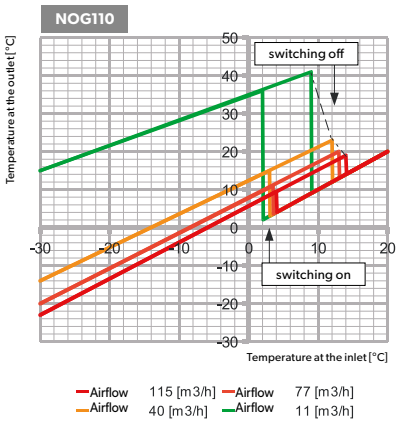
1- NLG110A no filter ξ=14.7 , S=87[cm²]
2- NLGS110A no filter ξ variable , S=87[cm²]
3- NLG110A with filter ξ=21.7 , S=87[cm²]
4- NLGS110A with filter ξ variable , S=87[cm²]



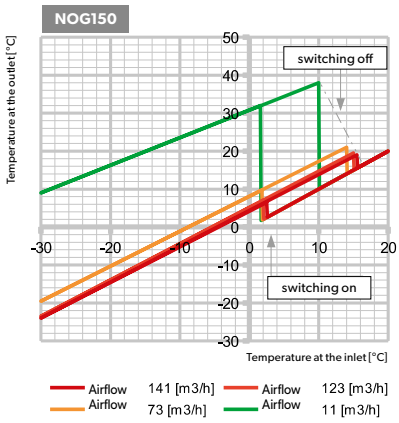
1- NLG150A no filter ξ=12.4 , S=177[cm²]
2- NLGS150A no filter ξ variable , S=177[cm²]
3- NLG150A with filter ξ=22.0 , S=177[cm²]
4- NLGS150A with filter ξ variable , S=177[cm²]



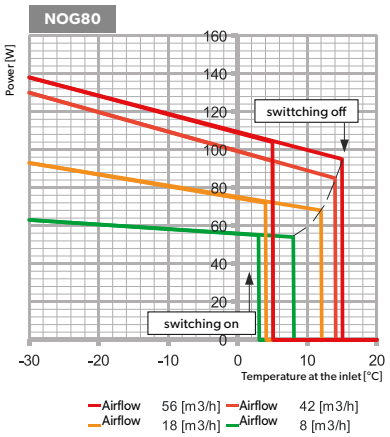
Airflow 56 [m3/h] Airflow 42 [m3/h]
Airflow 18 [m3/h] Airflow 8 [m3/h]



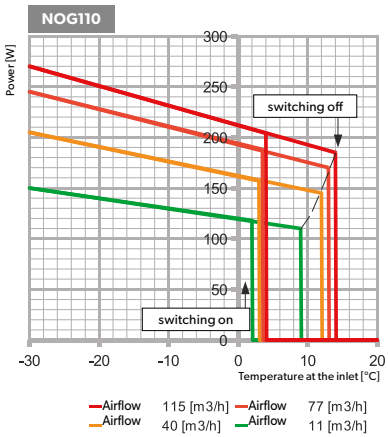
Airflow 115 [m3/h] Airflow 77 [m3/h]
Airflow 40 [m3/h] Airflow 11 [m3/h]



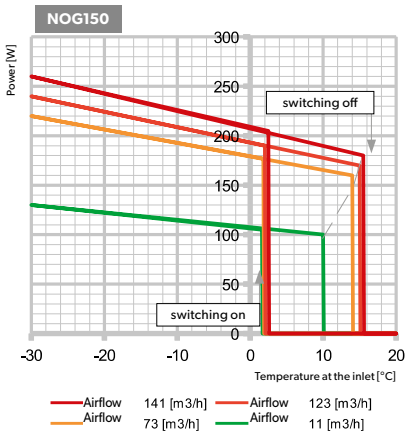
Airflow 141 [m3/h] Airflow 123 [m3/h]
Airflow 73 [m3/h] Airflow 11 [m3/h]



Airflow 56 [m3/h] Airflow 42 [m3/h]
Airflow 18 [m3/h] Airflow 8 [m3/h]

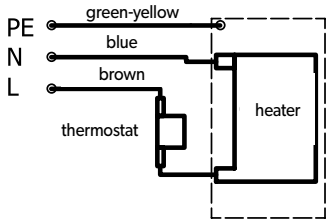


Airflow 115 [m3/h] Airflow 77 [m3/h]
Airflow 40 [m3/h] Airflow 11 [m3/h]



Airflow 141 [m3/h] Airflow 123 [m3/h]
Airflow 73 [m3/h] Airflow 11 [m3/h]

Electric diagram



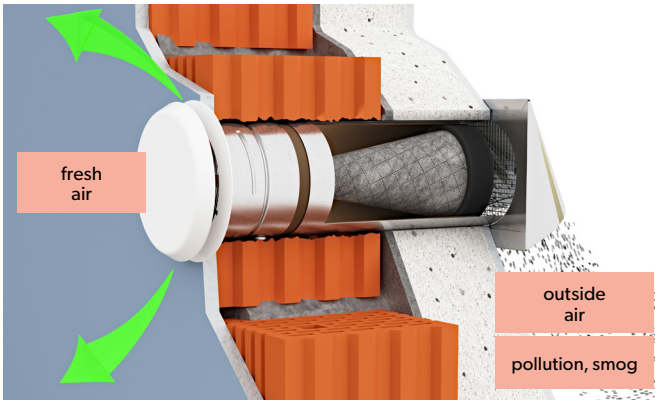
Electric parameters	NOG80	NOG110	NOG150
Supply voltage		230 V	
Nominal power	138 W	270 W	305 W
Max current	2 A	3 A	3.5 A
Protection level		IP 33	

ANTI POLLEN ROUND AIR INTAKE SET

Anti-pollen round air intake set is equipped with a nano-filter made of patented membrane. It catches even the smallest particles of harmful dust (PM 2.5), thanks to that it protects not only against smog, but also against allergens.
Caution! Periodic membrane cleaning is necessary. Dust or pollution may cause airflow reduction.

Destination	W	W	W	W - air supply ventilation
Air intake material	OC	-	-	OC - galvanised steel sheet
	-	CC	-	CC - chrome-nickel steel sheet
	-	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	PP	PP - pipe

Flap valve material-mild steel powder coated (white)



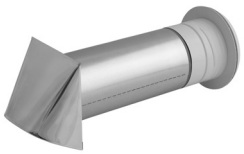
Technical data

Version	Channel cross-section [cm²]	Channel dimensions * L_{min}-L_{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Weight [kg]
NON080A	38	320÷550	90	14	0.9
NON110A	87	320÷550	120	26	1.5
NON150A	177	350÷580	170	39	2.6
NLN080A	38	320÷450	90	15	1.3
NLN110A	87	320÷450	120	22	1.4
NLN150A	177	320÷450	170	33	2.7

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NON080A	4,3	2	19,9	24
NON110A	5,5	2	27,2	25
NON150A	8,1	2	27	12
NLN080A	4,5	1	20,1	23
NLN110A	5,8	1	21	22
NLN150A	7,2	1	23,3	22

* see technical drawing on page 248

ANTI POLLEN ROUND AIR INTAKE SET NON



NON x - A - b

- b — air intake material
- A — flap valve
- x — nominal diameter
- NON — anti pollen round air intake set

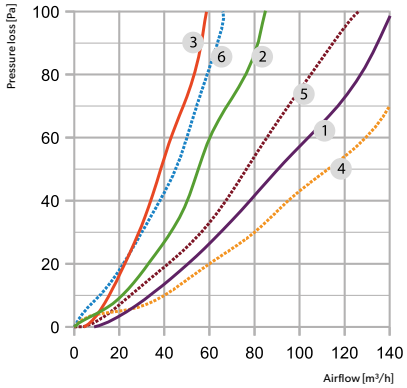
ANTI POLLEN ROUND AIR INTAKE SET WITH WINDOW RECESS INLET NLN



NLN x - A - b

- b — air intake material
- A — flap valve
- x — nominal diameter
- NLN — anti pollen round air intake set with window recess inlet

Airflow charts



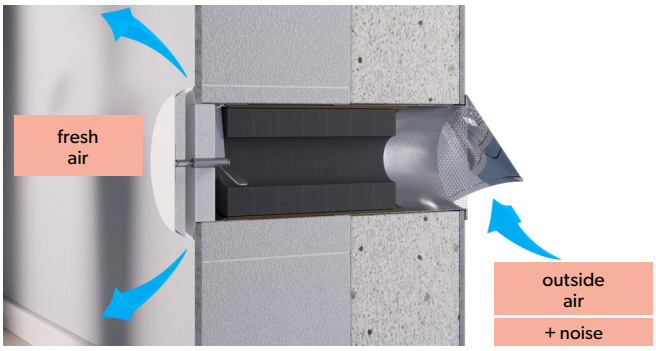
1 - NLN150A ξ variable, S=177 [cm²]
2 - NLN110A ξ variable, S=87 [cm²]
3 - NLN080A ξ variable, S=38 [cm²]
4 - NON150A ξ variable, S=177 [cm²]
5 - NON110A ξ variable, S=87 [cm²]
6 - NON080A ξ variable, S=38 [cm²]

ACOUSTIC AIR INTAKE SET

Acoustic round air intake set is equipped with noise reducing channel.

Destination	W	W	W	W - air supply ventilation
Air intake material	OC	-	-	OC - galvanised steel sheet
	-	CC	-	CC - chrome-nickel steel sheet
	-	-	ML	ML - galvanised steel sheet powder coated
Channel material	PP	PP	PP	PP - pipe

Flap valve material-mild steel powder coated (white)



ACOUSTIC ROUND AIR INTAKE SET NOA



NO a A x - A - b

- b - air intake material
- A - flap valve
- x - nominal diameter
- A - acoustic
- a - S - version with stabilizer (e.g. NOS)
- NO - air intake set

ACOUSTIC WINDOW RECESS AIR INTAKE SET NLA



NL a A x - A - b

- b - air intake material
- A - flap valve
- x - nominal diameter
- A - acoustic
- a - S - version with stabilizer (e.g. NLS)
- NL - air intake set

Technical data

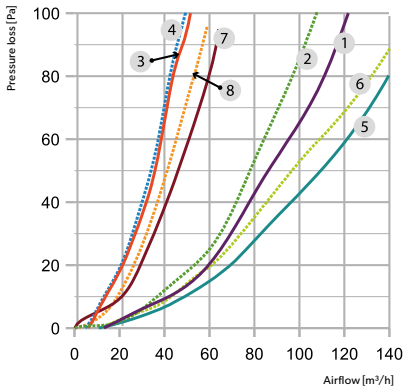
Version	Channel cross-section [cm²]	Channel dimensions * L_{min}-L_{max} [mm]	Mounting hole diameter [mm]	Airflow at 10 [Pa] (without filter) flap valve opening 23 mm [m³/h]	Sound attenuation - Flap valve opening Dn,e,w [dB]		Weight [kg]
					2 mm	23 mm	
NOA110A	14	320÷550	120	21	51 (-1; -4)	48 (-1; -4)	1.4
NOA150A	38	350÷580	170	49	48 (-1; -5)	43 (-1;-4)	2.4
NLA110A	14	320÷450	120	14	51 (-1; -4)	49 (0;-3)	1.5
NLA150A	38	320÷450	170	41	49 (-2;-5)	45 (-1;-4)	2.8

* see technical drawing on page 248

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NOA150A	7,7	2	29,2	20
NLA150A	7,4	2	26,1	22
NOSA150A	5,5	2	19,8	23
NLSA150A	6,3	2	22,5	23

Version	Airflow at 10 [Pa] (no filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NOA110A	5,1	2	25,4	13
NLA110A	4,4	1	20,2	23

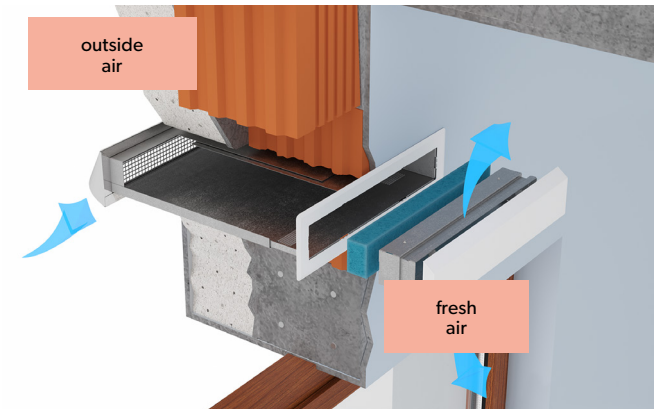
Airflow charts



1 - NLA150A - no filter ξ=45.5 , S=38 [cm²]
2 - NLA150A - with filter ξ=55.7 , S=38 [cm²]
3 - NLA110A - no filter ξ=72.7 , S=14 [cm²]
4 - NLA110A - with filter ξ=73.4 , S=14 [cm²]
5 - NOA150A - no filter ξ=1.3 , S=38 [cm²]
6 - NOA150A - with filter ξ=1.7 , S=38 [cm²]
7 - NOA110A - no filter ξ=1.0 , S=14 [cm²]
8 - NOA110A - with filter ξ=1.2 , S=14 [cm²]

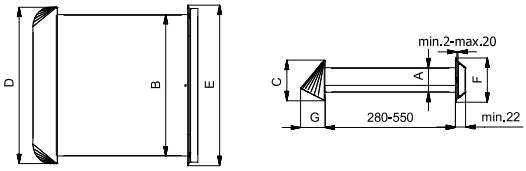
RECTANGULAR AIR INTAKE SET





Additional equipment:

- basic filter
- directional valve



Destination					
Air intake material	W	W	W	W	W - ventilation
	CH	-	-	-	CH - chrome-nickel steel sheet
	-	CH	-	-	CH - chrome-nickel steel sheet
	-	-	ML	-	ML - galvanised steel sheet powder coated (white)
	-	-	-	OC	OC - galvanised steel sheet
Channel material	CH	-	-	-	CH - chrome-nickel steel sheet
	-	OC	OC	OC	OC - galvanised steel sheet
Flap valve material	CH	-	-	-	CH - chrome-nickel steel sheet
	-	ML	ML	ML	ML - mild steel powder coated (white)

Technical data

Version	Dimensions [mm]							Channel cross-section S [cm²]	Pressure loss ratio ς with filter	Airflow at 10 [Pa] (without filter) flap valve opening 20 mm [m³/h]	Sound attenuation - Flap valve opening Dn,e,w [dB]		Weight [kg]
	A	B	C	D	E	F	G				2 mm	20 mm	
NP1	53	304	87	336	345	95	52	147	10.8	115	33 (-1,-1)	26 (0.0)	2.50
NPS1								147	13.0	84	33 (-1,-1)	26 (0.0)	2.90
NP2	75	594	109	626	635	116	64	419	15.9	249	38 (-1,-2)	26 (0.0)	4.80
NPS2								419	18.1	218	38 (-1,-2)	26 (0.0)	5.70

Version	Airflow at 10 [Pa] (with filter) acc. to PN-83/B-03430/Az3			
	minimum [m³/h]	opening [mm]	nominal [m³/h]	opening [mm]
NP1	7,9	2	26,9	5
NPS1	6,6	2	26,5	5
NP2	7,3	2	25,2	4
NPS2	8,7	1	28,7	max. u.t.

max. u.t. - maximum upper tilt

Positioning of the air intake in accordance with PN-83/B-03430/Az3

Air volume flow rate with the air intake open:

Requirement for mechanical exhaust ventilation: 20-30 [m³/h]

Requirement for gravity ventilation: 20-50 [m³/h]

Air volume flow rate with air intake closed:

20% to 30% of the flow at its nominal opening

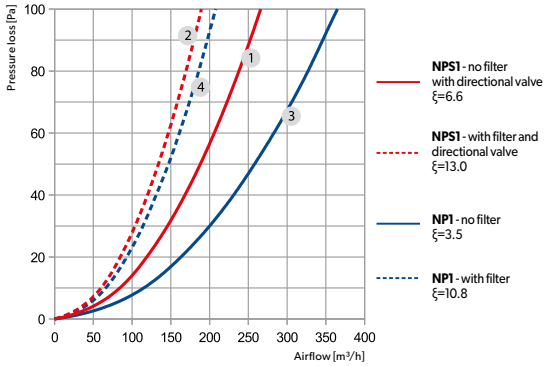
NP x - a / b

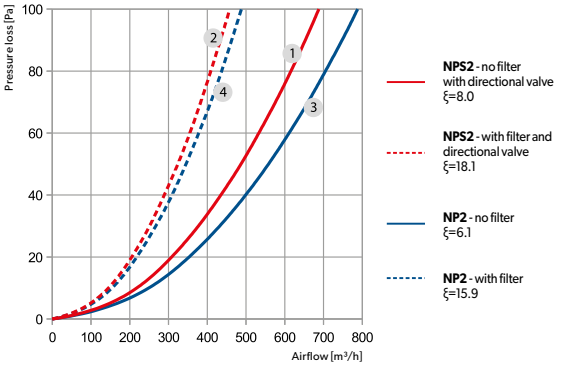
- flap valve material
- air intake material
- type
- rectangular air intake set

NPS x - a / b

- flap valve material
- air intake material
- type
- rectangular air intake set with directional valve

Airflow charts:





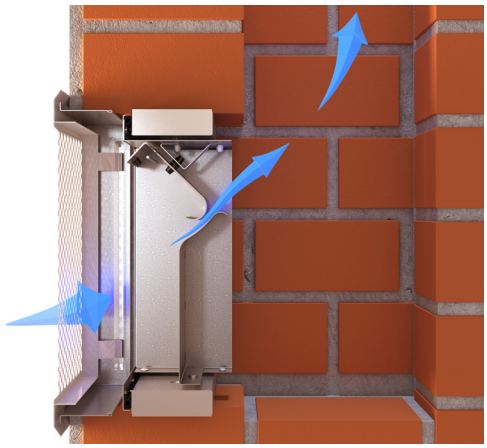
ADDITIONAL EQUIPMENT

N°	Name	Picture	Symbol	Usage
1	Flap valve		Anemostat ANP-...	Round air intake set additional equipment ... - inlet diameter (ø 080, 110, 150)
2	Airflow stabilizer		Stabilizator Przepływu SNP-...	
3	Filter		Filtr FNP-..	
4	Nano filter		Filtr antysmogowy FNON-...	
5	Filter FNP		FNP1	Rectangular air intake set additional equipment ... - material (OC - galvanised steel sheet, CH - chrome-nickel steel sheet)
6	Filter FNP		FNP2	
7	Directional valve SNP		SNPS1-...	
8	Directional valve SNP		SNPS2-...	

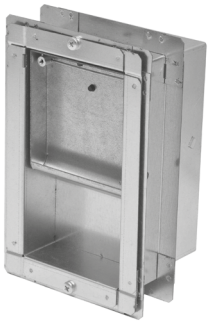
invent. build. enjoy.

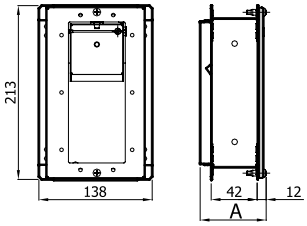
DRAUGHT STABILIZER - STABILER SW

Draught stabilizer is to be mounted in the horizontal part of a ventilation duct (of natural or hybrid type) just behind a ventilation grate. Main purpose of the stabilizer is to reduce excessive flow of air through the ventilation duct. Maximal amount of air that is allowed to flow through the device is limited by the way device is constructed. By low airflow volumes device allows it with very small pressure losses, when airflow gets bigger (closer to the maximal amount), damper of the device begins to close, limiting the airflow to a certain level. Maximal airflow values are set in a way that they are complying with current norms and directives regarding ventilation, what makes designating device to a proper room or ventilation channel easy.
Stabiler SW is designed to limit the discharge of internal air in ventilation and air-conditioning systems in residential, community and public buildings



DRAUGHT STABILIZER - STABILER SW1





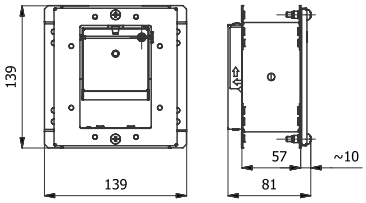
A = 79 mm (SW1-20, SW1-30)
105 mm (SW1-50, SW1-70, SW1-90)

SW1 ...

- airflow limit (20, 30, 50, 70, 90)
- draught stabilizer - version 1

DRAUGHT STABILIZER - STABILER SW2





SW2 ...

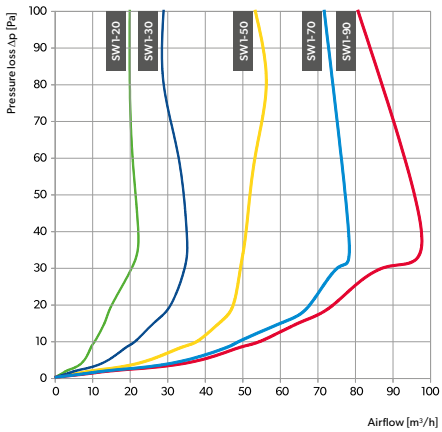
- airflow limit (20, 30, 50, 70)
- draught stabilizer - version 2

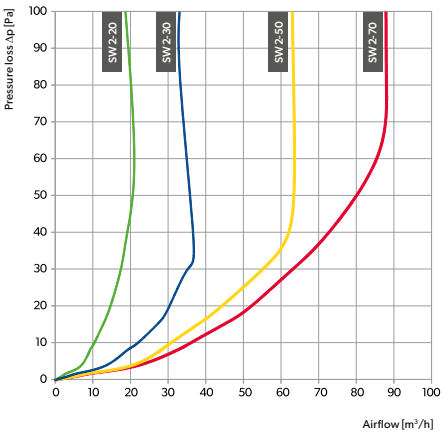
Determining proper Stabiler to a certain ventilation duct (based on polish regulations*):

Type of room	Efficiency of stabilizer [m³/h]
· Living rooms and bedrooms (per 1 person)	20
· Kitchen with outside window and electric cooker (apartment for 1 or 2 persons) · Separate toilet	30
· Living rooms and bedrooms (for 2 persons) · Kitchen with outside window and electric cooker (apartment for 3 persons) · Kitchen without outside window or alcove, kitchen with electric cooker · Bathroom with or without toilet	50
· Kitchen with outside window and gas or solid fuel cooker · Living rooms and bedrooms (per 3 persons)	70
· Living rooms and bedrooms (per 4 persons)	90

Destination	W	W - ventilation
Material	OC	OC - galvanised steel sheet

Airflow charts:





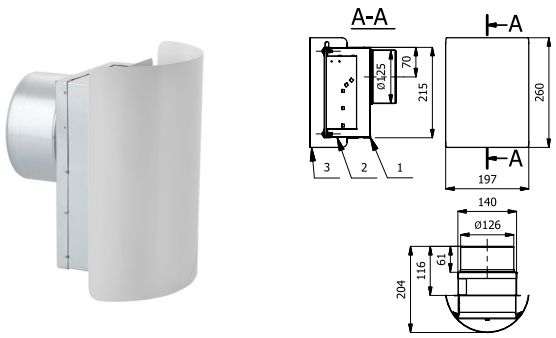
DRAUGHT STABILIZER WITH CASSETTE KSW1, KSW2

Stabiler KSW is designed to limit the discharge of internal air in ventilation and air-conditioning systems in residential, community and public buildings. Stabiler reduces excessive flow of air through the ventilation duct. Maximal amount of air that is allowed to flow through the device is limited by the way it is constructed. By low airflow volumes device allows it to go through with very small pressure losses, when airflow gets bigger (closer to the maximal amount) damper begins to close, limiting the airflow to a certain level.

Stabilizer versions are prepared in a way that they are complying with appropriate norms and directives regarding ventilation, this makes choosing a proper one to a given room or ventilation channel more than easy.
KSW series is a set dedicated to be mounted on pipe ducts. It consists of: stabilizer, mounting cassette with outlet and a decorative covering replacing ventilation shield grate.

Destination	W	W - ventilation
Material	OC	OC - galvanised steel sheet

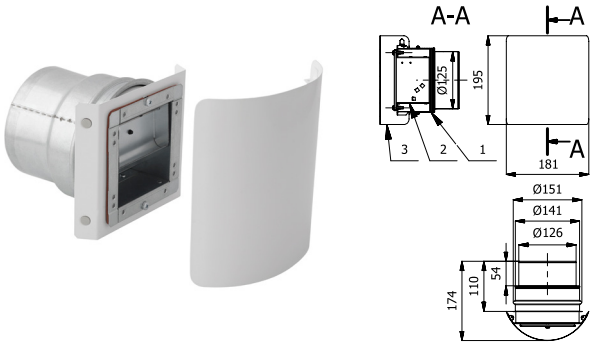
DRAUGHT STABILIZER - WITH CASSETTE KSW1



KSW1 x - ML - B

- B – colour
- ML – painted version
- x – airflow limit (20, 30, 50, 70, 90)
- KSW1 – draught stabilizer with cassette

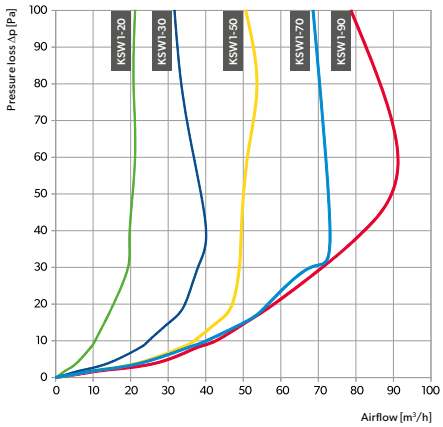
DRAUGHT STABILIZER - WITH CASSETTE KSW2

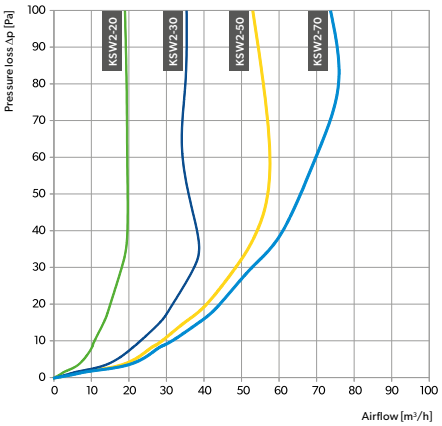


KSW2 x - ML - B

- B – colour
- ML – painted version
- x – airflow limit (20, 30, 50, 70)
- KSW2 – draught stabilizer with cassette

Airflow charts:

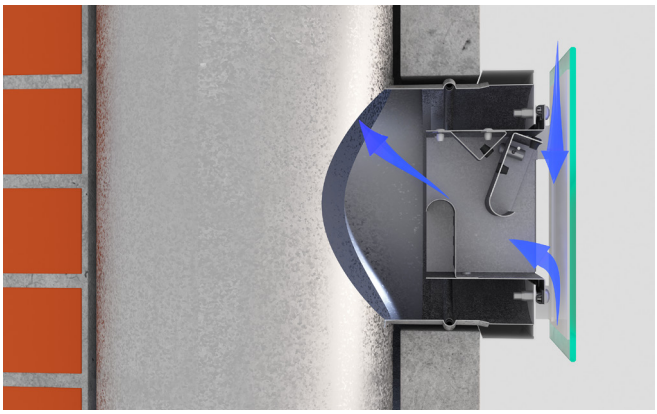




Pressure loss chart for draught stabilizers in a function of the airflow coming through it.

DRAUGHT STABILIZER WITH DECORATIVE COVER CSW





Stabiler CSW is designed to limit the discharge of internal air in ventilation and air-conditioning systems in residential, community and public buildings. CSW Draught Stabilizers are devices that combine functionality with modern design. This type of stabilzer allows easy mounting of one of several aesthetical wall panels and fronts, that will correspond nicely with every interior.
Wall panels are mounted to the Stabiler with screws (included in set) while removable, decorative fronts are to be hanged on the panel.

CSW1 - ... - a

- a – cover type
- ... – airflow limit (20, 30, 50, 70, 90)
- CSW1 – draught stabilizer with decorative cover type 1

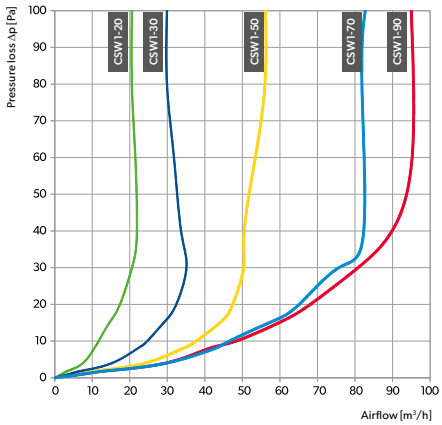
CSW2 - ... - a

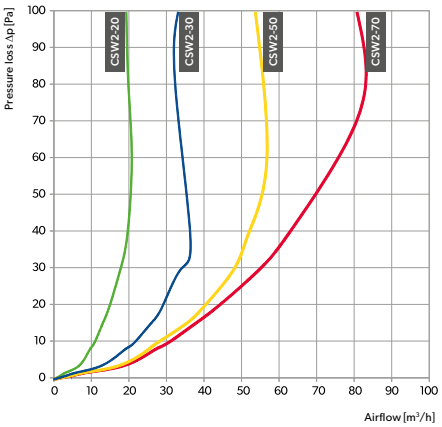
- a – cover type
- ... – airflow limit (20, 30, 50, 70)
- CSW2 – draught stabilizer with decorative cover type 2

Version	Mounting dimension		Airflow [m³/h] for Δp = 10 Pa				
	square ceramic duct [mm]	round steel duct [mm]	20	30	50	70	90
CSW1-...	140x210	≤ ø 140	x	x	x	x	x
CSW2-...	140x140	≤ ø 140	x	x	x	x	

Destination	W	W	W	W	W - ventilation
Flap valve version	STYL-1-ML.CZ	-	-	-	STYL-1-ML.CZ - mild steel powder painted (black)
	STYL-1-ML.B	-	-	-	STYL-1-ML.B - mild steel powder painted (white)
	STYL-3-ML.CZ	-	-	-	STYL-3-ML.CZ - mild steel powder painted (black)
	STYL-3-ML.B	-	-	-	STYL-3-ML.B - mild steel powder painted (white)
	-	SZ	-	-	SZ - white glass
	-	-	Z-CH	-	Z-CH -form of blinds -chrome-nickel steel
	-	-	-	G	G - prepared for plastering

Airflow charts:





Pressure loss chart for draught stabilizers in a function of the airflow coming through it.

STABILIZERS - TYPES:

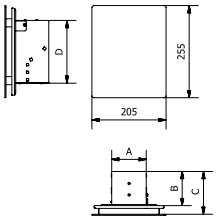
1. Stabilizer CSW1...-STYL-1- ML. ...



CSW1...-STYL-1- ML.CZ



CSW1...-STYL-1- ML.B



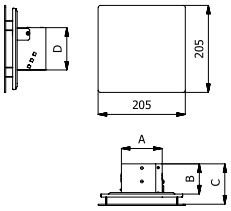
2. Stabilizer CSW2...-STYL-1- ML. ...



CSW2...-STYL-1- ML.CZ



CSW2...-STYL-1- ML.B



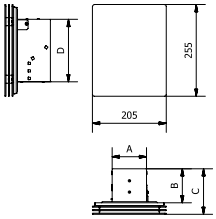
3. Stabilizer CSW1...-STYL-3- ML. ...



CSW1...-STYL-3- ML.CZ



CSW1...-STYL-3- ML.B



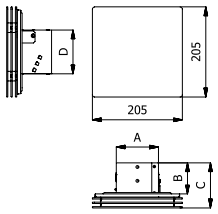
4. Stabilizer CSW2...-STYL-3- ML. ...



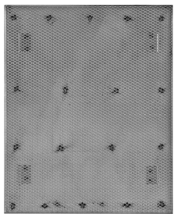
CSW2...-STYL-3- ML.CZ

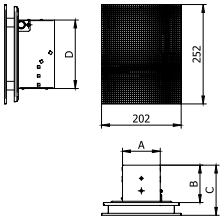


CSW2...-STYL-3- ML.B

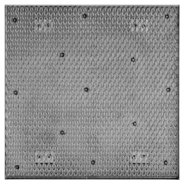


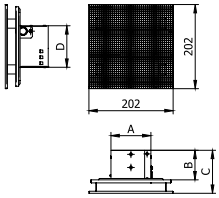
5. Stabilizer CSW1-...-G





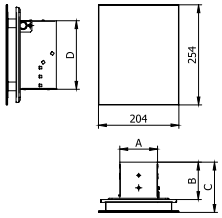
6. Stabilizer CSW2-...-G





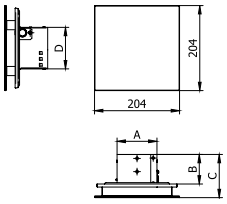
7. Stabilizer CSW1-...-SZ





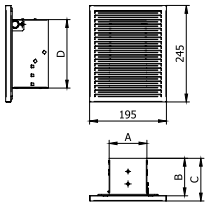
8. Stabilizer CSW2-...-SZ





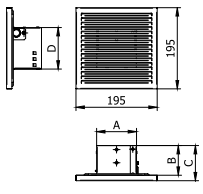
9. Stabilizer CSW1-...-Z-CH





10. Stabilizer CSW2-...-Z-CH



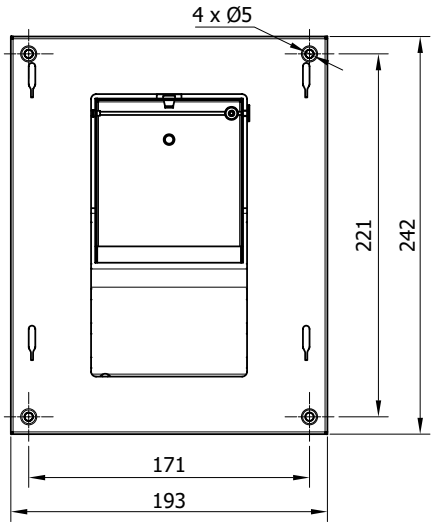


Measurements:

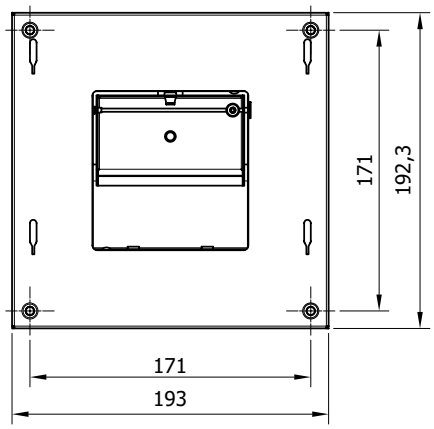
No	Version	A	B	C	D
1	CSW1-90-STYL-1-ML. ...	96	95	122	174
2	CSW1-70-STYL-1-ML. ...	96	95	122	174
3	CSW1-50-STYL-1-ML. ...	96	95	122	174
4	CSW1-30-STYL-1-ML. ...	70	70	97	174
5	CSW1-20-STYL-1-ML. ...	35	70	97	174
6	CSW1-90-STYL-3-ML. ...	96	95	127	174
7	CSW1-70-STYL-3-ML. ...	96	95	127	174
8	CSW1-50-STYL-3-ML. ...	96	95	127	174
9	CSW1-30-STYL-3-ML. ...	70	70	102	174
10	CSW1-20-STYL-3-ML-...	35	70	102	174
11	CSW1-90-G	96	95	127	174
12	CSW1-70-G	96	95	127	174
13	CSW1-50-G	96	95	127	174
14	CSW1-30-G	70	70	103	174
15	CSW1-20-G	35	70	103	174
16	CSW1-90-SZ	96	95	128	174
17	CSW1-70-SZ	96	95	128	174
18	CSW1-50-SZ	96	95	128	174
19	CSW1-30-SZ	70	70	103	174
20	CSW1-20-SZ	35	70	103	174
21	CSW1-90-Z-CH	96	95	108	174
22	CSW1-70-Z-CH	96	95	108	174
23	CSW1-50-Z-CH	96	95	108	174
24	CSW1-30-Z-CH	70	71	84	174
25	CSW1-20-Z-CH	35	71	84	174

No	Version	A	B	C	D
1	CSW2-70-STYL-1-ML. ...	96	71	98	100
2	CSW2-50-STYL-1-ML. ...	96	71	98	100
3	CSW2-30-STYL-1-ML. ...	70	70	97	102
4	CSW2-20-STYL-1-ML. ...	35	70	97	102
5	CSW2-70-STYL-3-ML. ...	96	71	103	100
6	CSW2-50-STYL-3-ML. ...	96	71	103	100
7	CSW2-30-STYL-3-ML. ...	70	70	102	102
8	CSW2-20-STYL-3-ML. ...	35	70	102	102
9	CSW2-70-G	96	71	103	100
10	CSW2-50-G	96	71	103	100
11	CSW2-30-G	70	70	103	102
12	CSW2-20-G	35	70	103	102
13	CSW2-70-SZ	96	71	104	100
14	CSW2-50-SZ	96	71	104	100
15	CSW2-30-SZ	70	70	104	102
16	CSW2-20-SZ	35	70	104	102
17	CSW2-70-Z-CH	96	71	84	100
18	CSW2-50-Z-CH	96	71	84	100
19	CSW2-30-Z-CH	70	71	84	102
20	CSW2-20-Z-CH	35	71	84	102

Mounting hole spacing:



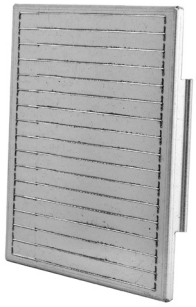
CSW1

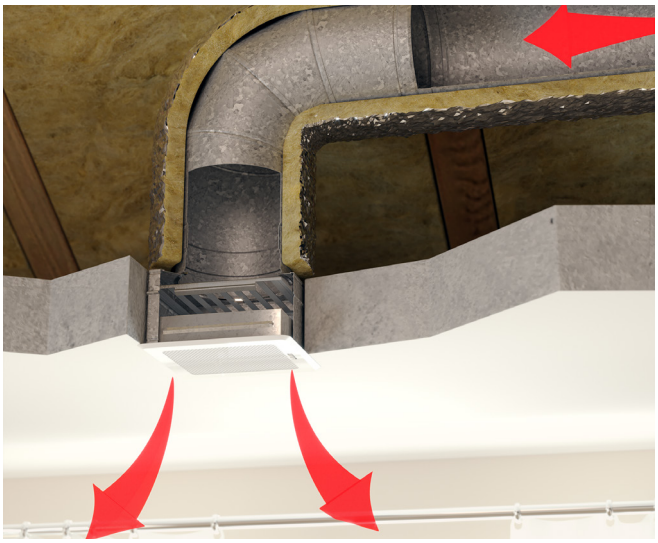


CSW2

invent. build. enjoy.

KY-TYPE FLANGE (RECTANGULAR)



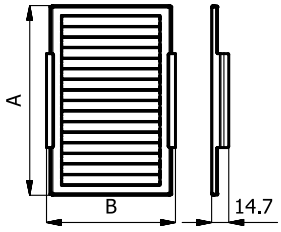


KY-type flanges in Hot Air Distribution System are used to adjust the amount of air supplied to the rooms. They are to be mounted in frames of shield grates (rectangular flanges) or inside inlet cassettes (round flanges). Adjustment is done by breaking off proper amount of shutters. Thanks to this it is possible to balance the airflow coming to all rooms.

KY x OC

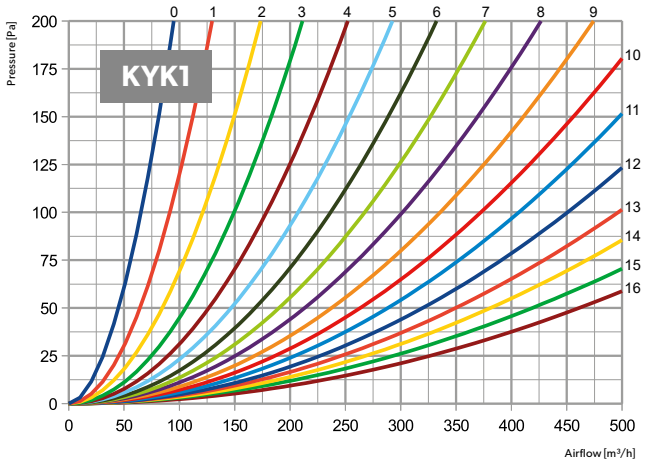
- material
- dimension e.g.: KYK3
- KY-type flange

Destination	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet



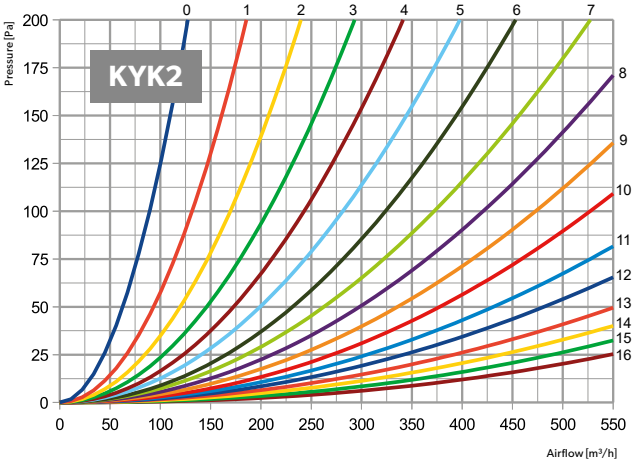
Type	A [mm]	B [mm]	Weight [kg]
KYK1	161.8	109.8	0.13
KYK2	161.0	143.3	0.16
KYK3	214.4	143.6	0.20

Airflow charts:



Pressure loss chart for KYK1 in a function of the airflow coming through it.

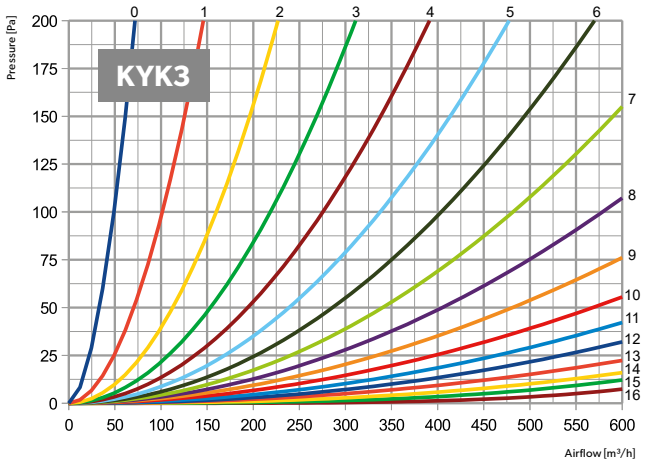
* 0...16 - amount of shutters broken off



Pressure loss chart for KYK2 in a function of the airflow coming through it.

* 0...16 - amount of shutters broken off

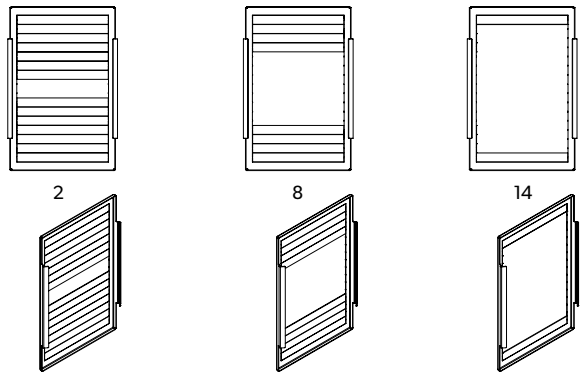
invent. build. enjoy.



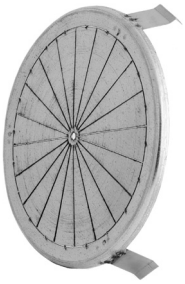
Pressure loss chart for KYK3 in a function of the airflow coming through it.

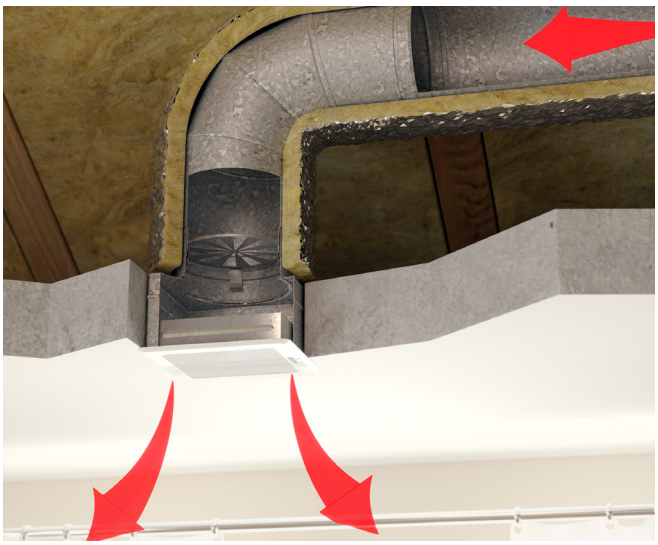
* 0...16 - amount of shutters broken off

Example for shutters broken off 2, 8 and 14:



KY-TYPE FLANGE (ROUND)





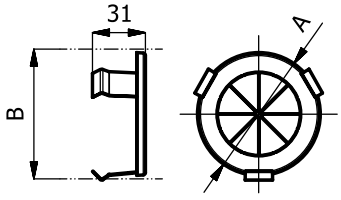
KY-type flanges in Hot Air Distribution System are used to adjust the amount of air supplied to the rooms. They are to be mounted in frames of shield grates (rectangular flanges) or inside inlet cassettes (round flanges). Adjustment is done by breaking off proper amount of shutters. Thanks to this it is possible to balance the airflow coming to all rooms.

Destination	-	O	O - air heating
Material	OC	OC	OC - galvanised steel sheet

KY x OC

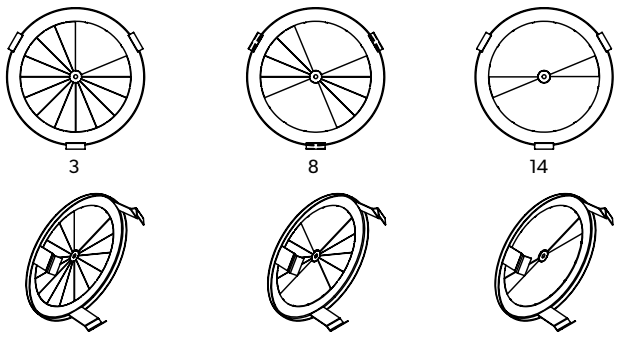
- material
- inlet cassette diameter
- KY-type flange

Dimensions:



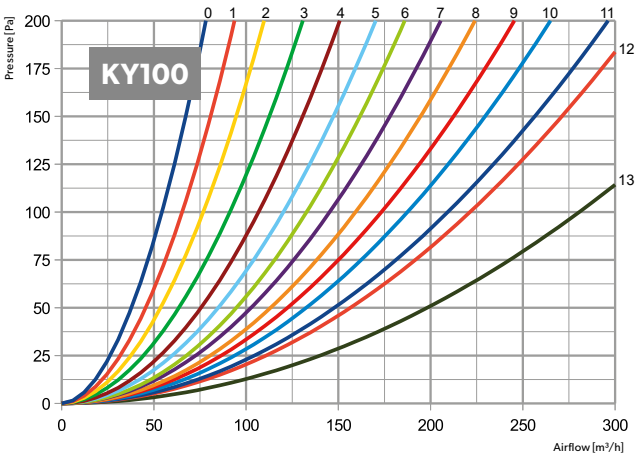
Type	A [mm]	B [mm]	Weight [kg]
KY100	ø92	ø96	0.05
KY110	ø102	ø106	0.06
KY125	ø117	ø121	0.07
KY130	ø120	ø126	0.07
KY140	ø125	ø134	0.08
KY150	ø138	ø140	0.10

Example for shutters broken off 3, 8 and 14:



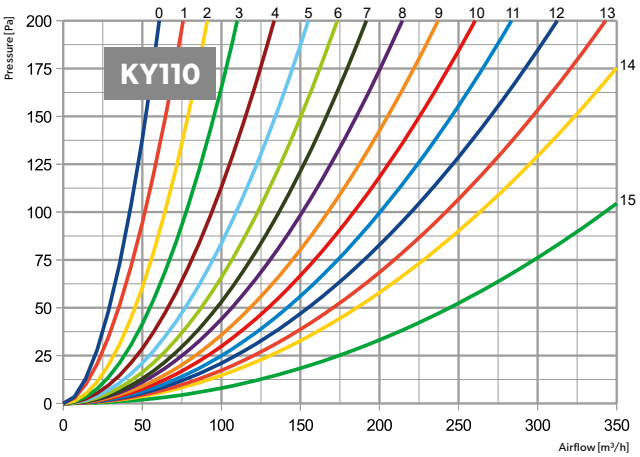
invent. build. enjoy.

Airflow charts:



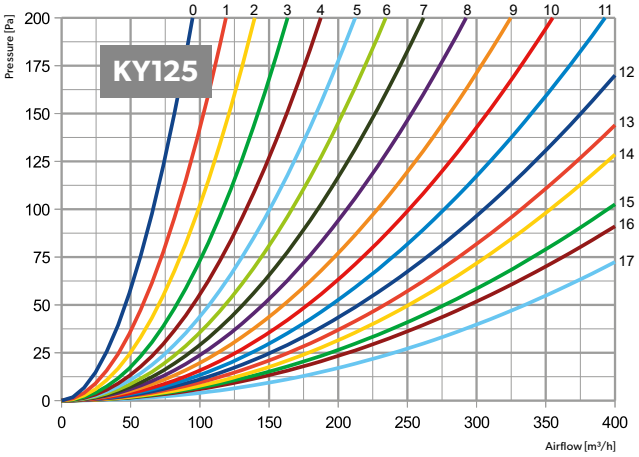
Pressure loss chart for KY100 in a function of the airflow coming through it.

* 0...12 - amount of shutters broken off, 13 - no flange



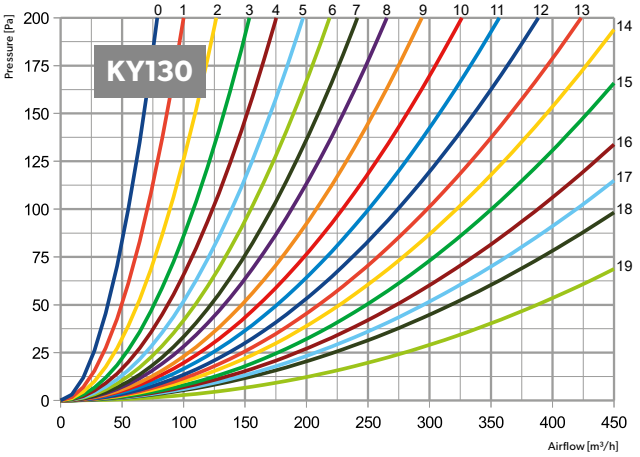
Pressure loss chart for KY110 in a function of the airflow coming through it.

* 0...14 - amount of shutters broken off, 15 - no flange



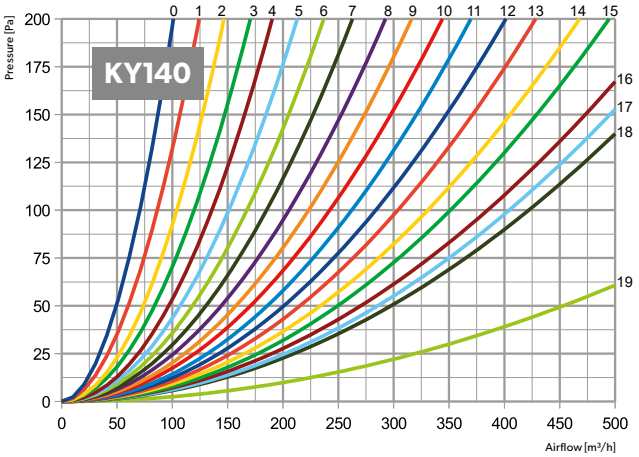
Pressure loss chart for KY125 in a function of the airflow coming through it.

* 0...16 - amount of shutters broken off, 17 - no flange



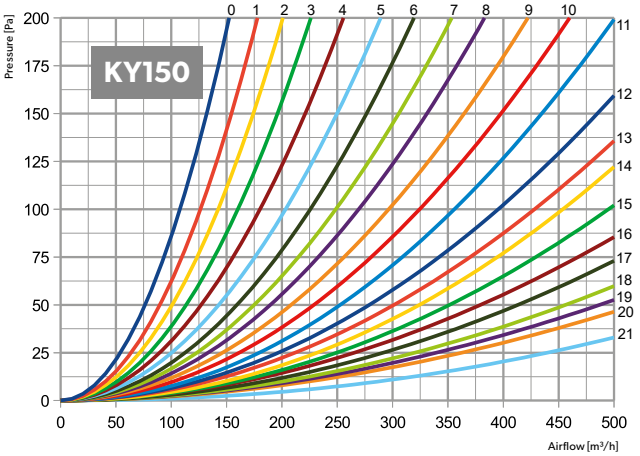
Pressure loss chart for KY130 in a function of the airflow coming through it.

* 0...18 - amount of shutters broken off, 19 - no flange



Pressure loss chart for KY140 in a function of the airflow coming through it.

* 0...18 - amount of shutters broken off, 19 - no flange



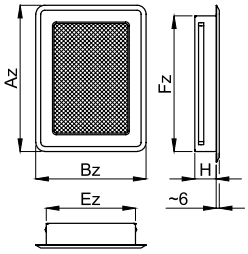
Pressure loss chart for KY150 in a function of the airflow coming through it.

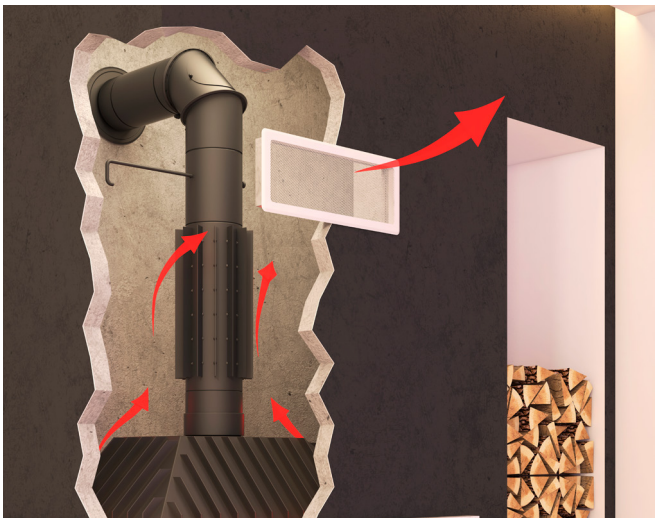
* 0...20 - amount of shutters broken off, 21 - no flange

invent. build. enjoy.

SHIELD GRATES LIGHT







KRL x - a - b

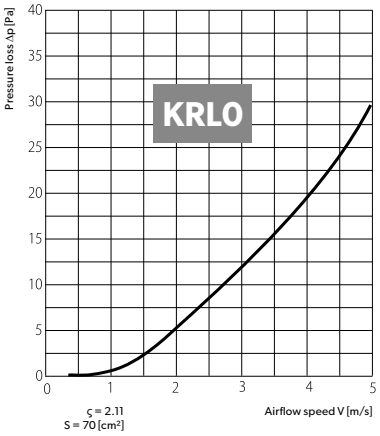
- face color
- face material
- type
- shield grate Light

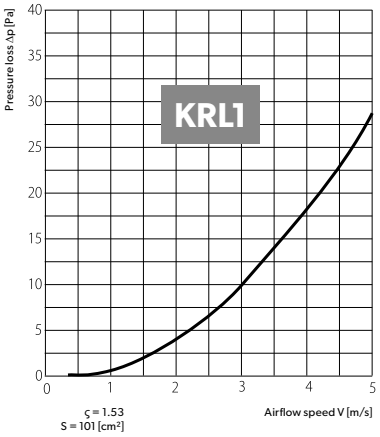
Measurements:

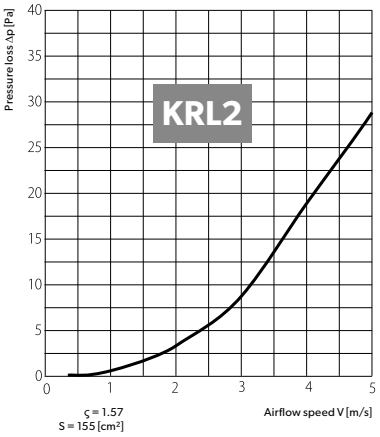
No	Type	Dimensions [mm]					Cross-section [cm²]	Weight [kg]
		Az	Bz	Fz	Ez	H		
1	KRL0	205	65	185	45	36	42	0.15
2	KRL1	195	135	165	105	36	64	0.35
3	KRL14	175	175	140	140	36	84	0.38
4	KRL2	195	175	165	140	36	98	0.40
5	KRL3	245	175	215	140	36	134	0.50
6	KRL4	335	195	300	165	36	234	0.70
7	KRL5	485	195	455	165	36	359	1.20

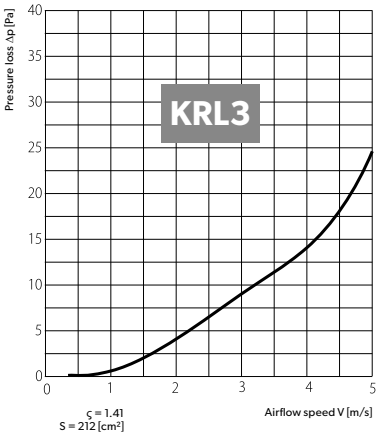
Destination	W	W	W - ventilation	Face material	
	O	O	O - air heating		
Face material	ML	-	ML - mild steel powder coated	B	white
				KR	beige
				GR	graphite / 7024
				CZ	black
Frame material	OC	OC	OC - galvanised steel sheet	-	-

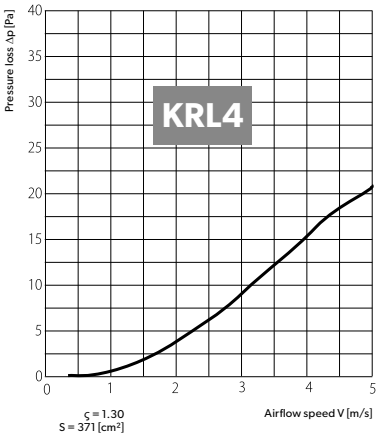
Airflow charts:

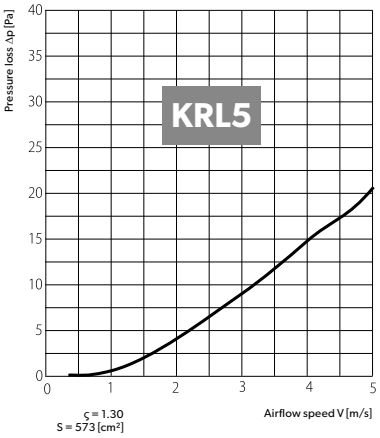








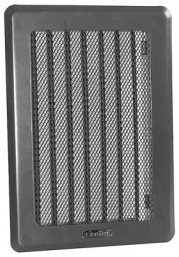


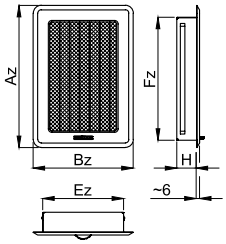


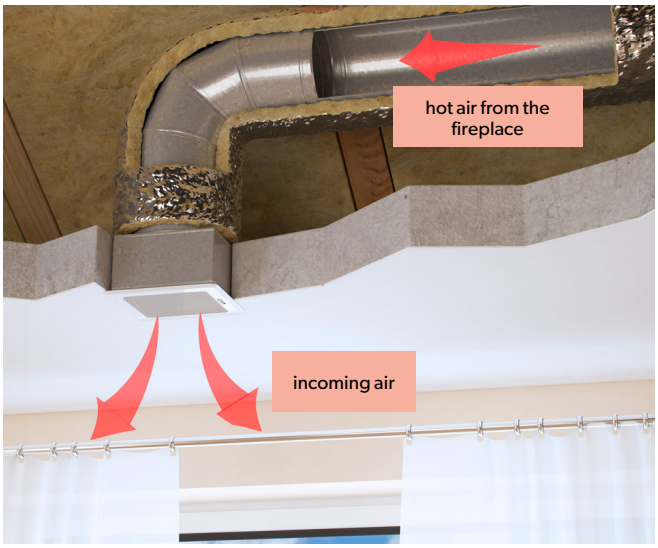
ç - pressure loss ratio

S - opening area

SHIELD GRATES WITH SHUTTER LIGHT







KRL z x - a - b

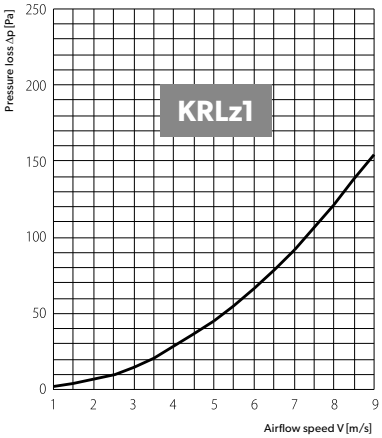
- face color
- face material
- type
- shutter
- shield grates LIGHT

Measurements:

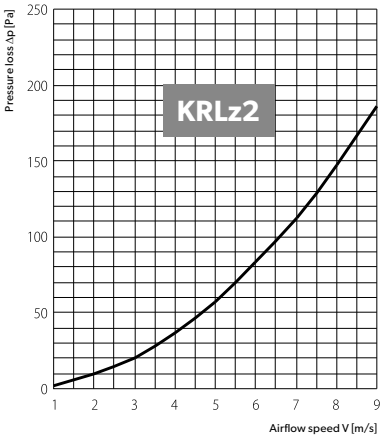
No	Type	Dimensions [mm]					Cross-section [cm²]	Weight [kg]
		Az	Bz	Fz	Ez	H		
1	KRLz1	195	135	165	105	36	64	0.40
2	KRLz14	175	175	140	140	36	84	0.48
3	KRLz2	195	175	165	140	36	98	0.50
4	KRLz3	245	175	215	140	36	134	0.70
5	KRLz4	195	335	300	165	36	234	0.95
6	KRLz5	195	485	455	165	36	359	1.40

				Face material	
Destination	W	W	W - ventilation		
	O	O	O - air heating		
Face material	ML	-	ML - mild steel powder coated	B	white
				KR	beige
				GR	graphite / 7024
				CZ	black
Frame material	OC	OC	OC - galvanised steel sheet	-	-

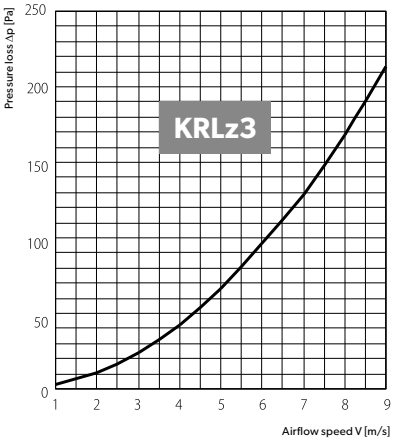
Airflow charts:



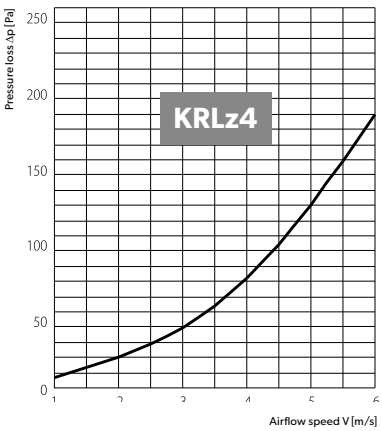
Pressure loss chart for the KRLz1 shield grate in a function of the airflow speed coming through its face.



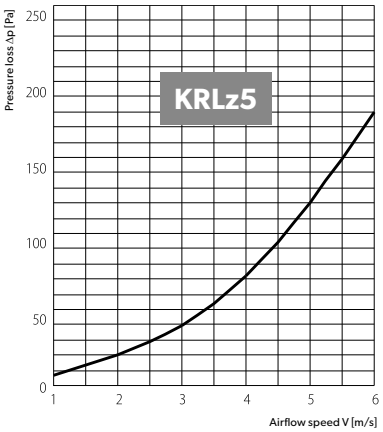
Pressure loss chart for the KRLz14 and KRLz2 shield grate in a function of the airflow speed coming through its face.



Pressure loss chart for the KRLz3 shield grate in a function of the airflow speed coming through its face.



Pressure loss chart for the KRLz4 shield grate in a function of the airflow speed coming through its face.



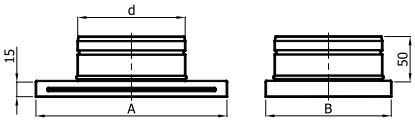
Pressure loss chart for the KRLz5 shield grate in a function of the airflow speed coming through its face.

invent. build. enjoy.

1. STRAIGHT INLET CASSETTE KDP



Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro" range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.20	0.23	0.25	0.35	0.55	0.60



KDP - x / d - a

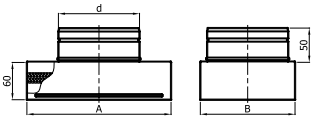
- a – material
- d – "spiro" diameter
- x – grate type
- KDP – straight inlet cassette

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

2. STRAIGHT INLET CASSETTE WITH FILTER KDP/FW



Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro" range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.40	0.45	0.50	0.70	0.80	0.95



KDP - x / d / FW - a

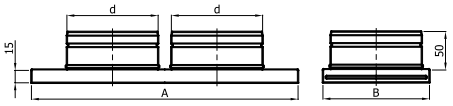
- a – material
- FW – fibre filter
- d – "spiro" diameter
- x – grate type
- KDP – straight inlet cassette

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. STRAIGHT DOUBLE INLET CASSETTE KDP



Grate type	K4-Kz4	K5-Kz5
A	301	456
B	166	166
d „spiro" range	100-125	100-150
Weight [kg]	0.63	0.68

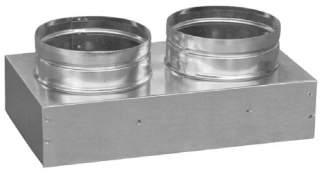


KDP - x / 2xd - a

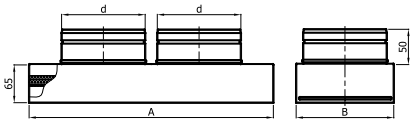
- a – material
- d – "spiro" diameter
- x – grate type
- KDP – straight inlet cassette

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

4. STRAIGHT DOUBLE INLET CASSETTE WITH FILTER KDP/FW



Grate type	K4-Kz4	K5-Kz5
A	301	456
B	166	166
d „spiro" range	100-125	100-150
Weight [kg]	0.63	0.68



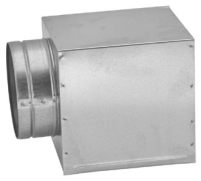
KDP - x / 2xd / FW - a

- a – material
- FW – fibre filter
- d – "spiro" diameter
- x – grate type
- KDP – straight inlet cassette

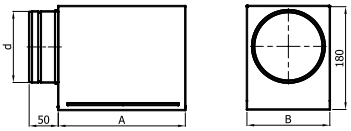
Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

invent. build. enjoy.

5. LATERAL INLET CASSETTE KDB



Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro" range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.50	0.60	0.70	0.85	1.15	1.50

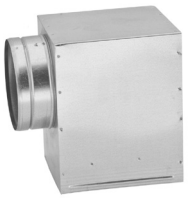


KDB - x / d - a

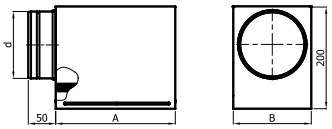
- material
- "spiro" diameter
- grate type
- lateral inlet cassette

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

6. LATERAL INLET CASSETTE WITH FILTER KDB/FW



Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	166	141	166	216	301	456
B	106	141	141	141	166	166
d „spiro" range	100-110	100-125	100-150	100-150	100-150	100-150
Weight [kg]	0.55	0.65	0.75	0.90	1.20	1.60

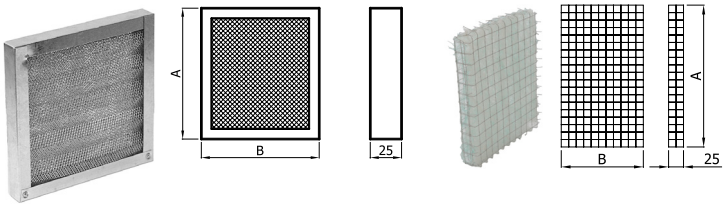


KDB - x / d / FW - a

- material
- fibre filter
- "spiro" diameter
- grate type
- lateral inlet cassette with filter

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

7. METAL FILTER TO INLET CASSETTES FM, FW



FM a

- type
- metal filter

FW a

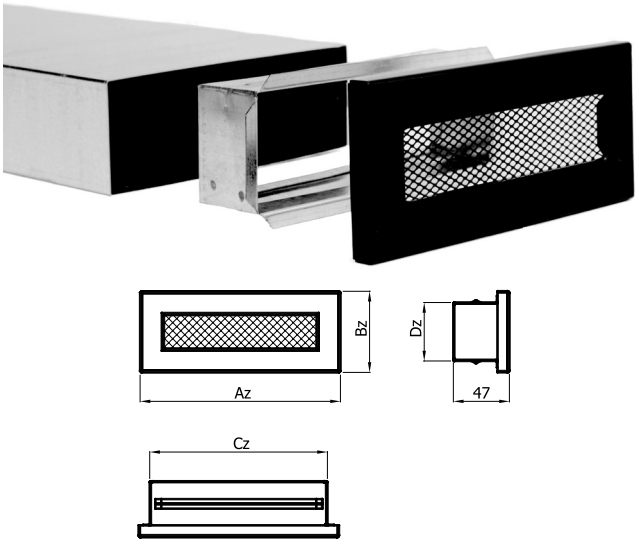
- type
- fibre filter

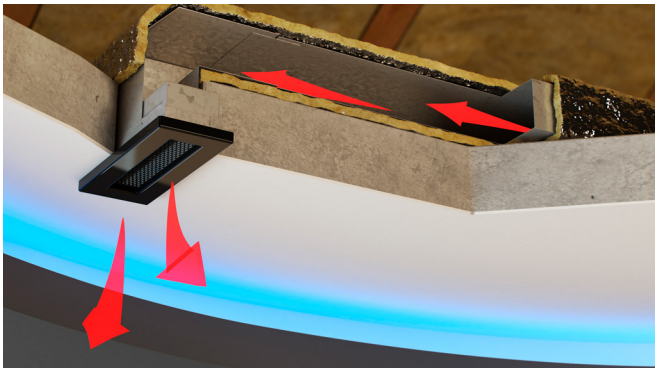
Grate type	K1-Kz1	K14-Kz14	K2-Kz2	K3-Kz3	K4-Kz4	K5-Kz5
A	162	137	162	212	297	452
B	102	137	137	137	162	162
Weight FM [kg]	0.45	0.50	0.55	0.80	0.90	1.20
Weight FM [kg]	0.10	0.10	0.10	0.12	0.15	0.20

Destination	W	W	W - ventilation
	O	O	O - air heating
Material FM	M	-	M - metal
Material FW	-	W	W - fibre

FW - working temperature up to 120°C

SHIELD GRATES FOR ENDING OF VENTILATION AND HOT AIR DSTRIBUTION RECTANGULAR DUCTS





KRKP x - a - b

- face color
- face material
- duct dimensions
- rectangular ducts ending grate

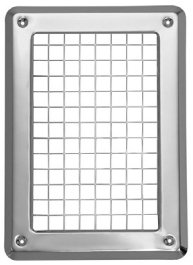
Measurements:

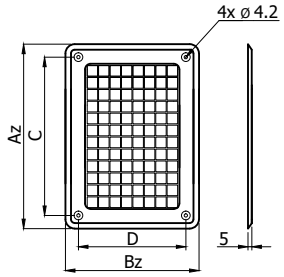
Type	Face outer dimensions Az x Bz	Cz	Dz	Cross-section [cm²]	Weight [kg]
KRKP 150x50	168 x 68	149	49	36	0.30
KRKP 200x50	218 x 68	199	49	66	0.38
KRKP 200x90	218 x 108	199	89	121	0.44
KRKP 250x50	268 x 68	249	49	83	0.44

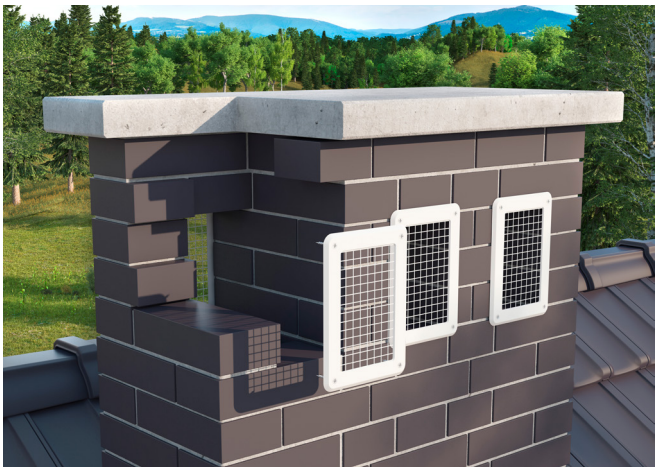
				Face material	
Destination	W	W	W - ventilation		
	O	O	O - air heating		
Face material	ML	-	ML - mild steel powder coated	B	white
				CZ	black
				KR	beige
				GR	graphite / 7024
Frame material	OC	OC	OC - galvanised steel sheet	-	-

invent. build. enjoy.

CHIMNEY LATERAL OUTLETS SHIELD GRATES







K x k - a - b

- face color
- face material
- chimney lateral outlets shield grate
- grate type
- shield grate

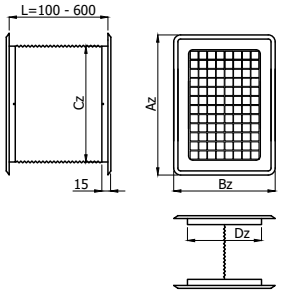
Measurements:

Type	Dimensions [mm]			Cross-section [cm²]	Weight [kg]
	Face outer dimensions Bz x Az	C	D		
K1k	135 x 195	159	99	84	0.08
K14k	175 x 175	139	139	100	0.09
K2k	175 x 195	159	139	141	0.10
K3k	175 x 245	209	139	204	0.12

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES







K x k s - a - b

- face color
- face material
- mounting with springs
- chimney lateral outlets shield grate
- grate type
- shield grate

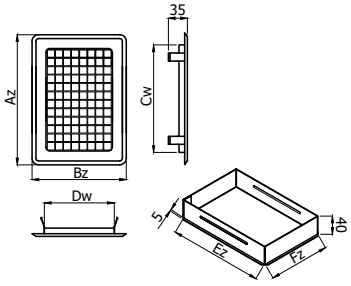
Measurements:

Type	Dimensions [mm]			Cross-section [cm²]	Weight [kg]
	Face outer dimensions Bz x Az	Cz	Dz		
K1ks	135 x 195	145	95	84	0.40
K14ks	175 x 175	130	130	100	0.35
K2ks	175 x 195	145	130	141	0.45
K3ks	175 x 245	200	130	204	0.50

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES WITH MOUNTING FRAME







K x k r - a - b

- face color
- face material
- version with mounting frame
- chimney lateral outlets shield grate
- grate type
- shield grate

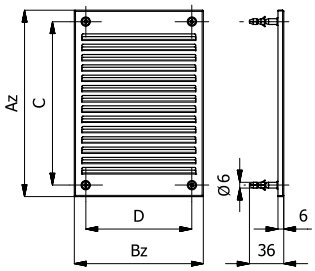
Measurements:

Type	Dimensions [mm]					Cross-section [cm²]	Weight [kg]
	Face outer dimensions Bz x Az	Cw	Dw	Ez	Fz		
K1kr	135 x 195	145	95	165	105	84	0.35
K14kr	175 x 175	130	130	140	140	100	0.38
K2kr	175 x 195	145	130	165	140	141	0.40
K3kr	175 x 245	200	130	215	140	204	0.50

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES KO (SHUTTER)







KO x k - a - b

- face color
- face material
- chimney lateral outlets shield grate
- grate type
- shield grate

Measurements:

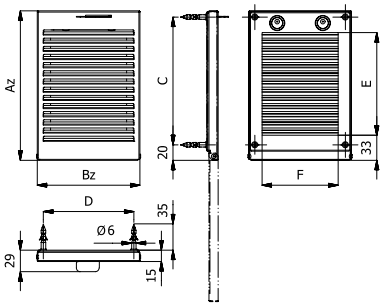
Type	Cross-section [cm²]	Az	Bz	C	D	Weight [kg]
KO1k	82	195	135	171	111	0.08
KO2k	117	195	175	173	151	0.16
KO3k	137	245	175	221	151	0.20

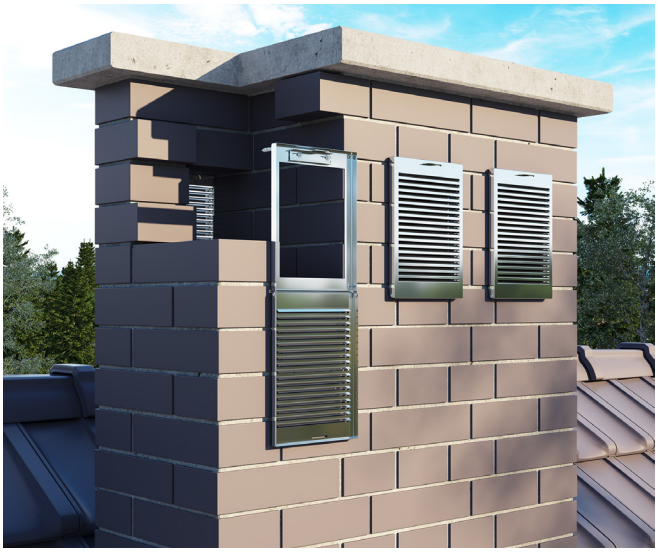
Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-

invent. build. enjoy.

CHIMNEY LATERAL OUTLETS SHIELD GRATES WITH MOUNTING FRAME KO...kr







KO x k r - a - b

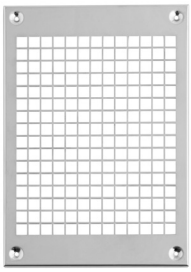
- face color
- face material
- version with mounting frame
- chimney lateral outlets shield grate
- grate type
- shield grate

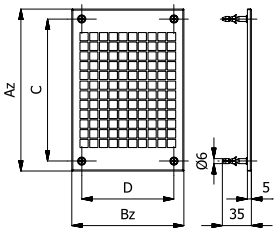
Measurements:

Type	Cross-section [cm²]	Az	Bz	C	D	E	F	Weight [kg]
KO1kr	82	196	135	168	119	135	100	0.24
KO2kr	117	196	175	168	159	135	140	0.29
KO3kr	137	246	175	218	159	185	140	0.34

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATE KB







KB x k - a - b

- face color
- face material
- chimney lateral outlets shield grate
- grate type
- shield grate

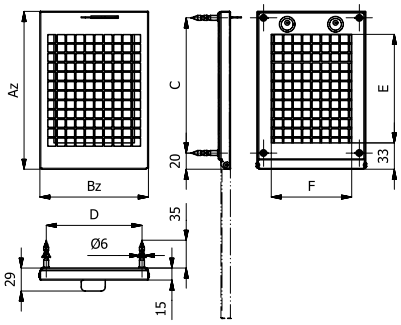
Measurements:

Type	Cross-section [cm²]	Az	Bz	C	D	Weight [kg]
KB1k	120	195	135	171	111	0.08
KB2k	169	195	175	171	151	0.09
KB3k	208	245	175	221	151	0.12

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-

CHIMNEY LATERAL OUTLETS SHIELD GRATES WITH MOUNTING FRAME KB...kr







KB x k r - a - b

- face color
- face material
- version with mounting frame
- chimney lateral outlets shield grate
- grate type
- shield grate

Measurements:

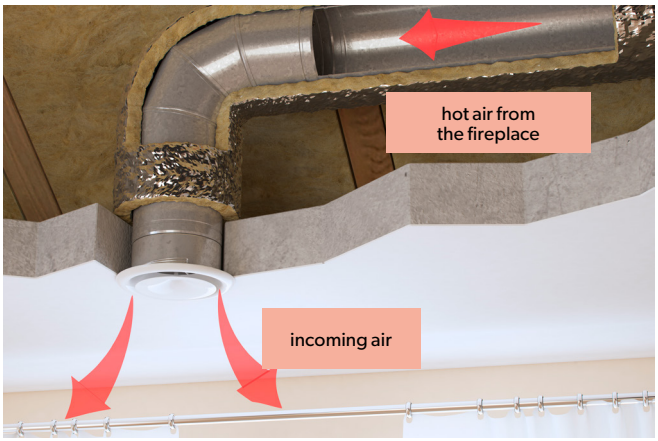
Type	Cross-section [cm²]	Az	Bz	C	D	E	F	Weight [kg]
KB1kr	120	196	135	168	119	135	100	0.19
KB2kr	169	196	175	168	159	135	140	0.22
KB3kr	208	246	175	218	159	185	140	0.25

Destination	W	W	W - ventilation	Face material	
Face material	ML	-	ML - chrome-nickel steel sheet 1.4301 powder coated	GR	graphite / 7024
				CZ	black
				BR	brown / 8017
				CE	brick red / 8004
	-	CH	CH - chrome-nickel steel sheet 1.4301	-	-
Frame material	CH	CH	CH - chrome-nickel steel sheet 1.4301	-	-

invent. build. enjoy.

FLAP VALVE





AS x y - ML

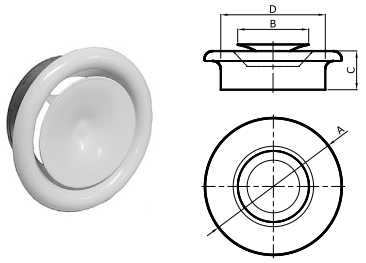
- material
- inlet diameter
- flap valve type (W-exhaust)
- flap valve

Measurements:

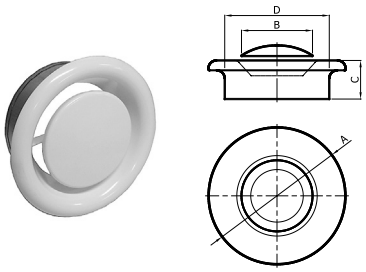
No	Type	Flap valve dimensions[mm]				Mounting frame dimensions [mm]			Channel cross-section [cm²]	Weight [kg]
		A	B	C	D	A	B	C		
1	AS80	115	76	42	77	105	78	50	50	0.23
2	AS100	138	92	40	97	125	98	50	78	0.25
3	AS125	164	111	46	122	150	123	50	122	0.30
4	AS150	202	135	50	147	175	148	50	176	0.44
5	AS160	211	147	54	157	185	158	50	201	0.50
6	AS200	248	194	63	197	225	198	50	314	0.75

Destination	W	W	W - ventilation
	O	O	O - air heating
Fap valve material	-	ML	ML - mild steel powder coated white
Frame material	-	OC	OC - galvanised steel sheet

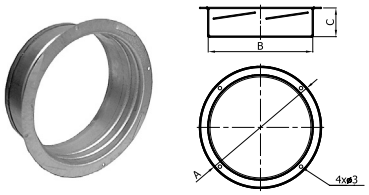
Flap valves are sold with mounting frame in a set.



Air supply flap valve AS

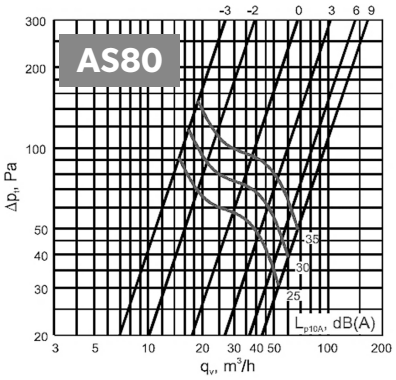


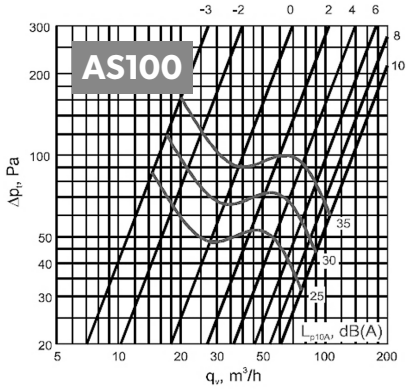
Air exhaust flap valve ASW

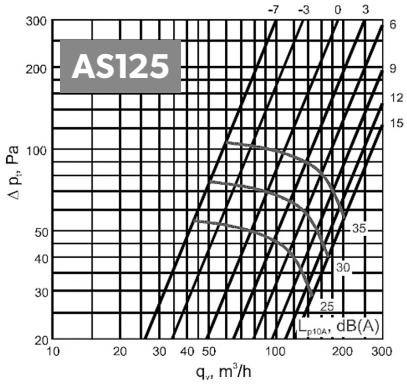


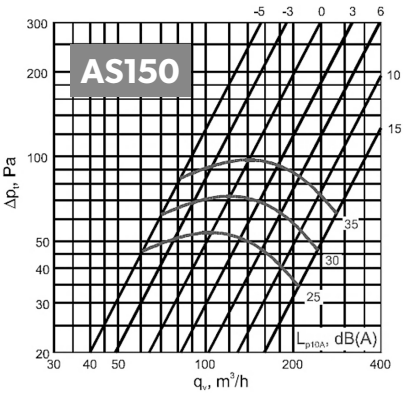
Mounting frame RAN

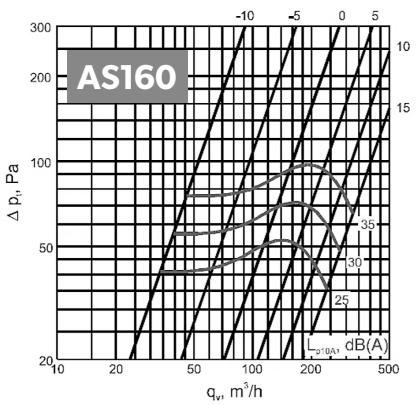
Airflow charts

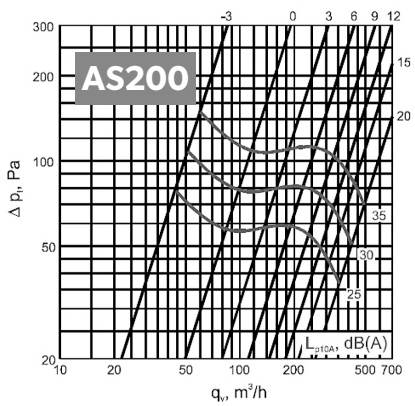












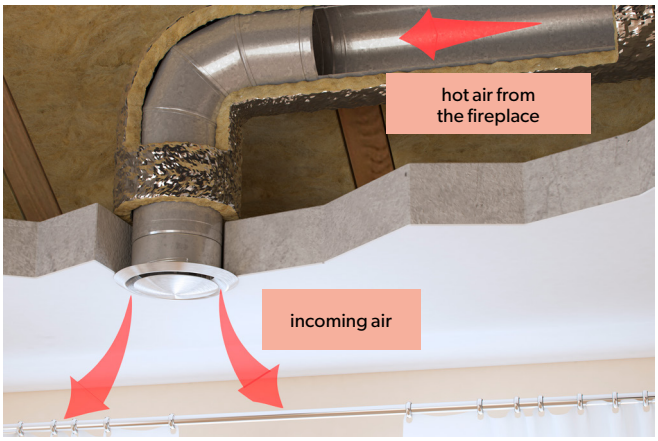
invent. build. enjoy.

CHROME-NICKEL FLAP VALVES



AS y - CH

- material
- inlet diameter
- flap valve

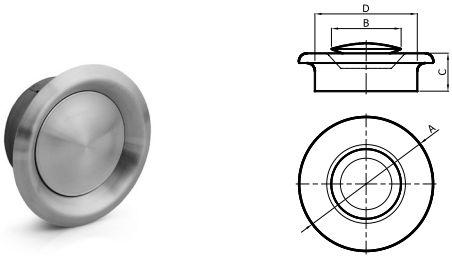


Measurements:

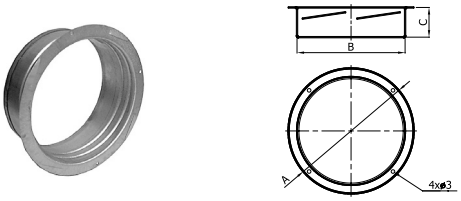
No	Type	Flap valve dimensions[mm]				Mounting frame dimensions [mm]			Channel cross-section [cm²]	Weight [kg]
		A	B	C	D	A	B	C		
1	AS100	142	97	37	105	125	98	50	78	0.20
2	AS125	172	118	42	127	150	123	50	122	0.30
3	AS150	217	142	50	153	175	148	50	176	0.44

Destination	W	W	W - ventilation
	O	O	O - air heating
Fap valve material	CH	-	CH - chrome-nickel steel sheet 1.4301
Frame material	CH	-	CH - chrome-nickel steel sheet 1.4301

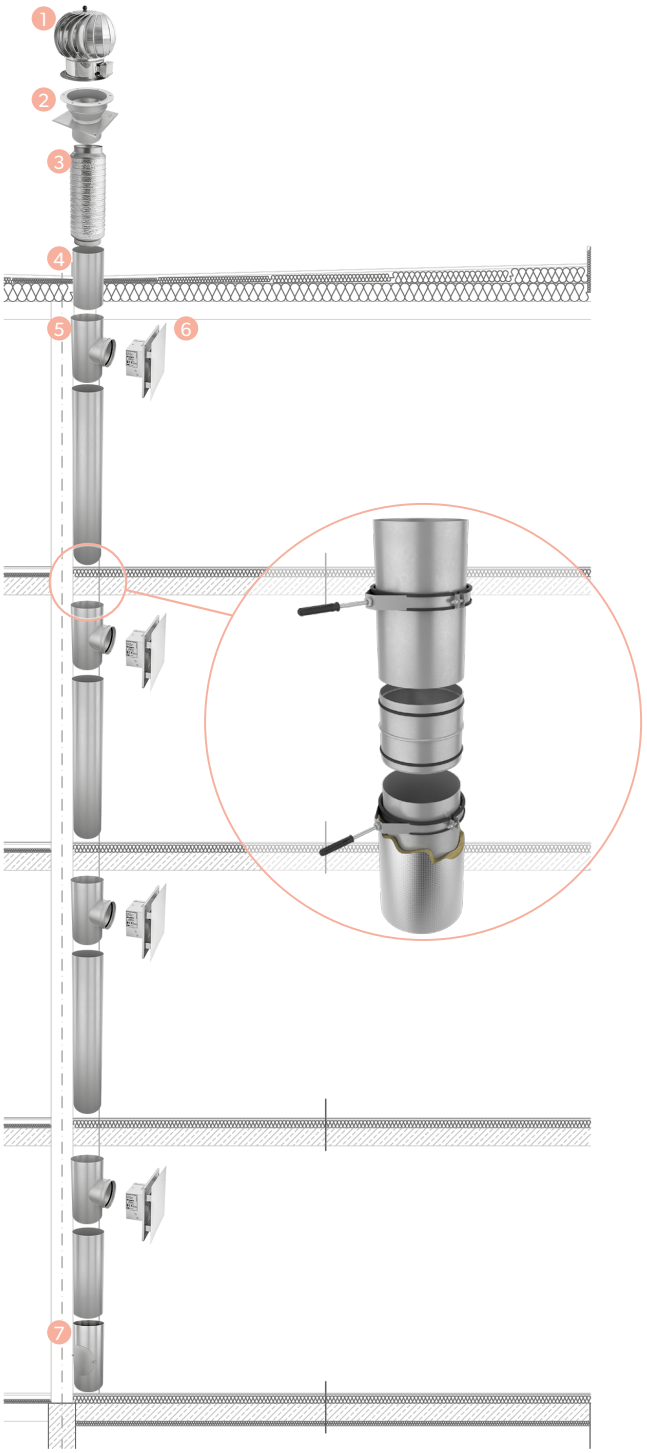
Flap valves are sold with mounting frame in a set.



Flap valve AS-CH



Mounting frame RAN



Building a typical vertical ventilation duct

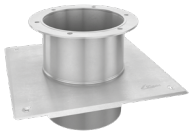
Location	Product	Length [m]
ROOF	Hybrid Turbowent Plus 250 mm	-
	Reducing connecting pipe 250/200	0.20
	Silencer ø 200	0.60
	Pipe ø 200	0.50
THIRD FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.69
SECOND FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.69
FIRST FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.69
GROUND FLOOR	Tee ø 200/150 + Stabilizer CSW2	0.31
	Pipe ø 200	2.06
	Clean out element with bottom ø 200	0.33

Additional elements		
	Male connector Ø 200 with seal	use on connections, one for each pipe element
	Mounting bracket with rubber cover	fixing to the construction every 2 m

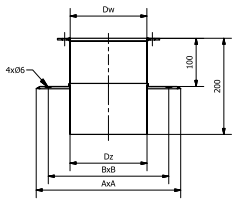
Summary of elements for a vertical sanitary duct in a building with four floors.

No	Elements	Product	Amount [pcs.]
1	Hybrid Turbowent Plus 250 mm	THP250CHAL-BIII	1
2	Reducing connecting pipe 250/200	KPKR250/200-OC	1
3	Silencer ø 200	TLE200/600-OC	1
4	Pipe ø 200	RP200/1000-OC-N	11
5	Tee ø 200/150	TRU200/150-OC-N-U	4
6	Stabilizer CSW2-50	CSW2-50	4
7	Clean out element with bottom ø 200	RPZR200-OC-N	1
8	Male connector ø 200	ZNY200-OC-U	18
9	Mounting bracket	UMO200-U	6

1. CONNECTING PIPE KPK



Dimensions [mm]				
DN	150	200	250	300
Dw	150.6	199.9	250.7	300.0
Dz	151.8	201.1	252.3	301.6
AxA	250 x 250	330 x 330	380 x 380	430 x 430
BxB	208 x 208	284 x 284	330 x 330	380 x 380

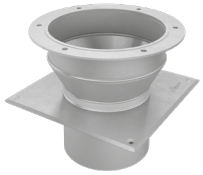


KPK DN - OC - BIII

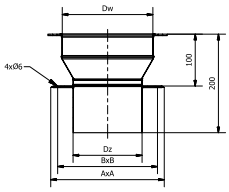
- base version
- material
- diameter
- connecting pipe

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

2. REDUCING CONNECTING PIPE KPKR



Dimensions [mm]:					
DN1/DN2	150/125	200/150	250/200	300/250	350/300
Dw	150.6	199.9	250.7	300	349.3
Dz	126.2	151.8	201.1	252.3	301.6
AxA	250x250	250x250	330x330	380x380	430x430
BxB	208x208	208x208	284x284	330x330	380x380



KPKR DN1/DN2 - OC - BIII

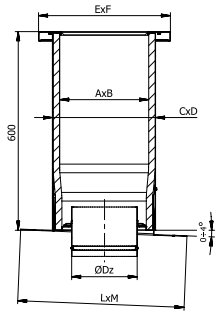
- base version
- material
- diameter
- reducing connecting pipe

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

3. ROOF TOP WQD



Connecting element allows easy and fast connection of a Turbowent chimney cowl with ventilation duct by using a male joint. Collar of chimney cowl and pipe are to be connected with each other with screws. This solution allows easy disassembling of the chimney cowl in case of maintenance.



WQD AxB/DN - OC

- material
- diameter
- roof top

Destination	W	W - ventilation
	O	O - air heating
Material	OC	OC - galvanised steel sheet

Dimensions [mm]							
Diameter DN	150 or 200	150 or 200	200 or 250	200 or 250	250 or 300	300 or 350	350
AxB	220 x 220	220 x 220	270 x 270	270 x 270	320 x 320	360 x 360	410 x 410
CxD	260 x 260	260 x 260	310 x 310	310 x 310	360 x 360	400 x 400	450 x 450
ExF	350 x 350	350 x 350	400 x 400	400 x 400	450 x 450	520 x 520	600 x 600
LxM	450 x 450	450 x 450	500 x 500	500 x 500	550 x 550	600 x 600	680 x 680
Dz	123	148	148	198	248	298	348

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4. SILENCER TE

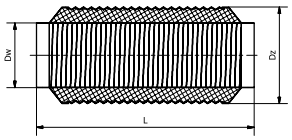


Silencer is a device used to reduce sounds transferred by ventilation ducts. They are placed between ducts and a Turbowent chimney cowl. Inner side of a silencer is made with perforated pipe. Outer side it is protected by covering that is strengthened with steel wire spirally winded. Filling between layers is made with mineral wool insulation of 25 mm thickness. Silencer is ended with metal collars, which are used to connect with elements of the installation by male joints.

TLE DN / L

- L — length
- DN — diameter
- TLE — silencer

Dimensions [mm]					
DN	125	150	200	250	300
Dw	125	150	200	250	300
Dz2	175	200	300	350	400
L	Length 600 or 1200 mm				



DN	L [mm]	Silencing [dB] for frequency [Hz]						
		125	250	500	1000	2000	4000	8000
125	600	2	7	14	21	26	20	12
150		2	5	12	17	24	17	11
200		1	4	10	16	20	14	11
250		1	4	8	14	16	12	10
300		1	3	6	12	13	10	10
125	1200	7	12	23	39	47	32	18
150		4	8	21	37	40	22	14
200		4	8	20	31	32	20	14
250		2	6	15	27	25	15	13
300		2	6	12	17	14	11	10

5. FIRE DAMPER KPPOZ



If different fire zones are determined in the building a necessity of usage of fire dampers may occur. These devices prevent from spreading the fire. Fire damper can be mounted in vertical ventilation duct or in horizontal part of channel, in stabilizer's cassette. Precise guidelines should be described in the construction project consulted with fire protection authorities. Fire damper is offered in two fire resistance classes EIS (60 and 120) in accordance to EN 1366-2. Fire damper should be mounted in opened position. Closing the flap is caused by a thermal releaser that is reacting when temperature rises above 72°C. After closing, flap is mechanically secured in closed position, it can be re-opened only manually (after cooling down). Any further usage is possible only after replacing the thermal releaser.

KPPOZ DN - O

- O — EIS fire resistance
- DN — diameter
- KPPOZ — fire damper

Type	EIS fire resistance	Diameter [mm]	Max. ambient temperature
Fire damper 125 mm EI60S	60	123.5	65°C
Fire damper 125 mm EI120S	120	123.5	65°C

6. BACKFLOW FLAP ZZS

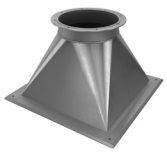


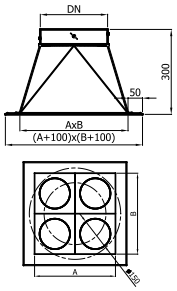
Backflow flap is designed to be mounted in the connection pipe of the kitchen extractor hood (diameter 125 mm). It prevents air and odors from getting into the kitchen from the collective channel. Device is equipped with sleeve which is closed when kitchen hood is off. When it is on - air pumped by ventilator opens it and allows the air to enter the ventilation duct.

ZZS 125

- 125 — backflow flap diameter

7. MULTIPLE DUCT REDUCING BASE (PIPE SYSTEM) PZR-I





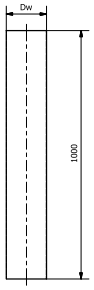
PZR-I AxB / DN - m - BIII

- BIII — type with collar
- m — material
- DN — diameter
- AxB — chimney duct dimensions
- PZR-I — multiple duct reducing base

Material			
	CH	-	CH - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

8. STRAIGHT PIPE (PIPE SYSTEM) RP





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3

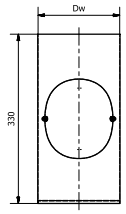
RP DN / 1000 - m - N

- male connection
- material
- length
- diameter
- straight pipe

Material			
	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

9. CLEAN OUT ELEMENT WITH BOTTOM (PIPE SYSTEM) WZD





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3

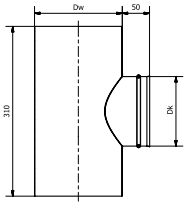
WZD DN - m - N

- male connection
- material
- diameter
- clean out element with bottom

Material			
	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

10. TEE 90 DEGREES WITH SEAL (PIPE SYSTEM) TRU





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3
Dk	127	127	127	127	127	127

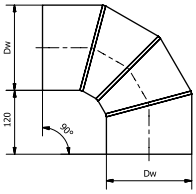
TRU DN / 125 - m - N

- male connection
- material
- outlet diameter
- diameter
- reduction tee

Material			
	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

11. ELBOW 90 DEGREES (PIPE SYSTEM) KS





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3

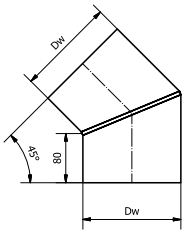
KS DN / 90 - m - N

- male connection
- material
- angle 90°
- diameter
- elbow

Material			
	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

12. ELBOW 45 DEGREES (PIPE SYSTEM) KS





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3

KS DN / 45 - m - N

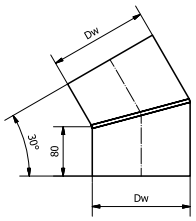
- male connection
- material
- angle 45°
- diameter
- elbow

Material			
	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

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13. ELBOW 30 DEGREES (PIPE SYSTEM) KS





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3

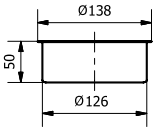
KS DN/30 - m - N

- male connection
- material
- angle 30°
- diameter
- elbow

Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

14. TEE PLUG (PIPE SYSTEM) ZTRU





ZTRU125 - m

- material
- tee plug ZTRU

Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

15. BOWL WITH SEAL (PIPE SYSTEM) MSU





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	125.6	152.8	202.1	253.3	302.6	352.4

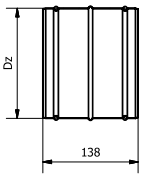
MSU DN - m - N

- male connection
- material
- diameter
- bowl with seal

Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

16. MALE CONNECTOR WITH SEAL (PIPE SYSTEM) ZNU





Dimensions [mm]						
DN	125	150	200	250	300	350
Dz	122.6	149.6	198.9	249.7	299.0	348.3

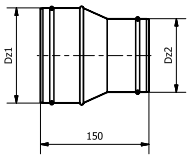
ZNU DN - m

- material
- diameter
- male connector with seal

Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

17. MALE REDUCING CONNECTOR WITH SEAL (PIPE SYSTEM) ZNRU





Dimensions [mm]					
DN1/DN2	150/125	200/150	250/200	300/250	350/300
Dz1	149.6	198.9	249.7	299	348.3
Dz2	122.6	149.6	198.9	249.7	299

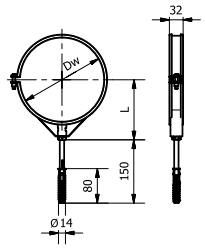
ZNRU DN1/DN2 - m

- material
- diameter
- male reducing connector with seal

Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

18. MOUNTING BRACKET WITH RUBBER COVER (PIPE SYSTEM) UMO





Dimensions [mm]						
DN	125	150	200	250	300	350
Dw	123.6	150.6	199.9	250.7	300.0	349.3
L	103.8	117.3	141.9	167.3	192.0	216.6

UMO DN - U

- seal
- diameter
- mounting bracket

Material	X	X - chrome-nickel steel sheet 1.4301

For mounting to following surfaces:

- concrete C220/25 class
- full ceramic brick class 15
- full silicate brick class 15
- ceramic construction brick (f.e. Porotherm) class 15

19. ADHESIVE WOOL STRIP WITH ALUMINUM FOIL



WELNA-KLIMAFIX - x

- thickness
- adhesive wool

Length	Width	thickness	Amount of m² in one pack
10.000	1.000	20	10
8.000	1.000	30	8
6.000	1.000	40	6
5.000	1.000	50	5

20. ALUMINUM TAPE 150°C



TA 50x l / 150

- max working temperature
- roll length
- width
- aluminum tape

Width [mm]	5.00	
Roll length [m]	10	50

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Round pipes and fittings - OC (galvanized) products made entirely of galvanized steel sheet are used for building ducts in natural and mechanical ventilation systems, air heating as well as air conditioning installations.
Maximum working temperature: 250°C.

Round pipes and fittings made of chrome-nickel steel sheet (type 1.4301 according to DIN17441) are used for building ducts in natural and mechanical ventilation systems, air heating as well as air conditioning installations.
Maximum working temperature: 250°C.

Application of chimneys and recommended sheet thicknesses

DiameterDN	W OC	W 1.4301
80	0.5	0.5
100	0.5	0.5
110	0.5	0.5
120	0.5	0.5
125	0.5	0.5
130	0.5	0.5
140	0.5	0.6
150	0.5	0.6
160	0.5	0.6
180	0.5	0.6
200	0.5	0.6
225	0.5	0.6
250	0.5	0.8
280	0.5	0.8
300	0.5	0.8
325	0.7	0.8
350	0.7	0.8
400	0.7	1.0
450	0.7	1.0
500	0.7	1.0

Destination:
W - ventilation
P - industrial processes

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	s
80	250	80.1	79.1	81.1	
100	315	100.8	99.8	101.8	
110	350	111.9	110.9	112.9	0.5
120	385	123.0	122.0	124.0	
125	390	124.6	123.6	125.6	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	0.6
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	
250	790	252.3	250.7	253.3	
260	818	261.2	259.6	262.2	
280	880	280.9	279.3	281.9	
300	945	301.6	300.0	302.6	0.8
325	1020	325.5	323.9	327.0	
350	1100	350.9	349.3	352.4	
400	1260	402.1	400.1	403.6	
450	1415	451.4	449.4	452.9	1.0
500	1575	502.3	500.3	503.8	

Sizes:
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]±0.1
Dw - inner diameter of pipe [mm]±0.1
Dk - inner diameter of bell joint of pipe [mm]±0.1
s - metal sheet thickness [mm]

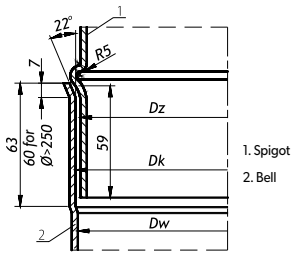
VENTILATION PIPE AND KKO FITTINGS:

Bell joint of the pipe - K

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other press-formed part of the element - a bell. Thanks to this type of joining chimney liner is characterized by very tight and stiff construction. It also assures the proper flow of condensate, along walls of the chimney straight to the condensate drain bowl.

CAUTION!

When placing orders for pipes and fittings, please always give the type of joint to be used. In Darco catalogues and pricelist there are pictures and prices for products with the usage of a bell joint given.

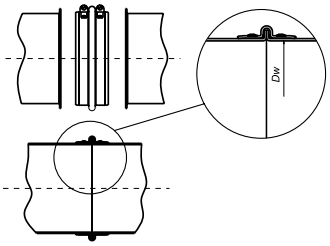


Clamp joint of the pipe - O

Individual elements of the system are being joint by a fastening clamp OPII. Both ends of pipe elements are flanged 5 mm to the outside. After putting two elements together and securing them with a fastening clamp a tight and rigid connection is achieved.

CAUTION!

When placing orders for pipes and fittings, please always give the type of joint to be used. In Darco catalogues and pricelist there are pictures and prices for products with the usage of a bell joint given.

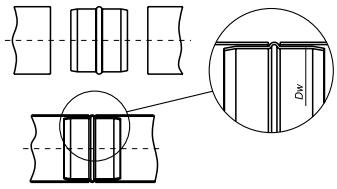


Spigot type joint of the pipe - N

Individual elements of the system are being joint by a special type of inner connector - a spigot. In this system both ends of pipe elements are even, without any bells, blocking rolls or prefabricated endings. This type of pipe joining allows getting rigid connection as well as gives possibility of cutting the pipe elements to size. It is necessary to secure the connection against accidental disconnecting (for example by securing it by screws or rivets).

CAUTION!

When placing orders for pipes and fittings, please always give the type of joint to be used. In Darco catalogues and pricelist there are pictures and prices for products with the usage of a bell joint given.



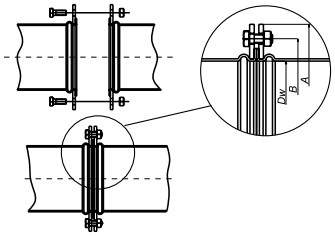
PIPES AND FITTINGS USED IN INDUSTRIAL PROCESSES:

Collar type joint of the pipe - KL

Individual elements of the system are being joint by use of collars according to PN-EN-12220, which are fixed together with screws. With the usage of collar type joint a very rigid and secure connection is achieved. To maintain tightness, usage of special sealant (appropriate to the fluid flowing in the pipelines) between collars is recommended.

CAUTION!

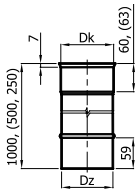
Elements quoted upon individual order. Manufacturer does not supply screws and seals.



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1. STRAIGHT PIPE RP





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Dz	80.2	100.9	112.1	123.2	124.8	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.4	350.9	401.9	451.2	502.2	for s=0.6
Dk	81.2	101.9	113.1	124.2	125.8	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.4	351.9	402.9	452.2	503.2	
Weight [kg]	1.00	1.25	1.42	1.55	1.60	1.67	1.75	1.92	2.00	2.30	2.50	2.85	3.17	3.80	4.45	5.04	5.70	6.30	

RP x / L - m s - k

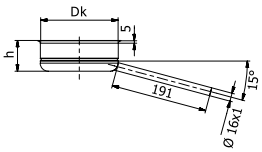
- joint type
- sheet thickness
- material
- length [mm]
- diameter DN
- straight pipe

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

2. CONDENSATE DRAIN BOWL MS







Bowl	I											II							
Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Dk [mm]	81	102	113	124	126	134	142	153	162	183	202	228	253	303	353	404	453	504	dla s=0.6
h [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
Weight [kg]	0.17	0.20	0.22	0.24	0.25	0.26	0.27	0.29	0.31	0.36	0.40	0.60	0.70	0.85	1.05	1.35	1.60	1.85	

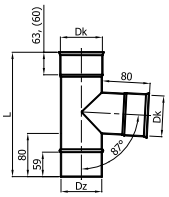
MS x - CH

- material
- diameter DN
- condensate drain bowl

Destination	W	W - ventilation
	S	S - flue ducts
	D	D - smoke ducts
Material	CH	CH - stainless steel 1.4404

3. TEE 90° TR/90





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Dz	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	for s=0.6
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
L[mm]	230	250	270	270	270	280	300	300	310	330	350	380	400	450	500	550	600	650	
Weight [kg]	0.33	0.42	0.50	0.55	0.56	0.58	0.66	0.71	0.79	0.92	1.09	1.29	1.60	2.12	2.70	3.17	3.39	4.85	

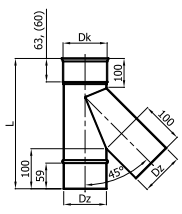
TR x / 90 - m s - k

- joint type
- sheet thickness
- material
- angle 90°
- diameter DN
- tee

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

4. TEE 45° TR/45





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	
Dz	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	for s=0.6
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
L[mm]	315	340	355	375	375	385	390	415	425	455	480	520	550	625	695	765	835	910	
Weight [kg]	0.42	0.55	0.63	0.75	0.77	0.79	0.83	1.00	1.09	1.25	1.45	1.75	2.04	2.75	3.50	4.38	5.30	6.38	

TR x / 45 - m s - k

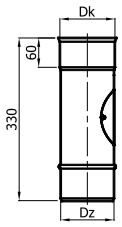
- joint type
- sheet thickness
- material
- angle 45°
- diameter DN
- tee

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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5. STRAIGHT PIPE Z WITH REVISION RPR





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.40	0.50	0.55	0.60	0.62	0.66	0.70	0.75	0.80	0.90	1.00	1.13	1.27	1.52	1.76	2.02	2.27	2.52	

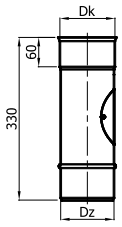
RPR x - m s

- s – sheet thickness
- m – material
- x – diameter DN
- RPR – straight pipe z with revision

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

6. CLEAN OUT ELEMENT WITH BOTTOM





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Dk	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.75	0.83	0.88	0.92	0.92	0.92	0.92	0.96	1.08	1.23	1.27	1.33	1.42	1.63	1.85	2.05	2.25	2.45	

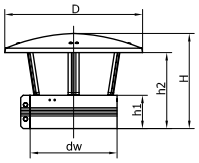
WZD x - m s - k

- k – connecting type
- s – sheet thickness
- m – material
- x – AxB
- WZD – clean out element

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

7. CHIMNEY CAP





Diameter DN / Dz	Dimensions [mm]					Weight [kg]	
	D	H	dw	h1	h2	OC	CH
ø100	220	178	100	70	140	0.30	0.30
ø110	220	185	110	70	147	0.35	0.35
ø120	250	202	120	80	164	0.37	0.37
ø125	250	202	125	80	164	0.37	0.37
ø130	250	209	130	80	171	0.40	0.40
ø140	290	218	140	80	178	0.45	0.45
ø150	290	225	150	80	185	0.50	0.50
ø160	290	225	160	80	185	0.55	0.55
ø200	350	260	200	80	220	0.94	0.94

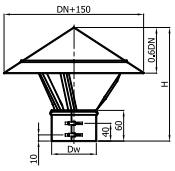
DA x - m s

- s – sheet thickness
- m – material
- x – diameter
- DA – chimney cap

Destination	W	W	W - ventilation
Material	CH	-	CH - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

8. CHIMNEY CAP





Diameter DN	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz	226.7	252.2	301.6	350.9	401.9	451.2	502.2	
H	330	360	420	480	540	600	660	
Weight [kg]	0.88	1.05	1.33	1.67	2.04	2.45	2.87	

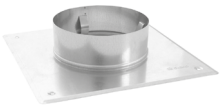
DA x - m s

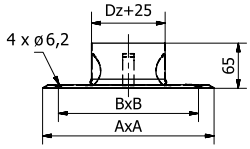
- s – sheet thickness
- m – material
- x – diameter
- DA – chimney cap

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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9. ROOF PLATE PD





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	280.8	301.6	350.9	401.9	451.2	502.2	
A [mm]	250	250	250	250	250	250	300	300	300	330	330	350	400	450	450	500	550	600	650	
B [mm]	200	200	200	200	200	200	250	250	250	280	280	300	350	400	400	450	500	550	600	
Weight [kg]	0.36	0.37	0.37	0.37	0.37	0.37	0.51	0.51	0.50	0.59	0.58	0.62	0.78	0.95	0.93	1.08	1.23	1.39	1.56	

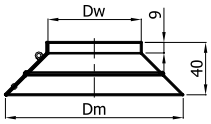
PD x - m

- material
- diameter DN
- roof plate

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

10. RAIN COLLAR KPD





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dw [mm]	79.0	99.7	110.9	122.0	126	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	300.4	349.7	400.7	450.0	501.0	
Dm [mm]	151	172	183	194	200	204	212	223	232	253	272	326	350	400	450	501	550	601	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.36	0.41	0.45	0.50	0.54	

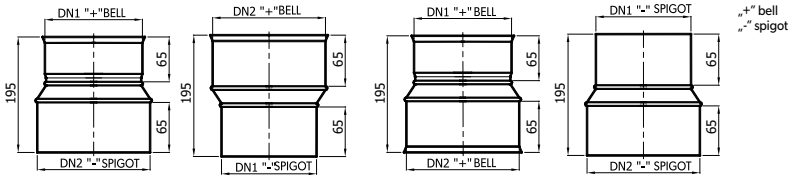
KPD x - m

- material
- diameter DN
- rain collar

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

11. REDUCER (SEGMENT-TYPE) RD





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Weight [kg]	depending on measurements																	

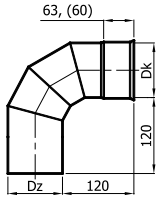
RD ±x / ±y - m s - k

- joint type
- sheet thickness
- material
- diameter DN1
- diameter DN2
- reducer

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. SOLID ELBOW 90° KS/90





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.27	0.40	0.45	0.51	0.53	0.55	0.62	0.67	0.81	0.92	1.00	1.13	1.52	1.89	2.20	3.12	3.80	4.55	

KS x / 90 - m s - k

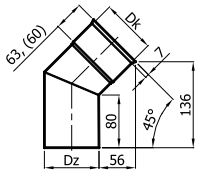
- joint type
- sheet thickness
- material
- angle 90°
- diameter DN
- solid elbow

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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13. SOLID ELBOW 45° KS/45





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.21	0.29	0.39	0.38	0.40	0.42	0.42	0.46	0.50	0.58	0.67	0.79	0.92	1.17	1.42	1.75	2.10	2.45	

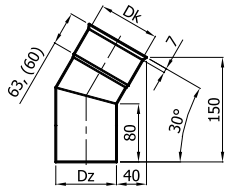
KS x/45 - m s - k

- joint type
- sheet thickness
- material
- angle 45°
- diameter DN
- solid elbow

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

14. SOLID ELBOW 30° KS/30





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
Weight [kg]	0.21	0.29	0.39	0.38	0.40	0.42	0.42	0.46	0.50	0.58	0.67	0.79	0.92	1.17	1.42	1.75	2.10	2.45	

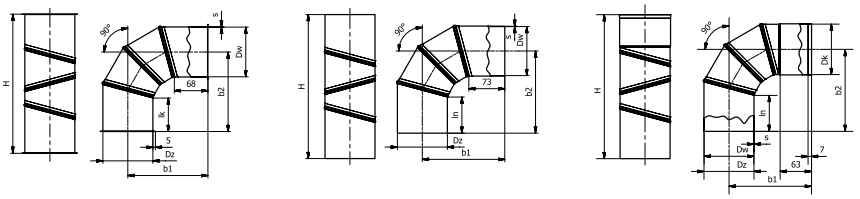
KS x/30 - m s - k

- joint type
- sheet thickness
- material
- angle 30°
- diameter DN
- solid elbow

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

15. ADJUSTABLE ELBOW 90° KN/90





Diameter DN	Version	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	for s=0.5
Dw [mm]	O N K	79.1	99.8	110.9	122	126.1	131.6	139.5	150.6	160.2	180.8	199.9	225.5	251	
Dz [mm]	O N K	80.1	100.8	111.9	123	127.1	132.6	140.5	151.6	161.2	181.8	200.9	226.5	252	
b1 [mm] dla	O	151	162	165	170	177	175	179	184	189	200	209	222	234	
	N K	156	166	170	175	177	180	184	189	194	205	214	227	239	
b2 [mm] dla	O K	150	161	158	161	172	165	176	173	197	200	205	222	239	
	N	155	165	163	166	172	170	181	178	202	205	210	227	244	
H [mm] dla	O K	264	280	280	287	294	294	307	307	334	344	354	379	404	
	N	274	290	290	297	304	304	317	317	344	354	364	389	414	
lk [mm]	O	68	67	61	59	63	59	65	57	76	69	64	68	73	
In [mm]	N K	73	73	67	65	68	64	70	62	81	74	67	73	78	
Weight [kg]	O N K	0.29	0.38	0.42	0.48	0.49	0.53	0.58	0.62	0.72	0.83	0.94	1.13	1.33	

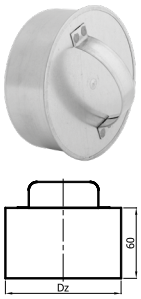
KN x/90 - m s - k

- joint type
- sheet thickness
- material
- angle 90°
- diameter DN
- adjustable elbow

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm

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16. TEE PLUG ZT



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Weight [kg]	0.10	0.12	0.14	0.16	0.16	0.17	0.18	0.20	0.22	0.25	0.29	0.35	0.40	0.53	0.67	0.83	1.00	1.17	

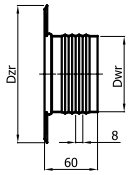
ZT x - m s - K/N

- K/N — bell or spigot
- s — sheet thickness
- m — material
- x — diameter Dz
- ZT — tee plug

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

17. ROSETTE ROZ





Diameter DN	ø80	ø85	ø90	ø95	ø100	ø105	ø110	ø115	ø120	ø125	ø130	ø135
Dwr [mm]	86	91	96	101	106	111	116	121	126	131	136	141
Dzr [mm]	157	162	167	172	177	182	187	192	207	212	217	222
Weight [kg]	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.20

Diameter DN	ø140	ø145	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø315	ø350	ø400	ø450	ø500
Dwr [mm]	146	151	156	166	186	206	231	256	286	306	321	356	406	456	506
Dzr [mm]	227	242	247	257	277	297	322	347	377	397	412	448	498	548	598
Weight [kg]	0.21	0.22	0.23	0.25	0.28	0.30	0.34	0.37	0.41	0.44	0.46	0.51	0.58	0.65	0.72

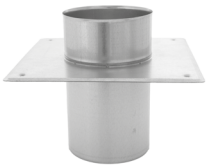
ROZ x - m b

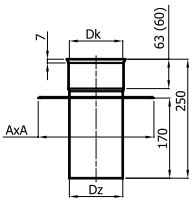
- b — face color
- m — material
- x — diameter DN
- ROZ — rosette

Destination	W	W	W	W - ventilation
Material	CH	-	-	CH - chrome steel H17
	-	OC	-	OC - galvanised steel sheet
	-	-	ML	ML - mild steel powder painted (white)*
Sheet thickness s	5	5	5	5 - sheet thickness 0.5 mm

* painted white as standard

18. INTERMEDIATE SUPPORT PP





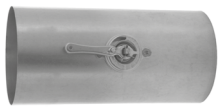
Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2	
A [mm]	250	250	250	250	250	250	250	300	300	300	330	350	400	450	550	550	600	650	
Weight [kg]	0.75	0.80	0.85	0.87	0.88	0.90	0.95	1.10	1.15	1.20	1.35	1.50	1.85	2.20	2.55	2.90	3.30	3.70	

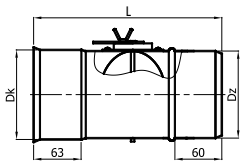
PP x - m s - k

- k — joint type
- s — sheet thickness
- m — material
- x — diameter DN
- PP — intermediate support

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

19. SINGLE-SURFACE DAMPER PJ





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
L	130	150	160	170	180	180	190	200	210	230	250	275	250	300	350	400	450	500	
Weight [kg]	0.18	0.26	0.29	0.33	0.35	0.38	0.45	0.50	0.58	0.73	0.90	1.15	1.4	2.05	4.15	5.40	6.80	8.50	

PJ x - m s - k

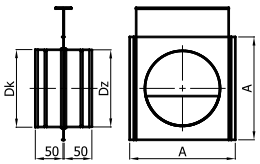
- k — joint type
- s — sheet thickness
- m — material
- x — diameter DN
- PJ — single-surface damper

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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20. LATCH ZS





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2
Dk [mm]	81.2	101.9	113.1	124.2	125.6	133.8	141.7	152.8	162.4	183.0	202.1	227.6	253.1	302.6	351.9	402.9	452.2	503.2
A [mm]	130	150	160	170	175	180	170	180	210	230	250	265	300	350	400	450	500	550
Weight [kg]	0.20	0.30	0.35	0.40	0.42	0.45	0.50	0.55	0.60	0.75	0.90	1.10	1.30	1.75	3.50	4.40	5.45	6.60

for s=0.5 (0.75)

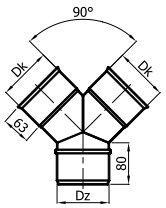
ZAS x - m s - k

- joint type
- sheet thickness
- material
- diameter DN
- latch

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

21. Y-SHAPED TEE YR/90





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.32	0.42	0.48	0.54	0.57	0.60	0.67	0.75	0.81	0.95	1.10	1.31	1.55	2.05	2.50	3.20	3.90	4.65

for s=0.5 (0.75)

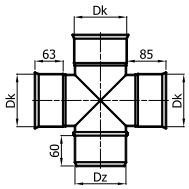
YR x / 90 - m s - k

- joint type
- sheet thickness
- material
- angle
- diameter DN
- Y-shaped tee

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

22. PIPE CROSS CZO/90





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.20	0.30	0.35	0.40	0.42	0.45	0.50	0.55	0.60	0.75	0.90	1.10	1.30	1.75	3.50	4.40	5.45	6.60

for s=0.5 (0.75)

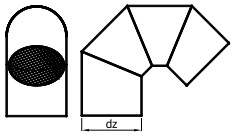
CZO x / 90 - m s - k

- joint type
- sheet thickness
- material
- angle
- diameter DN
- pipe cross

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

23. AIR EXHAUST ELBOW WITH MESH KWS/135





Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500
dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2
Weight [kg]	0.40	0.60	0.68	0.80	0.81	0.83	0.95	1.00	1.21	1.40	1.51	1.70	2.30	2.90	3.30	4.70	5.70	6.80

for s=0.5 (0.75)

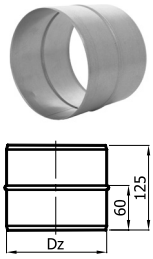
KWS x / 135 - m s - k

- joint type
- sheet thickness
- material
- angle 135°
- diameter DN
- exhaust elbow with mesh

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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24. SPIGOT - ZNY



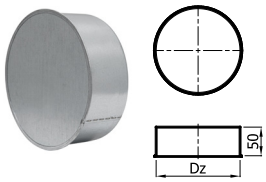
Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	78.1	98.8	109.9	121.0	122.7	130.6	138.5	151.8	161.4	182.0	201.1	226.6	252.1	299.0	348.3	399.1	448.4	499.3	
Weight [kg]	0.12	0.16	0.17	0.19	0.20	0.21	0.22	0.24	0.26	0.29	0.31	0.35	0.40	0.47	0.55	0.63	0.70	0.79	

ZNY x - m s - N

- x — joint type
- m — sheet thickness
- s — material
- N — diameter DN
- ZNY — spigot

Destination			
Material	W	W	W - ventilation
	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

25. DUCT ENDING PLUG - WZS



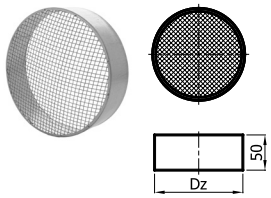
Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Weight [kg]	0.12	0.16	0.17	0.19	0.20	0.21	0.22	0.24	0.26	0.29	0.31	0.35	0.40	0.47	0.55	0.63	0.70	0.79	

WZS x - m s - K/N

- x — bell or spigot
- m — sheet thickness
- s — material
- K/N — diameter DN
- WZS — duct ending plug

Destination			
Material	W	W	W - ventilation
	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

26. DUCT ENDING PLUG WITH MESH - WZSS



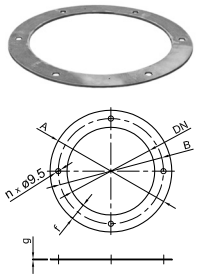
Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	for s=0.6
Dz [mm]	80.2	100.9	112.1	123.2	124.6	132.8	140.7	151.8	161.4	182.0	201.1	226.6	252.1	301.6	350.9	401.9	451.2	502.2	
Weight [kg]	0.12	0.16	0.17	0.19	0.20	0.21	0.22	0.24	0.26	0.29	0.31	0.35	0.40	0.47	0.55	0.63	0.70	0.79	

WZSS x - m s - K/N

- x — bell or spigot
- m — sheet thickness
- s — material
- K/N — diameter DN
- WZSS — duct ending plug with mesh

Destination			
Material	W	W	W - ventilation
	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.75 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

27. CIRCULAR COLLAR ACCORDING TO PN-EN 12220 - KL



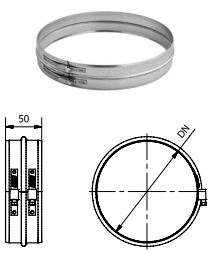
ø DN	160	200	250	315	350	400	500	630
ø B	192	233	283	352	392	438	538	670
ø A	222	263	313	378	413	464	564	714
n	6	6	8	8	8	8	8	12
f	30	30	30	30	30	30	30	40
g	3	3	3	3	3	4	4	4

KL x - m

- x — material
- m — diameter DN
- KL — collar

Destination			
Material	W	W	W - ventilation
	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

28. FASTENING CLAMP OPII-O



Diameter DN	ø80	ø100	ø110	ø120	ø125	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø300	ø350	ø400	ø450	ø500	ø630	for s=0.5 (0.75)
Weight [kg]	0.16	0.17	0.17	0.19	0.19	0.19	0.19	0.21	0.21	0.23	0.25	0.27	0.29	0.33	0.37	0.42	0.46	0.50	0.63	

OPII-O x - m

- x — material
- m — diameter DN
- OPII-O — fastening clamp

Destination			
Material	W	W	W - ventilation
	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	-	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

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Insulated round pipes and fittings - OC (galvanized) products made entirely of galvanized steel sheet are used for building ducts in natural and mechanical ventilation systems, heating as well as air conditioning installations. Inner pipe and outer layer are made of galvanized steel sheet; thermal insulation - mineral wool of 50 mm thickness.
Maximum working temperature: 250°C.

Insulated round pipes and fittings made (both inner and outer layer) of chrome-nickel steel sheet (type 1.4301 according to DIN17441) with thermal insulation - mineral wool of 50 mm thickness are used for building ducts in natural and mechanical ventilation systems, heating as well as air conditioning installations.
Maximum working temperature: 250°C.

Application of chimneys and recommended sheet thicknesses

Diameter DN	OC W OC	OC *) OC	X W 1.4301	X *) 1.4301
100	0.5	0.5	0.5	0.5
110	0.5	0.5	0.5	0.5
120	0.5	0.5	0.5	0.5
130	0.5	0.5	0.5	0.5
140	0.5	0.5	0.6	0.5
150	0.5	0.5	0.6	0.5
160	0.5	0.5	0.6	0.5
180	0.5	0.5	0.6	0.5
200	0.5	0.5	0.6	0.5
225	0.5	0.5	0.6	0.6
240	0.5	0.5	0.6	0.6
250	0.5	0.5	0.6	0.6
300	0.5	0.5	0.6	0.6
350	0.7	0.5	0.6	0.6
400	0.7	0.5	0.6	0.6
450	0.7	0.5	0.6	0.6
500	0.7	0.5	0.6	0.6
550	-	0.5	0.6	0.6
600	-	0.5	0.6	0.6

Table of layouts and sizes

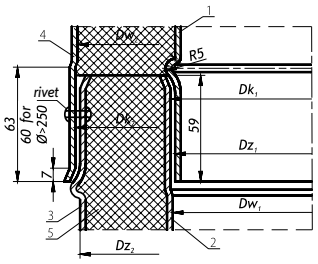
Diameter DN	Lr	Dz	Dw	Dk	s
100	315	100.8	99.8	101.8	0.5
110	350	111.9	110.9	112.9	
120	385	123.0	122.0	124.0	
130	415	132.6	131.6	133.6	
140	440	140.7	139.5	141.7	0.6
150	475	151.8	150.6	152.8	
160	505	161.4	160.2	162.4	
180	570	182.0	180.8	183.0	
200	630	201.1	199.9	202.1	
225	710	226.6	225.4	227.6	
240	766	244.4	243.2	245.4	
250	790	252.3	250.7	253.3	0.8
260	818	251.2	259.6	262.2	
280	880	280.9	279.3	281.9	
300	945	301.6	300.0	302.6	
325	1020	325.5	323.9	327.0	
350	1100	350.9	349.3	352.4	
400	1260	402.1	400.1	403.6	1.0
450	1415	451.4	449.4	452.9	
500	1575	502.3	500.3	503.8	
550	1728	551.0	549.0	552.5	
600	1885	601.0	599.0	602.5	

Destination:
W - ventilation
*) - outer pipe

Dimensions:
Lr - metal sheet layout [mm]±0.1
Dz - outer diameter of pipe [mm]±0.1
Dw - inner diameter of pipe [mm]±0.1
Dk - inner diameter of bell joint of pipe [mm]±0.1
s - metal sheet thickness [mm]

Bell joint of the pipe

Individual elements of the chimney system are being joint by the way of pushing one part of the element - a spigot, into the other pressformed part of the element - a bell. Thanks to this type of pipe joining, metal chimney is characterized by very tight and stiff construction. It also assures the proper flow of condensate, along walls of the chimney straight to the condensate drain bowl. The outer elements are connected „bell down" which prevents the chimney insulation from rain water.
Outer cassings of the chimney elements should be riveted together with couple of stainless steel rivets before placing a fastening clamp.



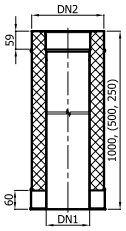
1. Spigot - inner pipe
2. Bell - inner pipe
3. Spigot - outer pipe
4. Bell - outer pipe
5. Thermal insulation

Fig. Method of joining double-walled pipe elements.

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1. STRAIGHT PIPE RPD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
Weight [kg]	7.00	7.20	8.10	8.25	8.75	9.25	9.35	10.50	11.35	12.40	13.45	15.60	17.75	19.90	22.00	24.15	

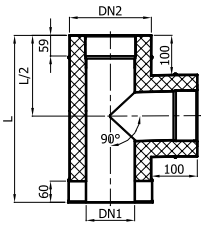
RPD DN1 / DN2 / L - m s

- s – sheet thickness DN1
- m – material DN1
- L – length [mm]
- DN2 – diameter DN2
- DN1 – diameter DN1
- RPD – straight pipe

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

2. TEE 90° TRD/90





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
L [mm]	400	400	425	425	440	450	450	480	500	525	550	600	650	700	750	800	
Weight [kg]	3.60	3.70	4.35	4.40	4.80	5.20	5.30	6.20	6.95	7.90	8.95	11.15	13.55	16.25	19.00	22.10	

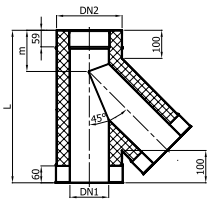
TRD DN1 / DN2 / 90 - m s

- s – sheet thickness DN1
- m – material DN1
- 90 – angle
- DN2 – diameter DN2
- DN1 – diameter DN1
- TRD – tee

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

3. TEE 45° TRD/45





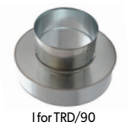
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
L [mm]	485	485	520	520	540	555	555	600	625	660	695	770	840	910	980	1050	
m [mm]	120	120	125	125	130	130	135	140	140	145	150	165	170	180	190	205	
Weight [kg]	4.10	4.20	5.00	5.10	5.55	6.00	6.10	7.30	8.15	9.35	10.70	13.50	16.55	20.00	23.65	27.60	

TRD DN1 / DN2 / 45 - m s

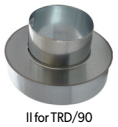
- s – sheet thickness DN1
- m – material DN1
- 45 – angle
- DN2 – diameter DN2
- DN1 – diameter DN1
- TRD – tee

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

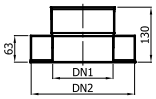
4. TEE PLUG ZTD-K (N)



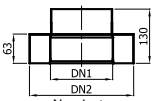
I for TRD/90



II for TRD/90



K - bell



N - spigot

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.40	0.40	0.45	0.45	0.50	0.55	0.55	0.60	0.70	0.75	0.80	1.00	1.10	1.25	1.40	1.55	

ZTD DN1 / DN2 - m s - w

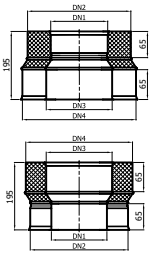
- w – version
- s – sheet thickness DN1
- m – material DN1
- DN2 – diameter DN2
- DN1 – diameter DN1
- ZTD – tee plug

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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5. REDUCER RDD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	280	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	225	250	250	280	300	325	350	380	400	450	500	550	600	
Weight [kg]	depending on measurements																	

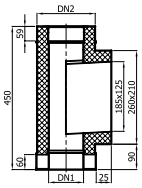
RDD DN1 / DN2 / DN3 / DN4 - m s

- sheet thickness DN1
- material DN1
- diameter DN4
- diameter DN3
- diameter DN2
- diameter DN1
- reducer

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - bl. ocynkowana
Sheet thickness s	5	5	5 - thickness 0.5 mm
	6	-	6 - thickness 0.6 mm
	-	7	7 - thickness 0.75 mm
	8	-	8 - thickness 0.8 mm
	1	1	1 - thickness 1.0 mm

6. CLEAN OUT ELEMENT WITH DOORS





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	3.80	3.90	4.30	4.35	4.60	4.80	4.85	5.35	5.75	6.20	6.70	7.70	8.60	9.60	10.55	11.50	

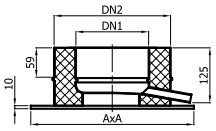
WCD DN1 / DN2 - m s

- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- clean out element with doors

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

7. CONDENSATE DRAIN BOWL MSD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.15	2.20	2.50	2.55	2.70	2.90	3.00	3.50	3.90	4.20	4.65	5.60	6.70	7.90	9.15	10.40	

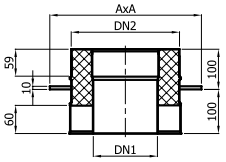
MSD DN1 / DN2 - m

- material DN1
- diameter DN2
- diameter DN1
- condensate drain bowl

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

8. INTERMEDIATE SUPPORT PPD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.35	2.30	2.60	2.60	2.75	2.90	2.90	3.30	3.40	3.90	4.25	4.95	5.65	6.40	7.10	7.85	

PPD DN1 / DN2 - m s

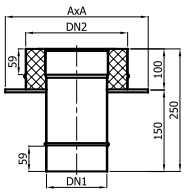
- sheet thickness DN1
- material
- diameter DN2
- diameter DN1
- intermediate support

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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9. INTERMEDIATE SUPPORT PJD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
A [mm]	300	300	325	325	325	350	350	380	400	425	450	500	550	600	650	700	
Weight [kg]	2.00	2.00	2.35	2.35	2.50	2.70	2.70	3.15	3.50	3.90	4.35	5.20	6.20	7.20	8.30	9.30	

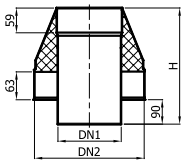
PJD DN1 / DN2 - m s

- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- intermediate support

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

10. MOUTHPIECE USD





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
H [mm]	330	330	330	330	330	330	330	330	330	330	330	330	400	420	420	420	
Weight [kg]	1.00	1.05	1.15	1.20	1.35	1.50	1.60	1.80	2.00	3.80	4.20	4.90	7.10	8.00	10.70	11.80	

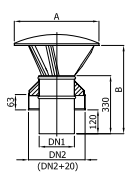
USD DN1 / DN2 - m s

- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- mouthpiece

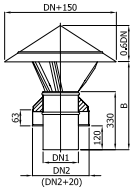
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

11. CAP DKD





for DN1/DN2<200/300



for DN1/DN2<225/325

Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
A [mm]	220	220	250	250	220	290	290	290	290	450	450	450	550	550	650	650	
B [mm]	410	410	410	410	430	430	430	430	450	600	630	690	750	810	870	930	
Weight [kg]	1.55	1.60	1.70	1.75	1.90	2.05	2.10	2.25	2.40	3.15	3.60	4.00	4.80	5.55	6.65	7.00	

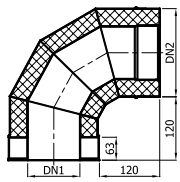
DKD DN1 / DN2 - m s

- sheet thickness DN1
- material DN1
- diameter DN2
- diameter DN1
- cap

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

12. SOLID ELBOW 90° KSD/90





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	2.35	2.40	2.70	2.75	3.35	3.70	3.75	4.20	4.50	4.95	6.45	7.80	8.85	12.35	14.75	17.40	

KSD DN1 / DN2 / 90 - m s

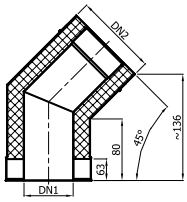
- sheet thickness DN1
- material DN1
- angle
- diameter DN2
- diameter DN1
- solid elbow

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

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13. SOLID ELBOW 45° KSD/45





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	1.55	1.60	1.85	1.95	2.10	2.25	2.30	2.65	3.00	3.40	3.80	4.75	5.65	6.85	8.15	9.40	

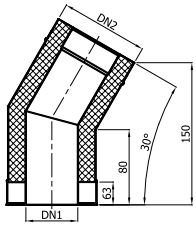
KSD DN1 / DN2 / 45 - m s

- s – sheet thickness DN1
- m – material DN1
- 45 – angle
- DN2 – diameter DN2
- DN1 – diameter DN1
- KSD – solid elbow

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

14. SOLID ELBOW 30° KSD/30





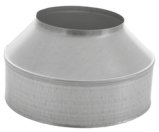
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	225	240	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	1.45	1.50	1.75	1.75	1.80	1.90	2.10	2.40	2.65	3.00	3.35	4.05	4.85	5.75	6.60	7.60	

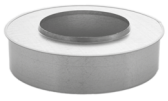
KSD DN1 / DN2 / 30 - m s

- s – sheet thickness DN1
- m – material DN1
- 30 – angle
- DN2 – diameter DN2
- DN1 – diameter DN1
- KSD – solid elbow

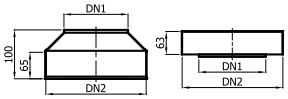
Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm
	-	7	7 - sheet thickness 0.7 mm
	8	-	8 - sheet thickness 0.8 mm
	1	1	1 - sheet thickness 1.0 mm

15. INSULATION CLOSING COLLAR NKD-G (D)





G - TOP D - BOTTOM



Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.25	0.28	0.31	0.34	0.40	0.46	0.52	0.58	0.64	

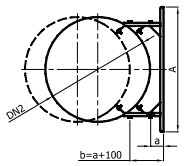
NKD DN1 / DN2 - m w

- w – version
- m – material DN1
- DN2 – diameter DN2
- DN1 – diameter DN1
- NKD – collar

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

16. MOUNTING BRACKET OMD II





amin = 50 mm
adjustable = 100 mm

Diameter DN2	200	225	240	250	280	300	325	350	400	450	500	550	600
A [mm]	380	395	400	409	424	433	445	456	476	556	580	602	622
Weight [kg]	1.10	1.15	1.20	1.20	1.25	1.30	1.35	1.40	1.45	1.95	2.05	2.50	2.60

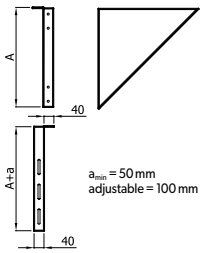
OMD-II - DN2 - m / a

- a – min. distance from the wall
- m – material
- DN2 – diameter DN2
- OMD-II – mounting bracket

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

17. SUPPORTING CONSOLE KWD





Diameter DN2	200	225	240	250	280	300	325	350	400	450	500	550	600	for s=2.0
A [mm]	304	304	354	354	384	404	429	454	504	552	604	654	701	
Weight [kg]	2.60	2.70	3.25	3.25	3.70	4.20	4.65	5.10	6.05	7.10	8.20	9.40	10.65	

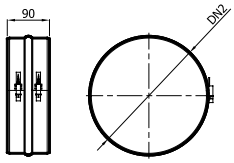
KWD DN2 - m /a-(a+100)

- min. distance from the wall
- material
- diameter DN2
- supporting console

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

18. FASTENING CLAMP OP I





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.25	0.25	0.30	0.30	0.30	0.35	0.35	0.40	0.40	0.45	0.50	0.55	0.60	0.70	0.75	0.80	

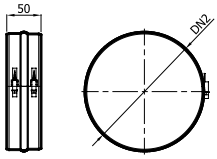
OPI DN2 - m

- material
- diameter DN2
- fastening clamp I

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

19. FASTENING CLAMP OP II





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 0.6/0.6
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.17	0.17	0.19	0.19	0.19	0.21	0.21	0.23	0.25	0.27	0.29	0.33	0.37	0.42	0.46	0.50	

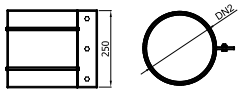
OPII DN2 - m

- material
- diameter DN2
- fastening clamp II

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

20. FASTENING CLAMP OP III





Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s=1.0
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	2.10	2.10	2.35	2.35	2.50	2.65	2.65	2.90	3.15	3.40	3.65	4.15	4.65	5.25	5.75	6.25	

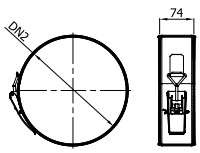
OPIII DN2 - m

- material
- diameter DN2
- fastening clamp III

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	1	1	1 - sheet thickness 1.0 mm

21. FASTENING CLAMP OP IV





Diameter DN1/DN2	120	130	140	150	160	180	200	225	250	300	350	400	for s 0.6/0.6
	225	225	240	250	260	280	300	325	350	400	450	500	
Weight [kg]	0.38	0.38	0.38	0.41	0.42	0.44	0.46	0.49	0.52	0.57	0.63	0.69	

OPIV DN2 - m

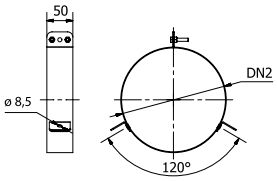
- material
- diameter DN2
- fastening clamp IV

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

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22. BRACKET FOR STABILIZING CORDS OPO





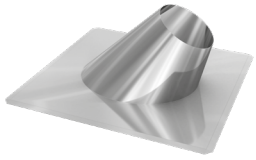
Diameter DN1/DN2	100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s 1.5 (2.0)
	200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
Weight [kg]	0.50	0.50	0.55	0.55	0.55	0.59	0.59	0.65	0.69	0.73	0.78	0.88	0.97	1.07	1.16	1.25	

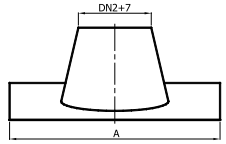
OPO DN2 - m

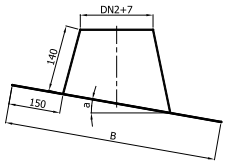
- material
- diameter DN2
- bracket for stabilizing cords

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet

23. ROOF FLASHING PDK







α = 20 → from 0-20°
α = 35 → from 20-35°
α = 50 → from 35-50°

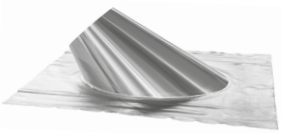
Diameter DN1/DN2		100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0.6
		200	200	225	225	240	250	250	280	300	325	350	400	450	500	550	600	
α 20	A	605	605	628	628	628	685	685	710	748	804	781	802	865	915	971	1022	
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035	
α 35	A	645	645	665	665	665	694	694	708	746	778	806	867	917	974	1031	1088	
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211	
α 50	A	670	670	700	700	700	735	735	769	795	797	821	908	970	1032	1094	1156	
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433	1522	
Weight [kg]		depending on measurements																

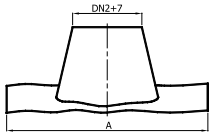
PDK DN2 / α - m

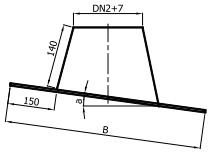
- material
- angle α
- diameter DN2
- roof flashing

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

24. ANGULAR ROOF FLASHING WITH COLLAR PDK







α = 20 → 0-20°
α = 35 → 20-35°
α = 50 → 35-50°

Diameter DN1/DN2		100	110	120	130	140	150	160	180	200	225	250	300	350	400	450	500	for s = 0.6
		200	200	225	225	240	250	260	280	300	325	350	400	450	500	550	600	
α 20	A	1000 (1120 - PE version)																
	B	610	610	632	632	632	708	708	718	756	820	816	803	875	929	982	1035	
α 35	A	1000 (1120 - PE version)																
	B	715	715	724	724	724	758	758	769	816	854	899	939	1013	1079	1145	1211	
α 50	A	1000 (1120 - PE version)																
	B	867	867	879	879	879	944	944	980	1017	942	959	1168	1256	1346	1433	1522	
Weight [kg]		depending on measurements																

PDK DN2 / α - m ...

- collar type (**PE** - elastic, **Pb** - lead)
- material
- angle α
- diameter DN2
- angular roof flashing

Destination	W	W	W - ventilation
Material	X	-	X - stainless steel 1.4301
	-	OC	OC - galvanised steel sheet
Sheet thickness s	5	5	5 - sheet thickness 0.5 mm
	6	-	6 - sheet thickness 0.6 mm

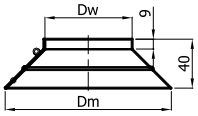
ML-CZ: painted - black colour (RAL 9011)
ML-GR: painted - grey colour (RAL 7043)

PDK DN2 / α - m PE (ML-...)

- painted (ML-CZ/ML-GR)
- elastic collar
- material
- angle α
- diameter DN2
- angular roof flashing

25. RAIN COLLAR KPD





Diameter DN	ø80	ø100	ø110	ø120	ø130	ø140	ø150	ø160	ø180	ø200	ø225	ø250	ø280	ø300	ø350	ø400	ø450	ø500	ø550	ø600	for s=0.6 (0.5)
Dw [mm]	79.0	99.7	110.9	122.0	131.6	139.5	150.7	160.2	180.9	200.0	225.5	251.0	279	300.4	349.7	400.7	450.0	501.0	550	600	
Dm [mm]	151	172	183	194	204	212	223	232	253	272	326	350	379	400	450	501	550	601	650	700	
Weight [kg]	0.14	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.23	0.25	0.29	0.31	0.37	0.36	0.41	0.45	0.50	0.54	0.6	0.65	

KPD x - X

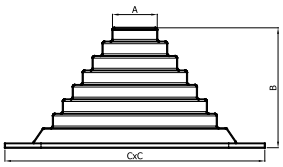
- material
- diameter DN
- rain collar

Destination	W	W - ventilation ducts
	S	S - flue ducts (gas, oil)
	D	D - smoke ducts
Material	X	X - stainless steel 1.4301
Sheet thickness s	6	6 - sheet thickness 0.6 mm

26. SEALING COLLAR KV



KV sealing collars are made with EPDM elastomer with strip of flexible aluminum alloy on the edges. Flexible base adjusts to all roof types creating durable connection. Sealing collars are especially useful when making passages for antennas, small ventilation chimneys etc.



KV x

- diameter DN
- sealing collar

Type	A	B	CxC
KV 30	ø 6 - 100	80	205x205
KV 40	ø 75 - 155	100	250x250
KV 50	ø 102 - 178	105	270x270
KV 60	ø 125 - 230	130	305x305
KV 70	ø 150 - 280	140	360x360

Destination	Roof flashing

Max. working temperature 100°C.

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INSULATED VENTILATION PIPES AND FITTINGS <SLIM-VENT>

Insulated round ventilation pipes and fittings <SLIM-VENT> are used for the construction of ventilation ducts in forced or gravity ventilation systems, air heating and air conditioning systems.
The inner pipe is made of galvanised sheet metal. The outer wall is made of galvanised or polished chromium-nickel sheet metal 1.4301-4N. Thermal insulation made of 30 mm mineral wool.

Maximum operating temperature of the system: 250°C.

The ventilation chimney made of system components is a self-supporting structure that does not require the use of conventional ceramic materials.



Application of chimney liners and recommended sheet thicknesses

Diameter DN	W	* OC/X.SZ
100	0.5	-
130	0.5	-
150	0.5	-
160		0.5
180	0.5	
190		0.5
200	0.5	-
210		0.5
240	-	0.5
260	-	0.5

Table of layouts and sizes

Diameter DN	Lr	Dz	Dw	Dk	Ds	s
100	315	100.8	99.9	101.8		0.5
130	415	132.6	131.6	133.6		0.5
150	475	151.7	150.7	152.7		0.5
160	505	161.2	160.2		158.9	0.5
180	570	182	180.8	183		0.5
190	595	189.9	188.9		187.5	0.5
200	630	201.1	199.9	202.1		0.5
210	660	210.6	209.6		208.2	0.5
240	753	240.3	239.1		237.8	0.5
260	818	261.2	259.6		258.5	0.5

Destination

W - ventilation ducts
* - outer pipe

Measurments

Lr - metal sheet layout [mm]±0,1
Dz - outer diameter of pipe [mm]±0,1
Dw - inner diameter of pipe [mm]±0,1
Dk - inner diameter of bell joint [mm]±0,1
Ds - outer diameter of nipple pipe part [mm]±0,1
s - metal sheet thickness [mm]

Bell connection

Individual system components are connected by inserting one part of the component – the spigot – into the other expanded part of the component – the bell.
Bell connection ensures a tight and rigid structure. This method of connecting the elements allows condensate to flow properly down
the walls of the insert into the condensate drain bowl. The outer wall is connected with spigot part (shrinked) upwards, which protects the chimney from rainwater.
The elements of the outer wall should be riveted with several chromium-nickel rivets at the connection point.

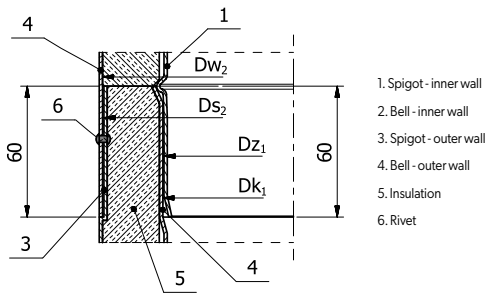
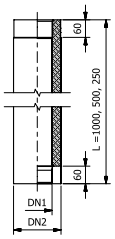


Fig. Method of joining acid-resistant steel chimney system elements <SKD-30-SLIM>

1. STRAIGHT PIPE RPD





Diameter DN1/DN2					
	100	130	150	180	200
	160	190	210	240	260
L[mm]	1000	1000	1000	1000	1000
Weight [kg]	7.10	8.50	9.65	11.60	12.90

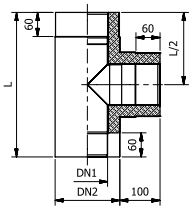
Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

RPD DN1 / DN2 / L - m / mp

- outer wall material
- pipe material
- length [mm]
- diameter DN2
- diameter DN1
- straight pipe

2. TEE 90° TRD/90





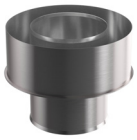
Diameter DN1/DN2					
	100	130	150	180	200
	160	190	210	240	260
L[mm]	360	390	410	440	460
Weight [kg]	2.45	3.15	3.70	4.80	5.50

Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

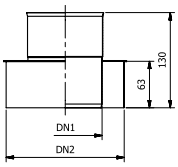
TRD DN1 / DN2 / 90 - m / mp

- outer wall material
- pipe material
- angle 90°
- diameter DN2
- diameter DN1
- tee

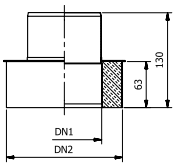
3. TEE PLUG ZTD (K-BELL TYPE / N-SPIGOT TYPE)







K - bell
for TR90



N - spigot
for TR45

Diameter DN1/DN2						
		100	130	150	180	200
		160	190	210	240	260
Weight [kg]	ZTD-K	0.37	0.45	0.51	0.65	0.72
	ZTD-N	0.62	0.75	0.85	1.05	1.18

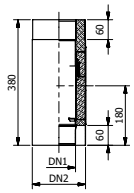
Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

ZTD DN1 / DN2 - m / mp - K/N

- version spigot or bell
- outer wall material
- pipe material
- diameter DN2
- diameter DN1
- tee plug

4. CLEAN OUT ELEMENT WCD WITH DOORS





Diameter DN1/DN2					
	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	2.80	3.35	3.75	4.50	5.00

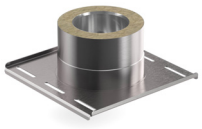
Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

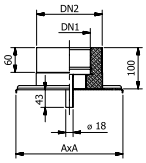
WCD DN1 / DN2 - m / mp

- outer wall material
- pipe material
- diameter DN2
- diameter DN1
- clean uot element

invent. build. enjoy.

5. CONDENSATE DRAIN BOWL WITH PLATE MSD





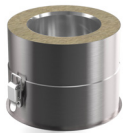
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
A [mm]	260	290	310	340	360
Weight [kg]	2.00	2.45	2.85	3.40	3.85

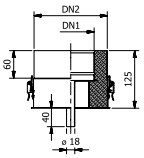
MSD DN1 / DN2 - m / mp

- outer wall material
- pipe material
- diameter DN2
- diameter DN1
- condensate drain with plate

Destination	W	W - ventilation ducts
Material	CH	CH - chrome-nickel sheet
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

6. CONDENSATE DRAIN BOWL WITH THE BOTTOM OUTLET MSDD





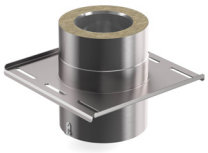
Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
Weight [kg]	1.20	1.50	1.80	2.20	2.50

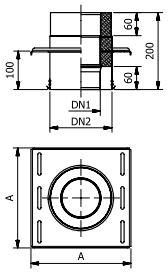
MSDD DN1 / DN2 - m / mp

- outer wall material
- pipe material
- diameter DN2
- diameter DN1
- bowl with the bottom outlet

Destination	W	W - ventilation ducts
Material	CH	CH - chrome-nickel sheet
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

7. INTERMEDIATE SUPPORT PPD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
A [mm]	260	290	310	340	360
Weight [kg]	2.25	2.65	3.00	3.55	3.90

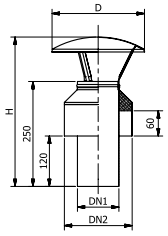
PPD DN1 / DN2 - m / mp

- outer wall material
- pipe material
- diameter DN2
- diameter DN1
- intermediate support

Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

8. CHIMNEY CAP DKD





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
D [mm]	220	250	290	290	350
H [mm]	355	359	360	360	360
Weight [kg]	0.90	1.15	1.40	1.68	1.90

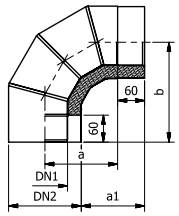
DKD DN1 / DN2 - m / mp

- outer wall material
- pipe material
- diameter DN2
- diameter DN1
- cap

Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

9. SOLID ELBOW 90° KSD/90





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
a [mm]	162	174	180	199	206
a1 [mm]	141	139	135	139	135
b [mm]	222	234	240	259	266
Weight [kg]	2.58	3.25	3.82	4.96	5.65

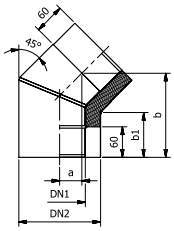
KSD DN1 / DN2 / 90 - m / mp

- outer wall material
- pipe material
- angle 90°
- diameter DN2
- diameter DN1
- solid elbow

Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

10. SOLID ELBOW 45° KSD/45





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
a [mm]	44	44	49	49	62
a1 [mm]	88	82	85	79	93
b [mm]	166	166	179	179	209
Weight [kg]	1.56	1.87	2.28	2.76	3.53

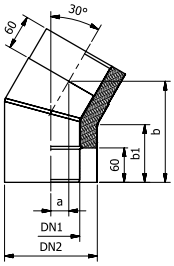
Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

KSD DN1 / DN2 / 45 - m / mp

- outer wall material
- pipe material
- angle 45°
- diameter DN2
- diameter DN1
- solid elbow

11. SOLID ELBOW 30° KSD/30





Diameter DN1/DN2	100	130	150	180	200
	160	190	210	240	260
a [mm]	31	31	31	31	31
a1 [mm]	100	96	94	90	87
b [mm]	176	176	176	176	176
Weight [kg]	1.56	1.87	2.15	2.58	2.75

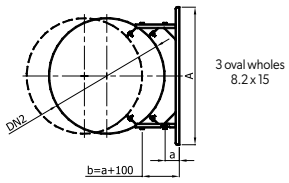
Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Outer wall material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

KSD DN1 / DN2 / 30 - m / mp

- outer wall material
- pipe material
- angle 30°
- diameter DN2
- diameter DN1
- solid elbow

12. MOUNTING BRACKET OMD-II





Diameter DN2	160	190	210	240	260
A [mm]	354	380	380	409	416
Weight [kg]	1.08	1.14	1.15	1.23	1.26

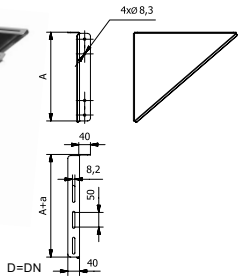
Destination	W	W - ventilation ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N

OMD-II DN2 - m / 5-15

- minimal wall distance
- material
- diameter DN2
- mounting bracket

13. SUPPORTING CONSOLE KWD





Diameter DN2	160	190	210	240	260
A [mm]	254	304	304	354	354
Weight [kg]	2.00	2.60	2.60	3.25	3.25

Destination	W	W - ventilation ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel

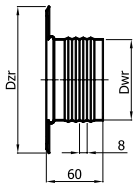
KWD DN2 - m / a-(a+100)

- minimal wall distance
- material
- diameter DN2
- supporting console

invent. build. enjoy.

14. ROSETTE ROZ





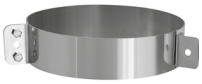
Diameter DN2	160	190	210	240	260
Dwr [mm]	166	196	216	246	266
Dzr [mm]	257	287	307	337	357
Weight [kg]	0.25	0.29	0.32	0.36	0.39

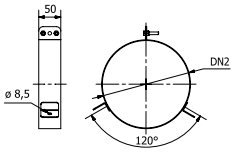
Destination	W	W - ventilation ducts
Material	OC	OC - galvanised steel
Sheet thickness	5	5 - sheet thickness 0.5 mm

ROZ x - m

- m: material
- x: diameter DN
- ROZ: rosette

15. BRACKET FOR STABILIZING CORDS OPO





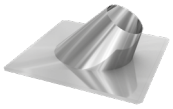
Diameter DN2	160	190	210	240	260
Weight [kg]	0.31	0.48	0.52	0.57	0.61

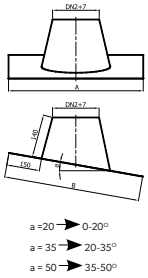
Destination	W	W - ventilation ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel

OPO DN2 - mp

- mp: outer wall material
- DN2: diameter DN2
- OPO: bracket for stabilizing cords

16. ANGULAR ROOF FLASHING PDK





Diameter DN1/DN2		100	130	150	180	200
		160	190	210	240	260
α 20	A	575	605	625	640	680
	B	575	605	625	640	680
α 35	A	595	630	650	690	720
	B	630	675	700	740	765
α 35	A	640	680	710	750	770
	B	760	810	850	910	950

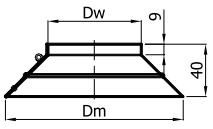
Destination	W	W - ventilation ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel

PDK DN2 / α - m

- m: material
- α: angle α
- DN2: diameter DN2
- PDK: angular roof flashing

17. RAIN COLLAR KPD





Diameter DN	ø160	ø190	ø210	ø240	ø260	for s=0.5
Dw [mm]	160.2	190.5	210.5	240.5	260.5	
Dm [mm]	232	263	283	313	333	
Weight [kg]	0.21	0.25	0.27	0.30	0.33	

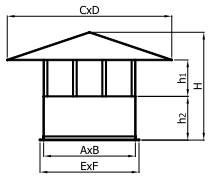
Destination	W	W - ventilation ducts
Material	X.SZ	X.SZ - steel sheet grade 1.4301-4N
	OC	OC - galvanised steel

KPD x - m

- m: material
- x: diameter DN
- KPD: rain collar

1. ROOF TERMINAL - TYPE A ACC. TO BN-70/8865-31 - WYRZ-A





A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	450x450	290x640	540x920	720x720	800x1030	1130x1130	1250x1620	1800x1800
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	475	525	590	580	670	740	885	996
h1	300	300	350	300	360	300	300	300
h2	100	120	140	160	200	250	320	400

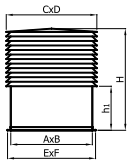
WYRZ - AxB - TYP-A - m

- m – material
- TYP-A – type
- AxB – dimensions
- WYRZ – roof terminal

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

2. ROOF TERMINAL - TYPE B ACC. TO BN-70/8865-31 - WYRZ-B





A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	320x320	320x470	320x700	470x470	470x700	700x700	700x1070	1070x1070
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	515	520	520	640	640	760	765	1130
h1	315	320	320	320	320	320	325	330

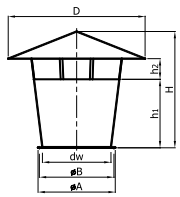
WYRZ - AxB - TYP-B - m

- m – material
- TYP-B – type
- AxB – dimensions
- WYRZ – roof terminal

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

3. ROOF TERMINAL - TYPE C ACC. TO BN-70/8865-31 - WYRZ-C





ø dw	160	200	250	315	350	400	500	630
ø D	320	400	500	630	700	800	1000	1260
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	320	340	425	535	595	680	850	1070
h1	200	200	250	315	350	400	500	630
h2	60	60	75	95	110	120	150	190

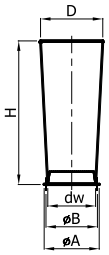
WYRZ - x - TYP-C - m

- m – material
- TYP-C – type
- x – inlet diameter
- WYRZ – roof terminal

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

4. ROOF TERMINAL - TYPE D ACC. TO BN-70/8865-31 - WYRZ-D





ø dw	160	200	250	315	350	400	500	630
ø D	210	260	325	410	455	520	650	820
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	480	600	750	945	1050	1200	1500	1890

WYRZ - x - TYP-D - m

- m – material
- TYP-D – type
- x – inlet diameter
- WYRZ – roof terminal

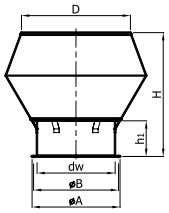
Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

invent. build. enjoy.

5. ROOF TERMINAL - TYPE E ACC. TO BN-70/8865-31 - WYRZ-E



ø dw	160	200	250	315	350	400	500	630
ø D	250	280	350	440	490	560	700	880
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	300	375	430	500	555	600	715	1000
h1	150	150	150	150	150	150	150	150

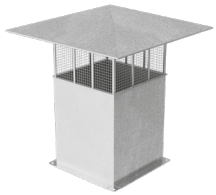


WYRZ - x - TYP-E - m

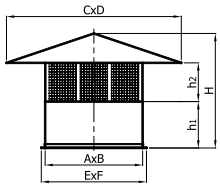
- m – material
- TYP-E – type
- x – inlet diameter
- WYRZ – roof terminal

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

6. AIR INTAKE TYPE A ACC. TO BN-70/8865-33 - CZERP-A



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	450x450	490x640	540x920	720x720	800x1030	1130x1130	1250x1620	1800x1800
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	525	590	665	660	715	870	1035	1195
h1	300	300	300	300	300	300	300	300
h2	150	185	215	240	245	380	470	600



CZERP - AxB - TYP-A - m

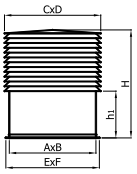
- m – material
- TYP-A – type
- AxB – dimensions
- CZERP – air intake

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

7. AIR INTAKE TYPE B ACC. TO BN-70/8865-33 - CZERP-B



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	320x320	320x470	320x700	470x470	470x700	700x700	700x1070	1070x1070
E x F	290x290	290x440	290x670	440x440	440x670	690x690	690x1060	1060x1060
H	515	520	570	640	640	760	765	1130
h1	315	320	320	320	320	320	325	330



CZERP - AxB - TYP-B - m

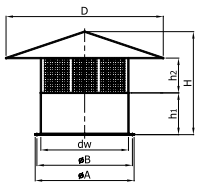
- m – material
- TYP-B – type
- AxB – dimensions
- CZERP – air intake

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

8. AIR INTAKE TYPE C ACC. TO BN-70/8865-33 - CZERP-C



ø dw	160	200	250	315	350	400	500	630
ø D	290	360	450	570	630	720	900	1140
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	445	480	525	585	630	720	900	1040
h1	300	300	300	300	300	300	300	300
h2	95	120	150	190	210	240	300	380



CZERP - AxB - TYP-C - m

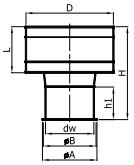
- m – material
- TYP-C – type
- AxB – dimensions
- CZERP – air intake

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

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9. CYLINDRICAL ROOF TERMINAL ACC. TO BN-66/8865-13 - WCG





ø dw	160	200	250	315	350	400	500	630
ø D	320	400	500	630	700	800	1000	1260
ø B	192	233	283	352	387	438	538	670
ø A	222	263	313	378	413	464	564	714
H	475	495	580	690	725	825	1000	1270
h1	210	155	155	155	155	155	200	200
L	192	240	300	378	420	480	600	756

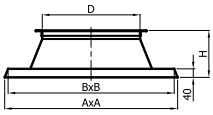
WCG - x - m - BN

- m – material
- x – inlet diameter
- WCG – cylindrical roof terminal

Application	P	P	P - industrial processes
Material	OC	-	OC - galvanised steel sheet
	-	X	X - chrome-nickel steel sheet 1.4301

10. ROOF BASE TYPE BI - POD-BI





Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
A	306	317	418	446	456	516	580	640	660	706	830	960
B	266	277	378	406	416	476	540	600	620	666	790	920
H	85	85	98	105	115	125	135	145	160	165	190	230

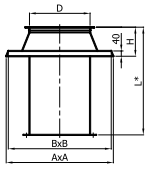
POD - x - BI - m

- m – material
- x – type
- BI – diameter
- POD – base

Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

11. ROOF BASE TYPE BII - POD-BII





Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
A	306	317	418	446	456	516	580	640	660	706	830	960
B	266	277	378	406	416	476	540	600	620	666	790	920
H	85	85	98	105	115	125	135	145	160	165	190	230

POD - x - BII - m

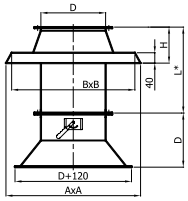
- m – material
- x – type
- BII – diameter
- POD – base

Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

* L=1000 [mm] - other dimensions upon request

12. ROOF BASE TYPE BIII - POD-BIII





Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630
A	306	317	418	446	456	516	580	640	660	706	830	960
B	266	277	378	406	416	476	540	600	620	666	790	920
H	85	85	98	105	115	125	135	145	160	165	190	230

* L=1000 [mm] - other dimensions upon request

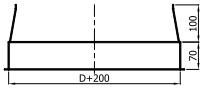
POD - x - BIII - m

- m – material
- x – type
- BIII – diameter
- POD – base

Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

13. CONDENSATING BOWL FOR ROOF BASE - TYPE BIII - MS-POD





Diameter D	ø110	ø125	ø150	ø160	ø200	ø250	ø300	ø315	ø350	ø400	ø500	ø630

MS - x - POD - m

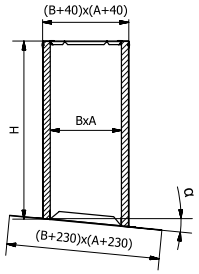
- m – material
- POD – roof base
- x – roof base diameter
- MS – condensating bowl

Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

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14. ROOF BASE WITH INSULATION - WPD





A [mm]	200	220	250	270	320	370	420	500	600
B [mm]	200	220	250	270	320	370	420	500	600

WPD - AxB/H/α - OC / BIII

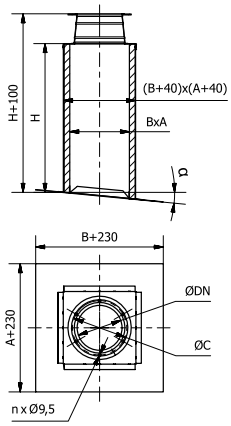
- version
- material
- dimensions
- roof base

Application	P	P - industrial processes
Material	OC	OC - galvanised steel/mineral fibre glass wool

Roof base to be used for roof flashings for type A or B roof base.

15. ROOF BASE WITH INSULATION - WPDT-I





A [mm]	220	270	320	370	420	500	600
B [mm]	220	270	320	370	420	500	600
C [mm]	182	233	283	337	392	438	538
n	6	6	8	8	8	8	8
DN [mm]	150	200	250	300	350	400	500

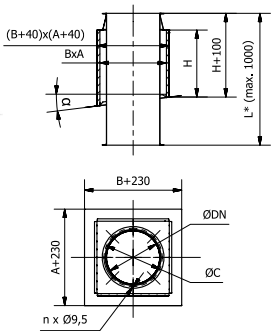
WPDT-I - AxB/H/α - OC

- material
- dimensions
- roof base

Application	P	P - industrial processes
Material	OC	OC - galvanised steel/mineral fibre glass wool

16. ROOF BASE WITH INSULATION AND PIPE - WPDT-II





A [mm]	220	270	320	370	420	500	600
B [mm]	220	270	320	370	420	500	600
C [mm]	182	233	283	337	392	438	538
n	6	6	8	8	8	8	8
DN [mm]	150	200	250	300	350	400	500

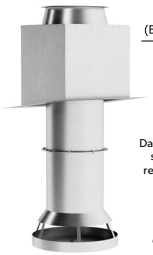
WPDT-II - AxB/H/α - OC

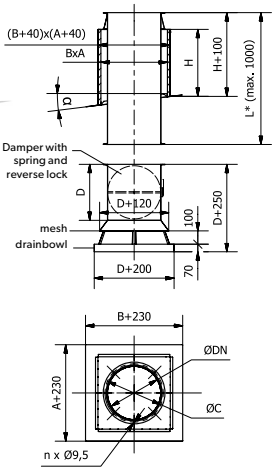
- material
- dimensions
- roof base

Application	P	P - industrial processes
	O	O - air heating
Material	OC	OC - galvanised steel/mineral fibre glass wool

* L=1000 [mm] – other dimensions upon request

17. ROOF BASE WITH INSULATION AND DAMPER - WPDT-III





A [mm]	220	270	320	370	420	500	600
B [mm]	220	270	320	370	420	500	600
C [mm]	182	233	283	337	392	438	538
n	6	6	8	8	8	8	8
DN [mm]	150	200	250	300	350	400	500

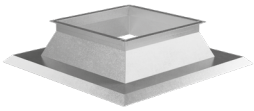
WPDT-III - AxB/H/α - OC

- material
- dimensions
- roof base

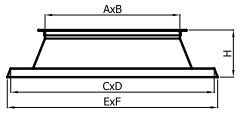
Application	P	P - industrial processes
	O	O - air heating
Material	OC	OC - galvanised steel/mineral fibre glass wool

* Standard L=1000 [mm] other dimensions upon request

18. ROOF BASE TYPE AI ACC. TO BN-70/8865-32 - POD-AI



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	490x490	490x640	490x870	665x665	665x745	945x945	945x1410	1410x1410
E x F	530x530	530x680	530x910	705x705	705x985	985x985	985x1450	1450x1450
H	145	145	145	170	170	220	220	320

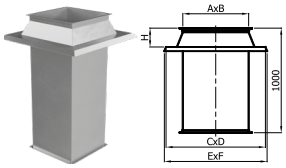


POD - AxB - AI - m

- m - material
- AI - type
- AxB - dimensions
- POD - base

Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

19. ROOF BASE TYPE AII ACC. TO BN-70/8865-32 - POD-AII



A x B	250x250	250x400	250x630	400x400	400x630	630x630	630x1000	1000x1000
C x D	490x490	490x640	490x870	665x665	665x745	945x945	945x1410	1410x1410
E x F	530x530	530x680	530x910	705x705	705x985	985x985	985x1450	1450x1450
H	145	145	145	170	170	220	220	320

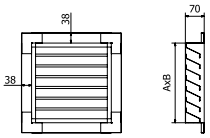
POD - AxB - AII - m

- m - material
- AII - type
- AxB - dimensions
- POD - base

Application	P	P	P - industrial processes
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - mild steel hot dip galvanized

1. WALL AIR INTAKE ACCORDING TO BN-70/8865-33 - CZERP-S





B - horizontal dimension
A - vertical dimension

B z A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800

CZERP-S - BxA - m

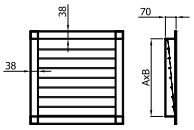
- m - material
- BxA - dimensions
- CZERP-S - wall air intake

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

stała żaluzja i siatka

2. WALL AIR INTAKE ACCORDING TO BN-70/8865-31 - WYRZ-S





B - horizontal dimension
A - vertical dimension

B z A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800

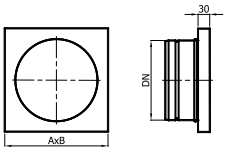
WYRZ-S - BxA - m

- m - material
- BxA - dimensions
- WYRZ-S - wall air intake

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

3. INLET CASSETTE FOR ROOF TERMINALS AND AIR INTAKES





B - horizontal dimension
A - vertical dimension

A x B	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800

KASETA-S - BxA - m

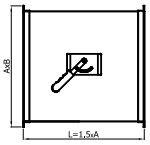
- m - material
- BxA - dimensions
- KASETA-S - inlet cassette

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

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1. SINGLE-SURFACE DAMPER - WPJ





B - horizontal dimension
A - vertical dimension

B z A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800

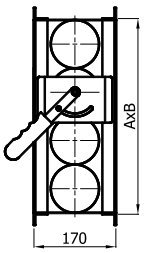
WPJ - BxA - m

- material
- dimensions
- single-surface damper

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

2. MULTISURFACE DAMPER - WPW





B - horizontal dimension
A - vertical dimension

B z A	200x200	250x250	300x300	350x350	400x400	500x500	600x600	700x700	800x800

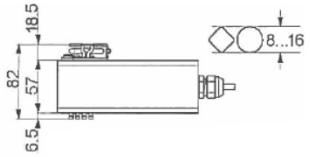
WPW - BxA - m

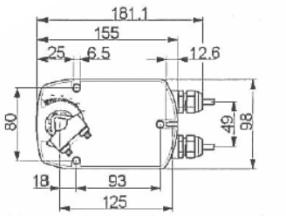
- material
- dimensions
- multisurface damper

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

3. LF ACTUATOR (WITH RETURN SPRING)







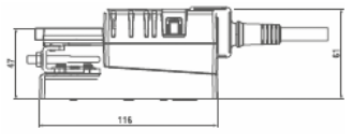
SIL-LF - x

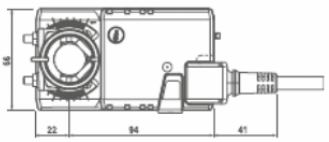
- type
- LF actuator

Proper type of actuator should be chosen according to the Belimo product catalogue.

4. LMC ACTUATOR (WITHOUT RETURN SPRING)







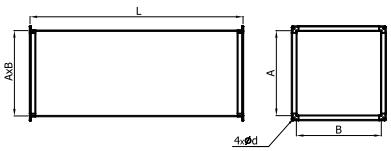
SIL-LMC - x

- type
- LMC actuator

Proper type of actuator should be chosen according to the Belimo product catalogue.

1. STRAIGHT DUCT - WKP





B - horizontal dimension
A - vertical dimension

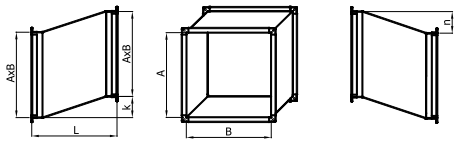
WKP - BxA / L - m

- material
- length
- dimensions
- straight duct

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

2. OFFSET PIPE - WUS





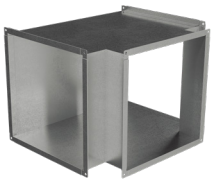
B - horizontal dimension
A - vertical dimension

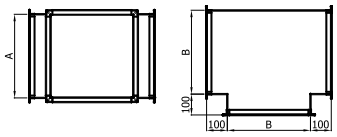
WUS - BxA / L / k/n - m

- material
- offset dimensions
- length
- dimensions
- offset pipe

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

3. TEE - WTR





B - horizontal dimension
A - vertical dimension

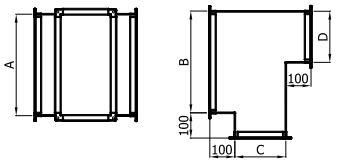
WTR - BxA - m

- material
- dimensions
- tee

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

4. REDUCING TEE - WTRR





B - horizontal dimension
A - vertical dimension

WTRR - BxA / C/D - m

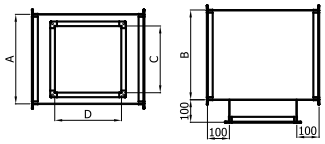
- material
- dimensions
- dimensions
- reducing tee

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

invent. build. enjoy.

5. REDUCING TEE - WTRP





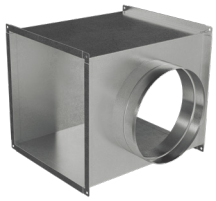
B - horizontal dimension
A - vertical dimension

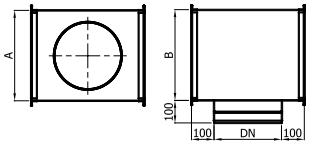
WTRP - BxA / CxD - m

- material
- dimensions
- dimensions
- reducing tee

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

6. REDUCING TEE - WTRO





B - horizontal dimension
A - vertical dimension

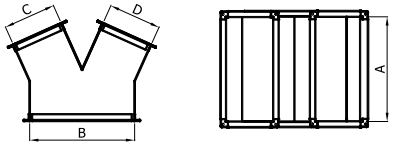
WTRO - BxA / DN - m

- material
- diameter
- dimensions
- reducing tee

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

7. TWIN BEND - WYRP





B - horizontal dimension
A - vertical dimension

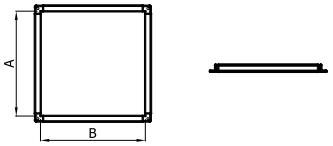
WYRP - BxA / C/D - m

- material
- dimensions
- dimensions
- twin bend

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

8. DUCT FRAME - WRAM





25 - for channels ≤ 1000x1000
30 - for channels > 1000x1000
other dimensions upon request

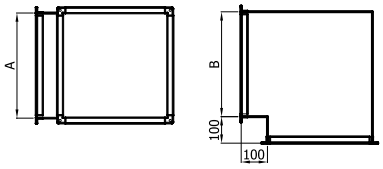
WRAM - BxA / ... - m

- material
- profil 25 or 30
- dimensions
- duct frame

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

9. ELBOW 90° - WKSP





B - horizontal dimension
A - vertical dimension

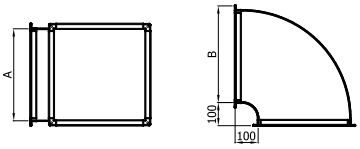
WKSP - BxA - m

- material
- dimensions
- elbow

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

10. ELBOW 0°- 90° - WLUK





B - horizontal dimension
A - vertical dimension

WLUK - BxA / ... - m

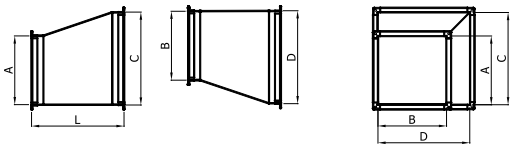
- material
- angle 0°-90°
- dimensions
- elbow

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

While ordering indicate the actual angle.

11. ASYMMETRICAL REDUCER - WRDN





B - horizontal dimension
A - vertical dimension

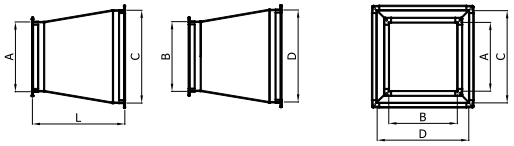
WRDN - BxA / DxC - m

- material
- dimensions
- dimensions
- asymmetrical reducer

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

12. SYMMETRICAL REDUCER - WRD





B - horizontal dimension
A - vertical dimension

WRD - BxA / DxC - m

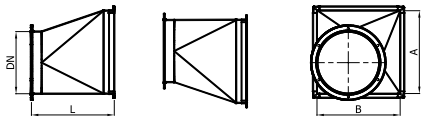
- material
- dimensions
- dimensions
- symmetrical reducer

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

invent. build. enjoy.

13. ASYMMETRICAL REDUCER - WRDN





B - horizontal dimension
A - vertical dimension

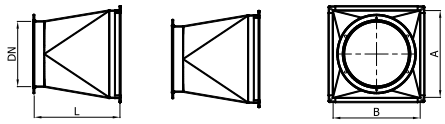
WRDN - BxA / DN - m

- material
- diameter
- dimensions
- asymmetrical reducer

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

14. SYMMETRICAL REDUCER - WRD





B - horizontal dimension
A - vertical dimension

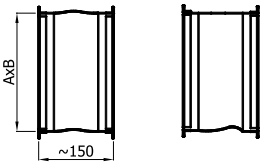
WRD - BxA / DN - m

- material
- diameter
- dimensions
- symmetrical reducer

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

15. FLEXIBLE DUCT CONNECTOR - WKE



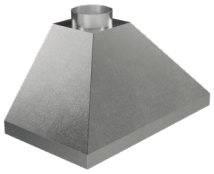


WKE - BxA - m

- material
- dimensions
- flexible duct connector

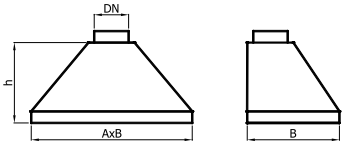
Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

16. VENTILATING HOOD - WOKAP



WOKAP - BxA / H / DN - m

- material
- diameter
- height
- dimensions
- ventilating hood



B - horizontal dimension
A - vertical dimension

Application	P	P	P - industrial processes
	O	O	O - air heating
Material	X	-	X - chrome-nickel steel sheet 1.4301
	-	OC	OC - galvanised steel sheet

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