



NORDsmoke

Rectangular smoke control ducts

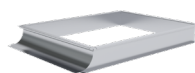
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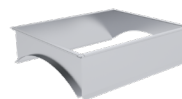
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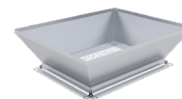


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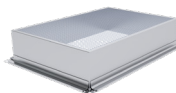


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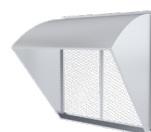
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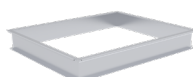


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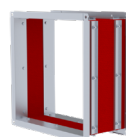
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General

NORDsmoke is a certified ventilation ducts product group for single compartment smoke extraction. It is used in a system to control the movement and/or containment of smoke and heat.

ETS NORD NORDsmoke smoke control duct section achieves CE standard requirements.

NORDsmoke -system complies with the requirements of EN 12101-7 and fire classified according to standard EN 13501-4. Duct system has been tested at 600C/ 2 hours according to EN 1366-9.

E₆₀₀ 120 (v_e - h_o) S 1500single

Maximum allowed underpressure is -1500 Pa

Resistance to temperature is 600 °C for 120 minutes

Rectangular smoke control duct section

We produce NORDsmoke rectangular ducts and fittings according to the requirements of standard EN 1505:2001. The steel duct is constructed in sections of galvanised steel sheet. For connecting ducts and duct sections products are provided with E30-profile.

Conformity to these standards can be achieved when the ducts are installed according to the installation instructions.

Maximum permitted dimension for installation is 1250x1000 mm.

Marking, dimensions and tolerances

The nominal size of a rectangular duct and duct section is the internal side measurements of the duct – a and b in millimeters. The sizes of the smaller end of the connection are marked as c and d.

Standard measures of side lengths are given in Table 2.

- Measures are given in mm.
- Angle size is given in degrees.
- Sheet metal thickness t
- Radius r
- Effective length of fitting l

Table 1. Deviations and tolerances

Dimensions		Deviation, mm
a, b, c, d		+0 -4
l, r	≤15	+0 -2
	> 15 ≤100	+0 -5
	>100	+0 -10
Angle α		2°
Length L		0,005L

Table 2. Standard dimensions

a	b									
	100	150	200	250	300	400	500	600	800	1000
200										
250										
300										
400										
500										
600										
800										
1000										
1200										
1250										

Material

In general all products are made of hot dip galvanized steel sheets, with the minimum thickness of the zinc layer being 275 g/m² on both side (C3 environmental class). As a special order, smoke ducts and fittings can be produced also from Magnelis (ZM310) coated steel (C4 environmental class).

Marking

Marking of standard products should clearly indicate the type and size of the product. All dimensions are given in millimeters. Each product of the smoke control systems ducts are labeled with the CE label and smoke control ducts also with NORDsmoke adhesive tape.

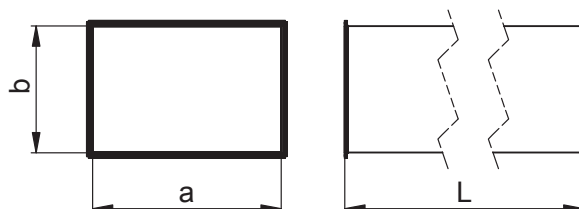
EKT-T Duct

A straight ventilation duct with a reinforced wave profile. Standard lengths of these ducts are 1250 and 2000 mm. For connection the duct is provided with E30-profile at both ends.



Reinforcements

- $a, b < 400$ and $400 \leq L \leq 2000$ without rod
- $a \geq 400$ and $L \geq 400$ reinforced with rods

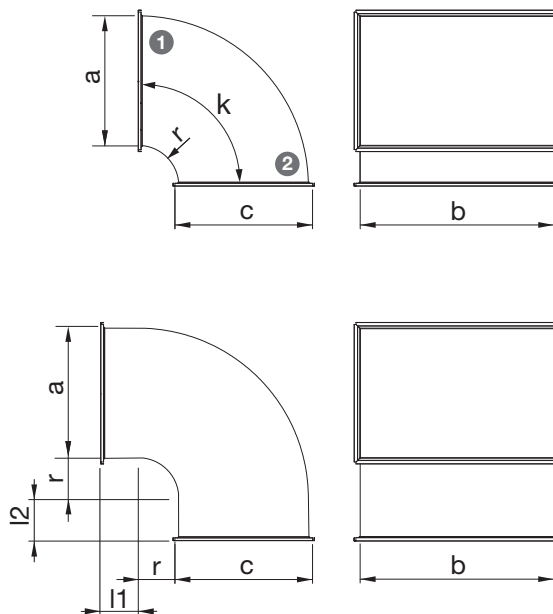


Product codes

	EKT-T	-	Material	-	A x B	-	L
Marking							
Material	Galvanized steel (DX51D+Z275), standard material ZM – zinc-magnesium coating (DX51D+ZM310)						
Nominal size A x B							
Length L							

Example: **EKT-T 600x400-1250**

EKP-T Bend



A bend with a rounded external angle.

In the event that side $a > 400$, the bend is provided with a reinforced guide.

In the event that the bend angle is $\leq 45^\circ$ there is no guide.

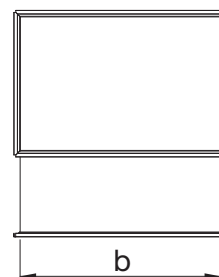
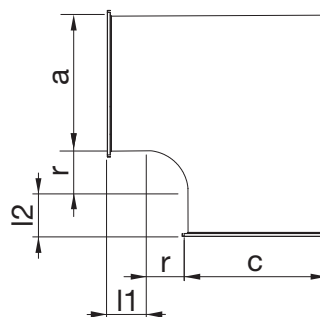
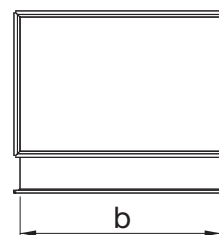
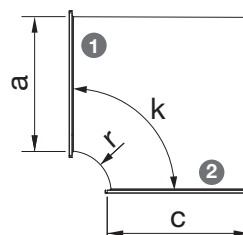
For connection the bend is provided with flanges height 30 mm.

Product codes

	EKP-T	-	Material	-	A x B	-	C x B	-	k	-	r	-	l1/l2
Marking													
Material													
Galvanized steel (DX51D+Z275), standard material													
ZM – zinc-magnesium coating (DX51D+ZM310)													
Dimensions A x B													
Dimensions C x B													
Angle k													
Radius r													
Length l1/l2													

Example: EKP-T EKP 800x400/800x400-90-r=125-l1=300-l2=200

EKPK-T Bend



Bend with a rectangular external angle.

In the event that side $a > 400$, the bend is provided with a reinforced guide.

In the event that the bend angle is $\leq 45^\circ$ there is no guide.

For connection the bend is provided with flanges height 30 mm.

Product codes

	EKPK-T	-	Materjal	-	A x B	-	C x B	-	k	-	r	-	l1/l2
Marking													
Material													
Galvanized steel (DX51D+Z275), standard material													
ZM – zinc-magnesium coating (DX51D+ZM310)													
Dimensions A x B													
Dimensions C x B													
Angle k													
Radius r													
Length l1/l2													

Example: EKPK-T EKP 800x400/800x400-90-r=125-l1=300-l2=200

EKK-T Reducer

Reducers are used to connect ducts of different sizes.

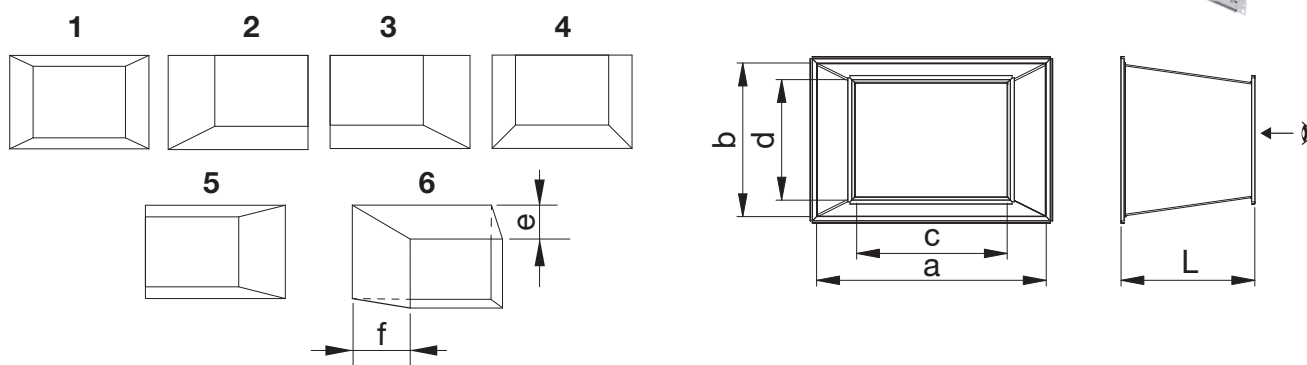
When a and $b < 800$, then $l = 300$ mm

When a or $b \geq 800$, then $l = 500$ mm

For connection the reducer is provided with flanges height 30 mm.



Location



Product codes

	EKK-T	-	Material	-	A x B	-	C x D	-	L	-	Location
Marking											
Material											
			Galvanized steel (DX51D+Z275), standard material								
			ZM – zinc-magnesium coating (DX51D+ZM310)								
Width A x Height B											
Width C x Height D											
Length											
Location											

Example: EKK-T 600x400/400x300-1

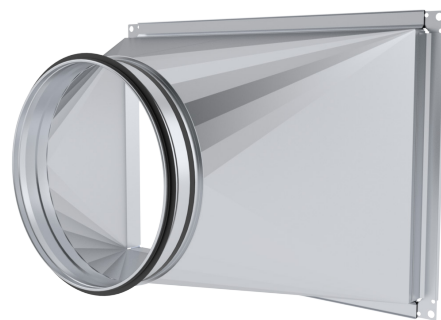
EKD-T Reducer to circular duct

Used to connect rectangular and circular ducts.

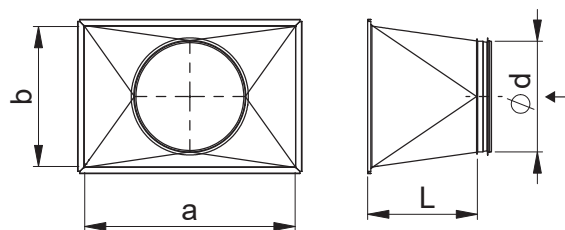
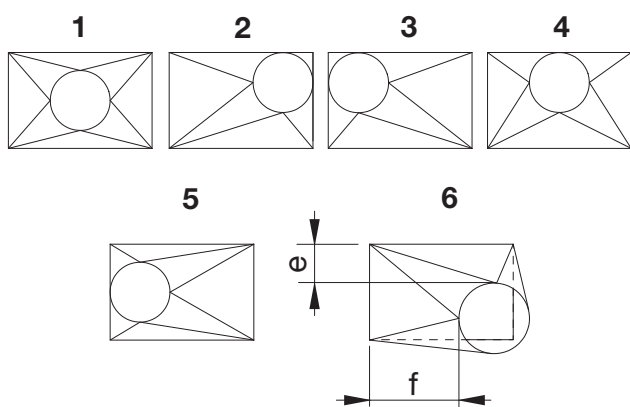
When a and $b < 800$, then $l = 300$ mm

When a or $b \geq 800$, then $l = 500$ mm

For connection the reducer rectangular end is provided with E30-profile.



Location



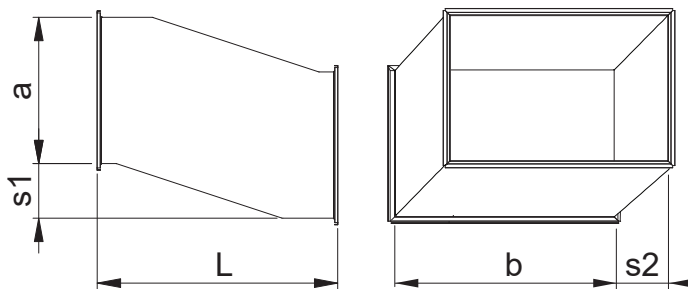
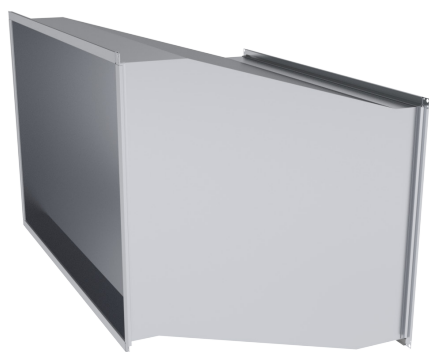
Product codes

EKK-T - Material - A x B - C x D - L - Location

Marking					
Material					
Galvanized steel (DX51D+Z275), standard material ZM – zinc-magnesium coating (DX51D+ZM310)					
Width A x Height B					
Diameter D					
Length L					
Location					

Example: EKD-T 600x400/400-2

EKN-T Offset



Offset is used for setting the ventilation system offset horizontally or vertically. The length of the offset depends on its size. The measures given in the table should be preferred, since ratio measures between height a , offset s and length l are important. Otherwise too sudden drop may limit air flow movement.

For connection the offset is provided with E30-profile at both ends.

a	b	s	l
100	200 300 400	50,100	300
150	200 300 400 500	50,100,150	350
200	100 150 300 400 500 600	50,100 150, 200	300 400
300	100 150 200 300 400 500 600 800	50,100 150, 200, 250, 300	400 500
400	100 150 200 300 400 500 600 800 1000	50, 100 150, 200 250, 300, 350, 400	400 500 600

a	b	s	l
500	150 200 300 400 600 800 1000	50,100,150 200, 250 300, 350, 400, 450, 500	500 600 700
600	200 300 400 500 800 1000	50, 100, 150 200, 250 300, 350 400, 450, 500, 550, 600	500 650 700 800
800	300 400 500 600 1000	50,100 150 200, 250 300, 350 400, 450, 500 600, 700	500 600 700 800 900 1100
1000	400 500 600 800	50, 100 150, 200 250, 300 350, 400, 450, 500 600, 700, 800, 900	550 700 850 1000 1200

Product codes

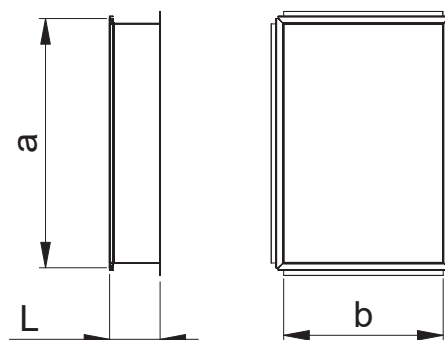
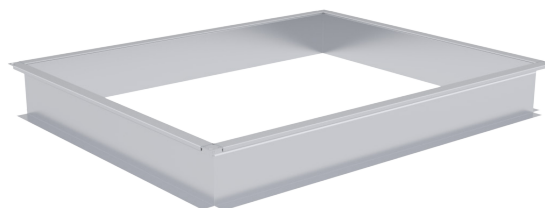
	EKN-T	-	Material	-	A x B	-	s1/s2	-	l
Marking									
Material									
			Galvanized steel (DX51D+Z275), standard material						
			ZM – zinc-magnesium coating (DX51D+ZM310)						
Width A x height B									
Lenght of offset s1/s2									
Lenght									

Example: EKN-T 600x400-200-650

ESS-T Straight saddle

Straight saddle for a rectangular duct. Standard length 125 mm.

For connection the saddle is provided with E30-profile.



Product codes

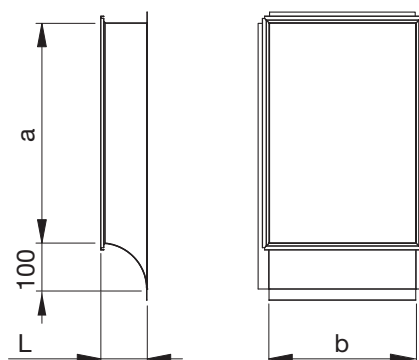
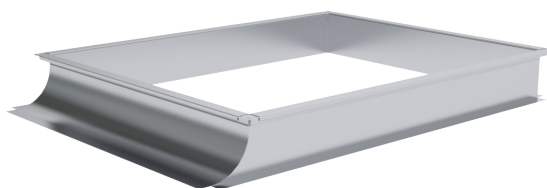
	ESS-T	-	Material	-	A x B	-	(-)	-	L
Marking									
Material									
			Galvanized steel (DX51D+Z275), standard material						
			ZM – zinc-magnesium coating (DX51D+ZM310)						
Nominal size A x B									
Duct connection									
Length L									

Example: ESS-T 600x400-125
ESS-T 600x400(-)-125

ESK-T Saddle

Flat saddle for a rectangular duct. One edge of the saddle is provided with a connection bar and the other edge is bent. Standard length is 125 mm.

For connection the saddle is provided with E30-profile.



Product codes

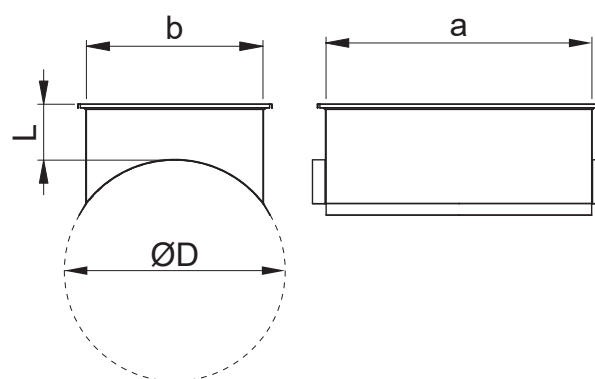
	ESK-T	-	Material	-	A x B	-	L
Marking							
Material							
			Galvanized steel (DX51D+Z275), standard material				
			ZM – zinc-magnesium coating (DX51D+ZM310)				
Nominal size A x B							
Length L							

Example: **ESK-T 600x400-125**

ESD-T Saddle for a round duct

Saddle for connecting with a round duct. Standard length is 125 mm.

For connection the saddle is provided with E30-profile. The end for a circular duct is bent.

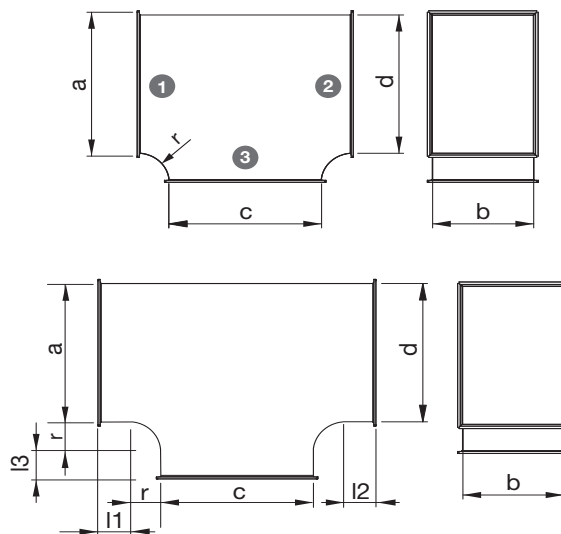


Product codes

	ESD-T	-	Material	-	A x B	-	(-)	-	D	-	L
Marking											
Material											
			Galvanized steel (DX51D+Z275), standard material								
			ZM – zinc-magnesium coating (DX51D+ZM310)								
Side A x side B											
Duct connection											
Diameter D											
Length L											

Example: ESD-T 500x300/315-125
ESD-T 500x300(-)/315-125

EKM-T T-piece



T-pieces are used to split the duct in two different directions.
Side dimensions (a, c, d) of the T-piece may differ.
For connection the T-piece is provided with E30-profile.

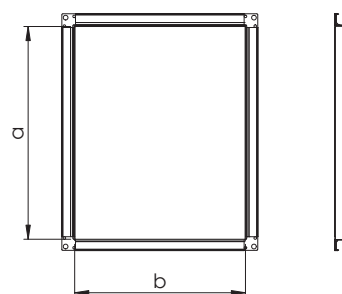
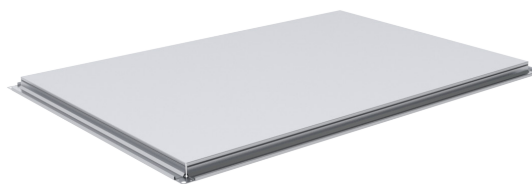
Product codes

	EKM-T	-	Material	-	A x B	-	C x B	-	D x B	-	r	-	l1/l2/l3
Marking													
Material													
Side A x side B													
Side C x side B													
Side D x side B													
Radius r													
Length l1/l2/l3													

Example: EKM-T 800x500-125
EKM-T 800x500/800x400/800x400-125

EKOL-T End cap

Ventilation cap used at the end of the duct. For connection the end cap is provided with E30-profile.



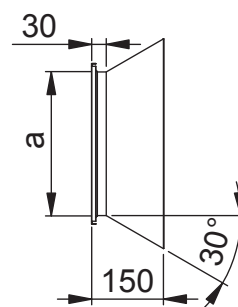
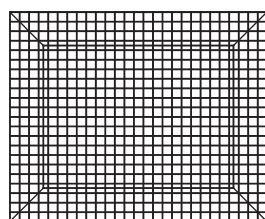
Product codes

	EKOL-T	-	Material	-	A x B
Marking					
Material					
			Galvanized steel (DX51D+Z275), standard material		
			ZM – zinc-magnesium coating (DX51D+ZM310)		
Side A x side B					

Example: EKOL-T 500x300

EVO-T Air intake with mesh

EVO-T air intake with mesh for supply and exhaust duct.

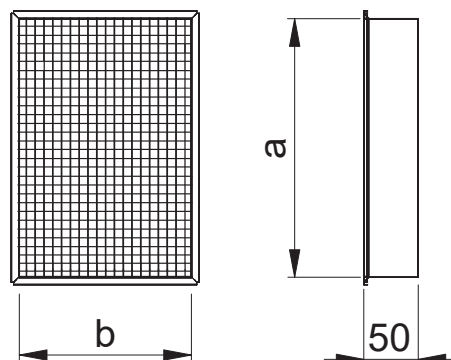
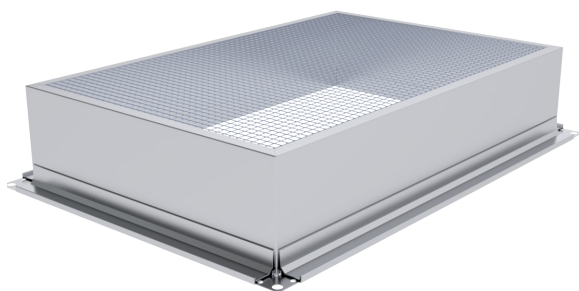


Product codes

	EVO-T	-	Material	-	A x B
Marking					
Material					
			Galvanized steel (DX51D+Z275), standard material		
			ZM – zinc-magnesium coating (DX51D+ZM310)		
Side A x side B					

Example: **EVO-T 500x300**

ESV-T Air intake with mesh

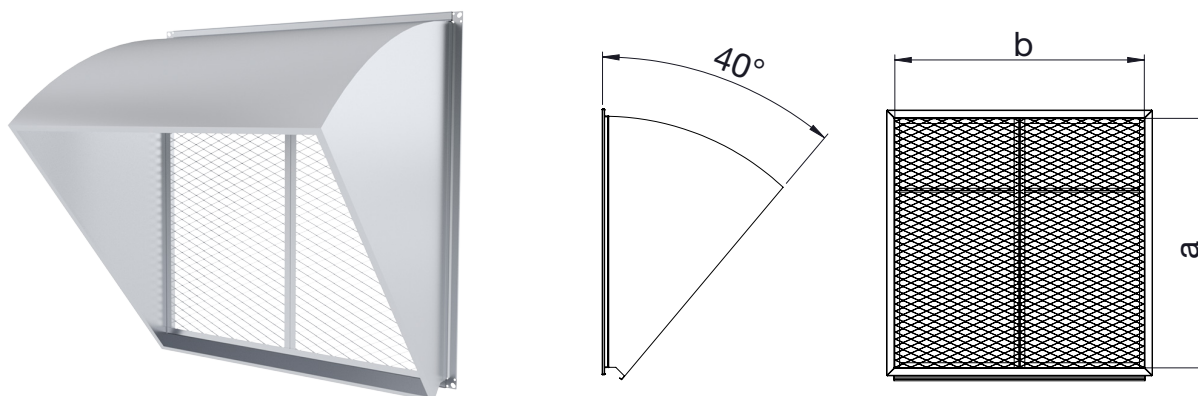


ESV-T straight air intake with mesh for supply and exhaust duct.

Product codes

	ESV-T	-	Material	-	A x B
Marking					
Material					
			Galvanized steel (DX51D+Z275), standard material		
			ZM – zinc-magnesium coating (DX51D+ZM310)		
Side A x side B					
Example:	ESV-T 500x300				

EVR-T Air intake with mesh



EVR-T diagonal air intake with mesh for supply and exhaust duct.

Product codes

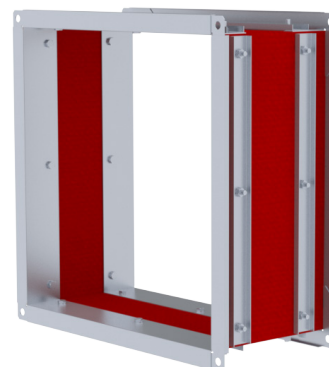
	EVR-T	-	Material	-	A x B
Marking					
Material					
			Galvanized steel (DX51D+Z275), standard material		
			ZM – zinc-magnesium coating (DX51D+ZM310)		
Side A x side B					

Example: EVR-T 500x300

ECL-T Compensator

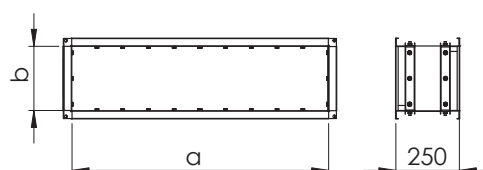
ECL-T compensator is a part of certified NORDsmoke smoke and heat control system. The compensator is intended for the installation into sheet metal smoke control ducts to prevent damage from the forces generated by longitudinal thermal expansion.

The distance between two compensators shall not exceed 10 m.



Technical description

ECL-T connection frame is made of hot-galvanised sheet steel, DX51D+Z275. Connection frame fits with E30 connection profile. For flexible joint are used an air-tight joint and a fabric.



Product codes

	ECL-T	-	Material	-	A x B
Marking					
Material					
			Galvanized steel (DX51D+Z275), standard material		
			ZM – zinc-magnesium coating (DX51D+ZM310)		
Side A x side B					

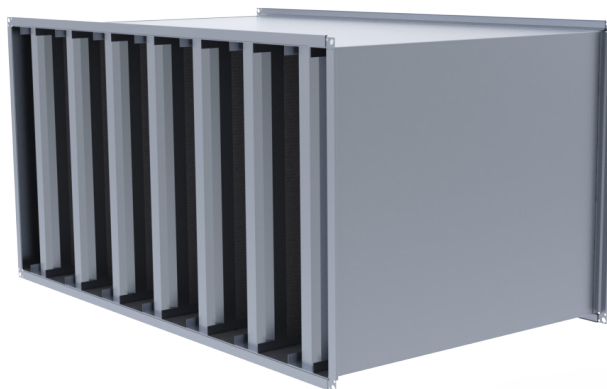
Example: **ECL-T 500x300**

MSK-T Rectangular silencer

MSK-T-rectangular silencer for rectangular duct systems. Suitable for use in exhaust, intake, discharge and supply air handling systems.

The elements are available in a widths 100, 150 and 200 mm.

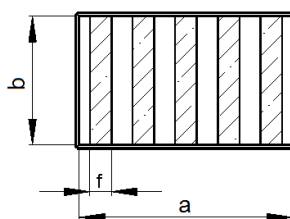
Standard lengths of rectangular silencers are 1250 and 2000 mm.



Design and dimensions

The MSK-T consists of an outer shell and absorption element manufactured of galvanized steel (standard) with E30-profile at both ends.

MSK-T absorption material: mineral wool board, covered with black glass fibre textile.



MSK-T Sound attenuation (absorption material mineral wool)

(Width a= 400, 600, 800, 1000, 1200)

MSK-T			Sound attenuation (dB)							
			Mean frequency of octave band (Hz)							
Element width	Elements spacing	Lenght L	63	125	250	500	1k	2k	4k	8k
100	100	600	1	2	6	14	29	23	17	10
		900	2	3	7	18	40	29	21	12
		1250	3	5	9	23	49	37	26	15
		1500	3	6	10	29	50	43	31	18
		1800	4	6	11	34	50	46	35	20
		2000	5	8	13	39	50	49	40	23
		2400	6	9	16	43	50	50	44	25
Element width	Elements spacing	Lenght L	63	125	250	500	1k	2k	4k	8k
200	100	600	2	5	13	21	27	22	18	13
		900	3	8	20	31	29	26	23	17
		1250	4	11	26	45	47	37	29	19
		1500	5	14	32	47	49	42	35	22
		1800	7	16	38	50	50	47	38	25
		2000	8	18	43	50	50	50	41	28
		2400	9	21	46	50	50	50	44	31

Product codes

	MSK-T	-	Material	-	A x B	-	L	-	f x n
Marking									
Material									
			Galvanized steel (DX51D+Z275), standard material ZM – zinc-magnesium coating (DX51D+ZM310)						
Width A x Height B									
Lenght L									
Element width x Quantity									

Example: MSK-T 600x400–1000–100x3

KR2-T Regulating damper

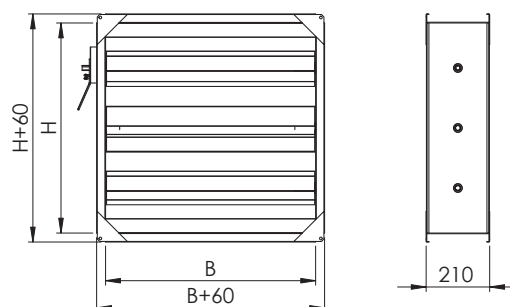
KR2-T rectangular damper with blades are designed for regulating air flow and controlling volume flow rates in smoke control and ventilation systems.

Damper tightness class is 1 (EVS-EN 1751:2014).

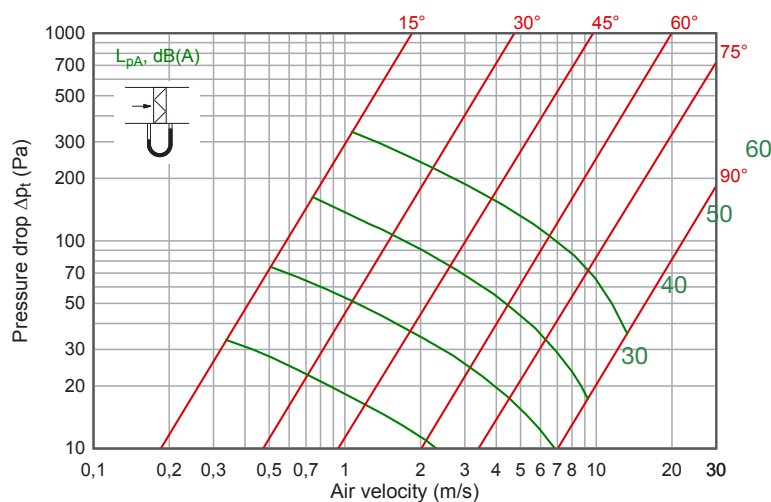


Structure and dimensions

Damper casing and blades are manufactured of galvanized steel sheet. The damper closing mechanism is equipped with brass bearings.



Technical data



Product codes

	KR2-T	-	Material	-	B x H
Marking					
Material			Galvanized steel (DX51D+Z275), standard material ZM – zinc-magnesium coating (DX51D+ZM310)		
Side B x side H					

Example: KR2-T 500x300

KRS-T Shut-off and regulating damper

The KRS-T shut-off and regulating damper is designed to be used for shut-off and regulate air-flow in smoke control and ventilation systems. Can be used as shut-off damper for compensating ventilation duct in smoke control system.

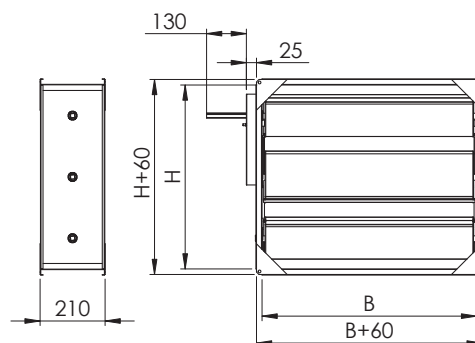
Damper tightness class is 3 (EVS-EN 1751:2014).



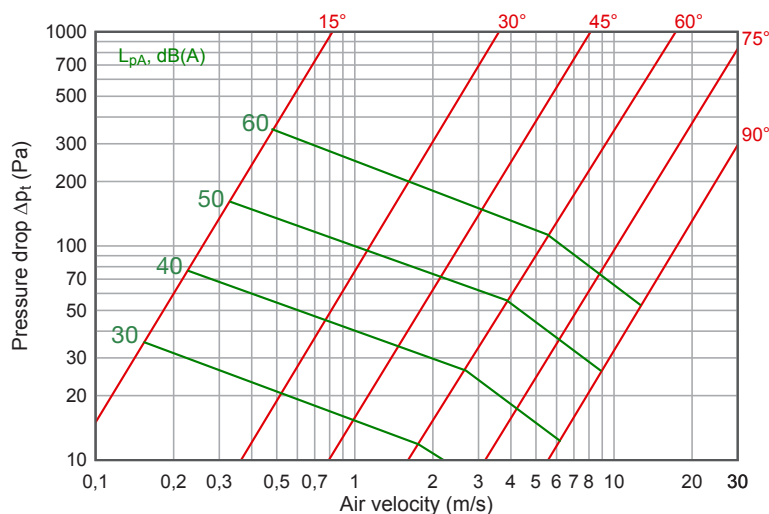
Structure and dimensions

KRS-T damper casing and blades are manufactured of galvanized steel sheet. The damper closing mechanism is equipped with brass bearings.

KRS-T damper blades are insulated with mineral wool. All blades have profiled sandwich structure and smooth surface to prevent thermal bridges and dirt accumulation.



Technical data



Product codes

KRS-T - Material - B x H

Marking	_____	_____	_____
Material	_____		
	Galvanized steel (DX51D+Z275), standard material ZM – zinc-magnesium coating (DX51D+ZM310)		
Side B x side H	_____		

Example: **KRS-T 500x300**

RSN-T Exhaust air grille

Grille for exhaust air with perforated front cover.

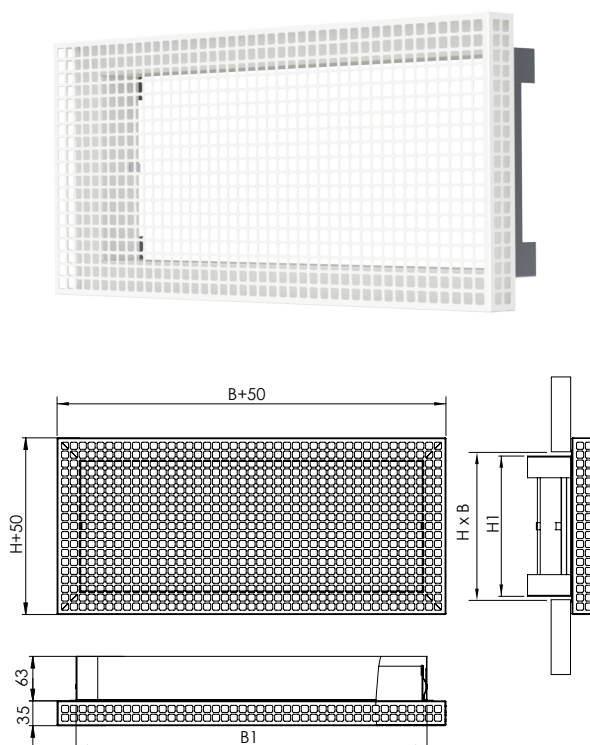
- Low sound power level
- Easy to clean

Structure and dimensions

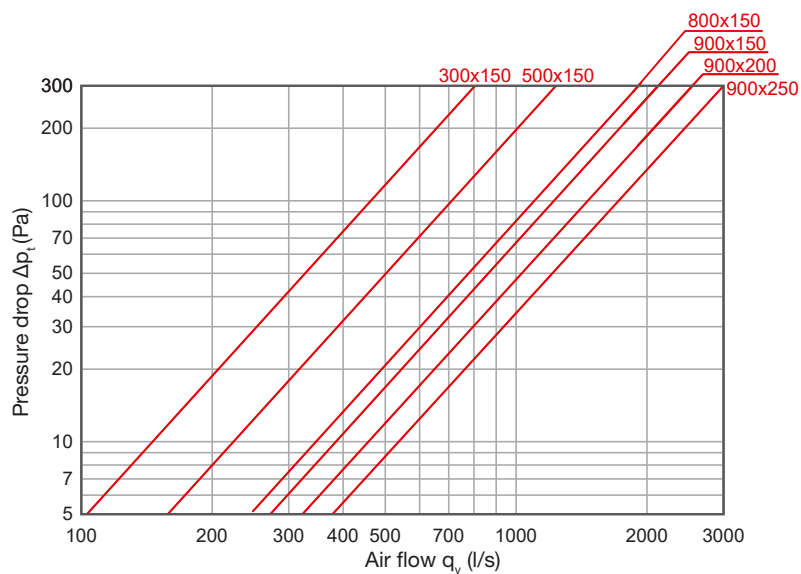
Manufactured of galvanized steel.

Standard colour white (RAL 9003). Other RAL colours available.

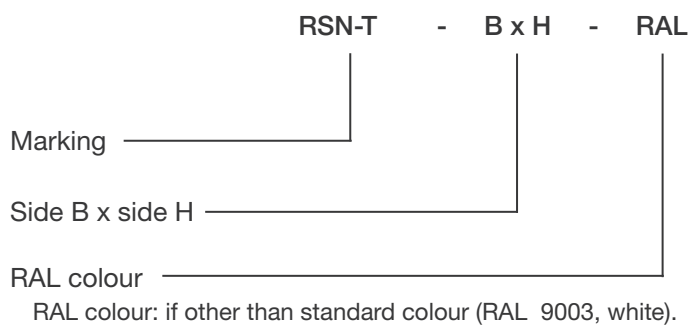
Nominal size B x H mm	B1	H1	Weight, kg
200x100	197	97	0,7
200x150	197	147	0,9
300x100	297	97	0,9
300x150	297	147	1,2
300x200	297	197	1,5
400x100	397	97	1,2
400x150	397	147	1,5
400x200	397	197	1,8
500x150	497	147	1,7
500x200	497	197	2,3
600x150	597	147	2,2
600x200	597	197	2,8
600x300	597	297	3,8
800x150	797	147	2,6
800x200	797	197	3,6
1000x200	997	197	4,4



Technical data



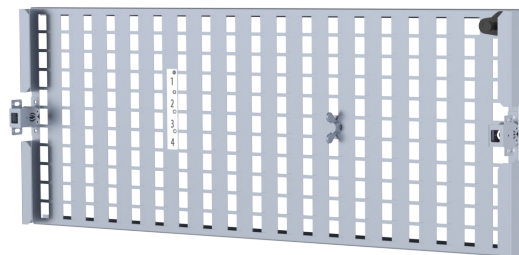
Product codes



Example: RSN 300x150

MRO Regulating part

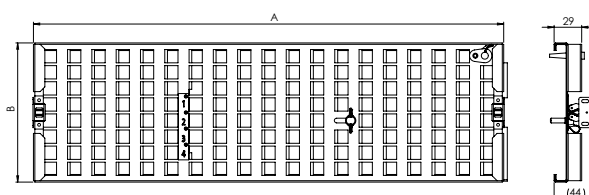
MRO rectangular regulating part for exact measuring and adjusting of air volumes. The MRO is intended to be installed with rectangular saddle directly onto the duct.



Structure and dimensions

MRO regulating part is manufactured of galvanized steel sheet.

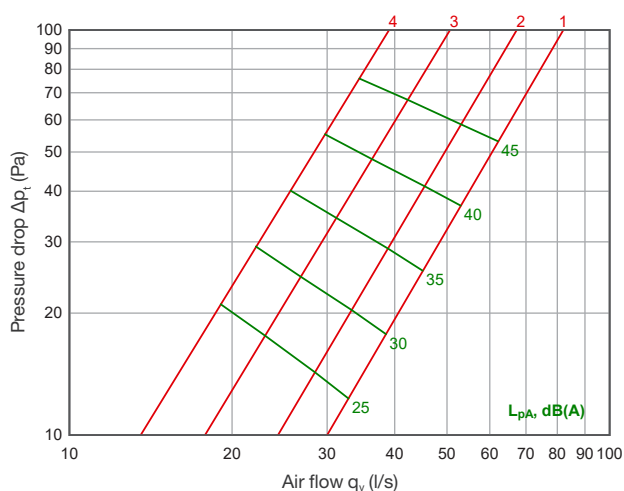
MRO is provided with mounting brackets which are removed from the part by pulling them out and then fixed separately to the inside of the rectangular saddle.



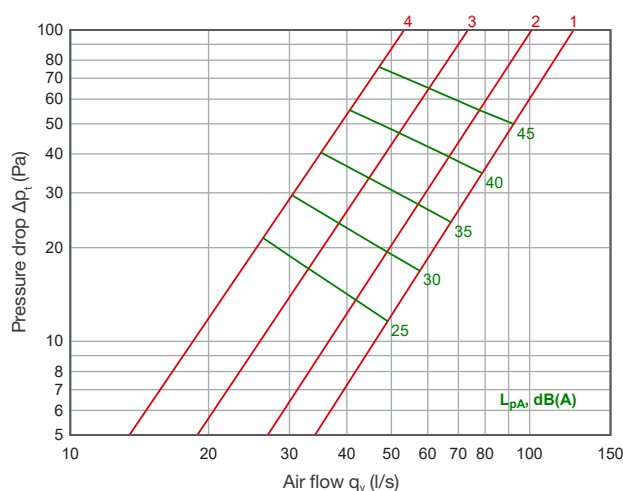
Measurements	A	B
200x100	197	97
200x150	197	147
300x100	297	97
300x150	297	147
300x200	297	197
400x100	397	97
400x150	397	147
400x200	397	197
500x150	497	147
500x200	497	197
600x150	597	147
600x200	597	197
600x300	597	297
800x150	797	147
800x200	797	197
1000x200	997	197

Technical data

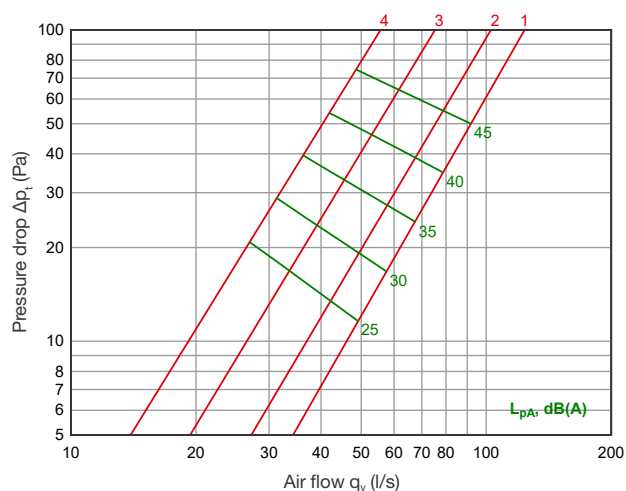
MRO 200x100



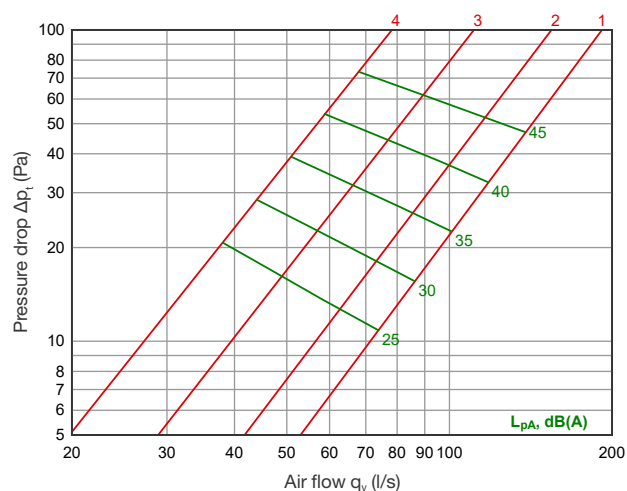
MRO 200x150



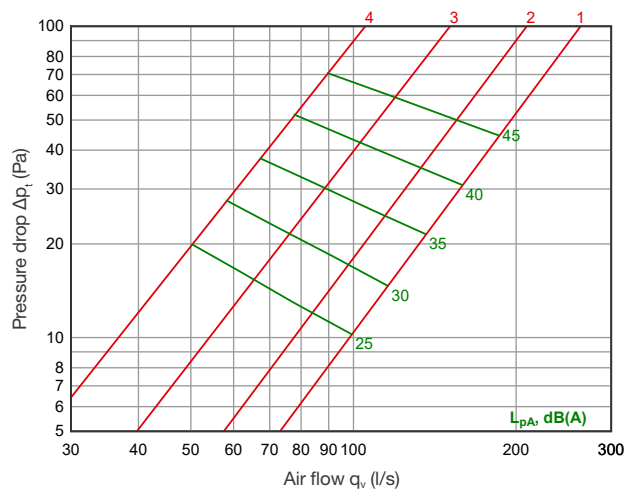
MRO 300x100



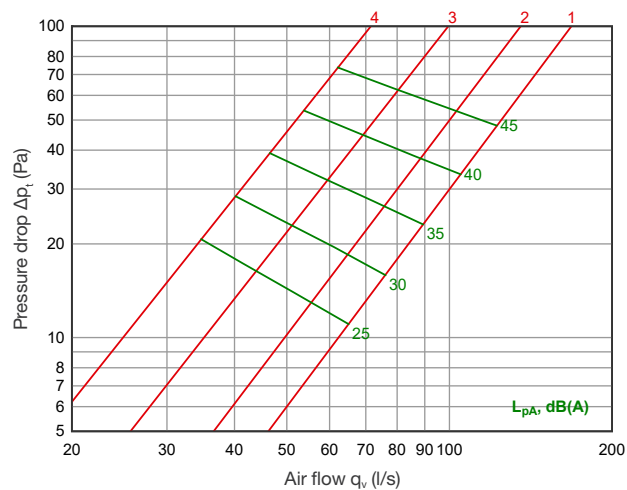
MRO 300x150



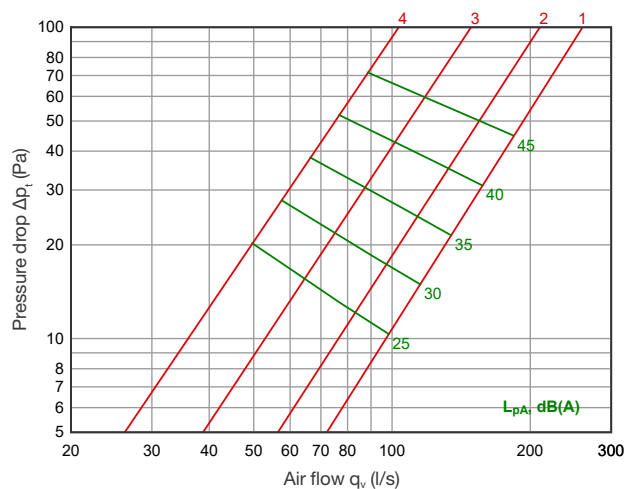
MRO 300x200



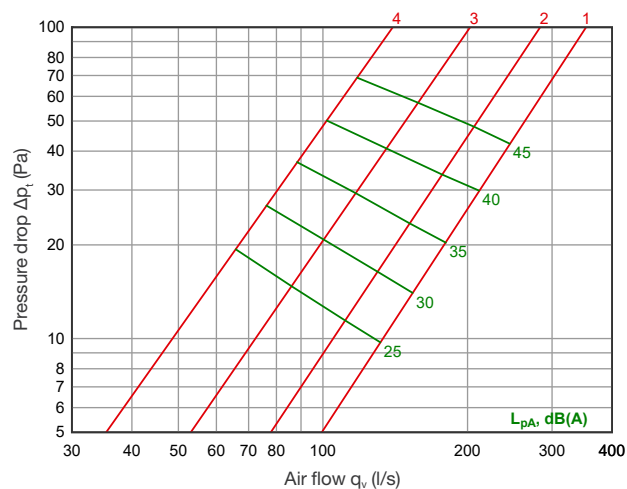
MRO 400x100



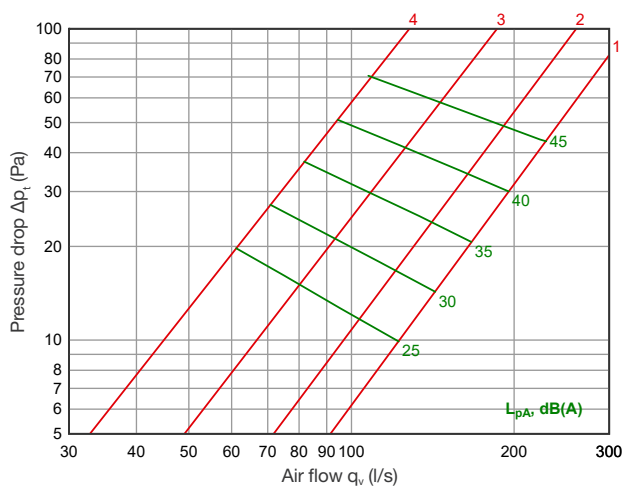
MRO 400x150



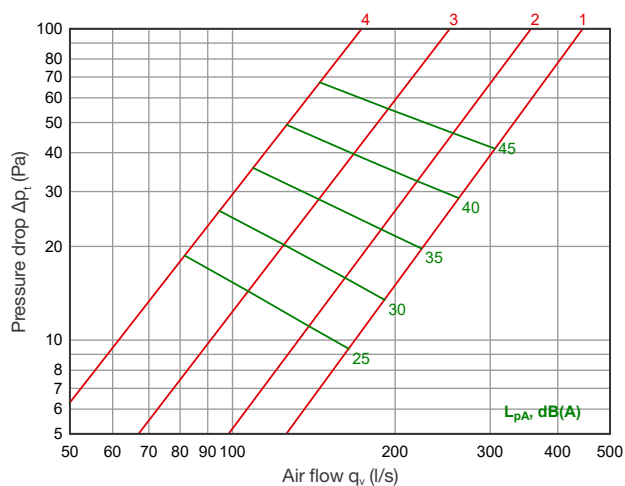
MRO 400x200



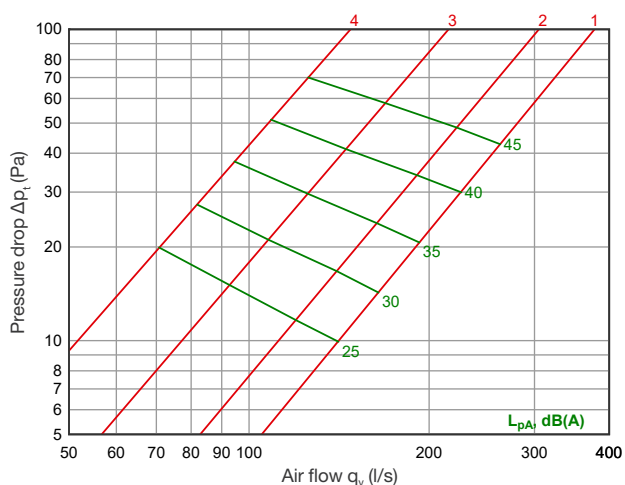
MRO 500x150



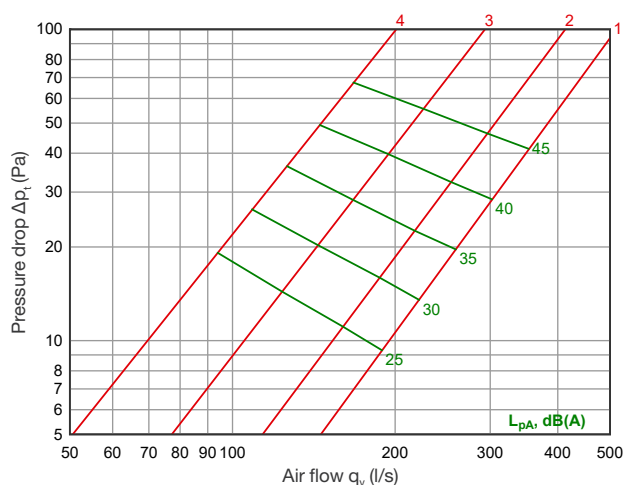
MRO 500x200



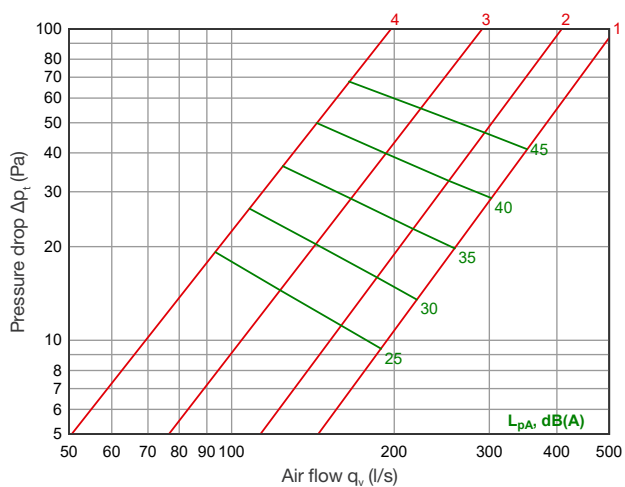
MRO 600x150



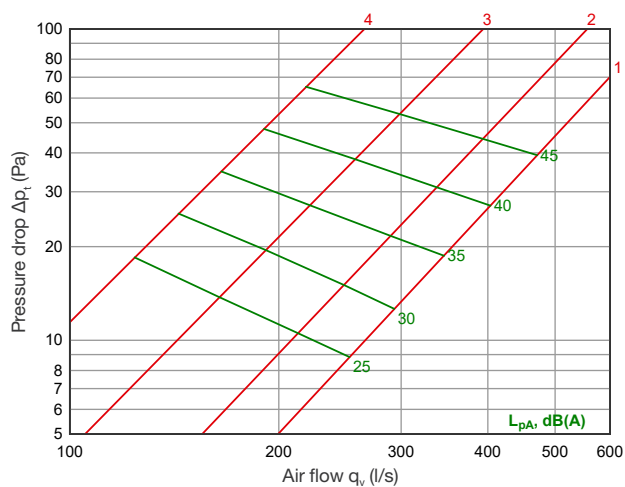
MRO 600x200



MRO 800x150



MRO 800x200



Installation accessories

Sealing materials

Firestop silicone



Firestop tape, 15x4 mm



Mounting components

Threaded rod, 2 m

M8
M10



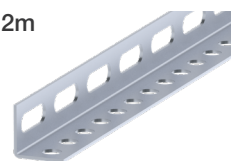
KOLI supported cantilever

L=300
L=400
L=600
L=800
L=1000
L=1200



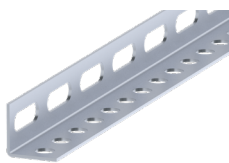
Mounting rail, L-profile

30x30x2, L=2m



Mounting rail, U-profile

30x30x2



Fixing clamp for euro profile





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