



**SVK2
EX SVK2**



SVV2



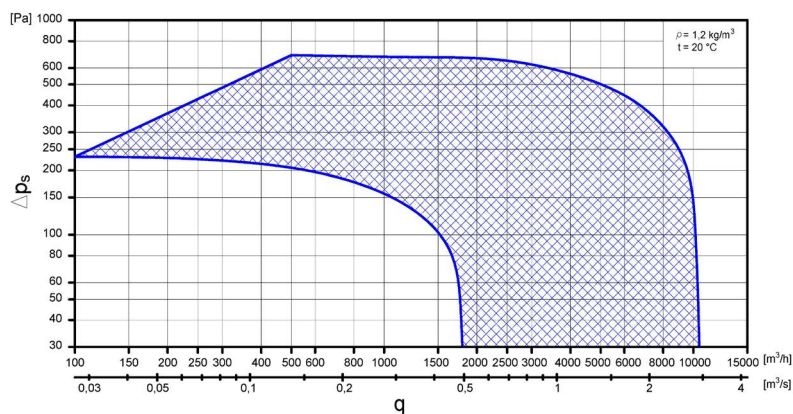
SVH2

ROOF FANS

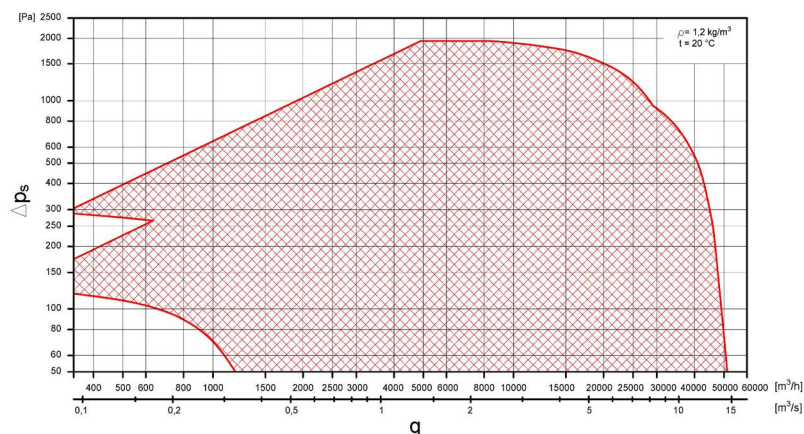
TABLE OF CONTENT

GENERAL SELECTION SVH2/SVV2	Page 2
GENERAL SELECTION SVK2/EX SVK2	Page 2
ROOF FANS TYPE SVH2 AND SVV2	Page 3
Designation	Page 3
Dimensions	Page 4
Technical data	Page 4
ROOF FANS TYPE SVK2	Page 5
Designation	Page 5
Dimensions	Page 7
Technical data	Page 8
ROOF FANS TYPE EX SVK2	Page 11
Designation	Page 11
Dimensions	Page 12
Technical data	Page 13
ACCESSORIES	Page 14
MOUNTING EXAMPLES	Page 15

GENERAL SELECTION SVH2/SVV2



GENERAL SELECTION SVH2/SVV2



ROOF FANS TYPE SVH2 and SVV2

Use

Roof fans SVH2 type with horizontal outlet and SVV2 type with vertical outlet are suitable for ventilation systems of industrial buildings, workshops, garages, apartment blocks, lavatories, shopping malls and other large spaces for the transport of dust free air and other non-aggressive gases.

Technical description

Fans have impellers with back-curved blades, which assure good efficiency ratio and low noise level. Impeller and electromotor are dynamically balanced in G 6.3 class by ISO 1940-1. Electromotor with impeller are mounted on the fan casing through the shock absorbers, which assure vibrations dampening inside a fan casing.

Base plate with inlet funnel enables minimal entry losses. Screws on the base plate ensure easy connection of all additional inlet accessories.

Protective caps at SVH2 and external casings at SVV2 are made of Al sheet metal. Impellers of both designs are protected against touch with safety mesh. Mesh also prevents animals, leaves or other larger parts to enter the fan.

Fans ensure long lasting operation, with long service intervals, for low cost operation and maintenance.

Temperature range:

- ambient temperature: -15 to 50°C

Drive

Roof fans type SVH2 and SVV2 have electric motors with external rotor.

Standard motors for sizes 250/200 and 315/250 are monophase, one-speed, 230V/50Hz, with integrated thermal protection.

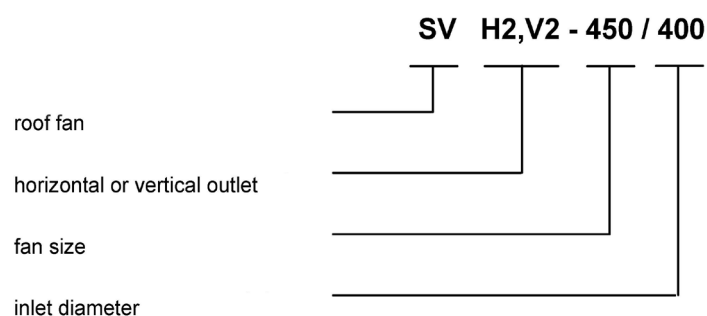
Roof fans sizes from 400/315 to 560/500 have three-phase, two-speed, 400V/50Hz motors with thermal protection sensors (TK). Sensor leads must be connected to the external protective device in switchboxes or speed controllers. All electromotors have IP 44 protection.

Start, stop and RPM regulation of the fan is possible with one or two speed switch and five speed regulator.

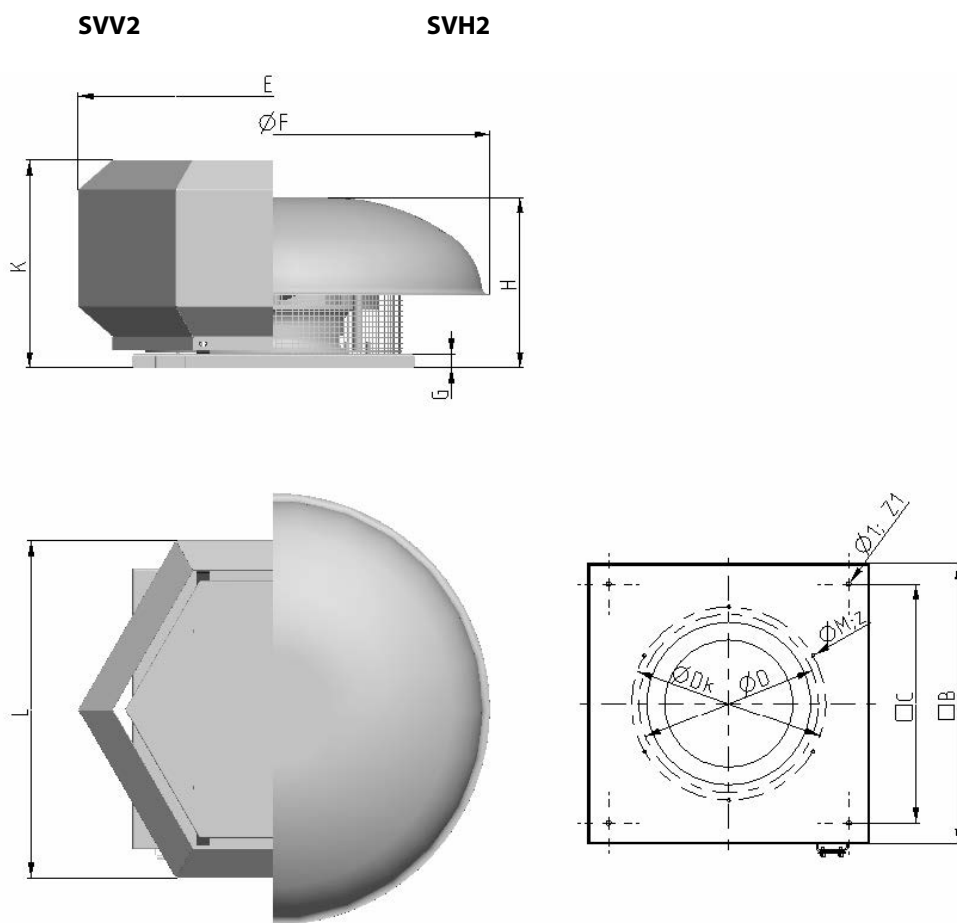
Accessories

Standard accessories are flexible connections, back draft shutters, roof upstands and silencers.

Designation



ROOF FANS TYPE SVH2 and SVV2



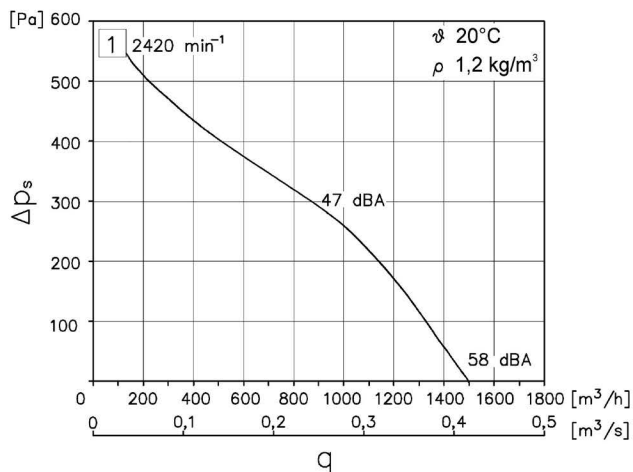
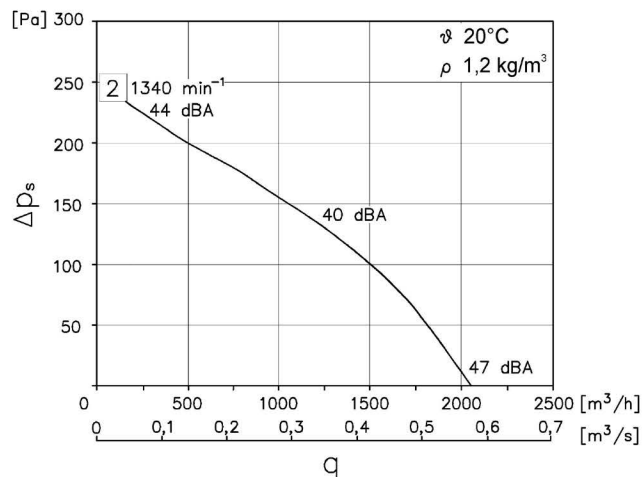
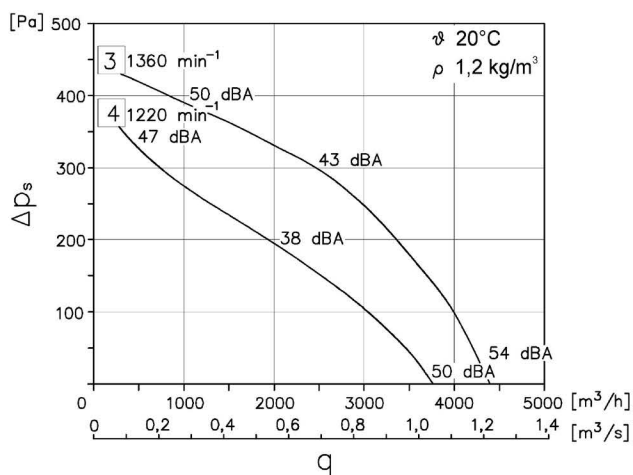
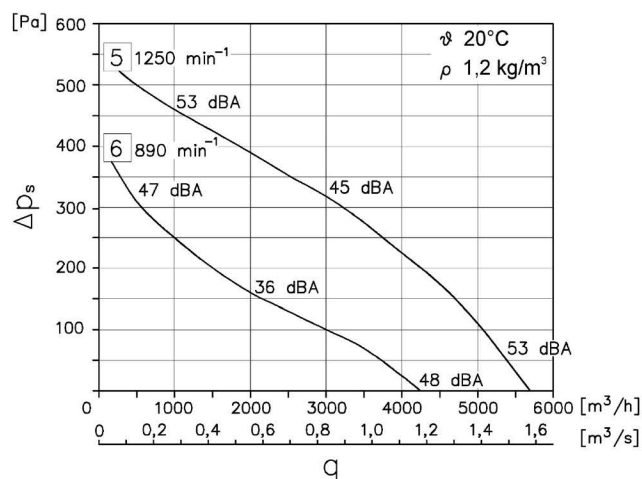
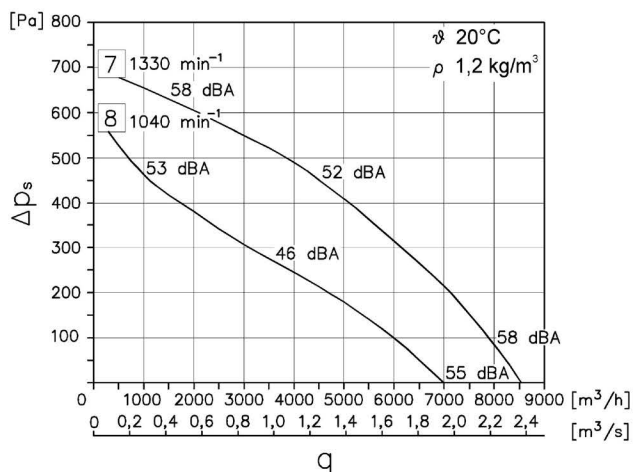
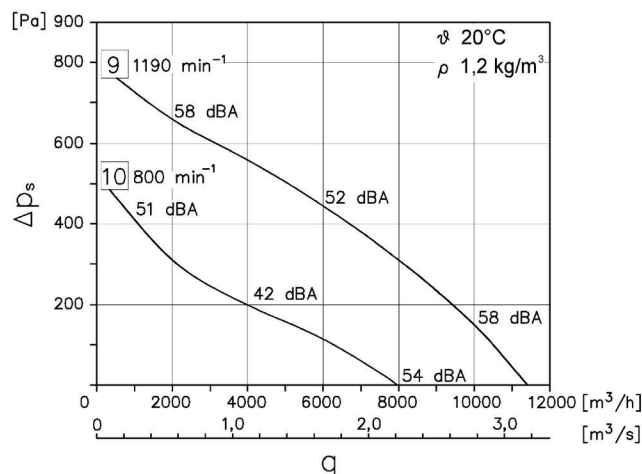
Dimensions

Type SVH2, SVV2	ØD	ØD _K	□B	□C	E	L	ØF	G	H	K	z; M	Ø ₁	z ₁
250/200	200	235	400	330	580	502	540	30	245	280	6xM6	Ø12	4
315/250	250	286	500	430	680	589	740	30	335	355	6xM6	Ø12	4
400/315	315	356	560	480	780	675	740	30	385	430	8xM8	Ø12	4
450/400	400	438	630	540	880	762	975	30	395	470	6xM8	Ø12	4
500/450	450	487	710	610	980	849	975	30	465	520	6xM8	Ø14	4
560/500	500	541	800	700	1100	953	1100	30	500	560	6xM8	Ø14	4

Technical data

Type SVH2, SVV2	Type of EM	RPM [min ⁻¹]	Power [kW]	Current [A]	Voltage [V]	Weight [kg]	Number
250/200	RH25V-2EP	2420	0,2	0,86	230V; 50Hz	9	1
315/250	RH31V-4EP	1240	0,14	0,62	230V; 50Hz	16	2
400/315	RH40V-4DK	1360	0,45	1,05	3x400V; 50Hz	21	3/4
450/400	RH45V-4DK	1360	0,75	1,55	3x400V; 50Hz	28	5/6
500/450	RH50V-4DK	1360	1,2/0,83	2,2/1,4	3x400V; 50Hz	48	7/8
560/500	RH56V-VDK	1340/1070	2,1/1,4	4,2/2,4	3x400V; 50Hz	57	9/10

ROOF FANS TYPE SVH2 and SVV2

SVH2 - 250/200 SVV2 - 250/200

SVH2 - 315/250 SVV2 - 315/250

SVH2 - 400/315 SVV2 - 400/315

SVH2 - 450/400 SVV2 - 450/400

SVH2 - 500/450 SVV2 - 500/450

SVH2 - 560/500 SVV2 - 560/500


NOTE: Sound pressure L_{pA} [dBA] is for SVH2. It is defined sideways on 4m distance on an outlet side and 4m under suction side with directivity factor $Q=2$.

Sound pressure correction on pressure side for type SVV2 is -2 dBA.

ROOF FANS TYPE SVK2

Use

Roof fans type **SVK2** with vertical outlet and three phase IEC electromotors are designed for ventilation systems of industrial buildings, kitchen hoods, workshops, garages, laundries and lavatories for air with increased humidity and pollution. Max air temperature is 120°C. Fans are designed for airflow range up to 50.000 m³/h and pressure 2000 Pa.

Technical description

Fans have welded impellers with back-curved blades, which assure good efficiency ratio and low noise level. They are dynamically balanced in G 6.3 class according ISO 1940-1.

Electromotor with impeller are mounted on the fan casing trough the shock absorbers, which assure vibrations dampening inside a fan casing.

Base plate with inlet funnel enables minimal entry losses. Screws on the base plate ensure easy connection of all additional inlet accessories.

External casings are made of Al sheet metal. Impellers are protected against touch with safety mesh. Mesh also prevents animals, leaves or other larger parts to enter the fan.

Fans ensure long lasting operation with long service intervals - low cost operation and maintenance.

Temperature range:

- ambient temperature: -20 to 50°C

Drive

SVK2 type roof fans have integrated standard three-phase electro motors 3x400V; 50Hz, IP55, IM V1.

For each fan size it is possible to select electromotor between one and two-speed speed. Motors are also equipped with PTC sensors for thermal protection. Start, stop and RPM regulation of the fan is possible with two speed switch or frequency converter, depending of the electromotor power.

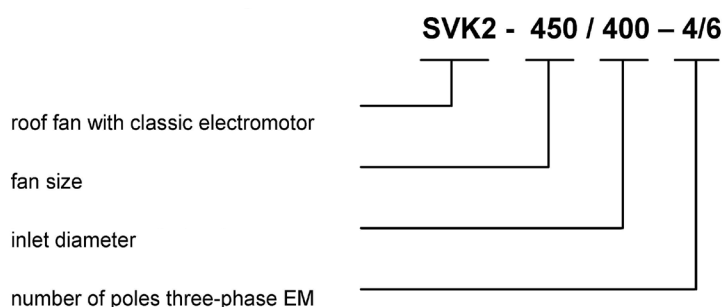
Accessories

Standard accessories are flexible couplings, back draft shutters, roof upstands and silencers.

Special design

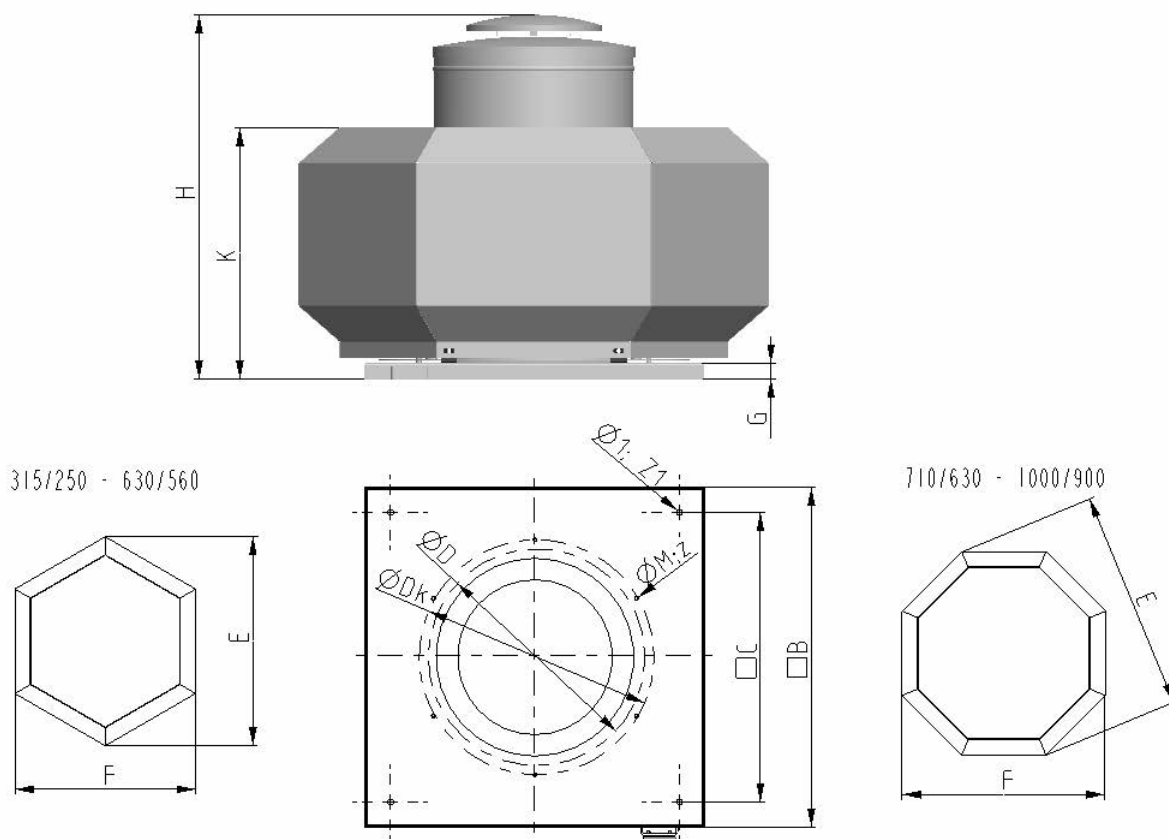
We also produce special SVK2 designs by customer's demand. Standard designs in production are roof fans for hazardous areas - Ex design (pg. 11) and **ODT-SVK2** roof fans - for smoke and heat extraction class F400 according to EN12101-3 (brochure ODT-SVK).

Designation



ROOF FANS TYPE SVK2

Dimensions



SVK2	$\varnothing D$	$\varnothing D_k$	$\square B$	E	F	G	H	K	M	Z	$\square C$	$\varnothing 1$	z_1
315/250	250	286	500	680	589	40	570	365	M6	6	430	$\varnothing 12$	4
400/315	315	356	560	780	675	40	640	440	M8	8	480	$\varnothing 12$	4
450/400	400	438	630	880	762	40	690	480	M8	6	540	$\varnothing 12$	4
500/450	450	487	710	980	849	40	730	530	M8	6	610	$\varnothing 14$	4
560/500	500	541	800	1100	953	40	780	570	M8	6	700	$\varnothing 14$	4
630/560	560	605	900	1315	1140	40	960	785	M10	8	780	$\varnothing 14$	4
710/630	630	674	1000	1407	1300	50	1060	845	M10	8	880	$\varnothing 18$	4
800/710	710	751	1120	1612	1490	50	1190	950	M10	8	1000	$\varnothing 18$	4
900/800	800	837	1250	1785	1650	50	1240	1000	M10	12	1100	$\varnothing 22$	4
1000/900	900	934	1400	2002	1850	50	1300	1060	M10	12	1250	$\varnothing 22$	4

ROOF FANS TYPE SVK2

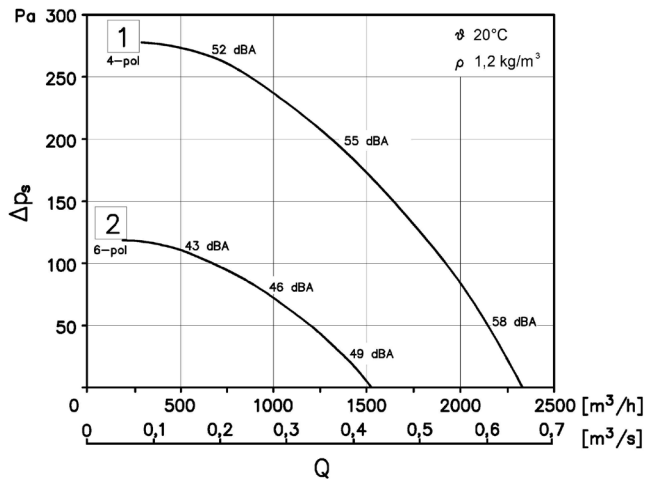
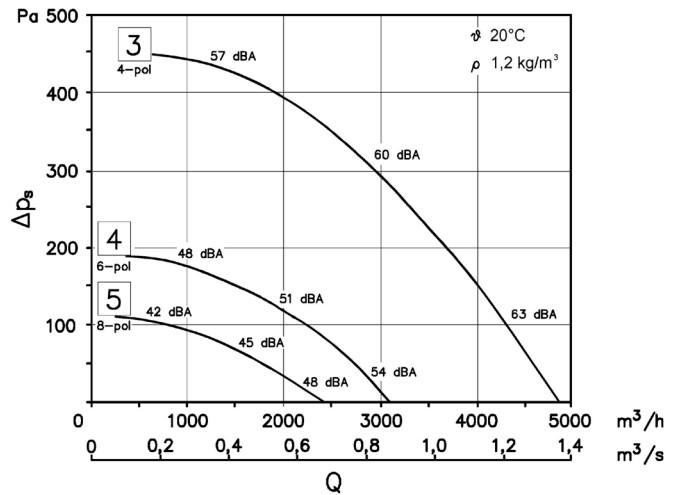
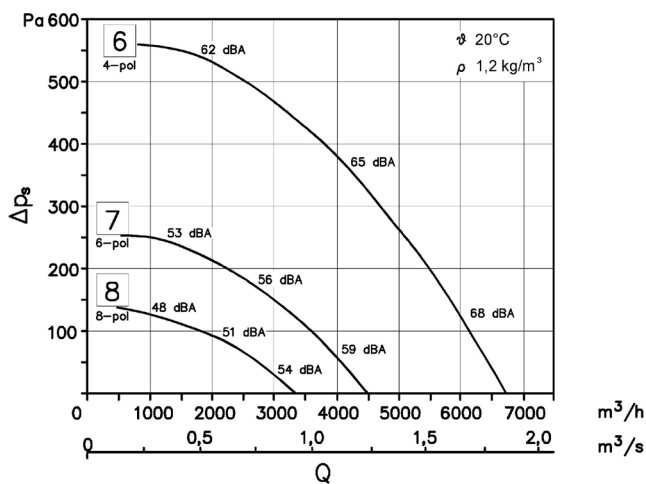
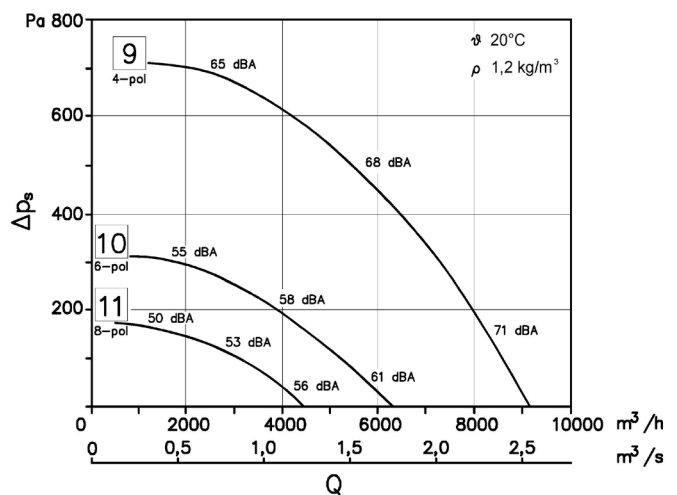
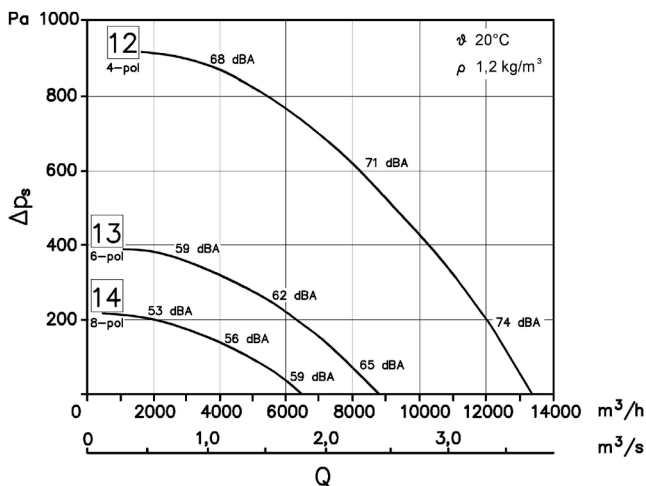
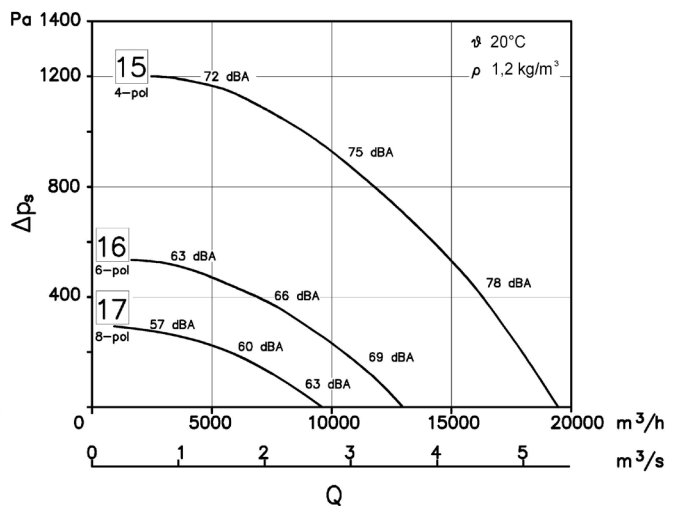
Technical data

Fan type SVK2	El. motor 3x400 V, 50Hz; IP 55; PTC				Ventilator Fan		
	n [min ⁻¹]	P [kW]	I _n [A]	Size	q _{max} [m ³ /h]	Weight [kg]	Number
				IEC			
315/250-4	1400	0,25	0,74	71 A	2300	28	1
315/250-6	915	0,18	0,66	71 A	1500	28	2
315/250-4/6	1400 / 950	0,18 / 0,07	0,72	71 A	2300 / 1500	28	1 / 2
400/315-4	1405	0,55	1,48	80 K	4700	37	3
400/315-6	910	0,37	1,17	80 K	3100	37	4
400/315-4/6	1420 / 965	0,6 / 0,2	1,69 / 1,02	80 K	4700 / 3100	37	3 / 4
400/315-4/8	1380 / 685	0,6 / 0,12	1,72 / 0,75	80 K	4700 / 2400	37	3 / 5
450/400-4	1385	1,1	2,7	90 S	6700	51	6
450/400-6	910	0,37	1,17	80 K	4500	51	7
450/400-4/6	1435 / 965	1,0 / 0,35	3,13 / 1,36	90 S	6700 / 4500	51	6 / 7
450/400-4/8	1395 / 705	1,4 / 0,30	3,63 / 1,21	90 S	6700 / 3300	51	6 / 8
500/450-4	1410	1,5	3,5	90 L	9100	63	9
500/450-6	900	0,55	1,77	80 G	6100	60	10
500/450-4/6	1420 / 935	1,5 / 0,4	4,63 / 1,46	90 L	9100 / 6200	63	9 / 10
500/450-4/8	1395 / 705	1,4 / 0,30	3,63 / 1,21	90 S	9100 / 4400	63	9 / 11
560/500-4	1425	3,0	6,40	100 LX	13300	85	12
560/500-6	930	1,5	4,0	100 L	8700	85	13
560/500-4/6	1420 / 965	3,0 / 1,0	7,8 / 2,88	112 M	13300 / 8700	90	12 / 13
560/500-4/8	1420 / 690	2,8 / 0,7	6,3 / 2,42	100 LX	13300 / 6500	90	12 / 14
630/560-4	1455	5,5	10,8	132 S	19300	130	15
630/560-6	940	2,2	5,12	112 M	12900	130	16
630/560-4/6	1455 / 975	6,0 / 2,2	11,8 / 5,66	132 M	19300 / 12900	140	15 / 16
630/560-4/8	1445 / 740	5,0 / 1,2	11,8 / 5,66	132 S	19300 / 9600	140	15 / 17
710/630-4S	1450	7,5	14,3	132 M	23700	250	18
710/630-4	1450	11,0	20,9	160 M	27500	250	20
710/630-6	970	3,0	7,0	132 S	18300	240	21
710/630-4/6	1465 / 975	10,0 / 3,3	21,1 / 8,4	160 M	27500 / 18300	280	20 / 21
710/630-4/8	1450 / 730	10,0 / 2,5	20,2 / 6,6	160 M	27500 / 13800	280	20 / 22
800/710-4	1460	15	28,1	160 L	39500	390	23
800/710-6	970	5,5	12,0	132 MX	26000	340	24
800/710-4/6	1475 / 985	16,0 / 5,4	30,5 / 13,9	180 M	39500 / 26000	390	23 / 24
800/710-4/8	1470 / 730	16,0 / 4,5	29,9 / 11,0	180 M	39500 / 19700	390	23 / 25
900/800-6	965	7,5	15,8	160 M	37000	410	26
900/800-8	715	4,0	9,3	160 M	27500	400	27
900/800-6/8	980 / 740	8,0 / 3,0	19,0 / 8,2	160 L	37000 / 27500	430	26 / 27
1000/900-6S	970	11,0	22,4	160 L	43200	520	28
1000/900-8S	720	5,5	12,4	160 MX	32000	500	29
1000/900-6	975	15,0	29,4	180 L	52000	520	30
1000/900-8	725	7,5	16,3	160 L	38000	500	31

Motors with different RPM and electrical parameters are offered on customer's request.

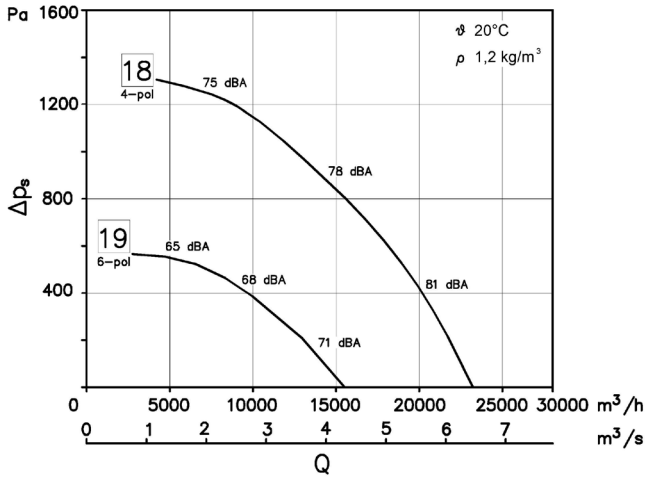
Motors for Ex design are specified at EX SVK2 fan type (page 13).

ROOF FANS TYPE SVK2

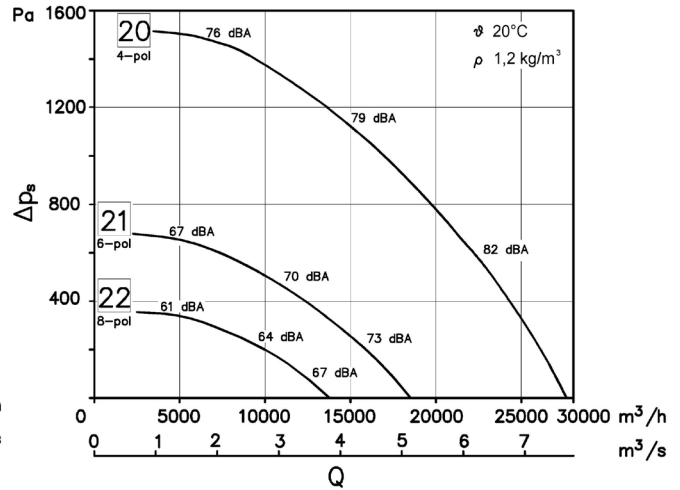
SVK2 - 315/250 EX SVK2 - 315/250

SVK2 - 400/315 EX SVK2 - 400/315

SVK2 - 450/400 EX SVK2 - 450/400

SVK2 - 500/450 EX SVK2 - 500/450

SVK2 - 560/500 EX SVK2 - 560/500

SVK2 - 630/560 EX SVK2 - 630/560


ROOF FANS TYPE SVK2

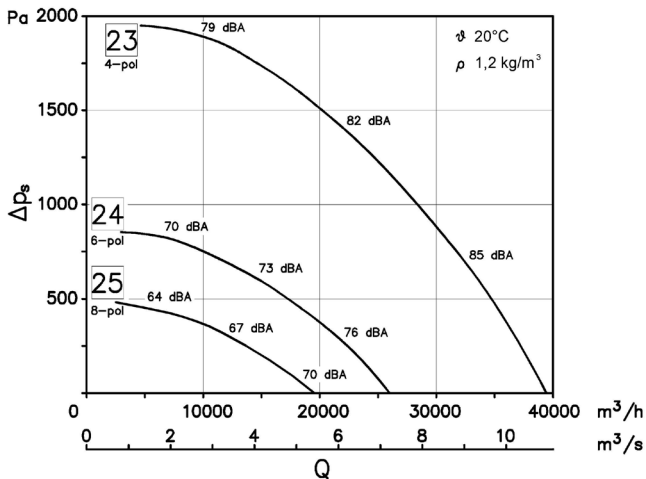
SVK2 - 710/630S EX SVK2 - 710/630S



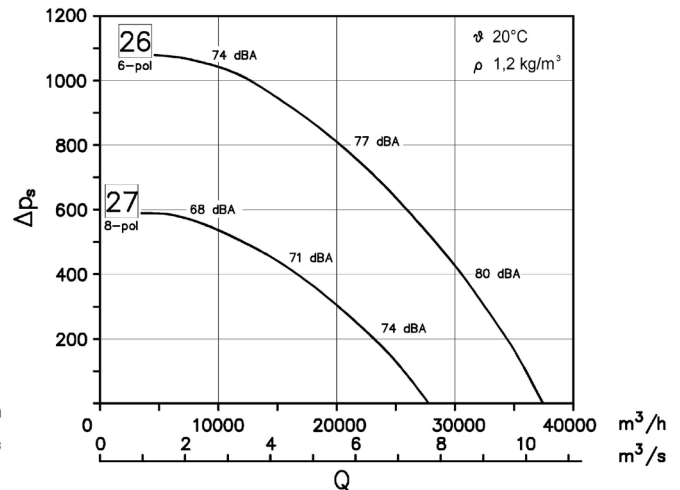
SVK2 - 710/630



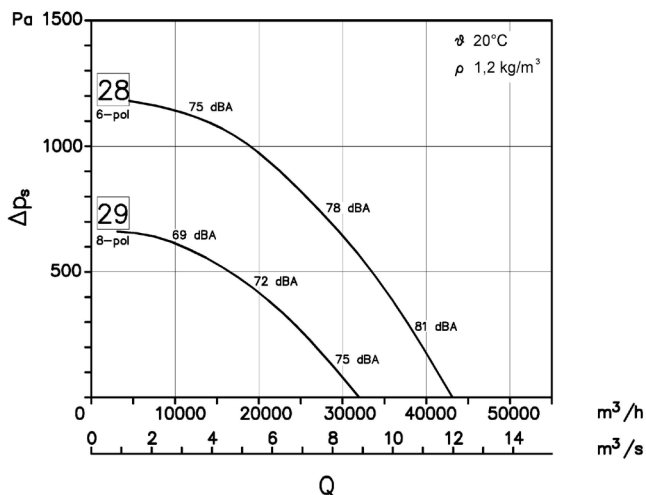
SVK2 - 800/710 EX SVK2 - 800/710



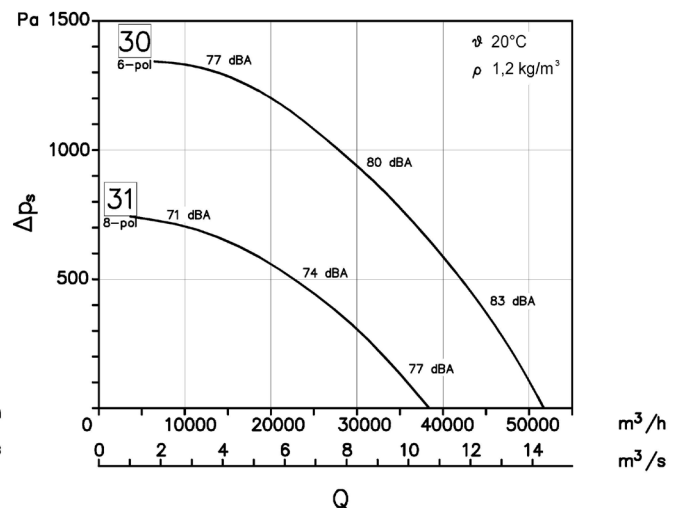
SVK2 - 900/800



SVK2 - 1000/900S



SVK2 - 1000/900



NOTE: Defined sound pressure L_{pA} [dBA] is measured sideways on 4m distance!

ROOF FANS TYPE EX SVK2

Roof fans for hazardous area

Explosive composition of gases and fumes with air, which are result of production process, or consequence of malfunction. Mixture ignition with spark or excessive heating of individual parts, can cause explosion or fire.

Roof fans type EX SVK2 are designed according to directives, which prevent explosion or fire, due to their operation. Also the customer has to strictly consider all the regulations and guidelines, by selection, mounting, usage and maintenance of the fan.

Application

The use of the roof fans **EX SVK2** is permitted for hazardous zones in industrial areas:

- hazardous zone 0: not allowed
- hazardous zone 1: **Ex II 2G c IIB T4**
- hazardous zone 2: **Ex II 3G c IIB T4**

Technical description

Explosion proof EX SVK2 fans are similar to standard SVK2 type, with construction improvements, which conforms to directive 94/9/ES and norm EN 13463-1 & EN 14986.

Temperature range:

- ambient temperature: -20 to 40°C

Drive

EX SVK2 fans have standard three-phase electromotors 3x400V; IP55, 50Hz with explosion proof protection II 2G EEx de IIC T4 and PTC sensors for thermal protection.

RPM regulation

Start, stop and RPM regulation is possible with one or twospeed switch or frequency converter.

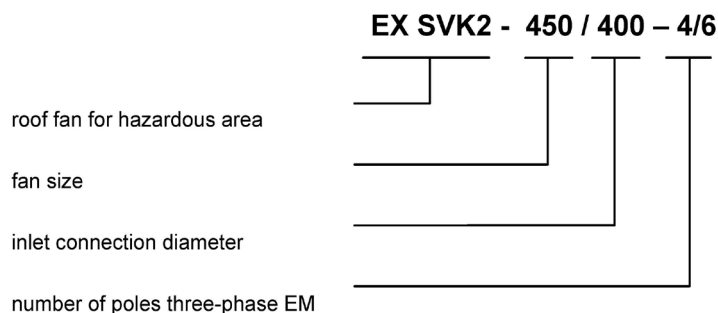
For switches and frequency converters is mandatory to mount them outside of the hazardous zone.

Switches for installation inside of the hazardous zone are available by specific customer's request.

Designation example:

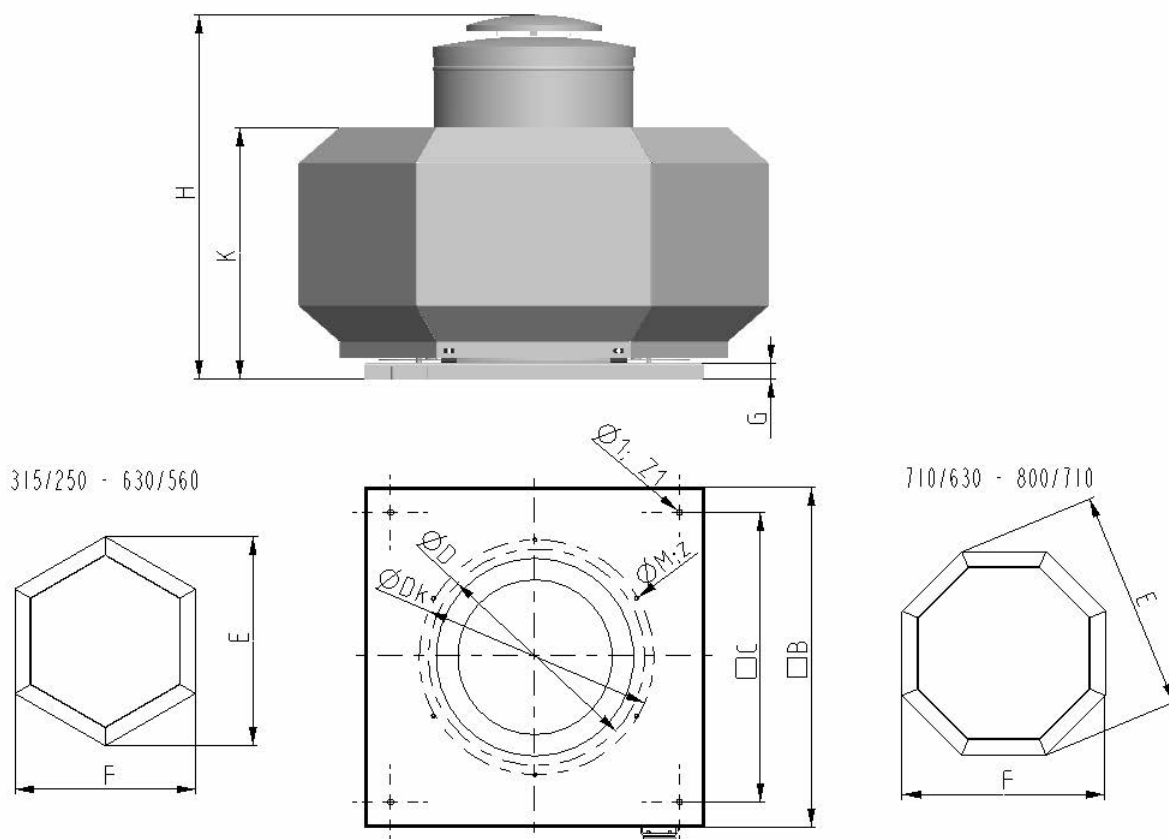
EX SVK2 560/500-4/6 II 2G c IIB T4

Designation



ROOF FANS TYPE EX SVK2

Dimensions



EX SVK2	ØD	ØDk	□B	E	F	G	H	K	M	Z	□C	Ø ₁	z ₁
315/250	250	286	500	680	589	40	570	365	M6	6	430	Ø12	4
400/315	315	356	560	780	675	40	640	440	M8	8	480	Ø12	4
450/400	400	438	630	880	762	40	690	480	M8	6	540	Ø12	4
500/450	450	487	710	980	849	40	730	530	M8	6	610	Ø14	4
560/500	500	541	800	1100	953	40	780	570	M8	6	700	Ø14	4
630/560	560	605	900	1315	1140	40	960	785	M10	8	780	Ø14	4
710/630	630	674	1000	1407	1300	50	1060	845	M10	8	880	Ø18	4
800/710	710	751	1120	1612	1490	50	1190	950	M10	8	1000	Ø18	4

ROOF FANS TYPE EX SVK2

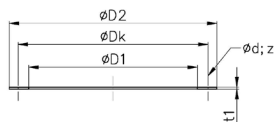
Technical data

Fan type EX SVK2	El. motor 3x400 V, 50Hz; IP 55; PTC II 2G EEx de IIC T4				q _{max} [m ³ /h]	Weight [kg]	Number
	n [min ⁻¹]	P [kW]	I _n [A]	IEC Size			
315/250-4	1355	0,25	0,75	71A	2000	32	1
315/250-6	930	0,18	0,67	71A	1350	32	2
315/250-4/6	1440 / 920	0,2 / 0,15	0,85 / 0,15	71A	2000 / 1350	32	1 / 2
400/315-4	1410	0,55	1,38	80 A	4000	42	3
400/315-6	925	0,37	1,17	80 A	2800	42	4
400/315-4/6	1450 / 945	0,66 / 0,45	1,75 / 1,5	90 S	4000 / 2800	42	3 / 4
450/400-4	1410	1,1	2,4	90 S	6000	56	6
450/400-6	925	0,37	1,17	80 A	3800	56	7
450/400-4/6	1425 / 960	0,9 / 0,6	2,1 / 1,8	90 L	6000 / 3800	61	6 / 7
500/450-4	1405	1,5	3,25	90 L	8000	68	9
500/450-6	915	0,55	1,5	80 B	5200	75	10
500/450-4/6	1420 / 960	1,3 / 0,9	3,0 / 2,4	100 LA	8000 / 5200	88	9 / 10
560/500-4	1400	3,0	6,4	100 LB	11500	100	12
560/500-6	930	1,5	3,7	100 L	7400	100	13
560/500-4/6	1450 / 970	2,4 / 1,5	5,05 / 3,55	112 M	11500 / 7400	110	12 / 13
630/560-4	1435	5,5	10,9	132 S	17000	155	15
630/560-6	960	2,2	5,0	112 M	10500	155	16
630/560-4/6	1460 / 975	4,5 / 3,0	8,9 / 6,7	132 M	17000 / 10500	170	15 / 16
710/630-4S	1445	7,5	14,3	132 M	20500	270	18
710/630-6S	975	3,0	6,6	132 S	13700	260	19
800/710-4	1460	15	29	160 L	35000	420	23
800/710-6	955	5,5	11,8	132 M	23000	370	24

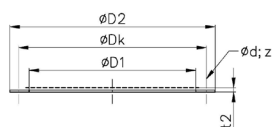
Motors with different RPM and electrical parameters are offered on customer's request.

ACCESSORIES

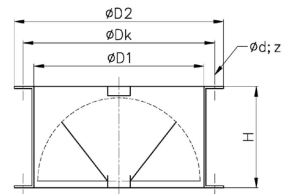
Flange D₁



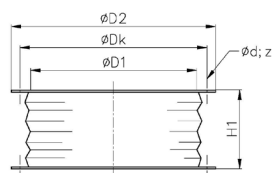
Protective grid D₁



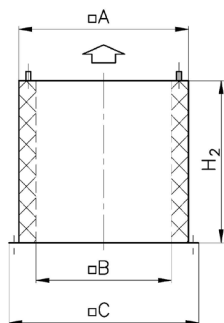
SL D₁ Back draft shutter



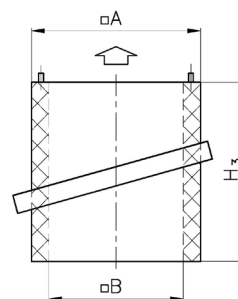
EP D₁ Flexible (cloth) coupling



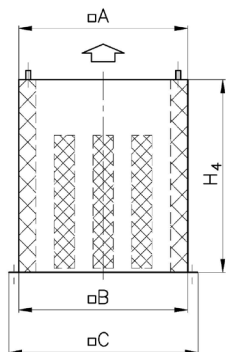
PR D_N/D₁ Isolated upstand for horizontal roof



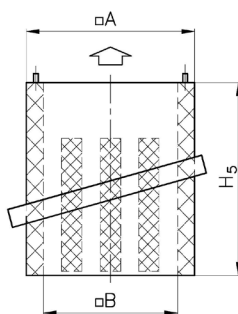
PS D_N/D₁ Isolated upstand for inclined roof



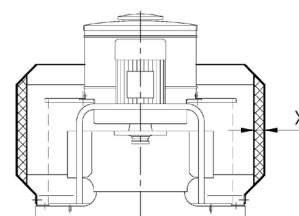
PRG D_N/D₁ Upstand silencer for horizontal roof



PSG D_N/D₁ Upstand silencer for inclined roof

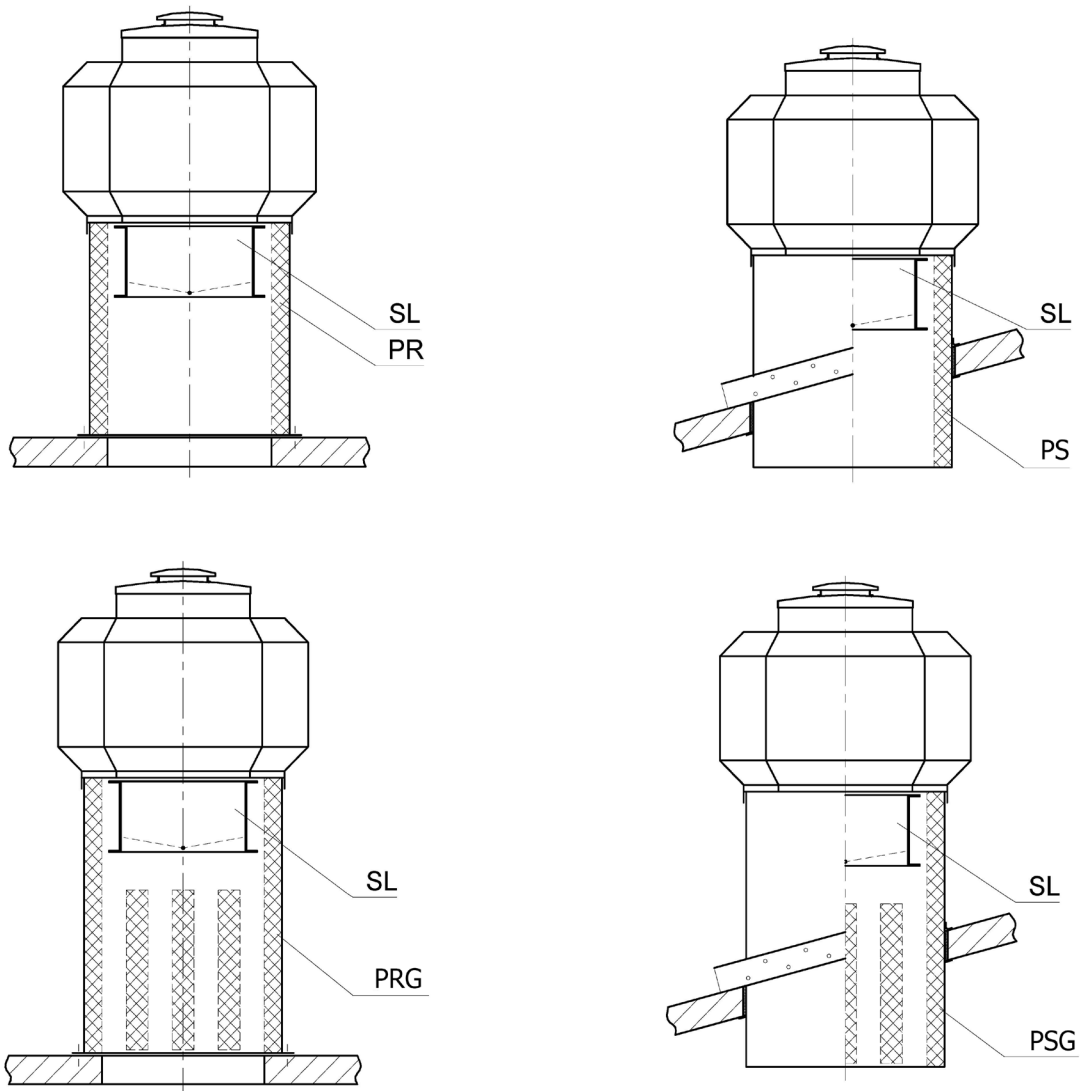


IZO D_N/D₁ Sound insulated fan housing



Type D _N /D ₁	ØD ₁	ØD ₂	ØD _k	Ød;z	H	H ₁	t ₁	t ₂	□A	□B	□C	H ₂	H ₃	H ₄	H ₅	X
250 / 200	200	255	235	Ø8x6	150	120	5	8	388	280	485	400	650	650	650	20
315 / 250	250	306	286	Ø8x6	150	120	5	8	488	380	585	400	700	700	700	20
400 / 315	315	382	356	Ø10x8	180	120	6	9	548	440	645	400	750	750	750	20
450 / 400	400	464	438	Ø10x6	220	120	6	9	614	505	720	400	800	800	800	20
500 / 450	450	513	487	Ø10x6	250	120	6	9	694	585	800	400	850	850	850	20
560 / 500	500	567	541	Ø10x6	280	150	6	9	780	670	900	400	900	900	900	20
630 / 560	560	639	605	Ø12x8	310	150	6	9	880	770	996	400	950	950	950	20
710 / 630	630	708	674	Ø12x8	350	150	6	9	980	870	1134	500	950	1250	1250	50
800 / 710	710	785	751	Ø12x8	400	150	6	9	1100	990	1254	500	950	1300	1300	50
900 / 800	800	871	837	Ø12x12	430	150	6	10	1230	1120	1384	500	950	1350	1350	50
1000 / 900	900	968	934	Ø12x12	500	150	6	10	1380	1270	1534	500	950	1450	1450	50

MOUNTING EXAMPLES



Roof fan is designed so, that it is ready for mounting without any connection accessories.

Following points have to be considered by mounting:

- Upstand has to be straight, suitable dimensions (see brochure) and stiff enough regarding the weight of the fan.
- Fan is mounted on the upstand with four nuts or bolts, which have to be suitably sealed.
- Upstand has to be correctly positioned and mounted on the roof or plate with suitable hydro-insulation, to prevent entry of water inside a building (not shown!).
- Temperature dilatation has to be considered, especially for accessories.



We reserve the right to changes without prior notice.

Almeco Belgium (HQ)

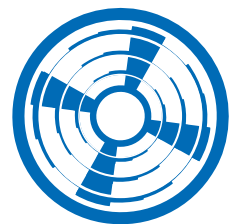
ALMECO NV
Royennestraat 51
B-7700 Moeskroen
+32 (0)56 85.40.80

Almeco The Netherlands

ALMECO NEDERLAND BV
Postbus 32
NL-5550 AA Valkenswaard
+31 (0)40 80.80.000

Almeco France

ALMECO FRANCE SARL
Rue de Luxembourg 67
FR-59777 Euralille
+33 (0)3 28.48.26.68



ALMECO

air and water technologies

ALMECO sa Air and water technologies
info@almeco.eu - www.almeco.eu