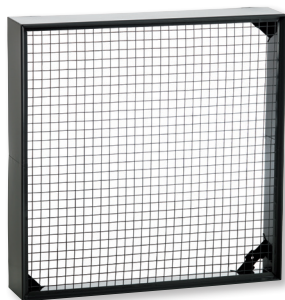


From 250 up to 525 models.



From 630 up to 1000 models.

DEF-D

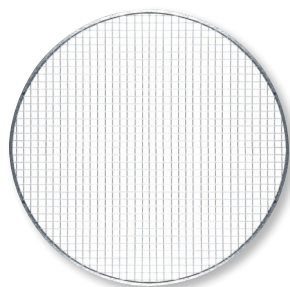
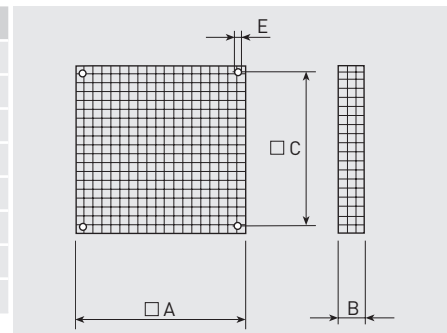
Square discharge wire protection guards. Protection guard to prevent any contact with the fan impeller.

Model	Ø A	B	Ø C	Ø E
DEF-250 D	332	64	286	8
DEF-325 D	397	64	351	8
DEF-375 D	449	64	403	8
DEF-450 D	501	64	455	8
DEF-525 D	553	64	507	8
DEF-630 D	808	150	735	8
DEF-800 D	1008	140	935	8
DEF-1000 D	1258	155	1185	8

Wire mesh hole size (mm):

10,6 x 10,6 (from 250 models to 525)

25 x 25 (from 630 models to 1000)



DEF-T

Inlet/outlet guard protection grille to be mounted to the S&P COMPACT cased axial fans.

Model	A	B	ØD	Number of holes
Guard protection grille DEF-T (inlet / outlet side)				
DEF-250 T	312	1,2	-	-
DEF-315 T	380	3	-	-
DEF-355 T	420	3	-	-
DEF-400 T	475	3	-	-
DEF-450 T	525	3	-	-
DEF-500 T	595	3	-	-
DEF-560 T	655	3	-	-
DEF-630 T	725	3	-	-

Guard protection grille DEF-T ASPIRACION (inlet impeller side)

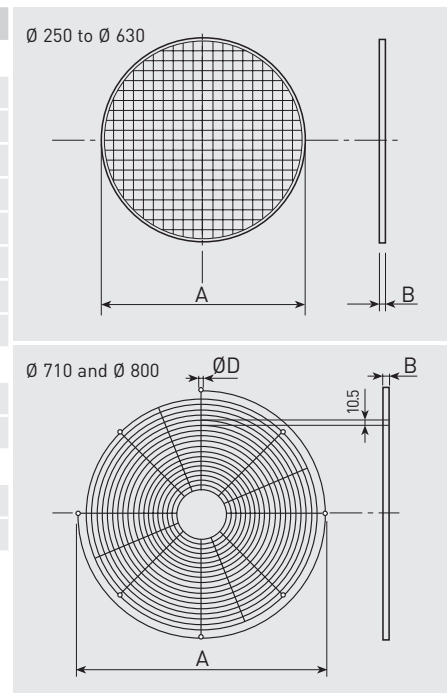
DEF-710 T ASPIRACION	770	5	12	8
DEF-800 T ASPIRACION	860	5	11	8

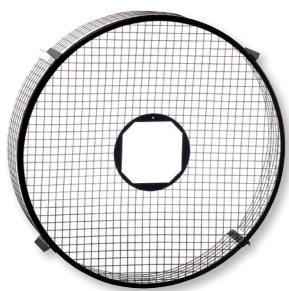
Guard protection grille DEF-T DESCARGA (outlet motor side)

DEF-710/H-T DESCARGA	770	5	12	8
DEF-710/L-T DES CARGA	770	5	12	8

Wire mesh hole size (mm):

10,6 x 10,6 (from 250 models to 630)



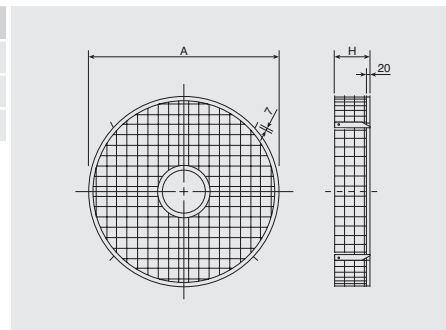


DEF-AN

Inlet guard protection grille to be mounted with large diameter (800 to 1000) plate mounted axial fans.

Model	Ø A	H
DEF-800 AN	926	178
DEF-900 AN / DEF-901 AN	1026	228
DEF-1000 AN	1154	163

Wire mesh hole size (mm): 25 x 25

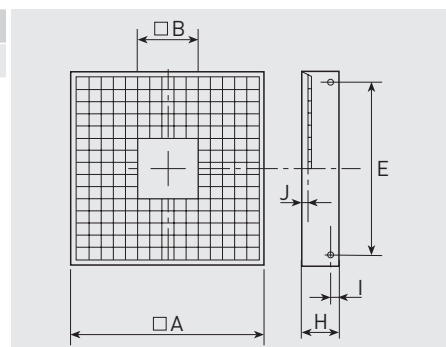


DEF-1001 A

Inlet guard protection grille to be mounted with HCFT/4-1000/H-X and HCBT/4-1000/H-X plate mounted axial fans.

Model	Ø A	Ø B	E	H	I	J
DEF-1001 A	1258	297	1185	265	34	22

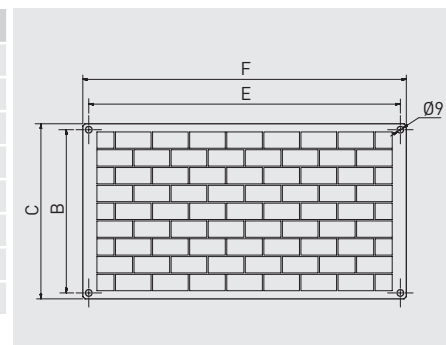
Wire mesh hole size (mm): 25 x 25

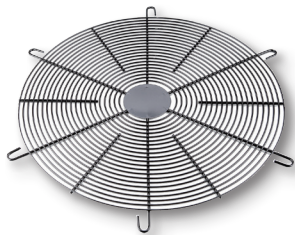


DEF

Rectangular protection guard.

Model	B	C	E	F
DEF-400x200	220	240	420	440
DEF-500x250	270	290	520	540
DEF-500x300	320	340	520	540
DEF-600x300	320	340	620	640
DEF-600x350	370	390	620	640
DEF-700x400	420	440	720	740
DEF-800x500	520	540	820	840
DEF-1000x500	520	540	1020	1040

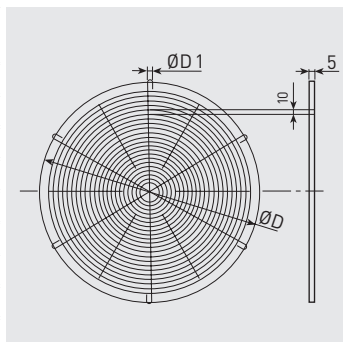




DEF.ASP.TGT/THGT

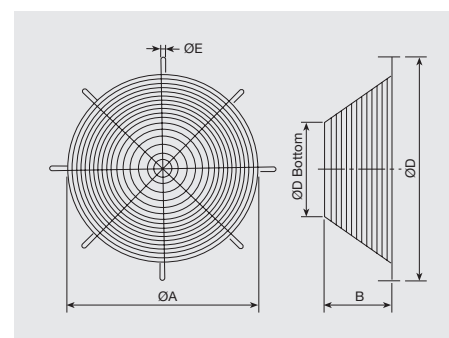
Inlet guard protection grille to be mounted to the TGT and THGT cased axial fans.

Model	D	D1	Number of holes	Weight (Kg)
DEFENSA DE ASPIRACIÓN TGT/THGT-400	450	12	4	1,1
DEFENSA DE ASPIRACIÓN TGT/THGT-450	500	12	4	1,2
DEFENSA DE ASPIRACIÓN TGT/THGT-500	560	12	6	1,7
DEFENSA DE ASPIRACIÓN TGT/THGT-560	620	12	6	2,1
DEFENSA DE ASPIRACIÓN TGT/THGT-630	690	12	6	2,6
DEFENSA DE ASPIRACIÓN TGT/THGT-800	860	12	8	4,0
DEFENSA DE ASPIRACIÓN TGT/THGT-900	970	12	8	4,9
DEFENSA DE ASPIRACIÓN TGT/THGT-1000	1070	12	8	5,9
DEFENSA DE ASPIRACIÓN TGT/THGT-1120	1190	12	10	8,0
DEFENSA DE ASPIRACIÓN TGT/THGT-1250	1320	12	10	9,2
DEFENSA DE ASPIRACIÓN TGT/THGT-1400	1470	12	10	13,0
DEFENSA DE ASPIRACIÓN TGT/THGT-1600	1680	12	12	16,0



DEF.DES.TGT/THGT

Outlet guard protection grille to be mounted to the TGT and THGT cased axial fans.



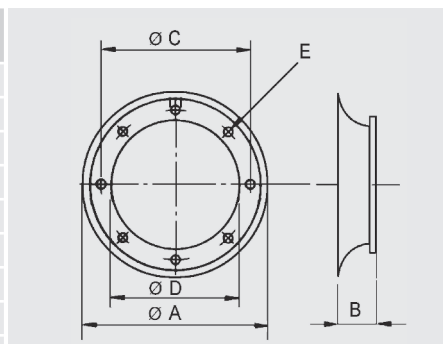
Model (motor side)	Ø A	Ø B	Bottom Ø D	Ø D	Ø E	Nº of holes	Weight (kg)
DEFENSA DE DESCARGA TGT/THGT-400	380	170	365	465	12	4	2,2
DEFENSA DE DESCARGA TGT/THGT-450	430	235	385	515	12	4	2,7
DEFENSA DE DESCARGA TGT/THGT-500	480	235	480	560	12	6	3,5
DEFENSA DE DESCARGA TGT/THGT-560	540	295	510	620	12	6	4,2
DEFENSA DE DESCARGA TGT/THGT-630	610	295	382	690	12	6	3,4
DEFENSA DE DESCARGA TGT/THGT-710	690	295	420	770	12	8	4,4
DEFENSA DE DESCARGA TGT/THGT-800	780	295	460	860	12	8	5,2
DEFENSA DE DESCARGA TGT/THGT-900	880	335	540	970	12	8	6,4
DEFENSA DE DESCARGA TGT/THGT-1000	980	335	620	1070	12	8	8,1
DEFENSA DE DESCARGA TGT/THGT-1120	1100	455	630	1190	15	10	15
DEFENSA DE DESCARGA TGT/THGT-1250	1230	465	800	1320	12	10	13,5
DEFENSA DE DESCARGA TGT/THGT-1400	1380	530	791	1470	15	12	15
DEFENSA DE DESCARGA TGT/THGT-1600	1580	530	995	1680	20	12	15



EMB-T

Bellmouth inlet with protection guard for form B airflow TGT/THGT, or form A with long casing. Reduce inlet loss and prevent entry of objects or contact with fan impeller.

Model	Ø A	B	Ø C	Ø D	E	Weight (Kg)
EMB-315T	426	165	355	320	8x10	3,4
EMB-355T	435	165	395	359	8x10	3,6
EMB-400T	507	165	450	401	8x12	4,4
EMB-450T	555	165	500	450	8x12	5,0
EMB-500T	617	165	560	504	12x12	5,9
EMB-560T	674	165	620	560	12x12	8,6
EMB-630T	744	165	690	630	12x12	9,7
EMB-710T	824	250	770	710	16x12	14,3
EMB-800T	914	250	860	800	16x12	16,1
EMB-900T	1014	250	970	900	16x15	18,3
EMB-1000T	1114	250	1070	1000	16x15	20,4
EMB-1120T	1234	250	1190	1120	20x15	24,0
EMB-1250T	1364	250	1320	1250	20x15	26,6
EMB-1400T	1516	250	1470	1400	20x15	33,0
EMB-1600T	1716	250	1680	1600	24x18	39,0



EMB-S

Bellmouth inlet with protection guard for form A airflow shortcase TGT/THGT. Reduce inlet loss and prevent entry of objects or contact with fan impeller.

Model	Ø A	B	Ø C	Ø D	E	Weight (Kg)
EMB-560S	674	345	620	560	12x12	13,3
EMB-630S	744	345	690	630	12x12	15,0
EMB-710T	824	250	770	710	16x12	14,3
EMB-800T	914	250	860	800	16x12	16,1
EMB-900S	1014	385	970	900	16x15	24,0
EMB-1000S	1114	385	1070	1000	16x15	26,8
EMB-1120S	1234	385	1190	1120	20x15	32,0
EMB-1250S	1364	515	1320	1250	20x15	42,6
EMB-1400S	1516	610	1470	1400	20x15	66,0
EMB-1600S	1716	610	1680	1600	20x18	76,0



From 100 up to 500 models*

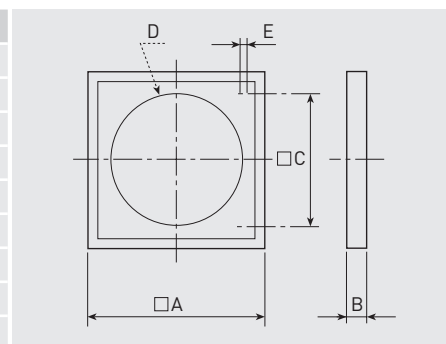


From 560 up to 1000 models*

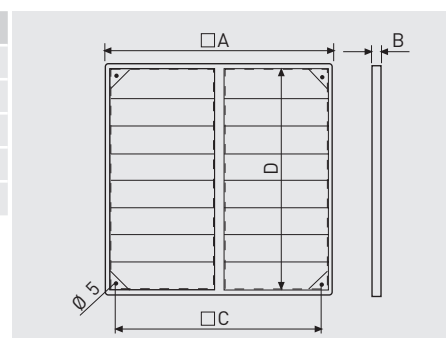
PER-W

Louvre back draft shutters manufactured totally from UV stabilized plastic material. Colour: Light grey (RAL 7035)

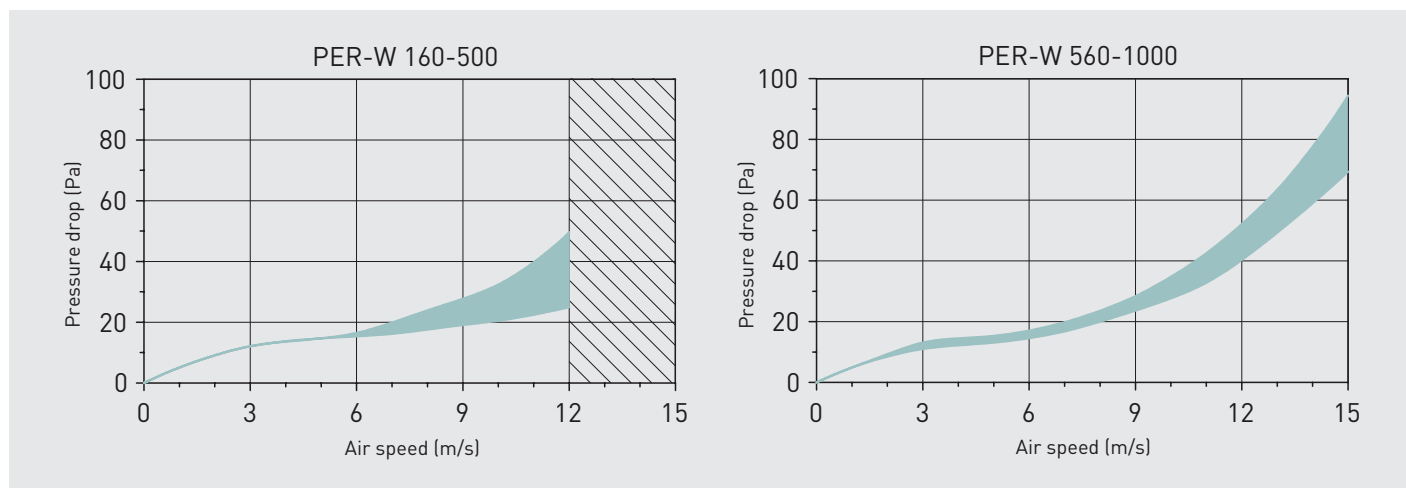
Model	Ø A	B	C	Ø D	Ø E
PER-100 W	123	12	90	98	4
PER-125 W	158	15	110	130	4
PER-160 W	178	20	130	152	4
PER-200 W	243	21	184	205	5
PER-250 W	294	26	233	260	5
PER-355 W	394	26	310	360	5
PER-400 W	457	26	365	420	5
PER-450 W	499	31	395	460	5
PER-500 W	548	31	443	510	5



Model	Ø A	D	Ø C	B
PER-560 W	605	565	522	28
PER-630 W	696	655	626	31
PER-710 W	760	720	692	40
PER-800 W	840	800	772	40
PER-1000 W	1040	1000	972	40



Pressure drop

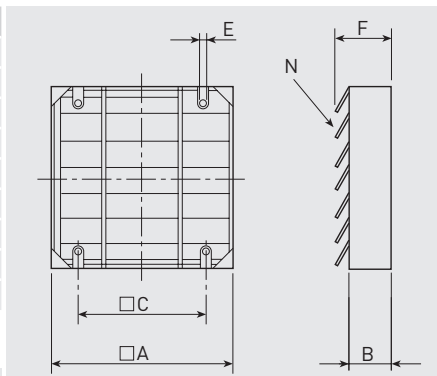




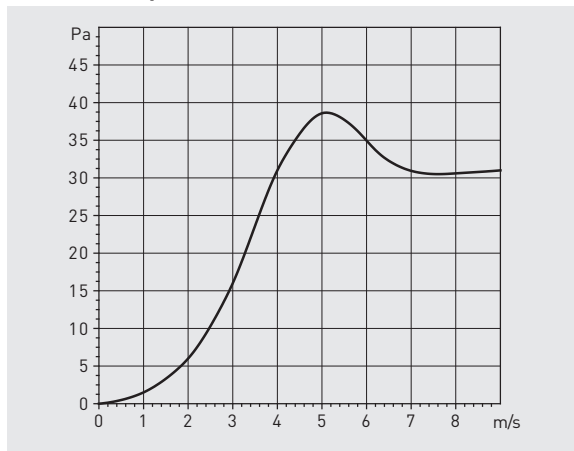
PER-CN

Louvre back draft shutters with steel frame and aluminium shutter blades. All models are fitted with bird guard.

Model	A	B	C	ØE	F	N
PER-250 CN	333	40	287	8	104	6
PER-355 CN	398	40	352	8	104	7
PER-400 CN	451	40	405	8	104	8
PER-450 CN	504	40	458	8	104	9
PER-500 CN	557	40	511	8	104	10
PER-630 CN	700	50	590	10	187	5
PER-710 CN	800	50	690	10	187	6
PER-800 CN	900	50	790	10	187	7
PER-1000 CN	1100	50	990	10	187	8



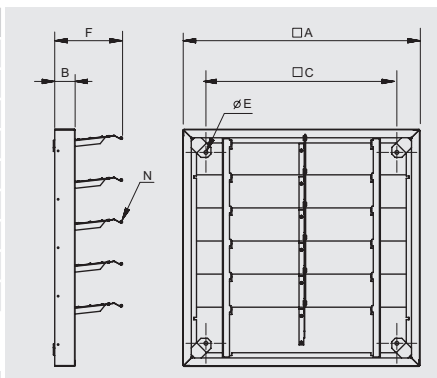
Pressure drop



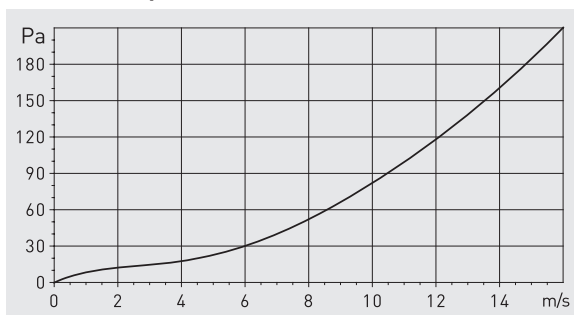
PER-CR

Louvre back draft shutters with steel frame and aluminium shutter blades with a system for simultaneous opening of all shutter blades. All models are fitted with bird guard.

Model	A	B	C	ØE	F	N
PER-250 CR	386	60	287	8	146	4
PER-355 CR	450	60	352	8	146	5
PER-400 CR	503	60	405	8	146	6
PER-450 CR	556	60	458	8	146	7
PER-500 CR	610	60	511	8	146	7
PER-630 CR	700	60	590	10	200	5
PER-710 CR	800	60	690	10	200	6
PER-800 CR	900	60	790	10	200	7
PER-1000 CR	1100	60	990	10	200	8



Pressure drop

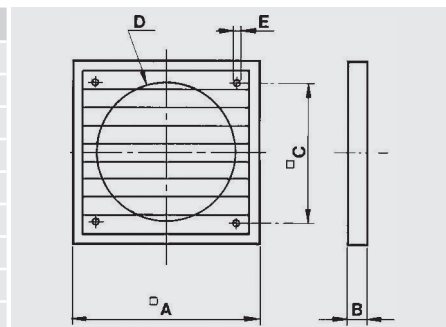




PER-EX

Louvre back draft shutters.
Explosion proof versions for zone 1 and zone 2.
- Automatic.
- Black colour.
- Frame and blades in plastic material.
- Air maximum speed 12 m/s.

Model	A	B	Ø C	Ø D	Ø E
PER-200 EX	244	22	182	210	5
PER-315 EX	344	26	275	314	5
PER-355 EX	397	26	310	360	5
PER-400 EX	459	26	364	420	5
PER-450 EX	501	31	395	460	5
PER-500 EX	549	31	445	510	5
PER-560 EX	605	28	552	564	5
PER-630 EX	696	31	626	655	5
PER-710 EX	760	31	692	720	5

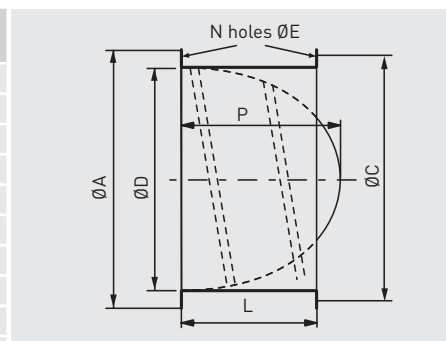


CLAR

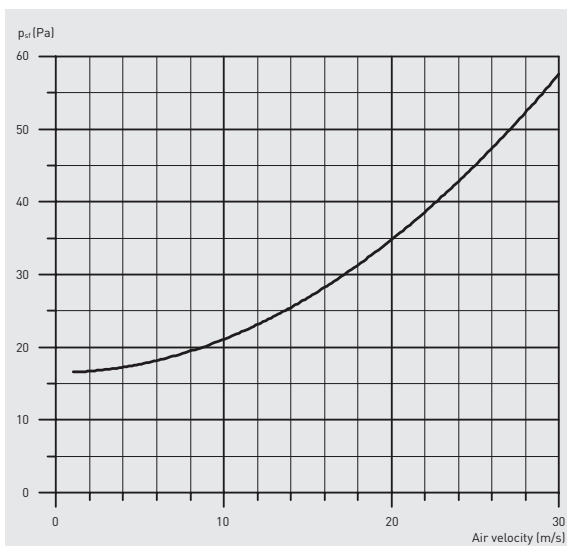
Back draft shutter to be installed within circular ducting to prevent back draft of air when the fans are switched off.
- To be mounted on the discharge section.

For TGT/THGT form B, it shall be long casing version, or short case plus an extension.

Model	Ø A	Ø C	Ø D	Ø E	N	L	P	Weight (kg)
CLAR-400	487	450	400	12	8	250	235	9,5
CLAR-450	537	500	450	12	8	250	260	11
CLAR-500	595	560	500	12	12	250	285	12,5
CLAR-560	655	620	560	12	12	250	315	14
CLAR-630	725	690	630	12	12	250	350	16,5
CLAR-710	806	770	710	12	16	300	395	27,5
CLAR-800	896	860	800	12	16	300	435	31,5
CLAR-900	1005	970	900	15	16	300	485	36,5
CLAR-1000	1105	1070	1000	15	16	300	535	41,5
CLAR-1120	1225	1190	1120	15	20	450	630	60
CLAR-1250	1355	1320	1250	15	20	450	660	68,5
CLAR-1400	1512	1470	1400	15	20	450	740	79,5
CLAR-1600	1772	1680	1600	20	24	500	840	101,0

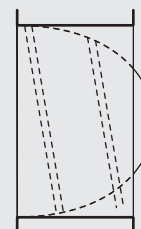


Pressure drop

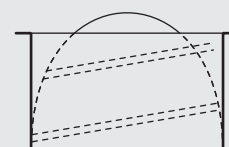


Working positions

Horizontal flow



Vertical flow upwards, as long as the air speed is greater than 11 m/s.

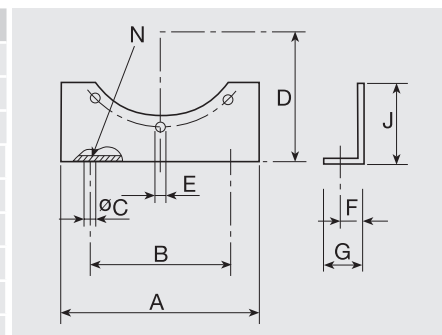




PIE

Support feet.
For installation with the COMPACT TCBB-TCBT and TTT ranges of in-line cased axial fans. Supplied in pairs.

Model	A	B	Ø C	D	Ø E	F	G	J	N
PIE-250	232	180	10,5	200	10,5	14	24	115	2
PIE-315	389	250	10,5	250	10,5	14	24	188	4
PIE-355	352	224	10,5	224	10,5	14	24	172	4
PIE-400	446	280	12,5	280	12,5	14	24	208	4
PIE-450	492	315	12,5	315	12,5	14	24	236	4
PIE-500	425	315	12,5	315	12,5	14	24	135	4
PIE-560	475	355	12,5	355	12,5	17	30	155	4
PIE-630	520	400	12,5	400	12,5	17	30	175	4
PIE-700/710	560	480	12,5	433	12,5	22	45	135	4
PIE-800	600	555	12,5	473	12,5	32	50	155	4

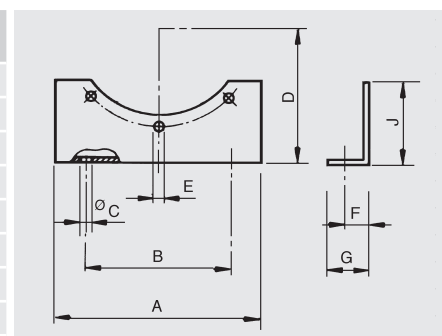


PIE SOP.TGT/THGT

Support feet.
For the installation with the TGT/THGT ranges of in-line cased axial fans. Supplied in pairs. It can be for horizontal or vertical mounting installations.

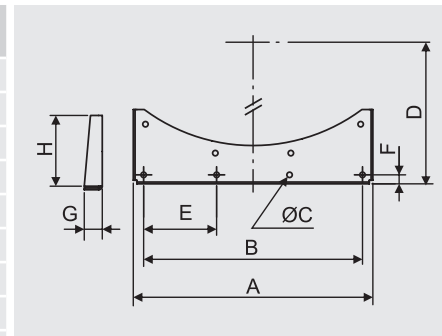
Support feet for horizontal mounting installations

Model	A	B	Ø C	D	Ø E	F	G	J	Nº of holes	Weight (kg)
PIE SOP.TGT/THGT-400	446	280	12,5	280	12,5	14	24	208	4	0,9
PIE SOP.TGT/THGT-450	492	315	12,5	315	12,5	14	24	236	4	1,4
PIE SOP.TGT/THGT-500	425	315	12,5	315	12,5	14	24	135	4	0,8
PIE SOP.TGT/THGT-560	475	355	12,5	355	12,5	17	30	155	4	1,3
PIE SOP.TGT/THGT-630	520	400	12,5	400	12,5	17	30	175	4	1,6
PIE SOP.TGT/THGT-710	560	480	12,5	433	12,5	22	45	135	4	2,3
PIE SOP.TGT/THGT-800	600	555	12,5	473	12,5	32	50	155	4	2,5
PIE SOP.TGT/THGT-900	950	800	15	540	15	30	60	300	6	9
PIE SOP.TGT/THGT-1000	1020	880	15	573	15	35	60	300	6	9,1
PIE SOP.TGT/THGT-1120	1050	975	15	637,5	15	35	60	260	6	9,3
PIE SOP.TGT/THGT-1250	1100	1030	15	714	15	35	60	280	6	10
PIE SOP.TGT/THGT-1400	1300	1200	15	781	15	60	100	310	6	19,2
PIE SOP.TGT/THGT-1600	1750	1650	20	910	20	60	100	450	8	33,6



Support for vertical mounting installations

Model	A	B	Ø C	D	E	F	G	H	Weight (kg)
PIE SOP.TGT/THGT-400 V	477	435	12,5	280	4x145	20	40	210	1,7
PIE SOP.TGT/THGT-450 V	523	483	12,5	305	4x161	20	40	225	1,9
PIE SOP.TGT/THGT-500 V	486	444	12,5	335	4x148	20	40	155	1,8
PIE SOP.TGT/THGT-560 V	523	483	12,5	365	4x161	20	40	160	2
PIE SOP.TGT/THGT-630 V	582	540	12,5	400	4x180	20	40	175	2,3
PIE SOP.TGT/THGT-710 V	548	488	12,5	468	5x122	30	45	165	3,2
PIE SOP.TGT/THGT-800 V	600	552	12,5	490	4x184	20	40	150	3
PIE SOP.TGT/THGT-900 V	900	836	15	562	5x209	40	60	315	10,4
PIE SOP.TGT/THGT-1000 V	985	892	15	633	5x223	40	60	360	12,7
PIE SOP.TGT/THGT-1120 V	1030	900	15	637,5	5x225	35	60	280	13,1
PIE SOP.TGT/THGT-1250 V	1130	960	15	702,5	5x240	35	60	300	14,8
PIE SOP.TGT/THGT-1400 V	1250	1100	15	781	5x275	60	100	320	21,3
PIE SOP.TGT/THGT-1600 V	1530	1300	20	910	5x325	60	100	430	31,8

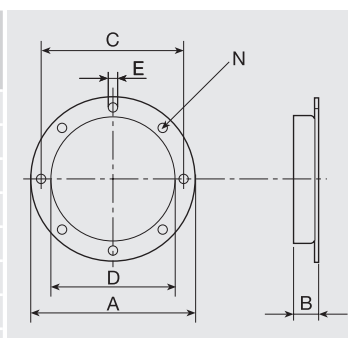




ARO BRIDA COMPACT

Circular duct matching flange.
 For installation with the COMPACT TCBB-TCBT and TTT ranges of in-line cased axial fans.

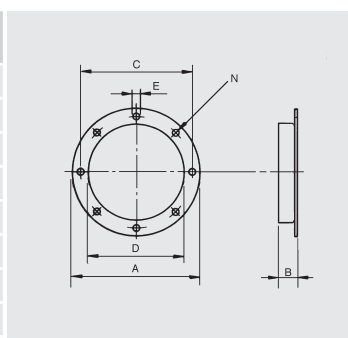
Model	Ø A	B	Ø C	Ø D	Ø E	N N° of holes
ARO BRIDA COMPACT-250	323	55	292	250	10	4
ARO BRIDA COMPACT-315	386	55	355	315	10	8
ARO BRIDA COMPACT-355	426	55	395	355	10	8
ARO BRIDA COMPACT-400	487	55	450	400	12	8
ARO BRIDA COMPACT-450	537	55	500	450	12	8
ARO BRIDA COMPACT-500	595	55	560	500	12	12
ARO BRIDA COMPACT-560	655	55	620	560	12	12
ARO BRIDA COMPACT-630	725	55	690	630	12	12
ARO BRIDA COMPACT-710	806	60	770	710	12	16
ARO BRIDA COMPACT-800	896	60	860	800	12	16



ARO BRIDA TGT/THGT N

Circular duct matching flange.
 For the installation with THGT and TGT ranges of in-line cased axial fans.

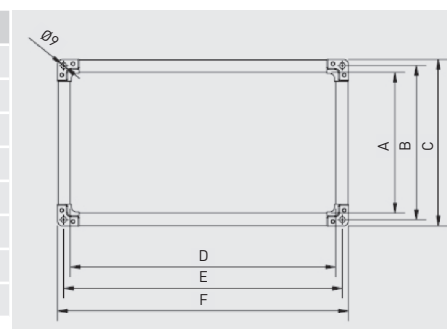
Model	Ø A	B	Ø C	Ø D	Ø E	N° of holes	Weight (kg)
ARO BRIDA TGT/THGT-400 N	487	55	450	400	12	8	1,94
ARO BRIDA TGT/THGT-450 N	537	55	500	450	12	8	2,17
ARO BRIDA TGT/THGT-500 N	595	55	560	500	12	12	2,51
ARO BRIDA TGT/THGT-560 N	655	55	620	560	12	12	2,80
ARO BRIDA TGT/THGT-630 N	725	55	690	630	12	12	3,14
ARO BRIDA TGT/THGT-710 N	806	60	770	710	12	16	4,62
ARO BRIDA TGT/THGT-800 N	896	60	860	800	12	16	5,20
ARO BRIDA TGT/THGT-900 N	1006	60	970	900	12	16	6,12
ARO BRIDA TGT/THGT-1000 N	1105	60	1070	1000	15	16	8,00
ARO BRIDA TGT/THGT-1120 N	1225	65	1190	1120	15	20	9,40
ARO BRIDA TGT/THGT-1250 N	1355	65	1320	1250	15	20	10,47
ARO BRIDA TGT/THGT-1400 N	1508	65	1470	1400	15	20	11,88
ARO BRIDA TGT/THGT-1600 N	1725	65	1680	1600	19	24	14,60



IBR

Rectangular duct flange

Model	A	B	C	D	E	F
IBR-200	198	220	240	400	420	440
IBR-225	248	270	290	500	520	540
IBR-250	298	320	340	500	520	540
IBR-285	298	320	340	600	620	640
IBR-315	348	370	390	600	620	640
IBR-355	398	420	440	700	720	740
IBR-400	498	520	540	800	820	840
IBR-450	498	520	540	1000	1020	1040

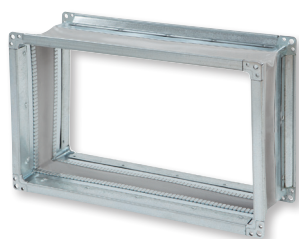
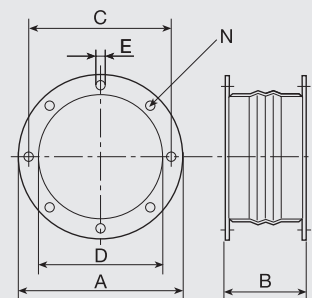




ACOP.BRIDA

Circular flexible flanged connectors.
 For installation with the COMPACT
 TCBB-TCBT and TTT ranges of in-line
 cased axial fans.

Model	Ø A	B	Ø C	Ø D	Ø E	N Nº of holes
ACOP.BRIDA-250	323	164	292	250	10	4
ACOP.BRIDA-315	386	164	355	315	10	8
ACOP.BRIDA-355	426	164	395	355	10	8
ACOP.BRIDA-400	487	164	450	400	12	8
ACOP.BRIDA-450	537	164	500	450	12	8
ACOP.BRIDA-500	595	164	560	500	12	12
ACOP.BRIDA-560	655	164	620	560	12	12
ACOP.BRIDA-630	725	164	690	630	12	12
ACOP.BRIDA-710	806	185	770	710	12	16
ACOP.BRIDA-800	896	185	860	800	12	16

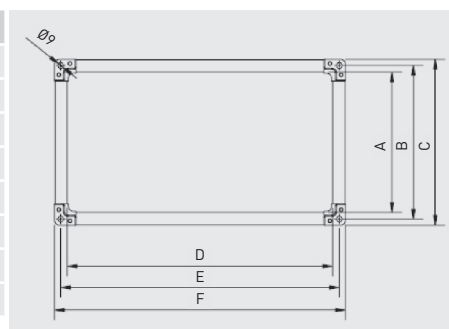


IAE

Rectangular flexible connector.

Model	A	B	C	D	E	F
IAE - 200	198	220	240	400	420	440
IAE - 225	248	270	290	500	520	540
IAE - 250	298	320	340	500	520	540
IAE - 285	298	320	340	600	620	640
IAE - 315	348	370	390	600	620	640
IAE - 355	398	420	440	700	720	740
IAE - 400	498	520	540	800	820	840
IAE - 450	498	520	540	1000	1020	1040

Maximum length: 135 mm.

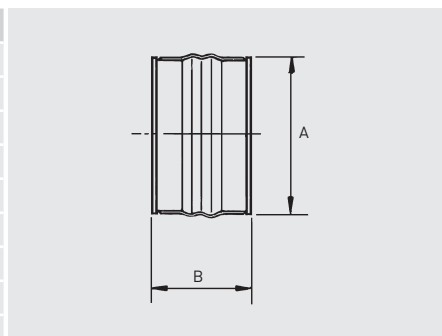




ACOPEL F400 N

Circular flexible connector.
 Certified F400-120.

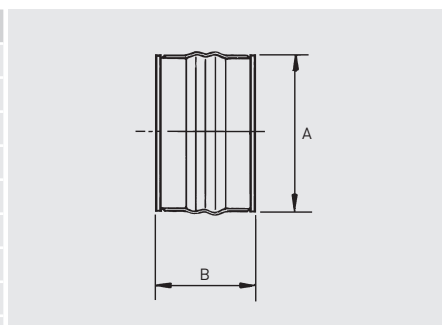
Model	Ø A	B
ACOPEL F400-120/160 N	115	160
ACOPEL F400-140/160 N	128	160
ACOPEL F400-160/160 N	163	160
ACOPEL F400-180/160 N	190	160
ACOPEL F400-200/160 N	203	160
ACOPEL F400-225/160 N	227	160
ACOPEL F400-250/160 N	260	160
ACOPEL F400-280/160 N	283	160
ACOPEL F400-315/160 N	323	160
ACOPEL F400-355/160 N	365	160
ACOPEL F400-400/160 N	410	160
ACOPEL F400-450/160 N	458	160
ACOPEL F400-500/160 N	510	160
ACOPEL F400-560/160 N	568	160
ACOPEL F400-630/160 N	640	160
ACOPEL F400-710/180 N	721	180
ACOPEL F400-800/180 N	809	180
ACOPEL F400-900/180 N	909	180
ACOPEL F400-1000/180 N	1010	180
ACOPEL F400-1120/200N	1130	200
ACOPEL F400-1250/200 N	1260	200
ACOPEL F400-1400/200N	1410	200
ACOPEL F400-1600/200 N	1610	200



ACOPEL EX N

Antistatic circular flexible connector ATEX.
 For the installation of explosion proof
 versions in-line cased axial fans.

Model	Ø A	B
ACOPEL EX-160/160 N	163	160
ACOPEL EX-200/160 N	203	160
ACOPEL EX-225/160 N	227	160
ACOPEL EX-250/160 N	260	160
ACOPEL EX-280/160 N	283	160
ACOPEL EX-315/160 N	323	160
ACOPEL EX-355/160 N	365	160
ACOPEL EX-400/160 N	410	160
ACOPEL EX-450/160 N	458	160
ACOPEL EX-500/160 N	510	160
ACOPEL EX-560/160 N	568	160
ACOPEL EX-630/160 N	640	160
ACOPEL EX-710/180 N	721	180
ACOPEL EX-800/180 N	809	180
ACOPEL EX-900/180 N	909	180
ACOPEL EX-1000/180 N	1010	180
ACOPEL EX-1120/200 N	1130	200
ACOPEL EX-1250/200 N	1260	200
ACOPEL EX-1400/200 N	1410	200
ACOPEL EX-1600/200 N	1610	200

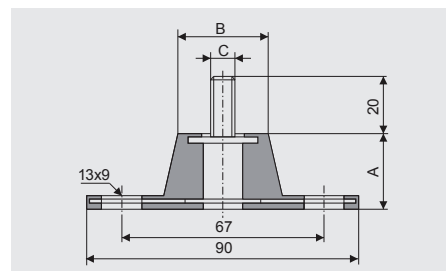




KSE

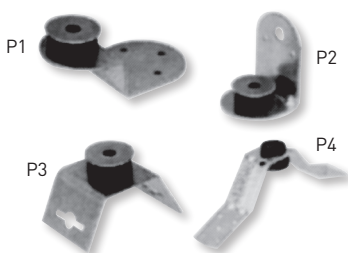
Rubber anti-vibration mounts that absorb vibration and attenuate the noise produced in the installation.
 (1 KSE = 4 supports in a bag)

Model	Weight of fan	A	B	C
KSE-45	40 - 100 kg	25	30	M8
KSE-70	80 - 200 kg	35	40	M8



ISA

Anti-vibration mounting
 (1 ISA = 4 supports)



P

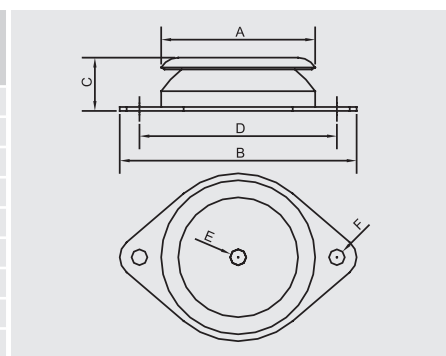
Securing clamps.
 Secured by means of threaded rod
 Ø 8 mm. Rubber support load 250 kg.
 Hardness: 40/45 Shore. Supplied in sets of 4 units.

PAVZ

Rubber anti-vibration mounts that absorb vibration and attenuate the noise produced in the installation.
 (1 PAVZ= 4 supports in a bag).

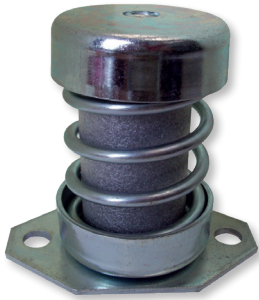


Model	A	B	C	D	ØE	ØF	Max. load* (kg)
PAVZ-60 SH 45	60	90	24	76	M6	6,2	15
PAVZ-60 SH 60	60	90	24	76	M6	6,2	25
PAVZ-60 SH 75	60	90	24	76	M6	6,2	45
PAVZ-80 SH 45	80	120	27	100	M8	8,2	45
PAVZ-80 SH 60	80	120	27	100	M8	8,2	80
PAVZ-80 SH 75	80	120	27	100	M8	8,2	130
PAVZ-100 SH 45	100	148	28	124	M10	10,2	105
PAVZ-100 SH 60	100	148	28	124	M10	10,2	180
PAVZ-100 SH 75	100	148	28	124	M10	10,2	247
PAVZ-150 SH 45	150	214	39	182	M14	12,2	149
PAVZ-150 SH 60	150	214	39	182	M14	12,2	286
PAVZ-150 SH 75	150	214	39	182	M14	12,2	390



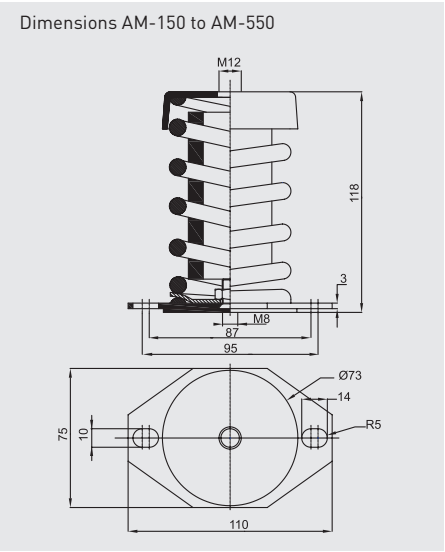
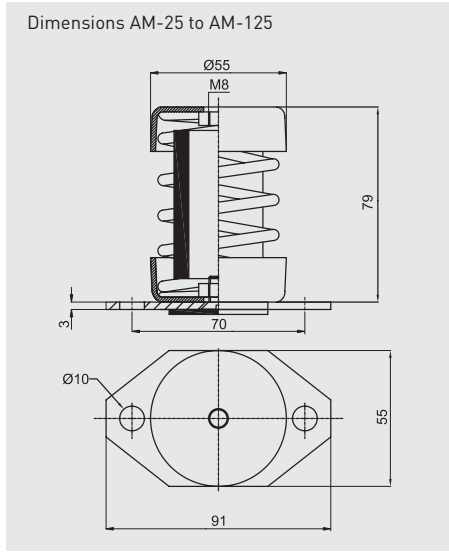
Dimensions (mm)

* The indicated value is the maximum load for each one of the anti-vibration mounts.



AM - ANTI VIBRATION MOUNTS (AVM)

Metallic bases with open holes to allow assembly and centring on the ground.

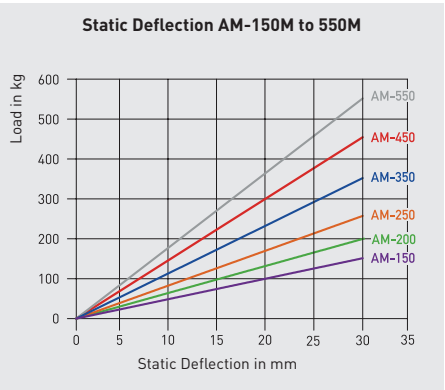
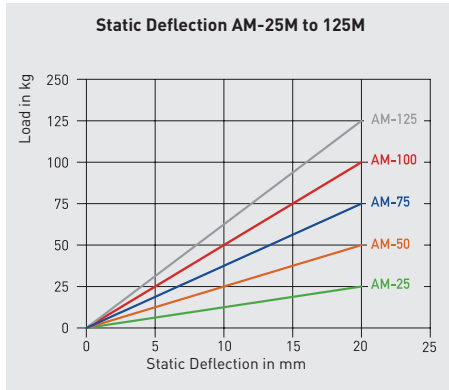


Model	Maximum load (Kg)/Avm
AM-25M	25
AM-50M	50
AM-75M	75
AM-100M	100
AM-125M	125

Model	Maximum load (Kg)/Avm
AM-150M	150
AM-200M	200
AM-250M	250
AM-350M	350
AM-450M	450
AM-550M	550

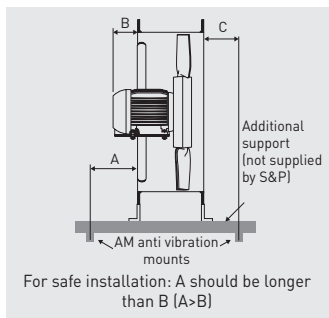
*Simple selection: Determine total weight of fans with accessories and divide by 4. Select AVM to accommodate load, or in accordance with any prescribed static deflection.
 Example: TGT-4-1000, with accessories, weight 300Kg. $300/4=75$ kg. Select 4 x AM100 with 15mm static deflection.

Deflection



AM Anti vibration mount installation for Short case fans.

If spring AM anti vibration mounts are required for Short case fans, it is recommended to install a support (not supplied by S&P) as shown to distribute load.



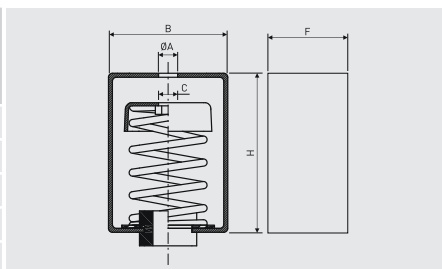
Model TGT, THGT	A (mm)	C (mm)
400	250	60
450	250	70
500	250	70
560	280	80
630	280	80
710	380	80
800	380	90
900	450	100
1000	450	100
1250	500	100



TM - ANTI-VIBRATION HANGERS (AVH)

Metallic anti-vibration hangers with open holes for affixing to ceiling

Model	Dimension (mm)					Load (Kg)	Deflection (mm)
	B	F	H	Ø A	C		
TM 25	75	55	100	12	M8	25	24±3,0
TM 50	75	55	100	12	M8	50	24±3,0
TM 75	75	55	100	12	M8	75	24±3,0
TM 100	75	55	100	12	M8	100	24±3,0
TM 125	75	55	100	12	M8	125	24±3,0



CSU ISOLE

Clamps to secure the extractor to the duct or other accessories, avoiding the transmission of vibration.

Model	Ø (mm)
CSU 80 ISOLE	80
CSU 100 ISOLE	100
CSU 125 ISOLE	125
CSU 160 ISOLE	160
CSU 200 ISOLE	200
CSU 250 ISOLE	250
CSU 315 ISOLE	315

Model	Ø (mm)
CSU 355 ISOLE	355
CSU 400 ISOLE	400
CSU 450 ISOLE	450
CSU 500 ISOLE	500
CSU 560 ISOLE	560
CSU 630 ISOLE	630
CSU 710 ISOLE	710



CX

Adjustable clamps to secure the extractor to the duct or other accessories, avoiding the transmission of vibration.

Model	Ø (mm)
CX 80/125	80/125
CX 125/215	125/215
CX 250	125/250
CX 315	300/315



COF

Fixed clamps to secure the extractor to the duct or other accessories, avoiding the transmission of vibration.

Model	Ø (mm)
COF 80	80
COF 100	100
COF 125	125
COF 150	150



BA-50

Adhesive aluminium duct tape.
 Resistance: -40°C to +80°C.
 C.Length: 10 mm or 50 m.

Model	Width (mm)	Length (m)
BA 50/10	50	10
BA 50/50	50	50



PVC 50/33

Adhesive PVC duct tape.
 C.Length: 33 m.

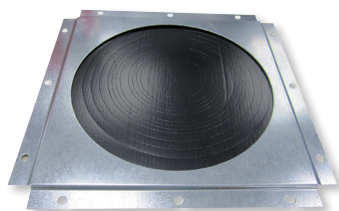
Model	Width (mm)	Length (m)
PVC 50/33	50	33



MASILLA

Paste for sealing joints.

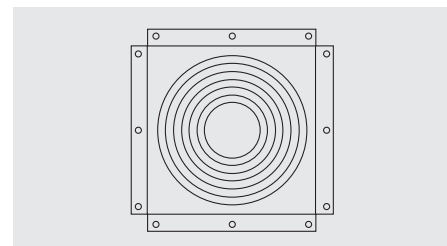
Model	Weight (kg)	Composition
MA1	1	Acrylic
MA2	6	Acrylic



EDP

Gasket for a complete seal between duct and wall.

Model	For diameter ducts Ø (mm)
EDP 80/200	80-100-125-150-160-200
EDP 250/500	250-315-355-400-450-500

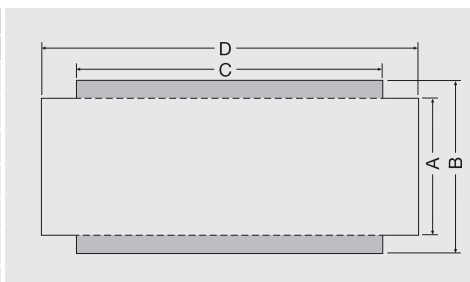




SIL

Sound attenuator to reduce noise transmission to ducting system. In galvanized steel.

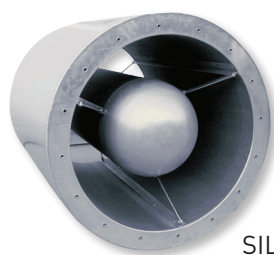
Model	ØA (mm)	ØB (mm)	C (mm)	D (mm)	Weight (kg)	Attenuation in dB							
						63	125	250	500	1000	2000	4000	8000
SIL 125	125	225	600	700	5,08	4	6	10	19	28	33	25	18
SIL 160	160	250	600	700	6,53	2	4	8	16	26	26	23	10
SIL 200	200	300	600	700	8,63	0	3	7	16	22	20	13	10
SIL 250	250	355	600	700	12,9	1	2	6	13	19	15	8	6
SIL 315	315	415	600	700	14,5	0	1	4	10	12	7	4	4
SIL 355	355	450	900	1050	16,9	1	2	6	14	18	12	6	5
SIL 400	400	500	900	1050	16,9	1	2	5	13	15	8	3	2
SIL 450	450	560	900	1050	22,4	1	2	5	13	13	6	4	3
SIL 500	500	630	900	1050	26,4	1	2	4	13	11	3	4	2
SIL 560	560	670	900	1050	26,5	2	4	7	12	12	12	10	2
SIL 630	630	710	900	1100	30,4	1	1	4	10	11	8	9	6
SIL 710	710	900	900	1140	55,0	2	3	9	13	5	2	3	2



SIL-CZ / SIL-CZO



SIL-CZ



SIL-CZO

SIL CZ

Casing pre-galvanised sheet steel Z200 of thickness 0,8 mm. Mounting flange with threaded insert. Acoustic miner wool density 70kg/m³ with erosion resistant facing with M0 fire resistance.

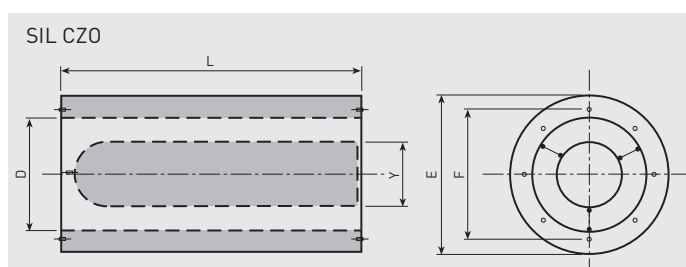
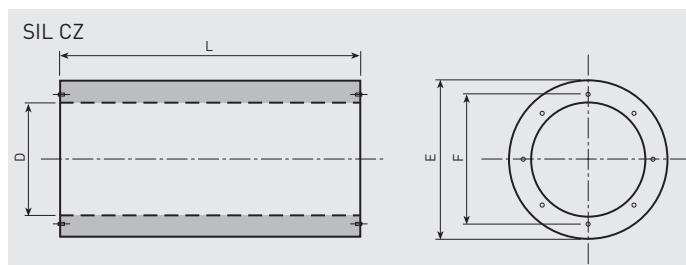
SIL CZO

As SIL CZ but with internal pod for extra attenuation.

On request

Version with stainless steel casing.

Ø nominal (mm)	ØD (mm)	ØE (mm)	ØF (mm)	Holes		ØY (mm)	L		
				nº	Type		ØDx1	ØDx1,5	ØDx2
400	400	540	450	8	M10	200	400	600	800
450	450	610	500	8	M10	250	450	675	900
500	500	660	560	12	M10	250	500	750	1000
560	560	720	620	12	M10	300	560	840	1120
630	630	790	690	12	M10	300	630	945	1260
710	710	870	770	16	M10	380	710	1065	1420
800	800	1000	860	16	M10	380	800	1200	1600
900	900	1100	970	16	M12	380	900	1350	1800
1000	1000	1200	1070	16	M12	650	1000	1500	2000
1120	1120	1320	1190	20	M15	650	1120	1680	2240
1250	1250	1450	1320	20	M12	650	1250	1875	2500
1400	1400	1600	1470	20	M15	650	1400	2100	2800
1600	1600	1800	1680	24	M12	650	1600	2400	3200



Sound attenuators SIL-CZ and SIL-CZO

Weights

Sound attenuator Ø	SIL-CZ		
	Length of sound attenuators		
	ØDx1	ØDx1,5	ØDx2
400	16	23	29
450	20	26	34
500	23	31	40
560	26	36	47
630	32	46	60
710	42	58	75
800	50	70	90
900	80	101	122
1000	115	137	160
1120	134	160	186
1250	159	191	223
1400	218	270	322
1600	290	434	578

Sound attenuator Ø	SIL-CZO		
	Length of sound attenuators		
	ØDx1	ØDx1,5	ØDx2
400	20	27	35
450	24	31	41
500	29	39	50
560	33	46	60
630	44	64	84
710	57	78	101
800	66	93	120
900	107	135	163
1000	149	178	208
1120	174	208	226
1250	206	248	289
1400	283	351	418
1600	377	564	751

Sound attenuators SIL-CZO

Pressure drops

SIL-CZO (ØDx1)	Air speed 5 m/s		Air speed 10 m/s		Air speed 15 m/s	
	Airflow (m³/h)	Pressure drop (Pa)	Airflow (m³/h)	Pressure drop (Pa)	Airflow (m³/h)	Pressure drop (Pa)
400	1.700	5	3.400	24	5.100	64
450	2.000	6	4.000	25	6.000	66
500	2.700	7	5.400	30	8.100	65
560	3.200	4	6.400	16	9.600	42
630	4.400	4,5	8.800	18	13.100	39
710	5.100	3	10.200	10	15.300	23
800	7.000	4	14.000	14	21.000	36
900	9.400	3	18.800	18	28.200	55
1000	8.200	3	16.300	10	24.500	27
1120	11.800	4	23.500	16	35.300	42
1250	16.100	5	32.200	23	48.300	56
1400	21.700	7	43.500	26	65.200	54
1600	30.200	10	60.400	32	90.700	61

SIL-CZO (ØDx2)	Air speed 5 m/s		Air speed 10 m/s		Air speed 15 m/s	
	Airflow (m³/h)	Pressure drop (Pa)	Airflow (m³/h)	Pressure drop (Pa)	Airflow (m³/h)	Pressure drop (Pa)
400	1.700	10	3.400	39	5.100	92
450	2.000	11	4.000	40	6.000	94
500	2.700	12	5.400	47	8.100	98
560	3.200	6	6.400	26	9.600	60
630	4.400	7	8.800	29	13.100	61
710	5.100	4,5	10.200	16	15.300	39
800	7.000	5,5	14.000	23	21.000	61
900	9.400	5	18.800	28	28.200	85
1000	8.200	5	16.300	15	24.500	41
1120	11.800	5	23.500	23	35.300	65
1250	16.100	7	32.200	35	48.300	89
1400	21.700	9	43.500	41	65.200	93
1600	30.200	14	60.400	52	90.700	104

Sound attenuators SIL-CZ and SIL-CZO

Sound attenuation by frequency band

	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
SIL-CZ-400	10	0	4	10	13	8	8
	15	1	5	14	19	12	10
	20	2	7	18	24	15	12
SIL-CZ-450	10	1	4	12	12	9	6
	15	1	6	17	17	13	9
	20	1	7	21	21	15	10
SIL-CZ-500	10	0	4	13	11	9	6
	15	1	6	18	17	12	9
	20	2	8	23	21	14	11
SIL-CZ-560	10	0	4	14	11	8	5
	15	2	7	20	15	11	8
	20	1	9	24	19	14	10
SIL-CZ-630	10	1	5	14	10	9	5
	15	2	7	20	14	12	8
	20	2	9	25	17	14	10
SIL-CZ-710	10	1	5	12	9	7	5
	15	2	7	18	11	9	6
	20	4	9	24	14	11	8
SIL-CZ-800	10	3	7	9	8	6	5
	15	5	10	13	12	9	7
	20	6	13	22	14	10	9
SIL-CZ-900	10	3	7	13	8	6	5
	15	5	11	16	11	7	7
	20	6	14	23	13	9	7
SIL-CZ-1000	10	3	8	12	8	4	4
	15	5	12	17	10	6	5
	20	6	16	23	12	7	6
SIL-CZ-1120	10	3	8	13	7	5	4
	15	5	12	18	8	6	5
	20	6	15	23	10	7	6
SIL-CZ-1250	10	3	9	13	7	4	3
	15	6	12	17	8	5	4
	20	8	17	22	10	6	5
SIL-CZ-1400*	10	6	12	16	10	8	7
	15	7	13	17	11	9	8
	20	8	14	18	12	10	9
SIL-CZ-1600*	10	7	12	16	10	8	7
	15	7	13	17	11	9	8
	20	8	15	18	12	10	9

* Value calculated at ± 1dB.

	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
SIL-CZO-400	10	1	4	11	20	18	14
	15	2	6	15	31	27	19
	20	2	9	20	37	35	23
SIL-CZO-450	10	1	6	14	21	19	13
	15	2	7	19	31	28	18
	20	3	10	23	39	36	21
SIL-CZO-500	10	2	5	13	20	16	11
	15	3	7	19	29	24	14
	20	3	10	24	38	32	18
SIL-CZO-560	10	1	6	15	21	17	11
	15	3	9	22	32	27	15
	20	2	12	27	41	35	18
SIL-CZO-630	10	1	6	15	19	16	10
	15	2	9	22	29	23	14
	20	3	11	27	37	29	15
SIL-CZO-710	10	2	7	15	20	18	12
	15	3	11	22	31	25	13
	20	5	14	29	41	32	18
SIL-CZO-800	10	3	9	12	17	15	9
	15	6	13	18	26	22	12
	20	6	16	29	35	26	15
SIL-CZO-900	10	4	8	15	16	11	8
	15	5	12	20	24	16	10
	20	7	17	30	34	20	12
SIL-CZO-1000	10	8	14	20	24	21	14
	15	10	22	30	37	29	16
	20	13	28	39	47	38	19
SIL-CZO-1120	10	6	13	20	21	14	8
	15	10	19	29	33	20	11
	20	14	26	36	42	24	13
SIL-CZO-1250	10	7	12	18	19	10	6
	15	10	18	26	29	14	9
	20	13	25	35	37	17	11
SIL-CZO-1400*	10	7	11	17	16	13	11
	15	8	13	19	18	15	13
	20	9	15	21	20	17	14
SIL-CZO-1600*	10	8	12	16	15	13	11
	15	9	14	19	18	15	13
	20	10	16	21	20	17	14

* Value calculated at ± 1dB.

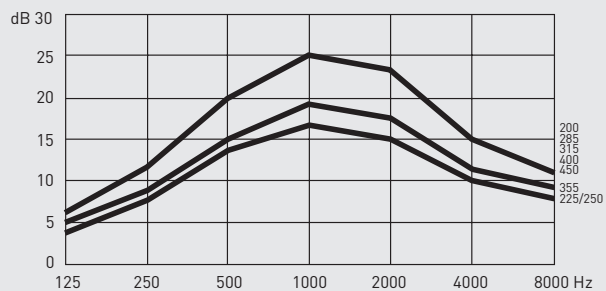


IAA

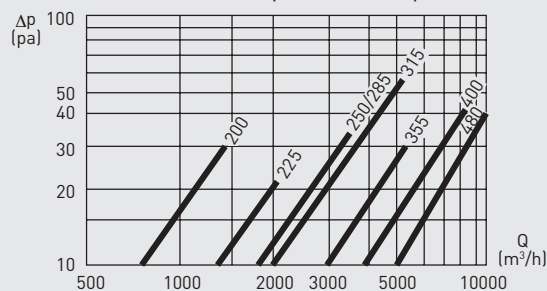
Sound attenuators

Designed to reduce in-duct sound levels.
All models are designed in 1m length.

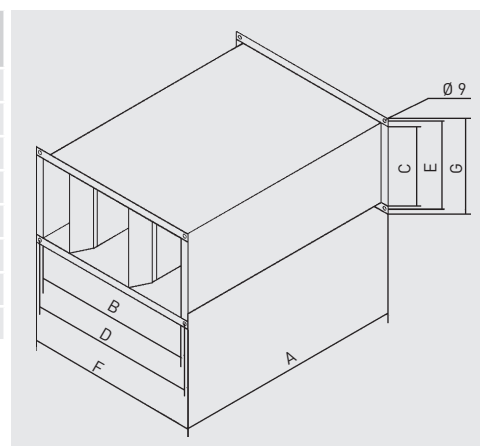
Attenuation for frequency band



Attenuator pressure drop



Model	A	B	C	D	E	F	G	Weight (kg)
IAA-200	1000	400	200	420	220	440	240	18,6
IAA-225	1000	500	250	520	270	540	290	23,0
IAA-250	1000	500	300	520	320	540	340	23,0
IAA-285	1000	600	300	620	320	640	340	28,2
IAA-315	1000	600	350	620	370	640	390	30,0
IAA-355	1000	700	400	720	420	740	440	34,6
IAA-400	1000	800	500	820	520	840	540	44,2
IAA-450	1000	1000	500	1020	520	1040	540	56,0

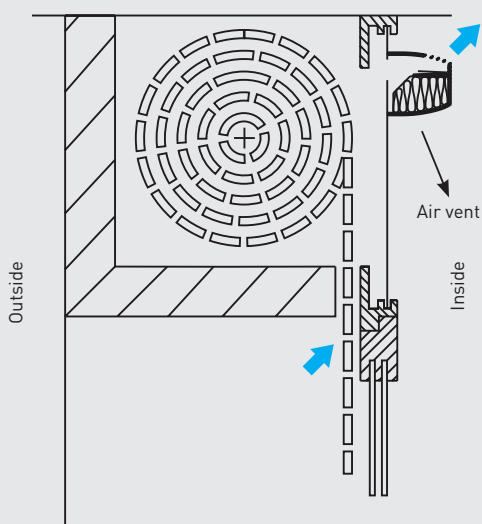


REGULATIONS

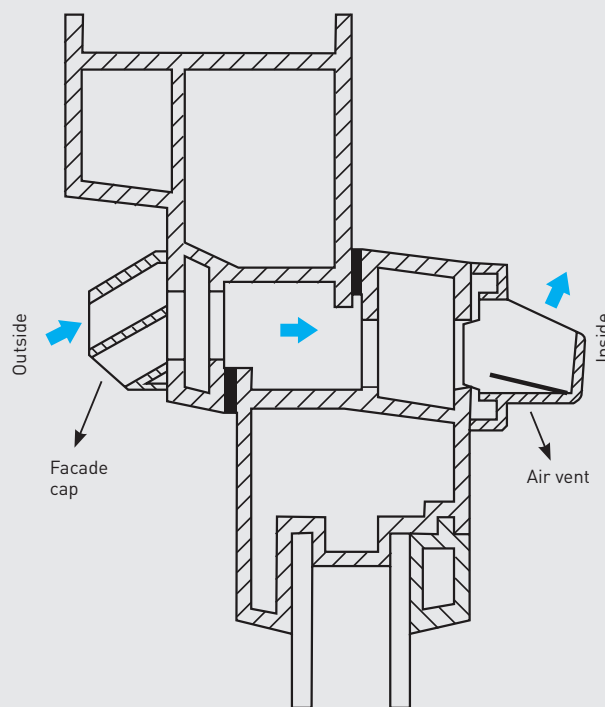
- Air must be able to circulate from the dry to the damp rooms, therefore, the dining rooms, bedrooms and living rooms must have inlet openings.
- The air vents must be placed more than 1.80 m above floor level.

MOUNTING ALTERNATIVES

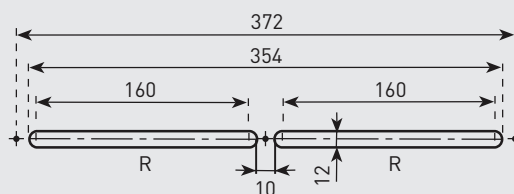
IN THE ROLLER BLIND BOX



IN THE WINDOW FRAME



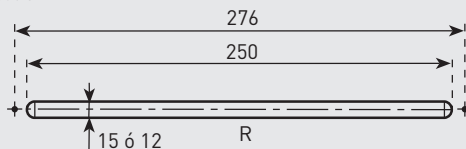
FIXING POINTS AND AIRFLOW



R: Groove
 † Fixing points

Two grooves (R) of 160x12mm should be done, with 10mm separation between them. Afterwards, the inlet should be fixed in the 3 fixing points.

EC-N 22 and 30 models

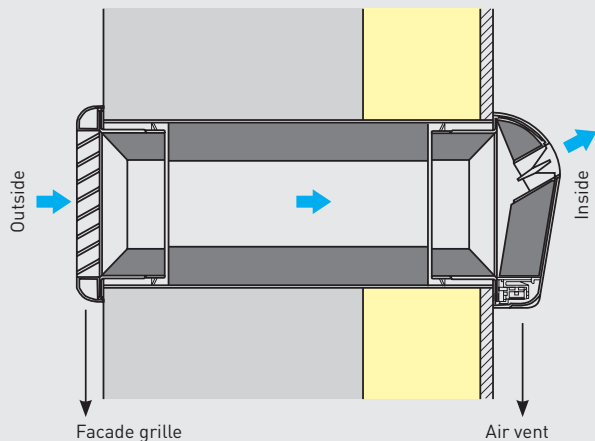


Two grooves (R) of 250x15 or 12mm should be done. Afterwards, the inlet should be fixed in the 3 fixing points.

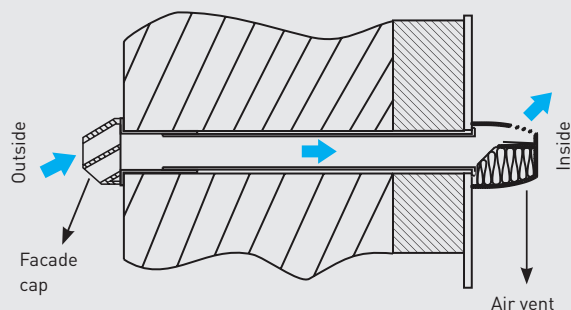
MOUNTING ALTERNATIVES

IN WALL

WITH SOUND ATTENUATOR



WITHOUT SOUND ATTENUATOR

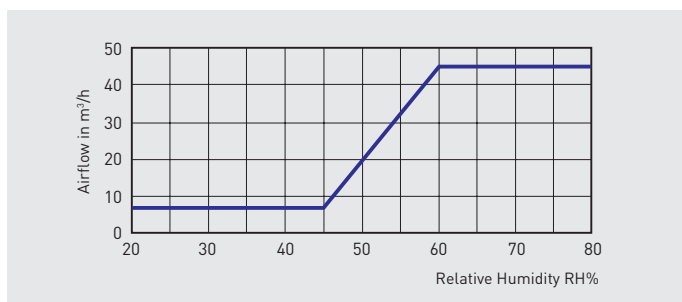


AIR VENTS MODELS

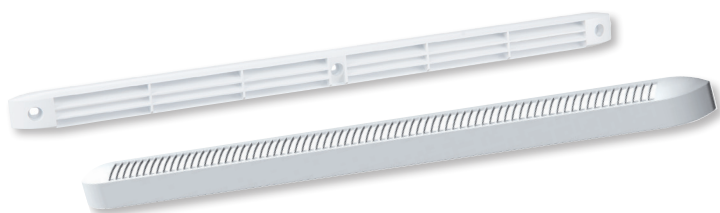
Self-regulating air vents:
The airflow circulating through the vent is maintained constant. An inner flexible element avoids sudden increases of airflow caused by wind blowing onto the facade of the building.

Humidity adjustable air vents:
The airflow circulating through the vent depends on the relative humidity of the indoor air. When it is high, a flap located inside the vent keeps the air passage totally open (maximum flow), while when the relative humidity indoors is low, the flap closes (minimum airflow), reducing energy loss.

Operation (at 20Pa)

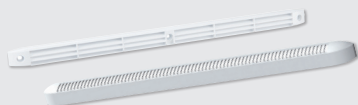


EC-N



Self-regulating air vents, manufactured in white or brown polystyrene. Guaranteeing air renewal in a home through the main rooms (Living room, sitting room and bedrooms). Enabling an airflow of 22, 30 and 45 m³/h. Fitted either to carpentry elements (in openings measuring 354x12 mm) or connected to a wall feedthrough tube. The EC N air vent has a cover that includes an insect grille, available in white or brown.

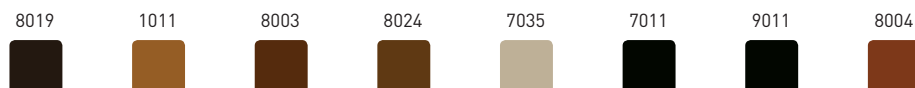
LxWxH (mm): 295 x 20 x 8 (EC-N 22 and 30)
400 x 23 x 12 (EC-N 45)



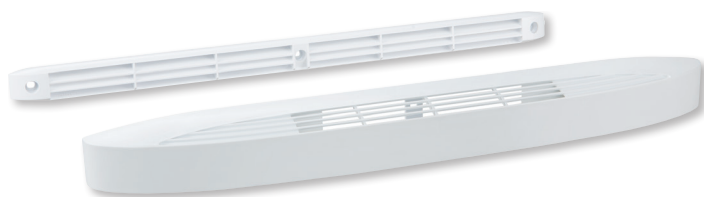
LxWxH (mm): 305 x 20 x 18 (EC-N 22 and 30)
405 x 20 x 18 (EC-N 45)

Model	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
EC-N 22 White	9016	22	35
EC-N 30 White	9016	30	34
EC-N 45 White	9016	45	33

On request (RAL):



ECA



Self-regulating air vents, manufactured from injection moulded polystyrene and available in three air volume range (22, 30, 36 and 45 m³/h). Fitted in openings measuring 354x12 mm. Suitable for installation on window joinery by crews. The air inlet acoustic element is placed on the indoor side while the cover is fitted on the external side of the joinery. An additional acoustic element can be slot into the air inlet (ECA+RA).

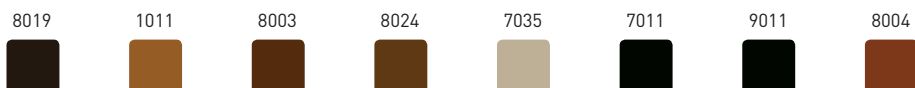
LxWxH (mm): 400 x 23 x 12



LxWxH (mm): 422 x 45 x 45

Model	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
ECA 22 White	9016	22	39
ECA 30 White	9016	30	39
ECA 36 White	9016	36	38
ECA 45 White	9016	45	37

On request (RAL):



ECA-RA



Self-regulating air vents, manufactured from injection moulded polystyrene. They allow air renewal in a house via main rooms (living room, dining room, bathroom).
Airflow of 22,30, 36 and 45 m³/h. It can be installed on carpentry elements or joined to a wall bypass sleeve.

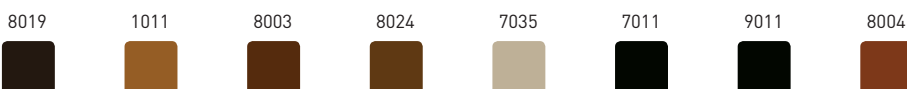
LxWxH (mm): 400 x 23 x 12



LxWxH (mm): 422 x 45 x 69

Model	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
ECA-RA 22 White	9016	22	41
ECA-RA 30 White	9016	30	41
ECA-RA 36 White	9016	36	39
ECA-RA 45 White	9016	45	39

On request (RAL):

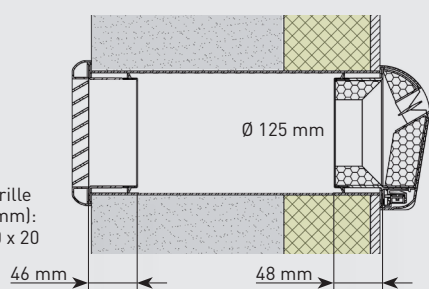


SILEM KIT

Self-regulating air vents with sound attenuator. SILEM KIT allows air renewal in a house via main rooms (living room, dining room, bathroom).
Airflow of 22 and 30 m³/h. They are fitted into the wall. With this purpose, it is included a sheet metal sleeve (Ø 125 mm and 300 mm length) and external facade grille.

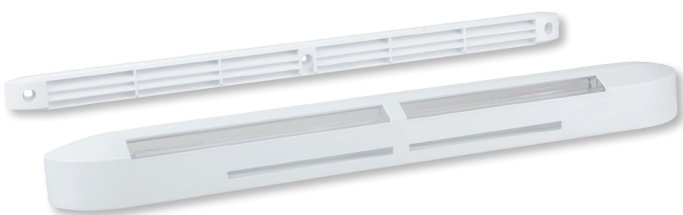
Model	Ø (mm)	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
SILEM KIT 22	125	9016	22	47
SILEM KIT 30	125	9016	30	47

Facade grille
LxWxH (mm):
150 x 150 x 20



Silenced air vent
LxWxH (mm):
220 x 150 x 52

EC-HY



Humidity adjustable air vents for renewing air in the main rooms of flats and detached homes.

They guarantee a variable flow of 6 to 45 m³/h according to the degree of humidity in the room, for a pressure difference of 20 Pa, It can be installed on carpentry elements or joined to a wall bypass sleeve.

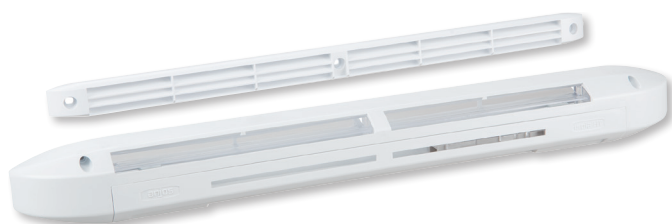


Model	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
EC-HY 6/45 White	9016	6 / 45	34

On request (RAL):

8019	1011	8003	8024	7035	7011	9011	8004

ECA-HY



Humidity adjustable acoustic air vents for renewing air in the main rooms of flats and detached homes. They guarantee a variable flow of 6 to 45 m³/h according to the degree of humidity in the room, for a pressure difference of 20 Pa, It can be installed on carpentry elements or joined to a wall bypass sleeve.

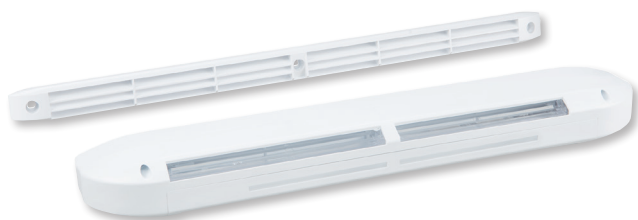


Model	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
ECA-HY 6/45 White	9016	6 / 45	37

On request (RAL):

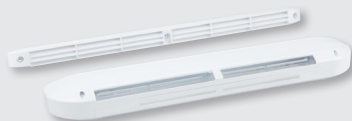
8019	1011	8003	8024	7035	7011	9011	8004

ECA-HY RA



Humidity adjustable air vents with an acoustic frame for renewing air in the main rooms of flats and detached homes. The acoustic frame offers great noise attenuation. They guarantee a variable flow of 6 to 45 m³/h according to the degree of humidity in the room, for a pressure difference of 20 Pa. It can be installed on carpentry elements or joined to a wall bypass sleeve.

LxWxH (mm): 400 x 23 x 12



LxWxH (mm): 420 x 45 x 64

Model	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
ECA-HY 6/45 RA White	9016	6 / 45	39

On request (RAL):

8019	1011	8003	8024	7035	7011	9011	8004



SILEM KIT HY

Humidity adjustable air vents with sound attenuator.

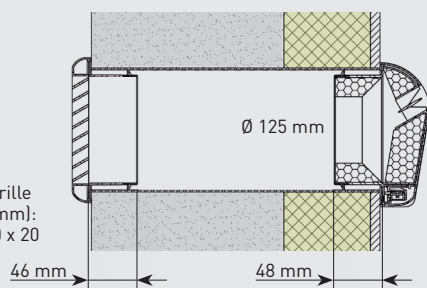
SILEM KIT HY allows air renewal in a house via main rooms (living room, dining room, bathroom).

Airflow of 22 and 30 m³/h

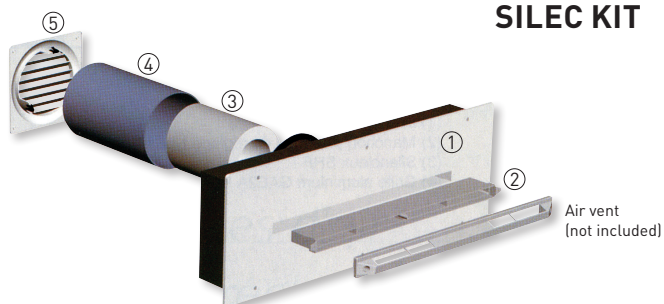
They are fitted into the wall. With this purpose, it is included a sheet metal sleeve (Ø 125 mm and 300 mm length) and external facade grille.

Model	Ø (mm)	RAL	Airflow (m ³ /h)	Dn,e,w (ctr)
SILEM KIT HY 125	125	9016	6 / 45	39

Facade grille
LxWxH (mm):
150 x 150 x 20



Silenced air vent
LxWxH (mm):
220 x 150 x 52



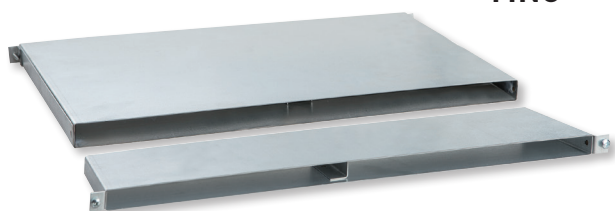
SILEC KIT

Wall feed through tube sound attenuator polystyrene. Fitted to any wall surface after perforating the wall and embedding a 125 mm diameter PVC tube.

SILEC KIT - Elementos	
①	Sound attenuator (535 x 195 ext) (500 x 160 int) Ø 125 mm
②	Plastic adaptor piece. Length: 50 mm
③	Acoustic tube 30 m ³ /h 51 dB(A). Length: 140 mm
④	PVC Ø 125 tube to embed in the wall. Length: 200 mm
⑤	Wall grille Ø 125 with 150 x 150 mm clips

Model	Dn,e,w (ctr)
SILEC KIT + EC-N 22	51
SILEC KIT + EC-N 30	51
SILEC KIT + EC-N 45	49
SILEC KIT + ECA-HY 6/45	50

The SILEC KIT does not include the sound attenuator



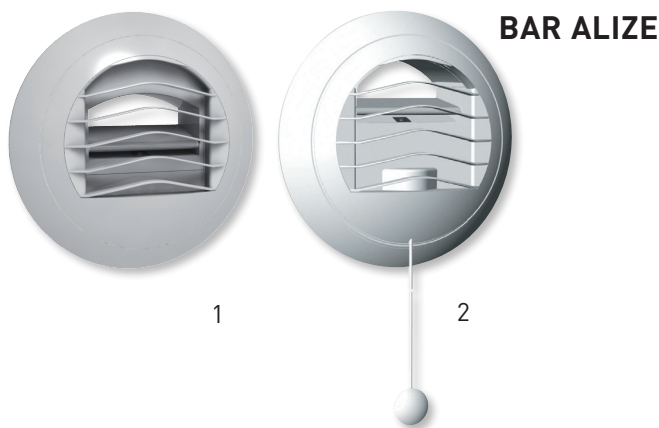
MNG

Connectors made of galvanized sheet steel 0.75 mm thick. Used for fitting air inlets in walls. Adapted to the air inlet grilles or air vents measuring 354 x 12 mm.

Model	Dimensions LxWxH (mm)
MNG M1 L70	360 x 70 x 15
MNG M1 L100	360 x 100 x 15
MNG M1 L200	360 x 200 x 15
MNG M2 L250	365 x 250 x 18

MNG M1 Adjustable connector (male)

MNG M2 Fixed connector (female)



BAR ALIZE

Wide range of self-adjusting exhaust valves, manufactured from injection moulded white polystyrene. Designed for kitchen, bathrooms and toilet ventilation applications, they are available either for one fixed air volume or for dual air volume.

Models:

- BARJ: with a connector joint, for fitting directly to the rigid conduit.
- BARP: with a connector with supports for anchoring plasterboard, for fitting to plasterboard plates and with flexible conduit.
- BAR: without connector.
- BARJ-T: 2 airflows: trickle and boost (30 min). With a connector joint.

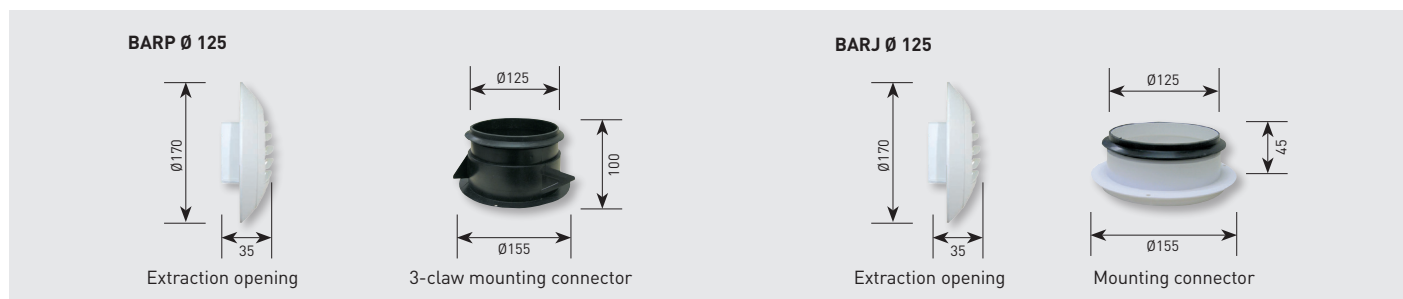
1: Constant airflow

Airflow (m ³ /h)	Valves with duct mounting connector with rubber seal	Valves with 3-claw mounting connector	Valves without connector	Ø Outlet (mm)
	Model	Model	Model	
15	BARJ 15	BARP 15	BAR 15	125
30	BARJ 30	BARP 30	BAR 30	125
45	BARJ 45	BARP 45	BAR 45	125
54	BARJ 54	BARP 54	BAR 54	125
60	BARJ 60	BARP 60	BAR 60	125
72	BARJ 72	BARP 72	BAR 72	125
75	BARJ 75	BARP 75	BAR 75	125
87	BARJ 87	BARP 87	BAR 87	125
90	BARJ 90	BARP 90	BAR 90	125
100	BARJ 100	BARP 100	BAR 100	125
115	BARJ 115	BARP 115	BAR 115	125
120	BARJ 120	BARP 120	BAR 120	125
122	BARJ 122	BARP 122	BAR 122	125
144	BARJ 144	BARP 144	BAR 144	125
150	BARJ 150	BARP 150	BAR 150	125

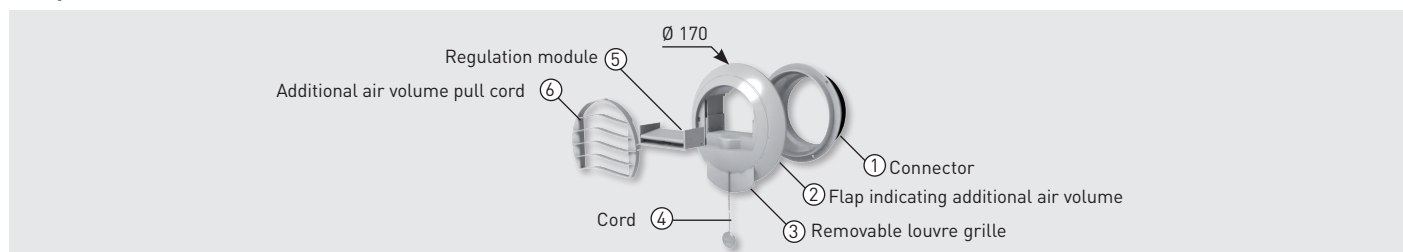
2: 2 airflows: model with cord*

Airflow (m ³ /h)	Valves with duct mounting connector with rubber seal	Valves with 3-claw mounting connector	Valves without connector	Ø Outlet (mm)
	Model	Model	Model	
15/30	BARJ 15/30	BARP 15/30	BAR 15/30	125
20/75	BARJ 20/75	BARP 20/75	BAR 20/75	125
30/90	BARJ 30/90	BARP 30/90	BAR 30/90	125
45/105	BARJ 45/105	BARP 45/105	BAR 45/105	125
45/120	BARJ 45/120	BARP 45/120	BAR 45/120	125
45/135	BARJ 45/135	BARP 45/135	BAR 45/135	125

* For this model, the change of airflow is obtained manually by pulling the cord.



Components



Self-adjusting exhaust valves accessories



MNGJ 99
Connector Ø 99 with gasket for BAR (except for double flow valves and models 120-150). L: 45 mm

MNGJ 125
Connector Ø 125 with gasket. L: 45 mm



MNGP 100
Connector Ø 100 with anchoring supports for plasterboard. (except for double flow valves and models 120-150). L: 100 mm

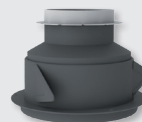
MNGP 125
Connector Ø 125 with anchoring supports for plasterboard. (except for double flow valves and models 120-150). L: 100 mm



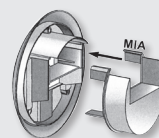
MIA
Sound attenuator module for connectors of 125mm diameter (except models from 72 to 150m³/h)
Made of melamine foam fitted on a polystyrene support, the MIA module reduces noise transmission (Dn,e,w).



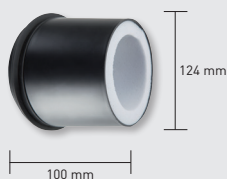
ANGULO ALIZE
Return angle guide
Ceiling installation will require the return angle fitting for pull cord guidance.



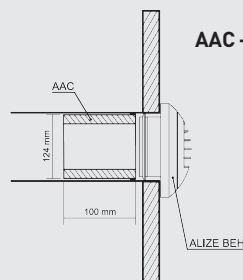
MNGP 80
Connector Ø 80 with anchoring supports for plasterboard.
L: 100 mm.



Installation
The MIA is fitted on the back part of the exhaust valve BAR.



AAC - Sound attenuator accessory
Plastic connector with gasket and basotect foam. Only valves for Ø 125



AAC - Installation

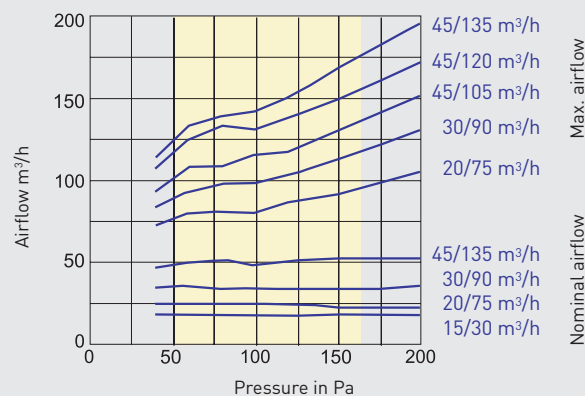
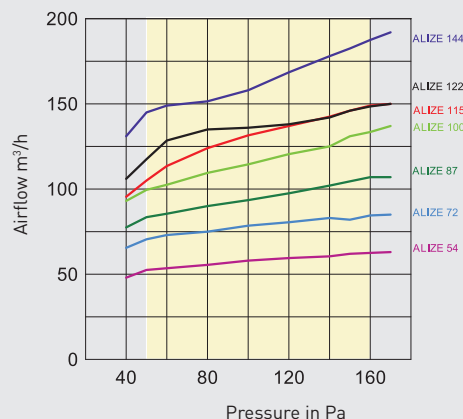
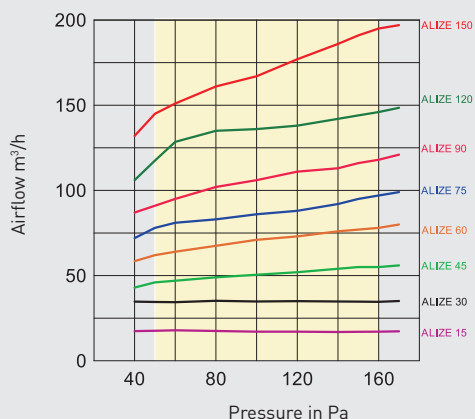
Acoustic data

Airflow (m ³ /h)	Lw en dB(A)				Dn,e,w (ctr) (dB)*
	70 Pa	100 Pa	130 Pa	160 Pa	
15	19	27	31	34	62
30	27	30	33	36	61
45	27	33	34	37	59
54	30	35	37	40	59
60	35	38	40	43	59
72	36	38	41	43	59
75	36	38	41	43	59
87	39	41	44	46	59
90	39	41	44	46	58
100	41	42	44	47	58
115	43	45	46	47	57
120	44	45	46	48	57
122	44	45	46	48	57
144	44	45	48	49	56
150	44	45	48	49	56

Airflow (m ³ /h)	Lw en dB(A)				Dn,e,w (ctr) (dB)*
	70 Pa	100 Pa	130 Pa	160 Pa	
15/30	19	27	31	34	61
20/75	24	27	30	33	56
30/90	25	31	34	36	56
45/105	27	33	34	37	55
45/120	27	33	34	37	55
45/135	27	33	34	37	55

* Without MIA

Technical characteristics (PV CSTB 41391 and 42562 and test reports CETIAT n° 2504)



Ø 125 mm
h: 100 mm

BM2D

Self-adjusting exhaust valve for twin-flow systems with a connector with anchoring supports for plasterboard.

Minimum / maximum opening.

Controlled by a presence detector acting on the motorised damper built into the inlet. Power supply: 1-230 V.

Model	Ø Duct (mm)	Ø Maximum x Depth	Air volume
BM2D 7,5/25 D125	125	180x58	7,5/25
BM2D 7,5/50 D125	125	180x58	7,5/50
BM2D 7,5/75 D125	125	180x58	7,5/75
BM2D 10/100 D125	125	180x58	10/100

Model	Electrical supply	Power (W)	Time of answer	IP Protection	Operating temperature range
BM2D	230V-50Hz	6,6	40s opening 80s closed	IP20	0°C to +50°C maximum 95% HR without condensation

ALIZE BEH



Humidity adjustable exhaust valves made of white polystyrene, to control the airflow according to humidity or air pollution inside detached houses, flats or commercial premises.

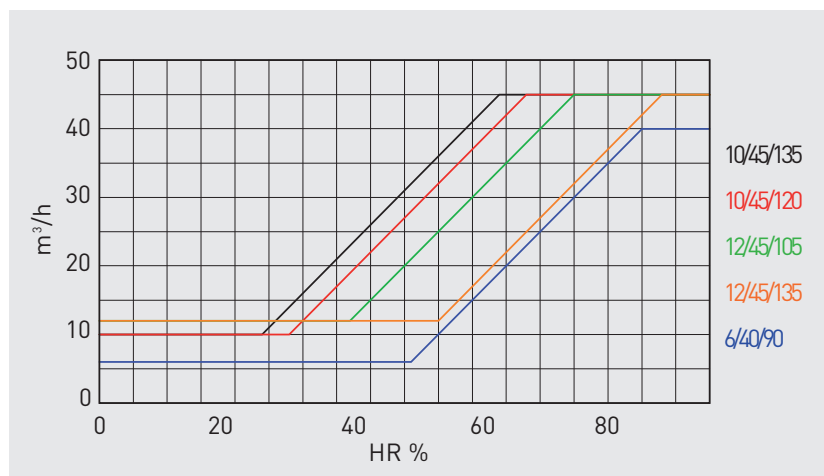
In houses, these inlets will be connected to an extractor network.

- J models: with a connector joint, for fitting directly to the rigid conduit.
- P models: with a connector with supports for anchoring plasterboard, for fitting to plasterboard plates and with flexible.

There are timed (30 minutes) humidity adjustable versions, manual, electric or with a presencedetector. They have a clamp-type connector.

Models J	P Models	Humidity adjustable	Timer	Presence detector (battery)	Electrical	String	Q Min HIGRO	Q Max HIGRO	Q Additional	Ø Connection
BEHT 15/50-125J	BEHT 15/50-125P	•					15	50		125
BEHT 15/75-125J	BEHT 15/75-125P	•					15	75		125
BEHT 15/100-125J	BEHT 15/100-125P	•					15	100		125
BEHT/E 10-45/150-125J	BEHT/E 10-45/150-125P	•			•		10	45	150	125
BEHT/DP 7,5/50-125J	BEHT/DP 7,5/50-125P			•			7,5	50		125
BEHT/DP 7,5/65-125J	BEHT/DP 7,5/65-125P			•			7,5	65		125
BEHC 6/40/90-125J	BEHC 6/40/90-125P	•	•			•	6	40	90	125
BEHC 12/45/105-125J	BEHC 12/45/105-125P	•	•			•	12	45	105	125
BEHC 10/45/120-125J	BEHC 10/45/120-125P	•	•			•	10	45	120	125
BEHC 10/45/135-125J	BEHC 10/45/135-125P	•	•			•	10	45	135	125
BEHC/E 6/40/90-125J	BEHC/E 6/40/90-125P	•	•		•		6	40	90	125
BEHC/E 12/45/105-125J	BEHC/E 12/45/105-125P	•	•		•		12	45	105	125
BEHC/E 10/45/120-125J	BEHC/E 10/45/120-125P	•	•		•		10	45	120	125
BEHC/E 10/45/135-125J	BEHC/E 10/45/135-125P	•	•		•		10	45	135	125
BEHW/DP 5/30-80J	BEHW/DP 5/30-80P			•			5	30		80

Technical characteristics (to 80 Pa)



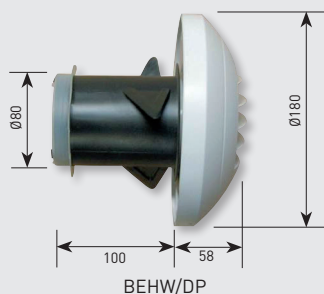
Acoustic characteristics

Models	100 Pa	130 Pa	160 Pa
BEHT 15/50-125J ó P	27	31	36
BEHT 15/75-125J ó P	35	39	41
BEHC 6/40/90-125J ó P	31	34	36
BEHC 12/45/105-125J ó P	31	35	37
BEHC 10/45/120-125J ó P	31	35	37
BEHC 10/45/135-125J ó P	31	35	37
BEHC/E 6/40/90-125J ó P	31	34	36
BEHC/E 12/45/105-125J ó P	31	35	37
BEHC/E 10/45/120-125J ó P	31	35	37
BEHC/E 10/45/135-125J ó P	31	35	37
BEHT/E 10-45/150-125J ó P	31	35	37
BEHW/DP 5/30-80J ó P	< 20	< 25	29
BEHT/DP 7,5/50-125J ó P	27	31	36
BEHT/DP 7,5/65-125J ó P	35	33	41

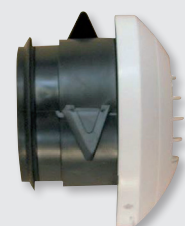
Lw: Sound level measured at the valve.

VALVES WITH PLASTERBOARD CONECTOR
 P versions

Type BEHP



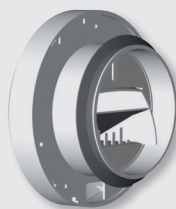
BEHW/DP



BEHT - BEHC/E
 BEHT/E - BEHT/DP

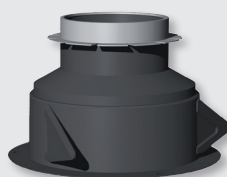
VALVES WITH JOINT
 J versions

Type BEHJ 125



Plasterboard connectors

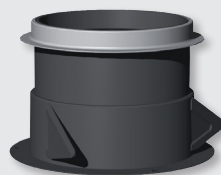
Type BEHJ 80



Ø 80 mm
 h: 100 mm

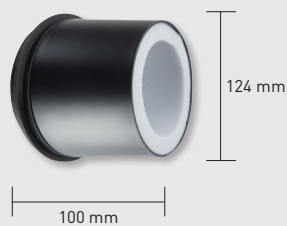


Ø 80 mm



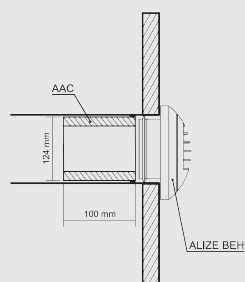
Ø 125 mm
 h: 100 mm

Acoustic accessories



AAC
 Made of melamine foam, fitted behind the inlet.
 Only valves Ø 125.

AAC - Installation



Other accessories



ANGLE CHANGER

Angle changer for inlets with a cord installed in the ceiling. Enables the cord to be guided along the wall with the BEHC and BEHW manual control inlets.



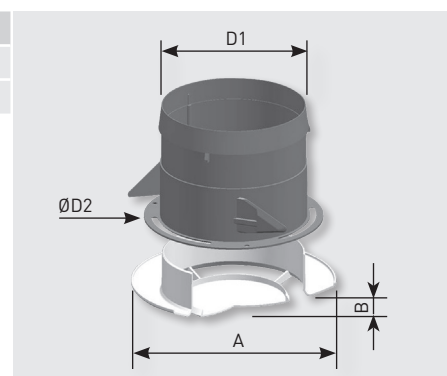
BOCP

Plastic exhaust valves manufactured from injection moulded white polypropylene plastic. Used for extraction in VMC simple or double flow installations.

Can be fitted:
In plaster board ceilings: inlet with clamps (BOCP).
The clamping sleeve, made of plastic, has three securing clamps.
A gasket ensures securing to the duct as as sealing.

Model	Ø (mm)	Connector
BOCP 80	80	3-claw mounting connector
BOCP 125	125	3-claw mounting connector

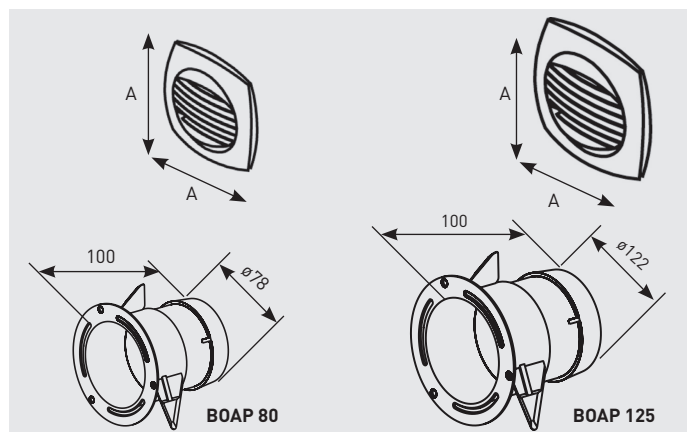
Model	A	B	D1	D2	H
BOCP 80	119	19	78	99	100
BOCP 125	169	27	122	159	100



BOAP

Plastic exhaust valves manufactured from injection moulded white polypropylene plastic. Used for extraction in simple or double flow VMC installations.
Clamp inlet (BOAP). The clamp sleeve, made of plastic, has 3 securing clamps.

Model	Ø (mm)	Connector	Dimension A
BOAP 80	80	Plasterboard anchor supports	129
BOAP 125	125	Plasterboard anchor supports	172





BDOP and BDO

White plastic valves used in extraction or blowing and in single flow or double flow VMC installations.

When blowing, the direction and the distance of the airflow can be adjusted. BDOP model includes a BDO + a connexion sleeve with anchors to mount on plasterboard.

It can be fitted with an airflow regulator on the sleeve (BDOP 80 and 125 models) or on the ducting (100, 160 and 200 BDO models).

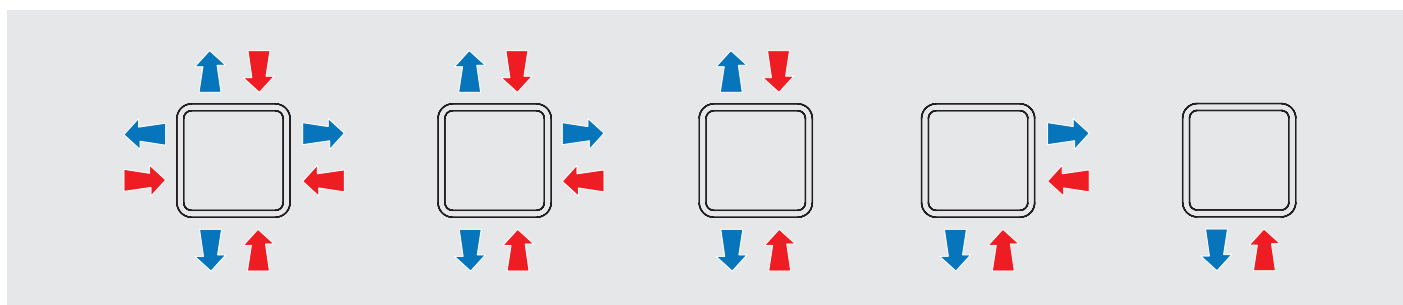
Model	Ø Outlet (mm)	Airflow* (m³/h)	Connector
BDO 100	100	15 - 75	Sleeve mounting
BDO 160	160	120 - 240	Sleeve mounting
BDO 200	200	240 - 350	Sleeve mounting

* Flow rate of extraction and blowing without the side flaps.

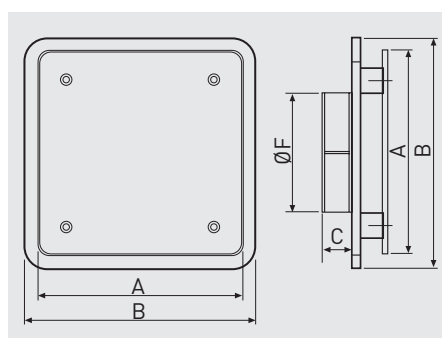
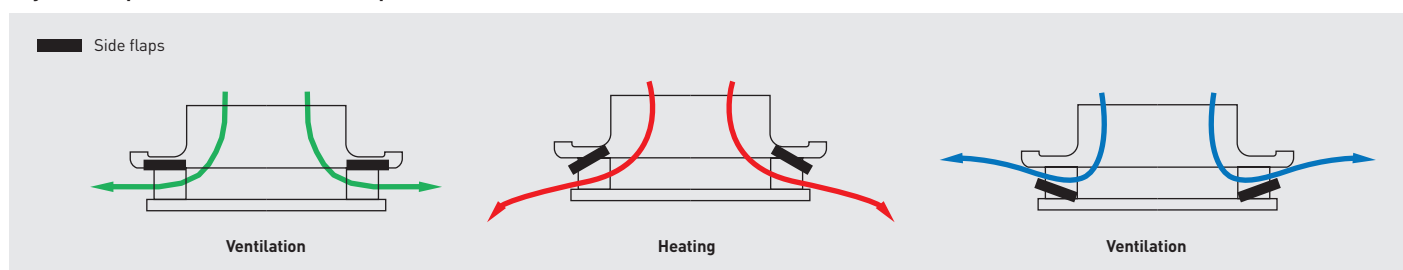
Model	Ø Outlet (mm)	Airflow* (m³/h)	Connector	
			Material	Height (mm)
BDOP 80	80	15 - 60	Plastic	100
BDOP 100	100	15 - 75	Metallic	150
BDOP 125	125	45 - 150	Plastic	100
BDOP 160	160	120 - 240	Metallic	150
BDOP 200	200	240 - 350	Metallic	150

* Flow rate of extraction and blowing without the side flaps.

Possible airflow direction



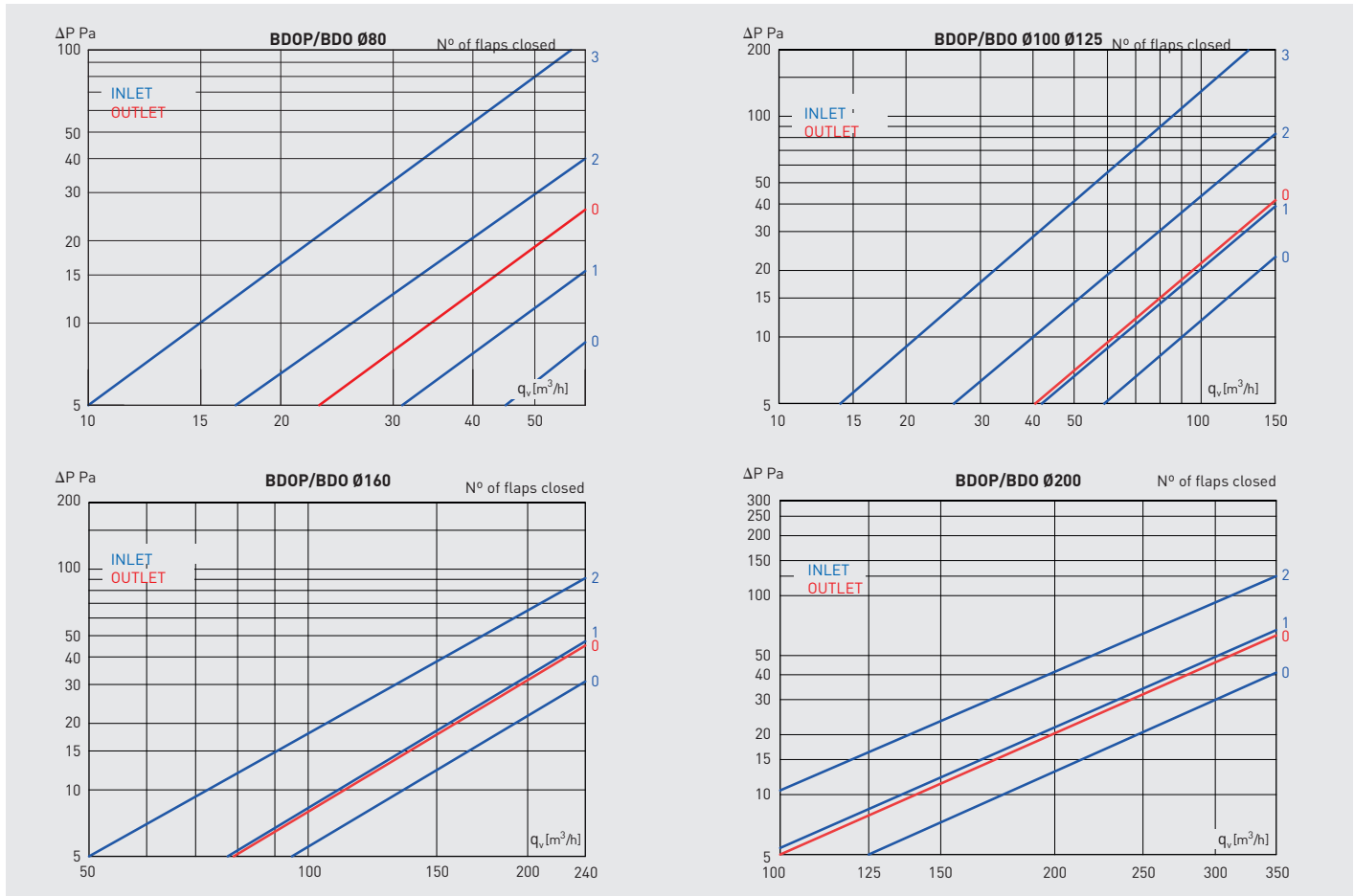
Adjustment possibilities of the side flaps



* Dimensions in mm.

BDOP-BDO	A	B	C	ØF
80	136	151	20,0	80
100	185	205	30,0	100
125	185	205	30,0	125
160	230	250	36,8	160
200	275	300	45,8	200

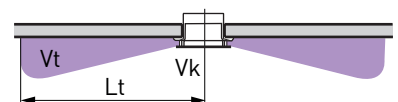
Technical characteristics



BDOP	qv [m³/h]	OUTLET		INLET							
		Without baffle		Without baffle		1 baffle		2 baffles		3 baffles	
		ΔP (Pa)	Lw (dB(A))	ΔP (Pa)	Lw (dB(A))	ΔP (Pa)	Lw (dB(A))	ΔP (Pa)	Lw (dB(A))	ΔP (Pa)	Lw (dB(A))
80	15	2	24	1	23	2	24	3	24	8	24
	30	6	24	3	23	5	24	11	24	30	36
	45	12	25	7	24	11	25	23	27	66	35
100	15	1	22	1	<21	1	21	2	22	5	23
	30	2	23	3	22	3	22	6	23	12	27
	45	4	24	5	24	6	24	11	25	30	28
100	60	8	26	8	26	10	27	18	28	51	33
	75	12	28	12	28	15	28	27	33	75	38
	45	4	24	3	23	5	24	10	24	28	25
125	60	7	25	5	25	8	26	17	28	49	33
	75	11	27	8	27	13	28	26	32	73	39
	90	15	29	11	28	18	30	36	35	101	44
125	120	39	31	18	31	31	34	63	40		
	150	39	35	28	36	48	39	97	47		
	120	13	<20	9	23	15	21	30	32		
160	150	18	24	12	26	18	28	35	37		
	180	26	29	18	32	27	33	50	42		
	200	32	32	22	34	33	37	62	44		
160	210	35	33	24	36	36	38	69	46		
	240	45	37	31	40	47	42	91	49		
	125	8	<20	5	<20	8	23	17	32		
200	150	12	23	8	21	12	26	24	36		
	240	30	29	20	28	32	32	59	43		
	270	37	32	24	31	40	36	74	48		
200	300	46	36	30	34	50	39				
	350	63	40	41	39	67	44				

BDOP	INLET				
	Air range (for Vt = 0.25 m/s) installed on the ceiling				
	qv [m³/h]	Vk (m/s)	Lt(m) DT = 0°C	Lt(m) DT = -5°C	Lt(m) DT = -10°C
80	15	0,8	0,8	0,4	0,3
	30	1,7	1,1	0,9	0,6
	45	2,5	1,8	1,5	1,1
100	15	0,5	0,3		
	30	0,8	0,4		
	45	1,1	0,6		
100	60	1,5	1,1		
	75	1,8	1,5		
	45	1	0,5	0,4	0,3
125	60	1,4	1	0,8	0,6
	75	1,7	1,4	1,1	0,8
	90	2	2,1	1,8	1,3
125	120	2,7	3,3	2,9	2,1
	150	3,4	4	3,8	2,7
	120	1,7	2,8	2,3	1,6
160	150	2,1	3,7	3,1	2,2
	180	2,5	4,1	3,6	2,6
	200	2,8	4,2	3,8	2,7
160	210	2,9	4,5	4,1	2,9
	240	3,3	5	4,7	3,3
	240	2,1	4,2	3,6	2,5
200	270	2,4	4,5	3,9	2,8
	300	2,7	4,7	4,2	3
	350	3,1	4,9	4,5	3,2

Vk: Air flow rate at the valves outlet mouth (in m/s)
 Vt: Terminal speed (in m/s)
 Lt: Airflow range (m)



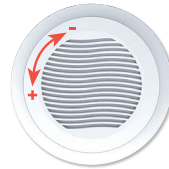


BOREA

White supply valves made from plastic (PS). They are used in extraction or impulsion in simple flow, double flow or air conditioning installations. False ceiling and wall mounting, especially for supply air. Model BOREA P has a connecting sleeve with anchors for mounting on plasterboard and model BOREA J has a mounting connector with a rubber joint.
Diameter 80 / 125.



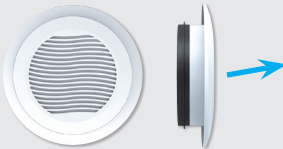
Opening (+) or closing (-) of the blind



Opening (+) or closing (-) of the shutter (closed position, 1 or 2)

Impulsion

Wall mounting

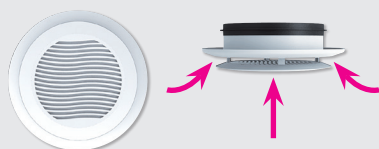


Grille open
Shutter closed

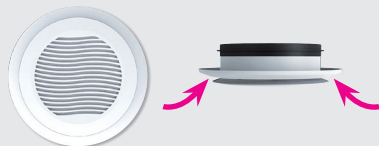
Model	Ø Duct diameter (mm)	Airflow (m³/h)	Mounting connector
BOREA 80 J	80	15 - 45	With rubber seal
BOREA 125 J	125	45 - 90	With rubber seal

Model	Ø Duct diameter (mm)	Airflow (m³/h)	Sleeve	
			Material	Height (mm)
BOREA 80 P	80	15 - 45	Plastic	100
BOREA 125 P	125	45 - 90	Plastic	100

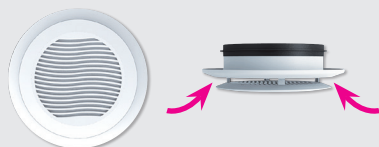
Extraction



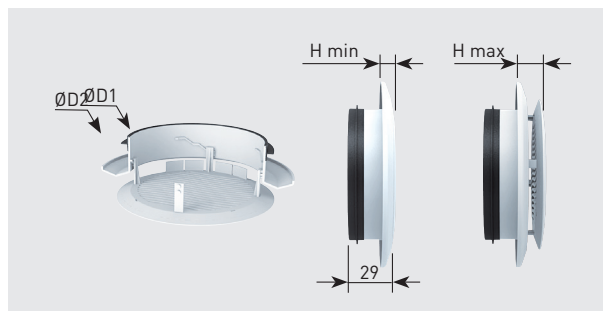
Open grille
Shutter position 2
No deflector



Grille closed
Shutter position 1
No deflector

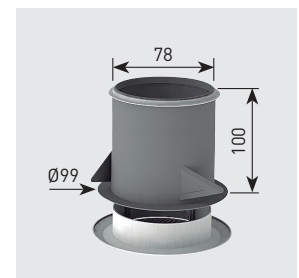


Grille closed
Shutter position 2
No deflector



Model	ØD1 (mm)	ØD2 (mm)	H min (mm)	H max (mm)
BOREA 80	74	110	9	20
BOREA 125	119	165	12	24

Elbow dimensions (mm)



Technical characteristics

Model	Airflow (m³/h)	IMPULSION				EXTRACTION			
		Grille open shutter closed		Open grille open shutter		Grille closed shutter open			
		DP (Pa)	Lw (dB(A))	Position 2		Position 1		Position 2	
				DP (Pa)	Lw (dB(A))	DP (Pa)	Lw (dB(A))	DP (Pa)	Lw (dB(A))
BOREA 80	15	8	<20	2	<20	10	<20	4	<20
	30	33	21	7	<20	36	35	14	22
	45	70	34	15	28	-	-	29	34
BOREA 125	45	9	<20	3	<20	20	23	7	<20
	60	17	<20	5	<20	37	33	13	21
	75	25	24	8	<20	57	41	20	25
	90	36	31	11	20	80	46	27	29



BOR

White polystyrene air exhaust valves for dwelling and commercial applications. All models offer an adjustable central valve to regulate the airflow. They can be used in heating, air conditioning and ventilation systems.

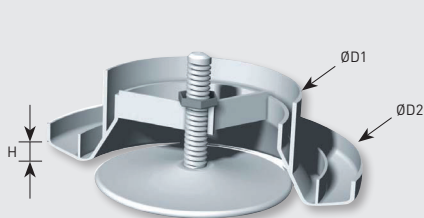
Operation range from 40 to 150 Pa.

The central mobile shutter can be used to control the airflow by utilising a central adjustment screw.

Versions:

- Adjustable inlets with a clamp for installation in plasterboard BOR-P
- Adjustable gasket openings for conduit installation: BORJ

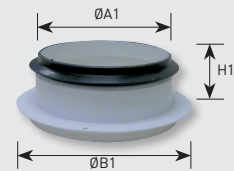
Ø Duct diameter (mm)	Airflow (m³/h)	Plasterboard anchoring connector		Joint connector	
		Model	Model	Model	Model
80	10 - 60	BORP 80		BORJ 80	
100	15 - 100	BORP 100		BORJ 100	
125	25 - 140	BORP 125		BORJ 125	
160	35 - 160	BORP 160		BORJ 160	
200	70 - 250	BORP 200		BORJ 200	



BOR valve



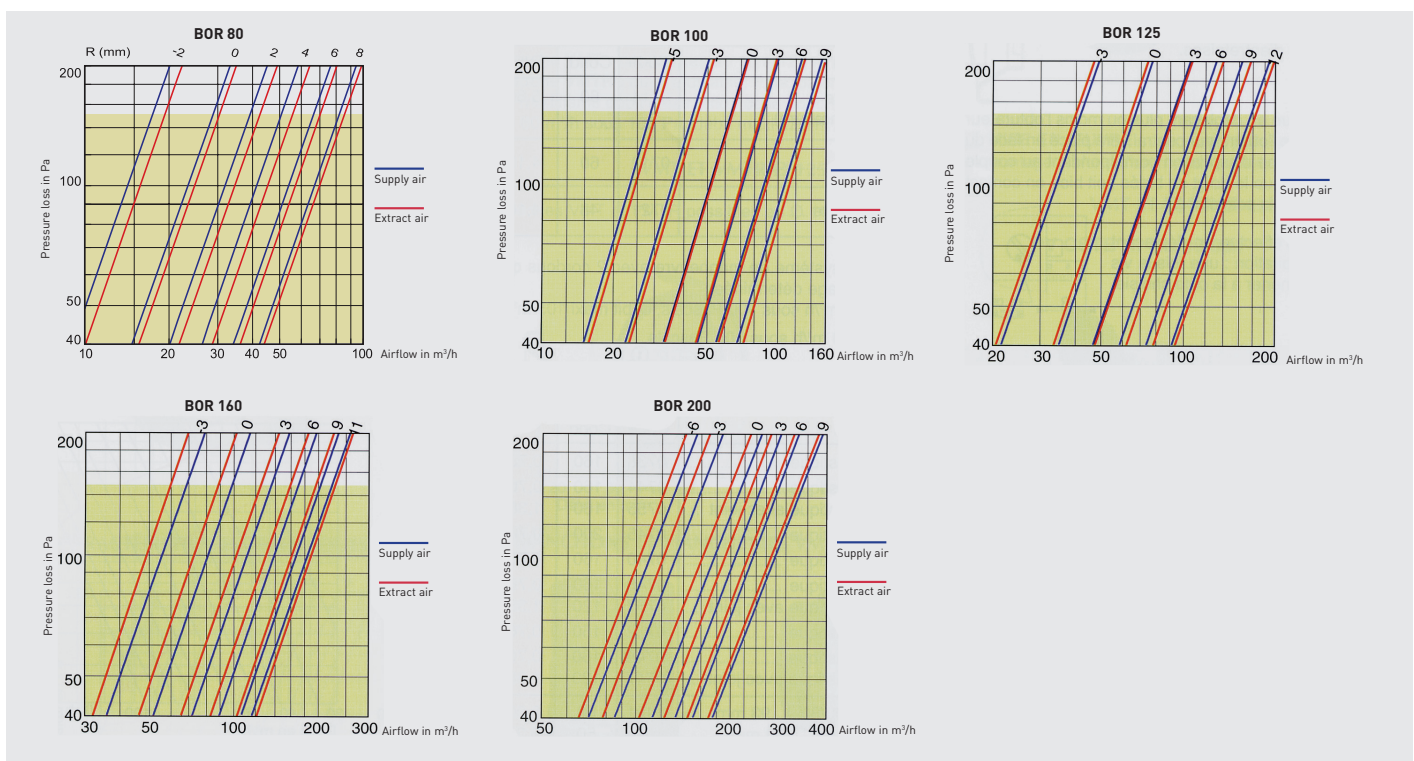
BORP
Plasterboard anchoring connector



BORJ
Joint connector

Model	Airflow (m³/h)	ØD1	ØD2	ØH	ØA1	ØB1	ØH1	ØA2	ØB2	ØH2
BOR 80	10-100	71	115	12	77	110	38	78	99	100
BOR 100	15-160	80	140	13	98	129	40	89	130	100
BOR 125	25-200	115	166	15	120	155	43	115	155	100
BOR 160	30-250	130	204	17	156	195	43	148	195	100
BOR 200	55-330	160	242	17	195	235	43	190	235	100

Technical characteristics (PV CSTB 41391 and 42562 and test reports CETIAT n° 2504)





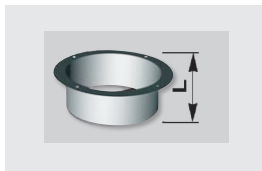
BIR

Outlets entirely made of sheet steel coated in white epoxy paint. Consists of a blowing cone, a mobile central shutter enabling the air jet to be adjusted and its direction guided and a rubber gasket that ensures it is secured and sealed, which can resist a continuous temperature of -20°C to 120°C.

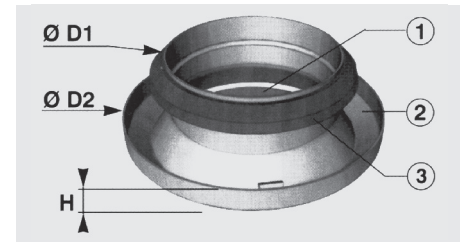
Used for injecting air in commercial accommodation and premises, ceiling-fitted. Range of use from 50 to 150 Pa.

Model	Ø (mm)	Dimensions		
		D1 (mm)	D2 (mm)	H (mm)
BIR-100	100	88	145	18
BIR-125	125	113	168	21
BIR-160	160	148	203	21
BIR-200	200	188	243	21

Model	Ø	L
BIR-100	100	47
BIR-125	125	47
BIR-160	160	51
BIR-200	200	52



Integrated rubber air seal

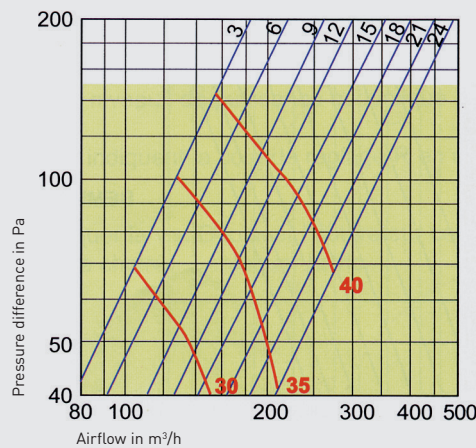
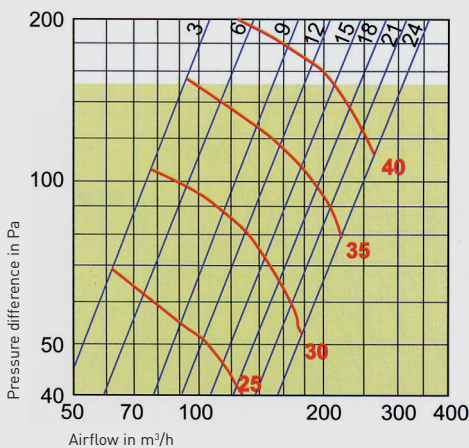
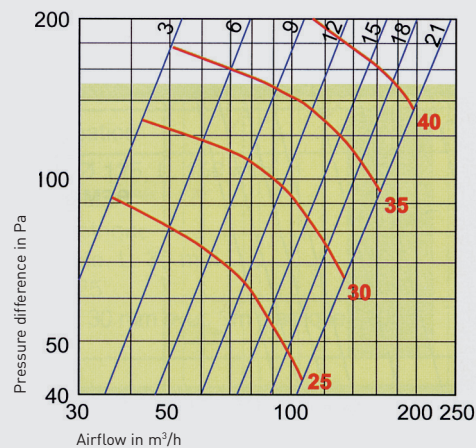
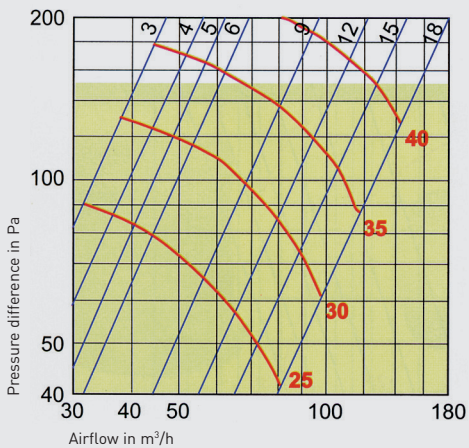


- ① Mobile central shutter.
- ② Blowing cone.
- ③ Rubber gasket.

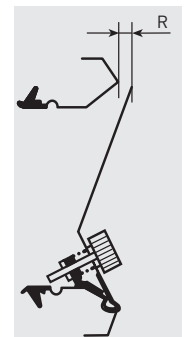
Performance curves

These graphs show the flow-pressure curves of the BIR outlets as well as their Lw noise production expressed in dB (A).

The figures at the top indicate the adjustment amount.



Adjustment

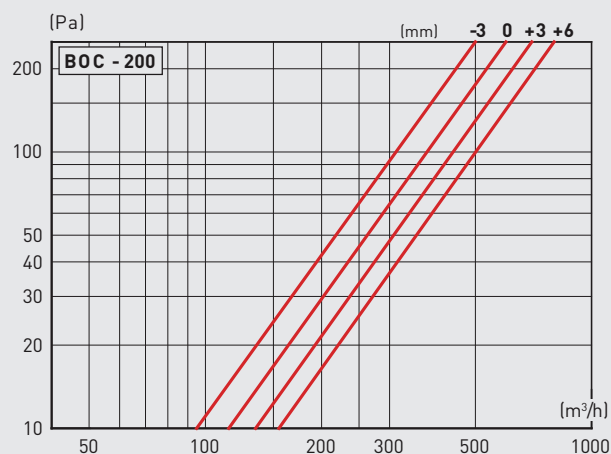
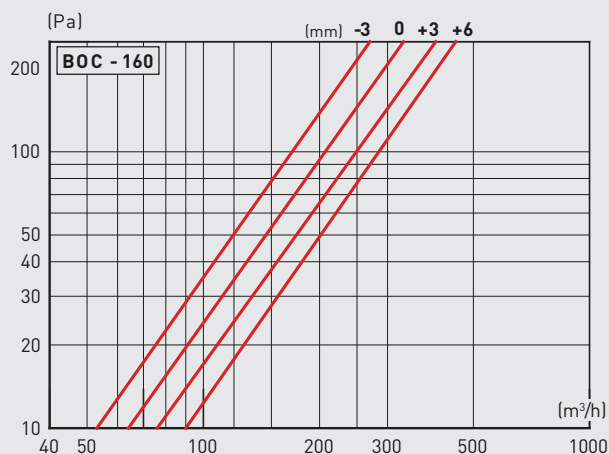
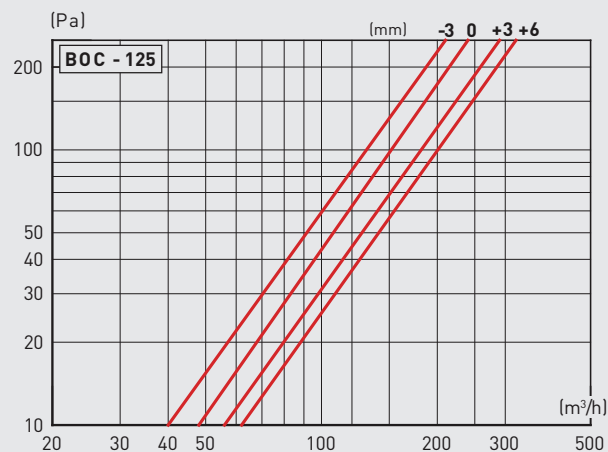
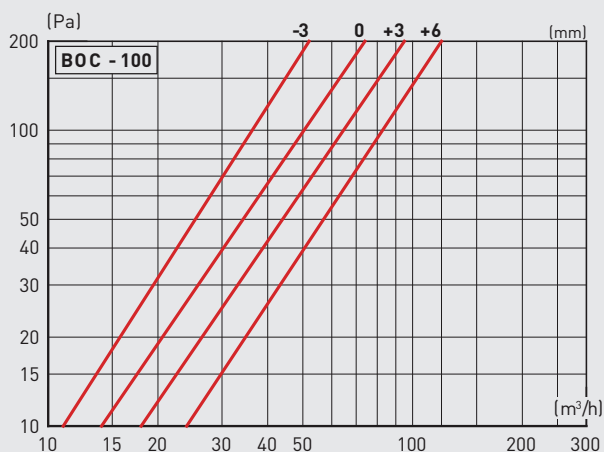
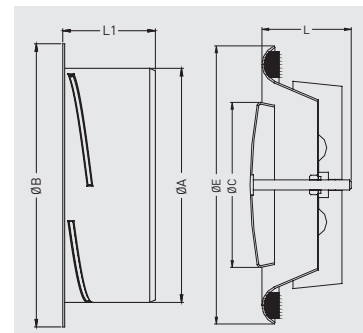


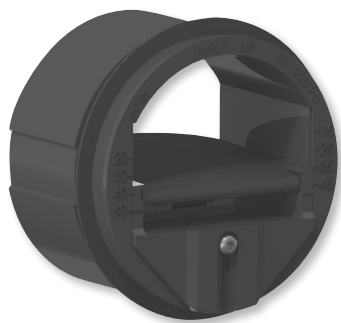


BOC

Exhaust valves for dwelling and commercial applications. All models offer an adjustable central valve to regulate the airflow. They can be used in heating, air conditioning and ventilation systems.

Model	Ø A	Ø B	Ø C	Ø D	Ø E	L
BOC-100	100	125	74	75	137	47
BOC-125	125	150	98	100	161	49
BOC-160	160	185	128	149	218	60
BOC-200	200	225	157	157	248	75





RDR

Air volume regulators, fitted inside a duct to maintain constant air volume within a pressure range from 50 to 200 Pa.

- The airflow can be adjusted during installation.
- The regulators can be used in commercial premises, both in ventilation and air treatment (max 60°C) as well as in air extraction or impulsion.
- It can be used in dwellings with double-flow installation.
- Easy to fit inside the duct.
- Sealing and stability provided by a foam joint.
- Manufactured from flame retardant plastic (M1 fire classification), with limit of operation at 60°C.

Ø 80 mm

Model	Airflow (m³/h)	Airflow regulation options	
		(m³/h)	in sections of (m³/h)
RDR-80/15	15	15 to 50	2,5
RDR-80/30	30	15 to 50	2,5
RDR-80/45	45	15 to 50	2,5

Data of Ø (mm) and airflow (m³/h) are included in the reference of RDR models.
RDR- Ø / airflow

Ø 100 mm

Model	Airflow (m³/h)	Airflow regulation options	
		(m³/h)	in sections of (m³/h)
RDR-100/15	15	10 to 20	5
RDR-100/30	30	15 to 50	5
RDR-100/45	45	15 to 50	5
RDR-100/50	50	15 to 50	5
RDR-100/60	60	50 to 100	5
RDR-100/75	75	50 to 100	5
RDR-100/90	90	50 to 100	5

Ø 125 mm

Model	Airflow (m³/h)	Airflow regulation options	
		(m³/h)	in sections of (m³/h)
RDR-125/15	15	10 to 20	5
RDR-125/30	30	15 to 50	5
RDR-125/45	45	15 to 50	5
RDR-125/60	60	50 to 100	5
RDR-125/75	75	50 to 100	5
RDR-125/90	90	50 to 100	5
RDR-125/120	120	100 to 180	5
RDR-125/150	150	100 to 180	5
RDR-125/180	180	100 to 180	5

Ø 160 mm

Model	Airflow (m³/h)	Airflow regulation options	
		(m³/h)	in sections of (m³/h)
RDR-160/120	120	80 to 130	5
RDR-160/150	150	100 to 180	5
RDR-160/180	180	100 to 180	5
RDR-160/210	210	180 to 300	5
RDR-160/240	240	180 to 300	5
RDR-160/270	270	180 to 300	5
RDR-160/300	300	180 to 300	5

Ø 200 mm

Model	Airflow (m³/h)	Airflow regulation options	
		(m³/h)	in sections of (m³/h)
RDR-200/210	210	180 to 250	10
RDR-200/240	240	180 to 300	10
RDR-200/270	270	180 to 300	10
RDR-200/300	300	180 to 300	10
RDR-200/350	350	300 to 500	10
RDR-200/400	400	300 to 500	10
RDR-200/450	450	300 to 500	10
RDR-200/500	500	300 to 500	10

Ø 250 mm

Model	Airflow (m³/h)	Airflow regulation options	
		(m³/h)	in sections of (m³/h)
RDR-250/350	350	300 to 500	25
RDR-250/400	400	300 to 500	25
RDR-250/450	450	300 to 500	25
RDR-250/500	500	300 to 500	25
RDR-250/550	550	500 to 750	25
RDR-250/600	600	500 to 750	25
RDR-250/650	650	500 to 750	25
RDR-250/700	700	500 to 750	25

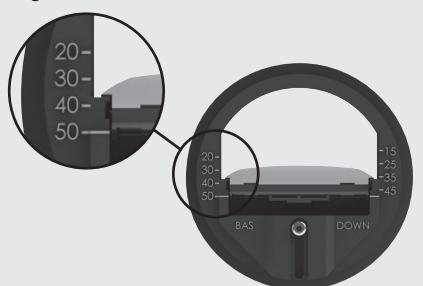
Regulators

Before carrying out the implementation of the regulator, it is necessary to calibrate the airflow:

1. Loosen the screws of the adjustment module.
2. Adjust the marker module (located on the left or right) in front of the desired airflow rate.
3. Tighten the screws of the adjustment module.

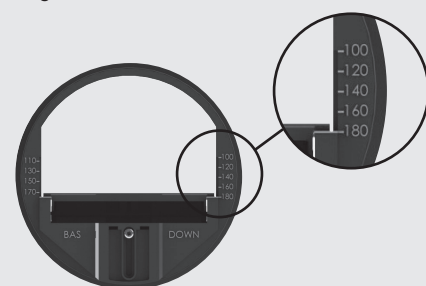
It is possible to get other rates than those indicated on the controller by shimming the mark on the control module on an intermediary position.

Regulators RD Ø 80 et 100 mm



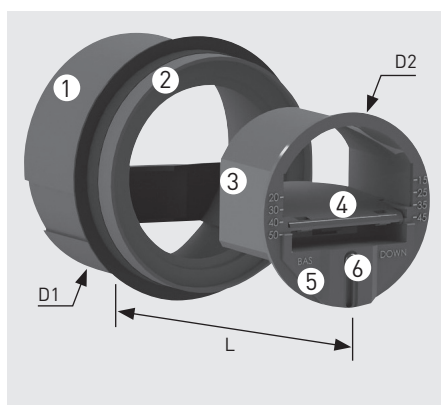
Example of regulator at 50 m³/h

Regulators RD Ø 125 à 250 mm



Example of regulator at 180 m³/h

Composition and design



RDR	D1 (mm)	D2 (mm)	L (mm)
Ø 80	76	76	55
Ø 100	96	93	70
Ø 125	120	117	86
Ø 150	146	148	91
Ø 160	146	148	91
Ø 200	190	195	91
Ø 250	245	236	127

- 1 ExtBrush seal
- 2 Spacer (as output)
- 3 Casing
- 4 Flap
- 5 Airflow control module
- 6 Locking screw adjustment mode

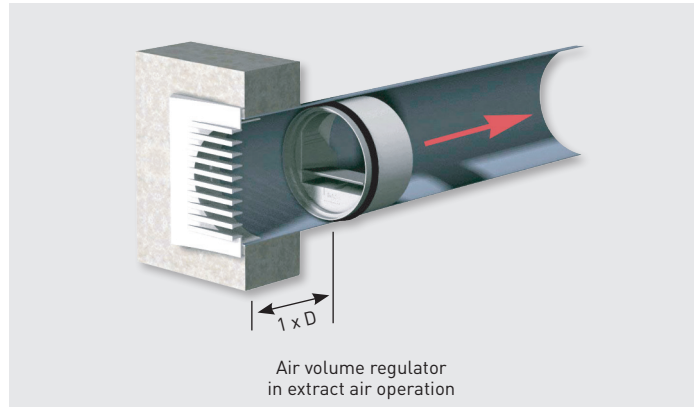
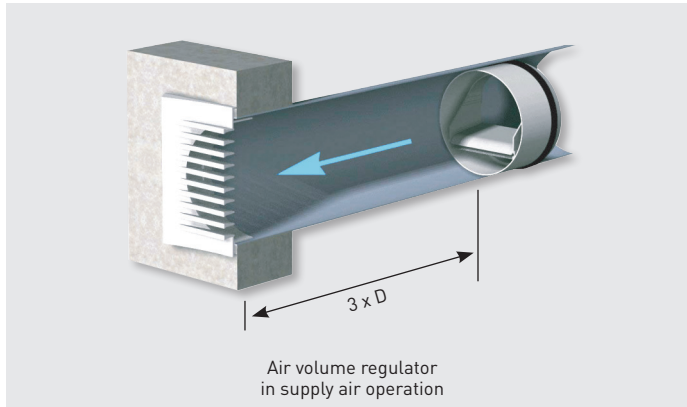
Installation

The air volume regulators are mounted inside vertical and horizontal ducting by simple interlocking. In a horizontal duct, "BAS" (bottom) indicated at the front of the regulator.

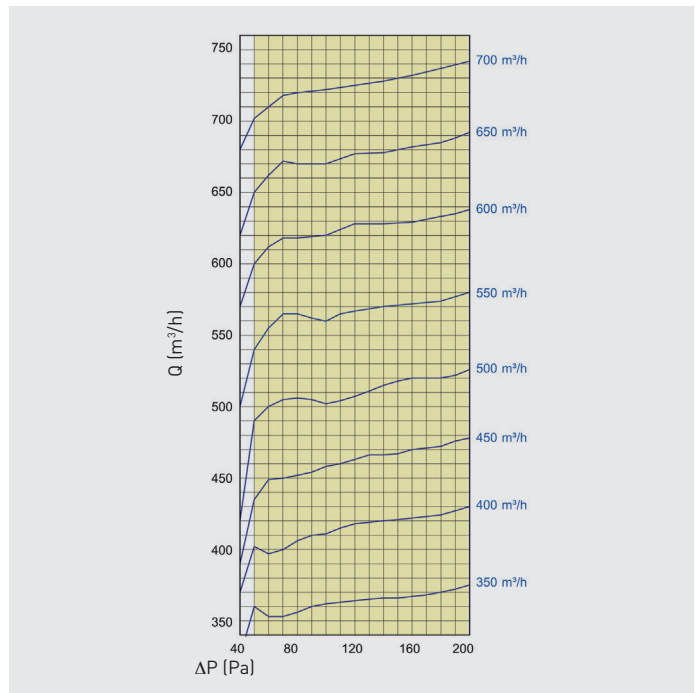
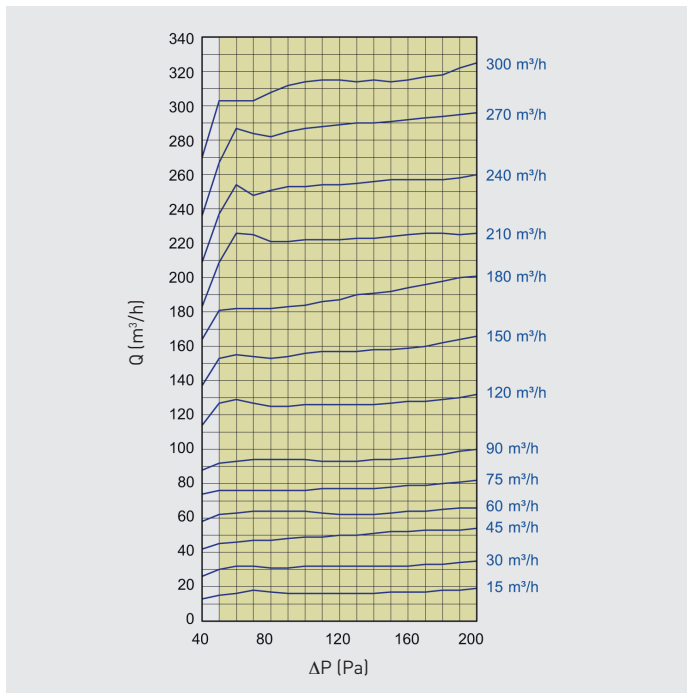
An external brush seal provides airtightness.

When the regulator is fitted to an inlet, the minimum distance between the inlet and the regulator must be the same as the diameter for extraction and three times the diameter for blowing.

It is important to respect the air flow direction shown on the connector.



Performance curves. The curves show the air volume variations in m³/h in relation with the pressure in Pascals.



Acoustic Characteristics

Débit (m ³ /h)	Lw en dB(A)			
	50 Pa	100 Pa	150 Pa	200 Pa
15	25	29	32	35
30	26	31	35	38
45	27	33	36	39
50	32	37	39	42
60	32	37	39	42
75	32	37	40	42
90	32	38	41	44
120	30	34	39	42
150	33	37	41	45

Débit (m ³ /h)	Lw en dB(A)			
	50 Pa	100 Pa	150 Pa	200 Pa
180	34	40	44	47
210	34	40	42	44
240	35	41	44	47
270	37	43	45	49
300	33	37	42	45
350	35	40	44	47
400	37	42	45	50
450	38	44	46	51
500	39	46	48	53



RDR BP / RDR BP SM

Self-regulating flow regulators, which are installed inside a duct (BP models) or inside the mouth sleeve BDOP (BP SM models), for achieve a constant flow rate in a pressure range between 20 and 100 Pa.

- The flow rate can be adjusted in the installation itself.
- It is used in tertiary installations, both in ventilation and in treatment of air (max 60°C), in extraction or impulsion of air.
- It is used in homes, both in single flow and double flow solutions.
- Ø 100 / Ø 125 mm.
- Easy coupling.
- Made of plastic fire classification M1, with limit of use to temperature of 60°C.
- Data in the name of the RDR BP regulators: Ø / flow rate (m³/h).

Model	Ø (mm)	Caudal (m ³ /h)	Airflow adjustment options	
			(m ³ /h)	In sections of (m ³ /h)
RDR BP 100/15	100	15	10 – 30	3
RDR BP 100/30	100	30	10 – 30	3
RDR BP 100/45	100	45	30 – 60	3
RDR BP 100/60	100	60	30 – 60	3
RDR BP 125/15	125	15	10 – 30	5
RDR BP 125/30	125	30	10 – 30	5
RDR BP 125/40	125	40	30 – 60	5
RDR BP 125/60	125	60	30 – 60	5
RDR BP 125/75	125	75	60 – 120	5
RDR BP 125/90	125	90	60 – 120	5
RDR BP 125/15 SM	125	15	10 – 30	5
RDR BP 125/30 SM	125	30	10 – 30	5
RDR BP 125/40 SM	125	40	30 – 60	5
RDR BP 125/60 SM	125	60	30 – 60	5
RDR BP 125/75 SM	125	75	60 – 120	5
RDR BP 125/90 SM	125	90	60 – 120	5



Models RD BP



Models RD BP SM

RD BP / RD BP SM

Self-regulating flow regulators, which are installed inside a duct (BP models) or inside the mouth sleeve BDOP (BP SM models), for achieve a constant flow rate in a pressure range between 20 and 100 Pa.

- It is used in tertiary installations, both in ventilation and in treatment of air (max 60°C), in extraction or impulsion of air.
- It is used in homes, both in single flow and double flow solutions.
- Ø 80 mm.
- Easy coupling.
- Made of plastic fire classification M1, with limit of use to temperature of 60°C.
- Data in the name of the RD BP regulators: Ø / flow rate (m³/h).

Model	Ø (mm)	Caudal (m ³ /h)	Airflow adjustment options	
			(m ³ /h)	In sections of (m ³ /h)
RD BP 80/15	80	15	10 – 30	1,5
RD BP 80/30	80	30	10 – 30	1,5
RD BP 80/15 SM	80	15	10 – 30	1,5
RD BP 80/30 SM	80	30	10 – 30	1,5

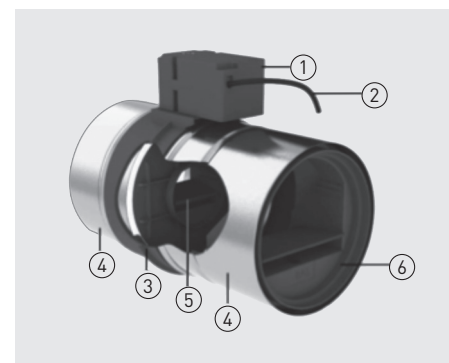


RMME

Self-regulating double-flow damper.

Model	Airflow (m ³ /h)	Ø (mm)
RMME 20/75 D125	20/75	125
RMME 30/90 D125	30/90	125
RMME 45/105 D125	45/105	125
RMME 45/120 D125	45/120	125
RMME 45/135 D125	45/135	125

- 1 Motor electric.
- 2 Connection cable of 20 cm length.
- 3 Plastic interior casing.
- 4 Outer casing in galvanized steel.
- 5 Minimum airflow regulator.
- 6 Maximum airflow regulator.



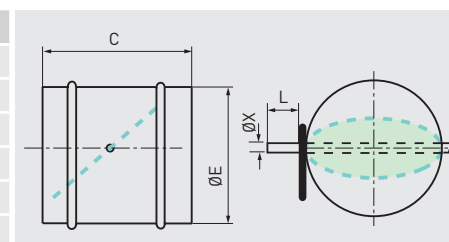
REEV

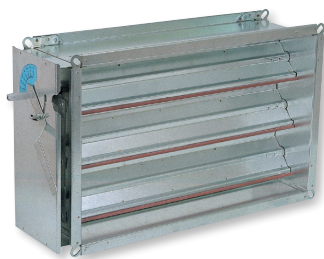
Motorisable manual damper to balance the nets or to close tightly branches or air inlets.

Description:
 Body and damper made from galvanized steel. Axis made from cadmium steel and bearing from bronze.
 Manual control or with support for LF motor.
 Sealing joints.



Model	ØE	C	X	L
REEV 250	250	200	8	60
REEV 315	315	300	12	100
REEV 355	355	300	12	100
REEV 400	400	400	12	100
REEV 450	450	400	12	100
REEV 500	500	400	12	100

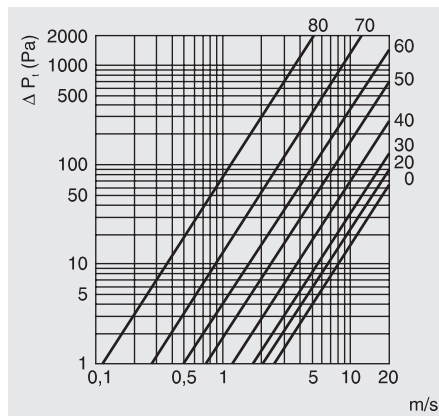




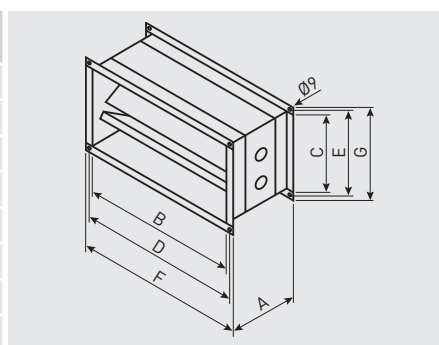
IJK

Damper

Supplied with standard rectangular flanges.
 Manufactured from galvanised sheet steel.
 Fitted as standard with removable handle.
 Shaft diameter: 10 mm.
 As accessory: electrical damper actuator LM230A.



Model	A	B	C	D	E	F	G	Weight (kg)
IJK-200	162	400	200	420	220	440	240	3,3
IJK-225	162	500	250	520	270	540	290	4,2
IJK-250	162	500	300	520	320	540	340	4,9
IJK-285	162	600	300	620	320	640	340	5,4
IJK-315	162	600	350	620	370	640	390	5,8
IJK-355	162	700	400	720	420	740	440	7,1
IJK-400	162	800	500	820	520	840	540	9,2
IJK-450	162	1000	500	1020	520	1040	540	11,0

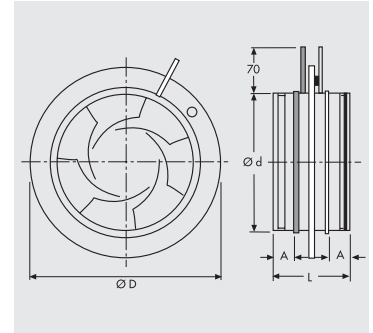




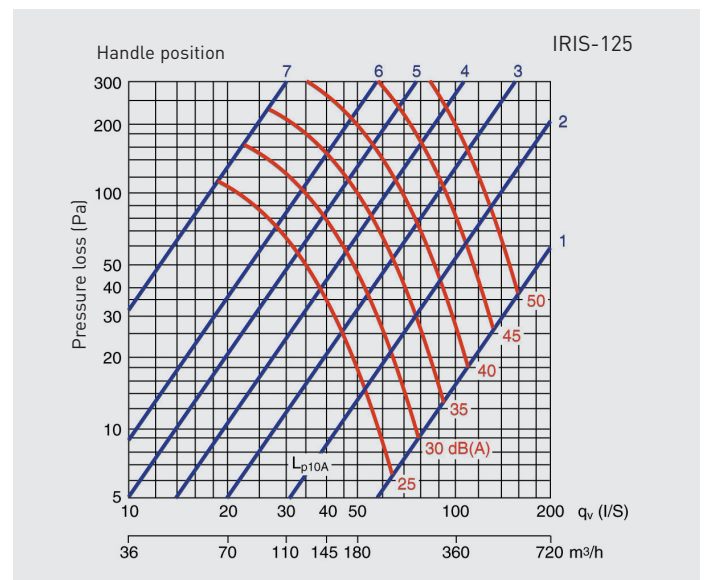
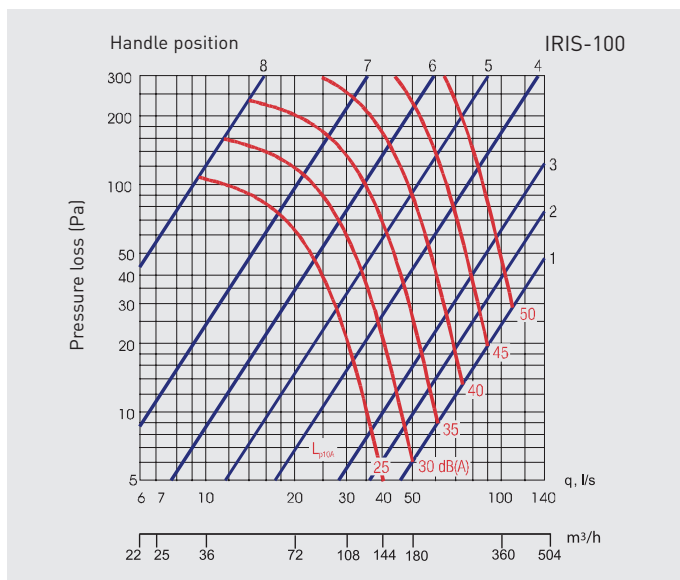
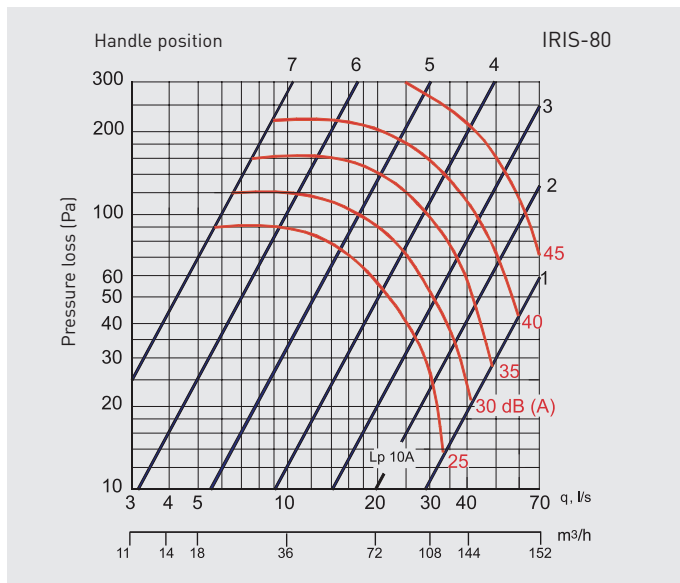
IRIS

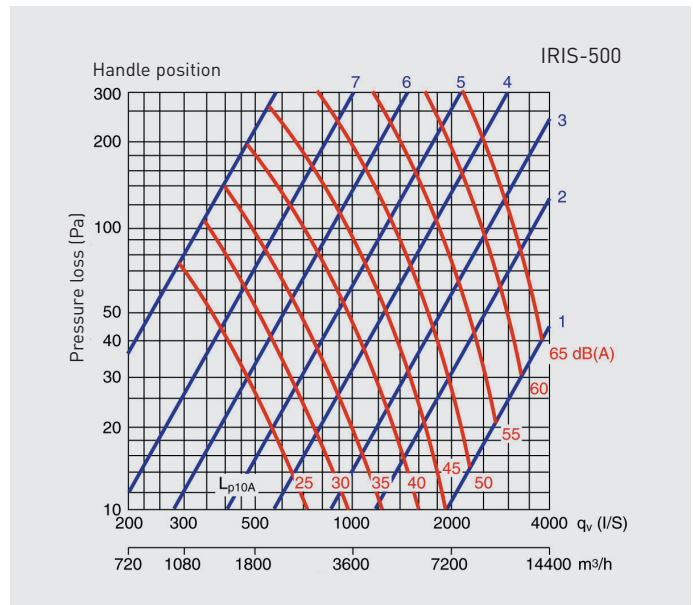
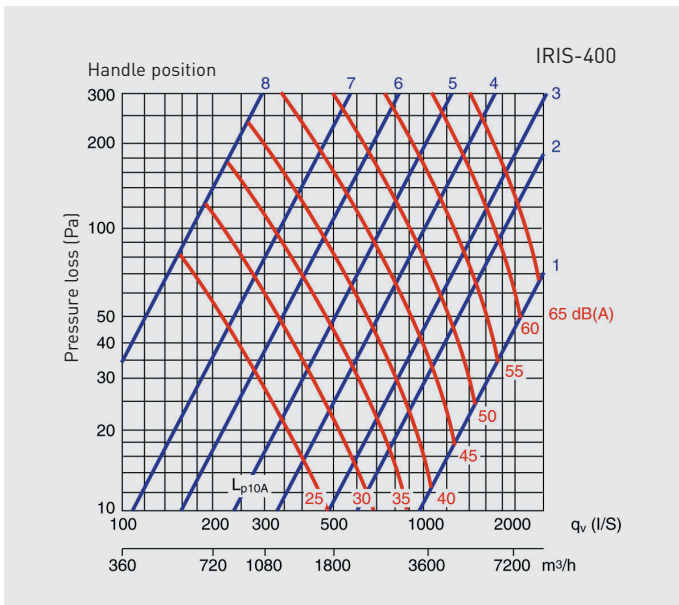
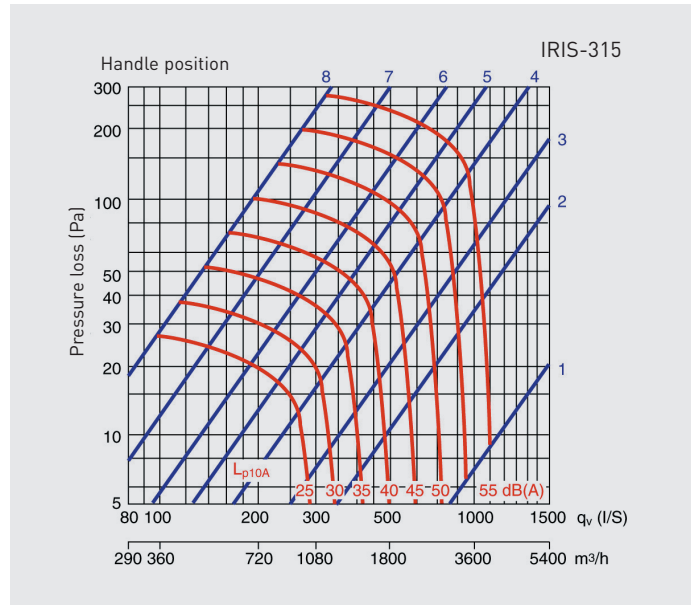
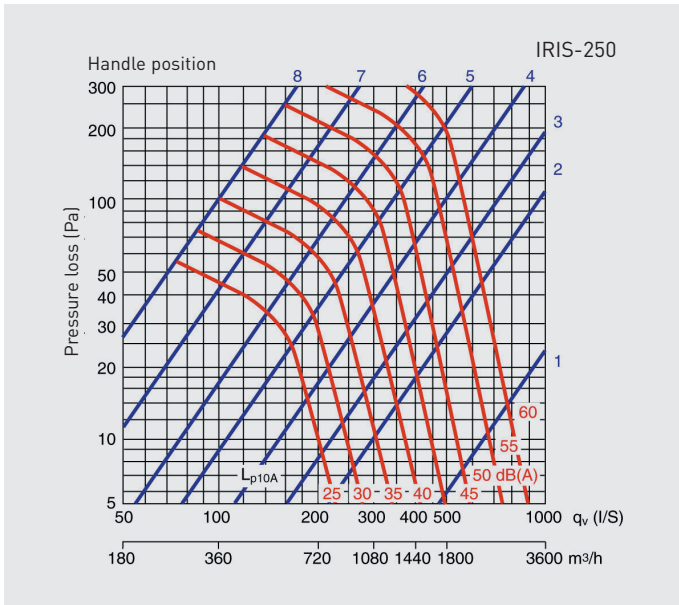
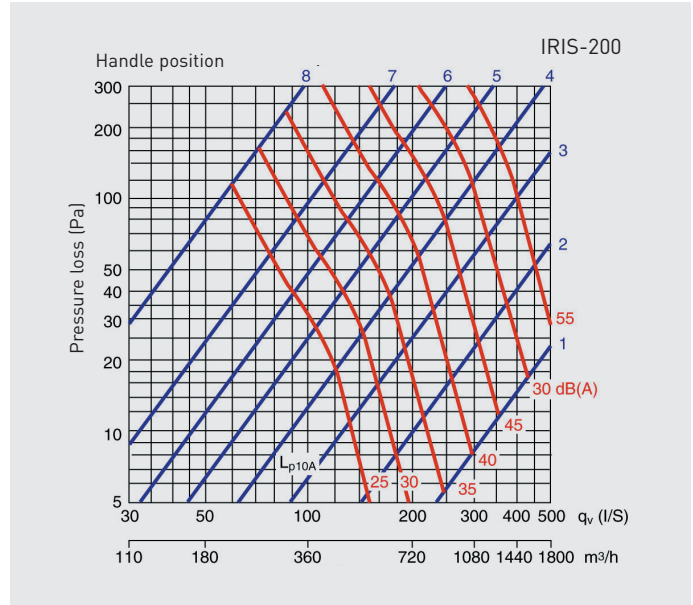
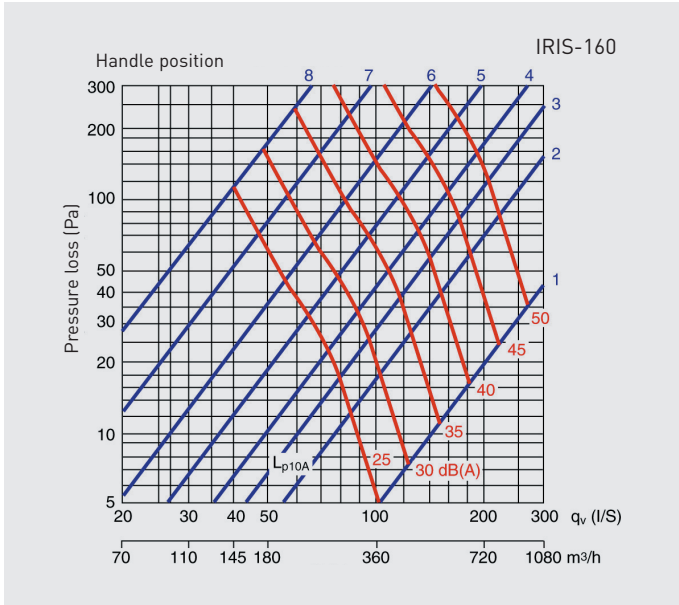
Complete range of dampers enabling to measured and regulate air volume in a circular duct system. Manufactured from galvanised sheet steel they incorporate inlet and discharge circular duct connection flanges with integrated rubber air seal.

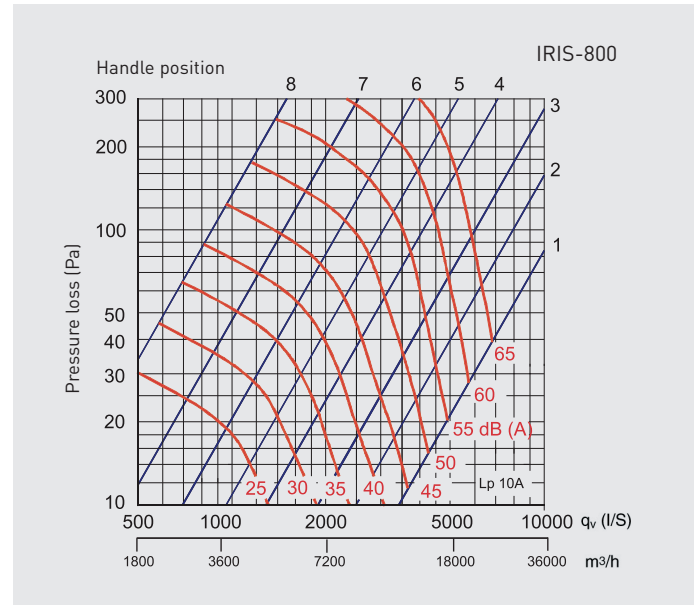
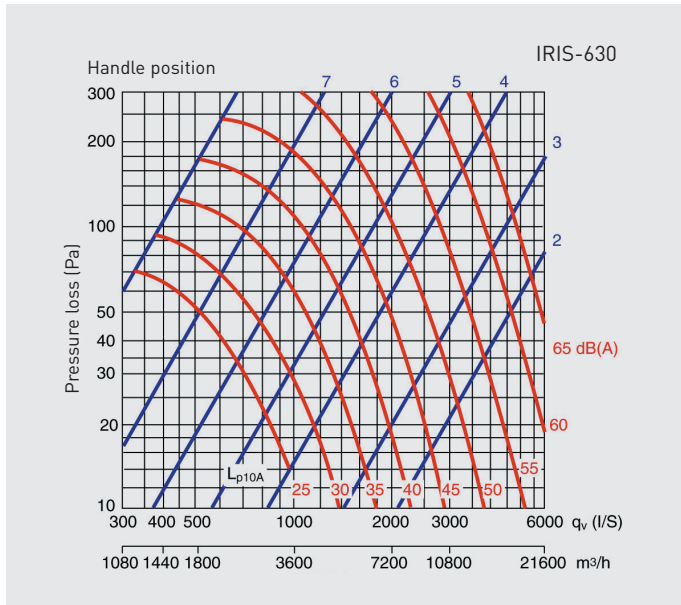
Model	Ø d	Ø D	L	A	Weight (kg)
IRIS-80	79	125	110	30	0,5
IRIS-100	99	165	110	30	0,5
IRIS-125	124	188	110	30	0,7
IRIS-160	159	230	110	30	0,9
IRIS-200	199	285	110	30	1,4
IRIS-250	249	335	135	40	2,1
IRIS-315	314	410	135	40	3,5
IRIS-400	398	525	190	60	6,4
IRIS-500	498	655	170	50	9,6
IRIS-630	628	815	170	50	15,6
IRIS-800	798	1015	270	100	25,0



Performance curves





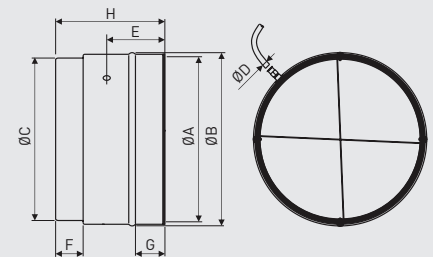


MPC

Flow detectors designed to correctly measure pressures at the inlet of Series TD devices unaffected by airflow.

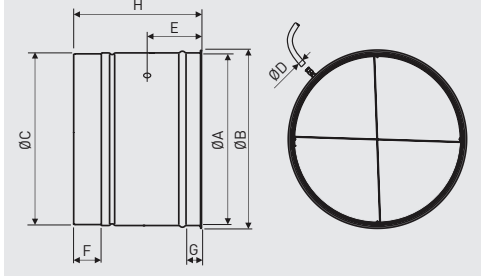
Model	A	B	C	D	E	F	G	H
MPC-250	102	109	95	6	58	28	34	106
MPC-350	126	136	120	6	58	28	34	107
MPC-500/150	152	164	147	6	64	35	37	121
MPC-500/160	162	174	157	6	64	35	37	121
MPC-800	202	214	198	6	70	35	37	132
MPC-1000	252	265	248	6	85	42	44	164
MPC-2000	313	329	312	6	106	50	50	204

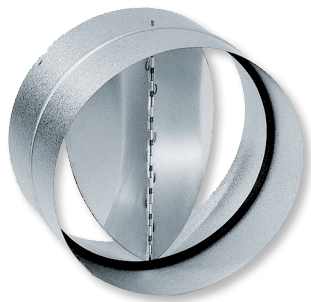
250 to 2000



Model	A	B	C	D	E	F	G	H
MPC-4000	350	374	358	6	165	55	33	265
MPC-6000	395	419	403	6	186	55	33	307

4000 to 6000

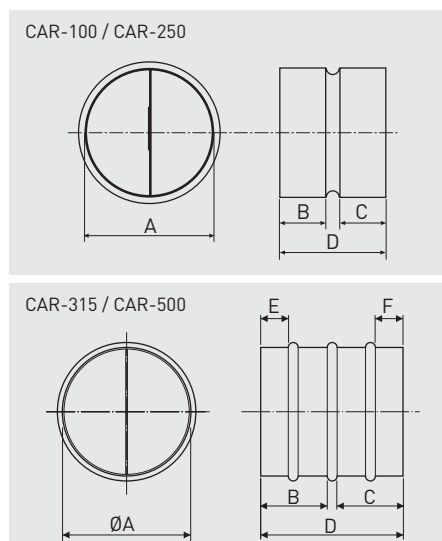




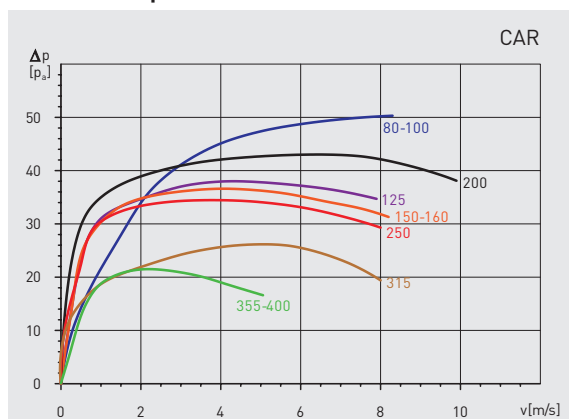
CAR

Back draft shutters to be installed within circular ducting to prevent back draft of air when the fans are switched off.

Model	ØA	B	C	D	E	F
CAR-80	80	37	35	82	-	-
CAR-100	100	35	31	80	-	-
CAR-110	110	47	45	112	-	-
CAR-125	125	45	43	100	-	-
CAR-150	150	55	53	120	-	-
CAR-160	160	55	53	120	-	-
CAR-200	200	65	63	140	-	-
CAR-250	250	65	63	140	-	-
CAR-315	315	65	63	140	50	45
CAR-355	355	65	63	140	50	45
CAR-400	400	100	140	250	80	80
CAR-500	500	100	190	300	80	80



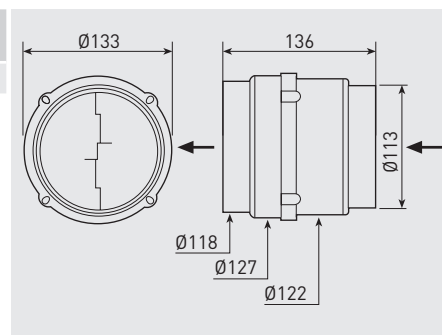
Pressure drop



CM-130

Small diameter plastic back draft shutter to be installed within a circular duct to prevent back draft of air when the fans are switched off.

Model	Diameter (mm)
CM-130	113/122 - 118/127





Class: M0
Minimum corvature radius: $0,6 \times \varnothing$
Operating temperature: -30°C to $+250^{\circ}\text{C}$

GSA-M0

Flexible aluminium ducts made of a aluminium and polyester exterior covering a spiral steel wire frame. Used for general installations in detached or collective housing and commercial premises.

Model	Ø (mm)	Length (m)
GSA-M0 80 10M	80	10
GSA-M0 80 3M	80	3
GSA-M0 100 10M	100	10
GSA-M0 100 3M	100	3
GSA-M0 125 10M	125	10
GSA-M0 125 3M	125	3
GSA-M0 150 10M	150	10
GSA-M0 150 3M	150	3
GSA-M0 160 10M	160	10
GSA-M0 160 3M	160	3
GSA-M0 200 10M	200	10
GSA-M0 200 3M	200	3
GSA-M0 250 10M	250	10
GSA-M0 250 3M	250	3
GSA-M0 315 10M	315	10
GSA-M0 315 3M	315	3



Class: M0/M1
Minimum corvature radius: $0,7 \times \varnothing$
Operating temperature: -10°C to $+150^{\circ}\text{C}$

GSI-M0

Flexible individual acoustic ducting made of aluminium and polyester. With an inner perforated M0 duct, protected by a 25 mm M0 fibreglass coating covered with flexible aluminium, reinforced with fibreglass mesh M1.

Model	Ø (mm)	Length (m)
GSI-M0 125 10M	125	10
GSI-M0 125 3M	125	3
GSI-M0 160 10M	160	10
GSI-M0 160 3M	160	3
GSI-M0 200 10M	200	10
GSI-M0 200 3M	200	3
GSI-M0 250 10M	250	10
GSI-M0 250 3M	250	3
GSI-M0 315 10M	315	10
GSI-M0 315 3M	315	3



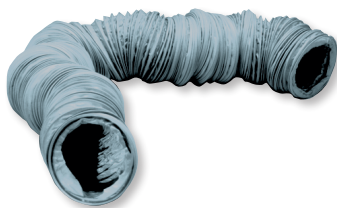
Class: M1
Minimum corvature radius: $0,6 \times \varnothing$
Operating temperature: -10°C to $+150^{\circ}\text{C}$

GAR-190/150

Aluminium rectangular flexible ducting (190x150 mm), 200 mm diameter and 3 m length.

Model	Dimensions (mm)	Ø equivalent (mm)	Length (m)
GAR-190/150	190 x 150	160	3

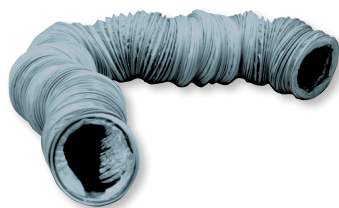
GP



Class: No
Minimum corvature radius: $0,6 \times \emptyset$
Operating temperature: -10°C to $+60^{\circ}\text{C}$

Grey PVC flexible ducting supplied in 6 m compressed lengths for dwelling ventilation applications.

Model	\emptyset (mm)	Length (m)
GP-60 6M	60	6
GP-80 6M	80	6
GP-100 6M	100	6
GP-125 6M	125	6
GP-150 6M	150	6



GP-PRO

Class: No
Minimum corvature radius: $0,6 \times \emptyset$
Operating temperature: -10°C to $+60^{\circ}\text{C}$

Flexible PVC ducting grey with a spiral steel wire frame. Used in individual VMC installations.

Model	\emptyset (mm)	Length (m)
GP-PRO 80 20M	80	20
GP-PRO 125 20M	125	20



GPX

Class: No
Minimum corvature radius: $0,6 \times \emptyset$
Operating temperature: -10°C to $+80^{\circ}\text{C}$

Grey PVC rectangular flexible ducting supplied reinforced with polyester and supplied in 6 m compressed lengths for dwelling ventilation applications.

Model	\emptyset (mm)	Length (m)
GPX-60 6M	60	6
GPX-80 6M	80	6
GPX-100 6M	100	6
GPX-125 6M	125	6
GPX-150 6M	150	6
GPX-160 6M	160	6
GPX-200 6M	200	6

GRX



Class: No
Minimum curvature radius: $0,6 \times \emptyset$
Operating temperature: -10°C to $+80^{\circ}\text{C}$

Grey PVC rectangular flexible ducting supplied reinforced with polyester and supplied in 6 m compressed lengths for dwelling ventilation applications.

Model	Dimensions (mm)	Ø equivalent (mm)	Length (m)
GRX 90 x 45	90 x 45	80	6
GRX 135 x 70	135 x 70	125	6

GP-ISO ECOSOFT



Class: No
Minimum curvature radius: $1 \times \emptyset$
Operating temperature: from -10°C to $+60^{\circ}\text{C}$

Flexible acoustic black PVC ducting, without oxalates, protected by recyclable glass fibre inner insulation of 25mm. Volatile organic compounds emission, VOC: A+ Class
It produces no smell, dust or allergies. It can be used in single-dwelling whole house ventilation installations, to connect the fan unit with the valves.

Model	Ø (mm)	Length (m)
GP-ISO 80/25 10M ECOSOFT	80	10
GP-ISO 80/25 6M ECOSOFT	80	6
GP-ISO 100/25 6M ECOSOFT	100	6
GP-ISO 125/25 10M ECOSOFT	125	10
GP-ISO 125/25 6M ECOSOFT	125	6
GP-ISO 150/25 6M ECOSOFT	150	6
GP-ISO 160/25 6M ECOSOFT	160	6
GP-ISO 200/25 6M ECOSOFT	200	6



GPR-ISO

Polythene insulated ducting of 2 meters in length and 15 mm of thickness, and elbows.

Used in VMC installations for detached and collective housing (hygro-adjustable and double flow).



Ducts	Ø (mm)	Length (m)
GPR-ISO 80	80	2
GPR-ISO 125	125	2
GPR-ISO 160	160	2



30° bend	Ø (mm)	Angle
CDR-ISO 80/30	80	30°
CDR-ISO 125/30	125	30°
CDR-ISO 160/30	160	30°



Tees	Ø (mm)	Angle
TER-ISO 125/80	125/80	90°
TER-ISO 160/80	160/80	90°
TER-ISO 125/125	125/125	90°
TER-ISO 160/125	160/125	90°



45° bend	Ø (mm)	Angle
GPR-ISO 80/45	80	45°
GPR-ISO 125/45	125	45°
GPR-ISO 160/45	160	45°



Fixing clamps	Ø (mm)
CSR-ISO 125	125
CSR-ISO 160	160

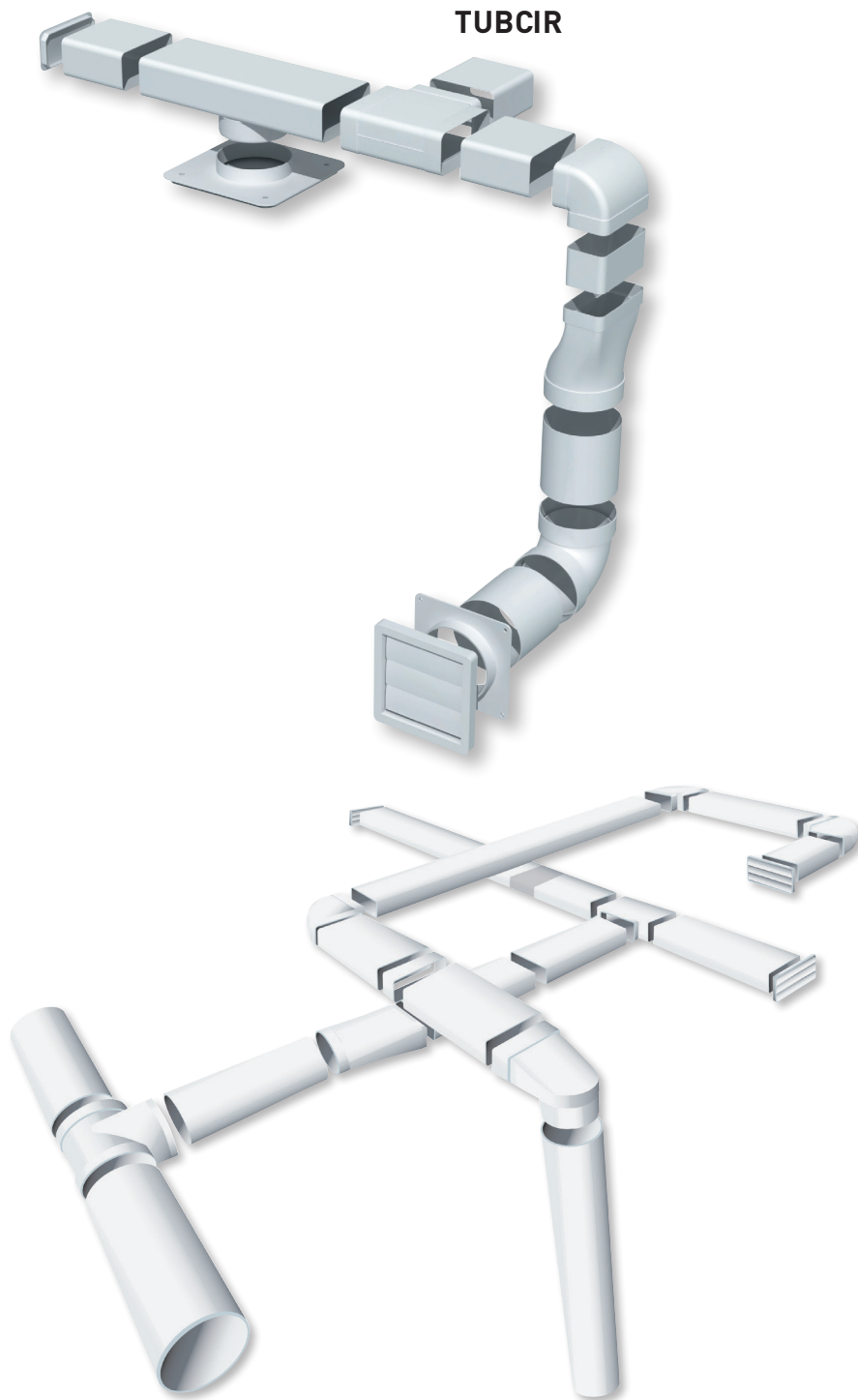


90° bend	Ø (mm)	Angle
CDR-ISO 80/90	80	90°
CDR-ISO 125/90	125	90°
CDR-ISO 160/90	160	90°



Couplings	Ø (mm)
MFR-ISO 125	125
MFR-ISO 160	160

**TUBREC
 TUBCIR**



Line of rectangular and circular ducts and accessories for use in single-family homes or shared housing. Specifically for use in drop ceilings with very limited space. Offering attractive installations with a good finish. Full line of accessories.

Characteristics

- Self-extinguishing thermoplastic duct (PVC).
- High-impact polystyrene accessories.
- High airtight.
- Antifungal.
- Antibacterial.
- Free of peassodded metals.
- Working temperature: 90°
- Antirot 100%.
- Hygienic non-stick solid particles.
- Corrosion protection.
- Athermic and dielectric.
- Acoustic attenuator.

Specific applications

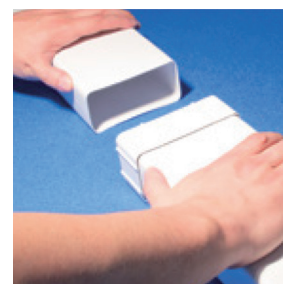
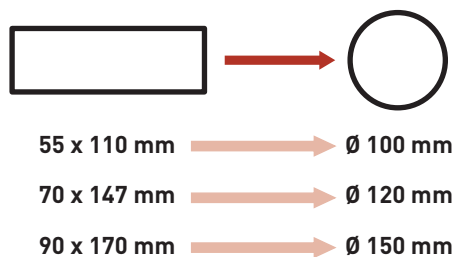


VMC
 Single
 dwellings



VMC
 Multi dwellings
 blocks

Dimensions / Equivalences



Easy to install

Easy and quick assembling of all the elements.

TUBREC rectangular ducts



Length: 1,5 m



Length: 3 m



Ø150	Ø120	Ø100
170x90 mm	147x70mm	110x55 mm
TUBREC TR 150 1,5 m Rectangular duct 170x90x1.500 mm	TUBREC TR 120 1,5 m Rectangular duct 147x70x1.500 mm	TUBREC TR 100 1,5 m Rectangular duct 110x55x1.500 mm
TUBREC TR 150 3 m Rectangular duct 170x90x3.000 mm *	TUBREC TR 120 3 m Rectangular duct 147x70x3.000 mm *	TUBREC TR 100 3 m Rectangular duct 110x55x3.000 mm *
-	TUBREC FRP 120 Flat rectangular bracket 147x70 mm	TUBREC FRP 100 Flat rectangular bracket 110x55 mm
-	-	TUBREC FRPC 100 Edge rectangular bracket 110x55 mm

* It is necessary to consult the delivery time for all the 3 meters length ducts.

TUBCIR circular ducts



Length: 1,5 m



Length: 3 m













Ø150	Ø120	Ø100
TUBCIR TC 150 1,5 m Circular duct Ø 150x1.500 mm	TUBCIR TC 120 1,5 m Circular duct Ø 120x1.500 mm	TUBCIR TC 100 1,5 m Circular duct Ø 100x1.500 mm
TUBCIR TC 150 3 m Circular duct Ø 150x3.000 mm *	TUBCIR TC 120 3 m Circular duct Ø 120x3.000 mm *	TUBCIR TC 100 3 m Circular duct Ø 100x3.000 mm *
-	TUBCIR FC 120 Circular bracket Ø 120 mm	TUBCIR FC 100 Circular bracket Ø 100 mm

* It is necessary to consult the delivery time for all the 3 meters length ducts.

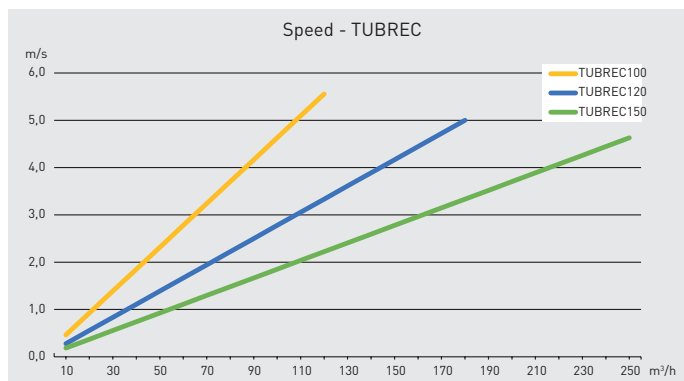
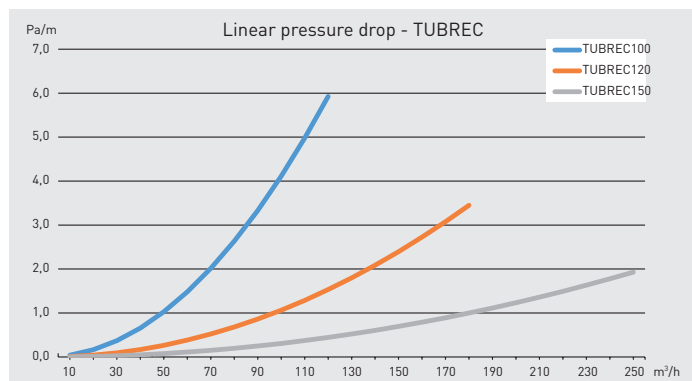
TUBREC - Standard rectangular accessories

	Ø150	Ø120	Ø100		Ø150	Ø120	Ø100
	170x90 mm	147x70 mm	110x55 mm		170x90 mm	147x70 mm	110x55 mm
	TUBREC MR 150 Rectangular sleeve 170x90 mm	TUBREC MR 120 Rectangular sleeve 147x70 mm	TUBREC MR 100 Rectangular sleeve 110x55 mm		-	TUBREC MPR 120 Rectangular wall sleeve 147x70 mm	TUBREC MPR 100 Rectangular wall sleeve 110x55 mm
	TUBREC MM 150 Mixed sleeve Ø 150 mm 170x90 mm	TUBREC MM 120 Mixed sleeve Ø 120 mm 147x70 mm	TUBREC MM 100 Mixed sleeve Ø 100 mm 110x55 mm		-	-	TUBREC MPM 100 Mixed wall sleeve Ø 100 mm 110x55 mm
	TUBREC RR 150 Rectangular reduction 170x90 to 147x70	TUBREC RR 120 Rectangular reduction 147x70 to 110x50			-	TUBREC EPR 120 Rectangular wall beautifier 147x70 mm	TUBREC EPR 100 Rectangular wall beautifier 110x55 mm
	TUBREC CMH 150 90° mixed bend Ø 150 mm 170x90 mm	TUBREC CMH 120 90° mixed bend Ø 120 mm 147x70 mm	TUBREC CMH 100 90° mixed bend Ø 100 mm 110x55 mm		-	TUBREC RER 120 White Rectangular external grille 147x70 mm white	TUBREC RER 100 White Rectangular external grille 110x55 mm white
	TUBREC CRV 90 150 90° rectangular vertical bend 170x90 mm	TUBREC CRV 90 120 90° rectangular vertical bend 147x70 mm	TUBREC CRV 90 100 90° rectangular vertical bend 110x55 mm		-	TUBREC VAR 120 White External rectangular louvre 147x70 mm white	TUBREC VAR 100 White External rectangular louvre 110x55 mm white
	TUBREC CRH 90 150 90° rectangular horizontal bend 170x90 mm	TUBREC CRH 90 120 90° rectangular horizontal bend 147x70 mm	TUBREC CRH 90 100 90° rectangular horizontal bend 110x55 mm		TUBREC VARM 150 White Mixed louvre 170 X 90 mm and 150 mm (back draft)	-	TUBREC VARM 100 White External mixed louvre Ø 100 mm 110x55 mm white
	TUBREC CRH 45 150 45° rectangular horizontal bend 170x90 mm	TUBREC CRH 45 120 45° rectangular horizontal bend 147x70 mm	TUBREC CRH 45 100 45° rectangular horizontal bend 110x55 mm				
	TUBREC TERH 150 Rectangular tees 170x90	TUBREC TERH 120 Rectangular tees 147x70 mm	TUBREC TERH 100 Rectangular horizontal tees 110x55 mm				
	-	-	TUBREC TEMV 100 Mixed rectangular vertical tees 110x55 mm Ø 100 mm				

TUBCIR - Standard circular accessories

	Ø150	Ø120	Ø100		Ø150	Ø120	Ø100
	TUBCIR MC 150 Circular sleeve Ø 150 mm	TUBCIR MC 120 Circular sleeve Ø 120 mm	TUBCIR MC 100 Circular sleeve Ø 100 mm		-	TUBCIR MPC 120 Circular wall sleeve Ø 120 mm	TUBCIR MPC 100 Circular wall sleeve Ø 100 mm
	TUBCIR RE 150 Reduction Ø 150 a Ø 120 mm	TUBCIR RE 120 Reduction Ø 125 a Ø 120 mm	TUBCIR RE 100 Reduction Ø 100 a Ø 80		-	TUBCIR EPC 120 Circular wall eautifer Ø120 mm	TUBCIR EPC 100 Circular wall eautifer Ø 100 mm
	-	TUBCIR REM Multiple reduction Ø 125-120- 115-100 mm	TUBCIR REM Multiple reduction Ø 125-120- 115-100 mm		-	TUBCIR REC 120 White Circular external grille Ø 120 mm white	TUBCIR REC 100 White Circular external grille Ø 100 mm white
	TUBCIR CC 90 150 90° circular bend Ø 150 mm	TUBCIR CC 90 120 90° circular bend Ø 120 mm	TUBCIR CC 90 100 90° circular bend Ø 100 mm		-	TUBCIR VAC 120 White External circular louvre Ø120 mm white	-
	-	TUBCIR CC 45 120 45° circular bend Ø 120 mm	TUBCIR CC 45 100 45° circular bend Ø 100 mm				
	-	TUBCIR TEC 120 Circular tees Ø 120 mm	TUBCIR TEC 100 Circular tees Ø 100 mm				

TUBREC Linear pressure drop - Speed





FLEXIREC
FLEXICIR

Line of semi-flexible ducts and accessories for use in single-family homes or shared housing. Specifically for use in drop ceilings with very limited space.

Easy to install like a flexible duct and as sturdy as a rigid duct, so it doesn't lose shape.

The internal design minimises pressure loss.

Available in circular or oblong.

Oblong:

Very low profile (50 mm) for use in very tight spaces.

Dimensions 114x50 mm.

Circular:

With low pressure loss so it can be installed inside suspension grid.

Dimensions 75 mm. ext / 63 mm int.

Full line of accessories.

Characteristics

- Polypropylene (PP) duct
- High-impact polystyrene accessories
- Easy to install
- Snap assembly
- Airflow regulation accessory

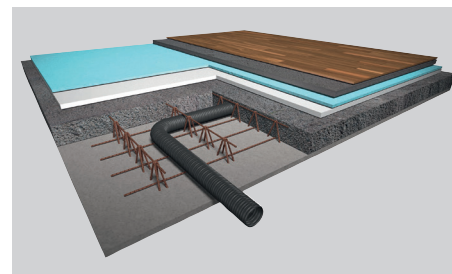
Specific applications



VMC
single-family
homes



VMC
shared
housing



Calculations

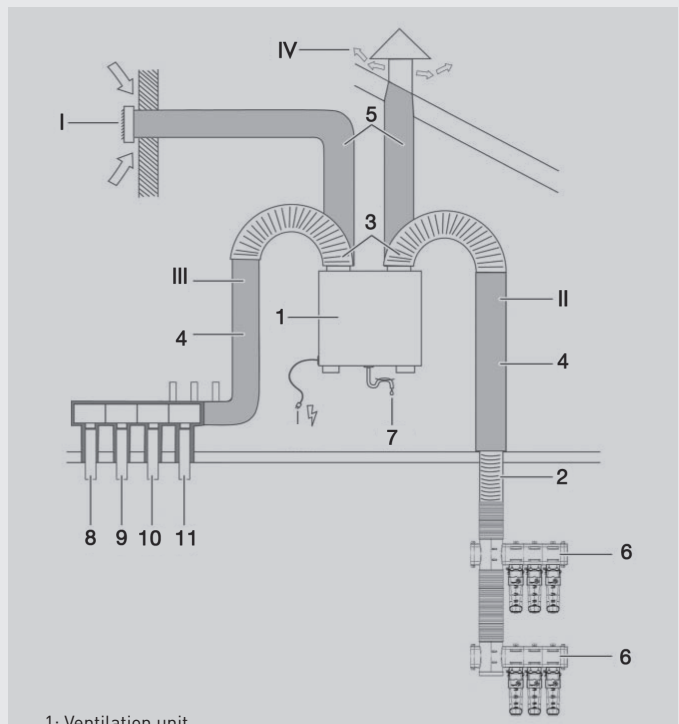
To calculate loss of pressure with the semi-flexible tube, consider a linear pressure loss of:

Oblong: 2.5 Pa/m for 30 m³/h, and 4.6 Pa/m for 40 m³/h.

Circular: 2.4 Pa/m for 30 m³/h, and 4.2 Pa/m for 40 m³/h.

If greater airflow is needed, dual duct runs should be used.

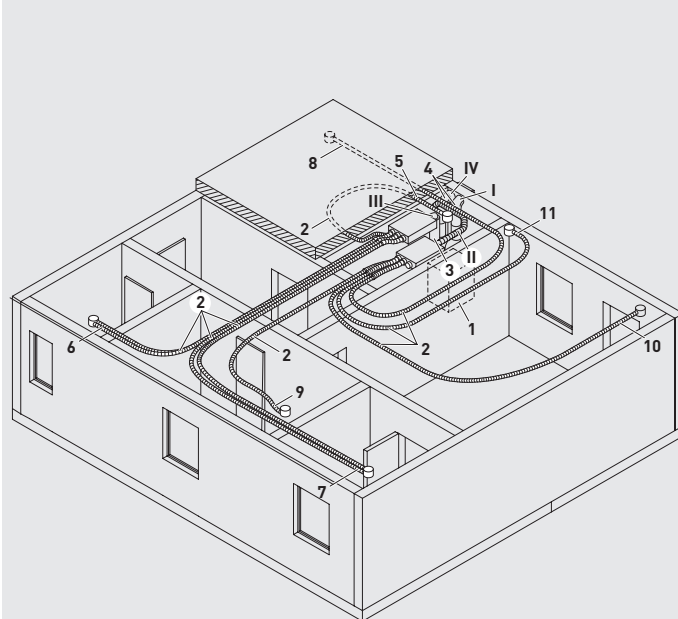
Installing FLEXIREC



- 1: Ventilation unit
- 2: Circular duct
- 3: Insulated flexible duct
- 4: Insulated rigid duct
- 5: Insulated duct
- 6: Oblong
- 7: Salida de condensados
- 8, 9, 10 and 11: Extractor branches

- I: Air intake
- II: Impulsion
- III: Extraction
- IV: Output

Installing FLEXICIR



- 1: Ventilation unit
- 2: semi-flexible duct FLEXICIR
- 3: Plenum
- 4: Insulated duct GPR ISO
- 5: Extraction site
- 6: Bathroom
- 7: Kitchen
- 8 and 9: Bedroom
- 10 and 11: Living room

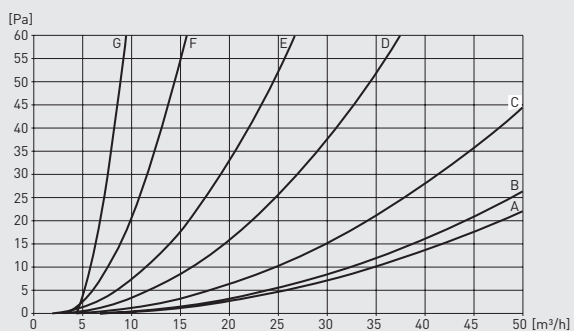
- I: Air intake
- II: Impulsion
- III: Extraction
- IV: Output

Regulation elements

To balance different branches, the provided regulation elements may be used:

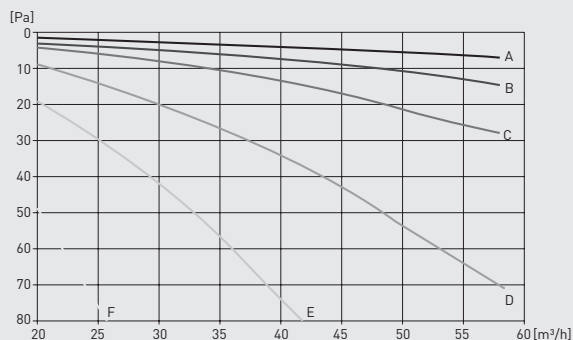
Oblong - NOD50

The output from the distribution box has a damper that can be used to modify the diameter with the pressure loss indicated on the curves. Should be readily accessible in case adjustments need to be made later.

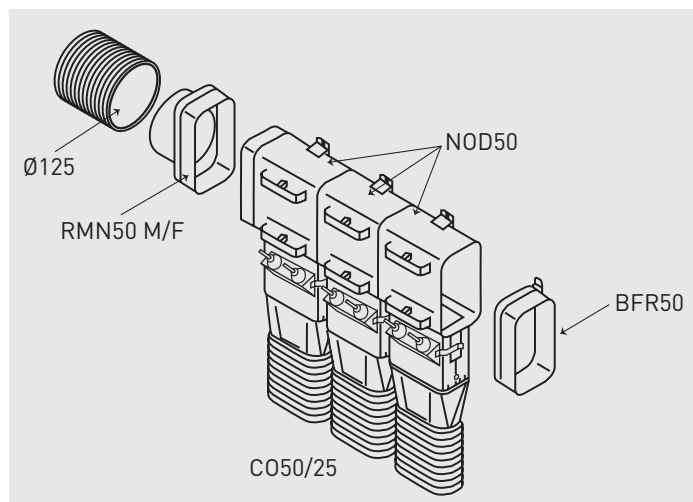


Circular - RD75

This element balances the circuit according to the curve below. Recommended for each output from the plenum in a spot accessible for later adjustments.



Composition of oblong distribution box with three branches



FLEXIREC semi-flexible oblong ducts

	Model	Description
	C050/25	Oblong duct 114x50 25 m
	ABM50	Air intake
	FXR50	Clamp
	NOD50	Port/ oblong duct distribution box
	BFR50	Distribution
	RMN50 M/F	Circular distribution box adaptor
	THR50	Oblong horizontal T
	CVR50	Oblong vertical elbow
	MCR50	Duct connection hose
	PLI 50/5P	Plenum 5 port C050
	CHR50	Oblong horizontal
	PLI 50/9P	Plenum de 9 ports C050
	ACR50-80	Mixed duct Ø80 114x50
	ACR80-125	Mixed duct Ø125 2 x 114x50

FLEXICIR semi-flexible circular ducts

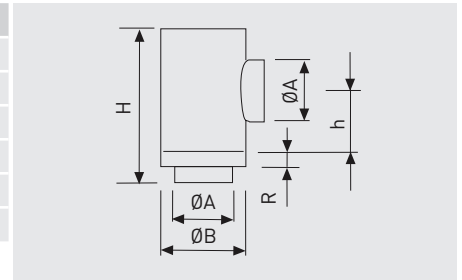
	Model	Description
	PKR75-25	semi-flexible circular tubing Ø75 (25m)
	EVWS75	Air intake plenum 2xØ75
	BR150	Air intake plenum
	VKR125	Plenum 6 ports Ø75 Ø connection 125
	VKR150	Plenum 10 ports Ø75 Ø connection 150
	RD75	Airflow regulatorl Ø75
	B0090-75	Circular elbow 90° Ø75
	UA75	Duct connection hose Ø75
	EVBS1	Circular grill + G2 filter
	EVAB1	White decorative grill
	EK75	Cap Ø75
	RDV75	Port Ø75 + Cap



TES

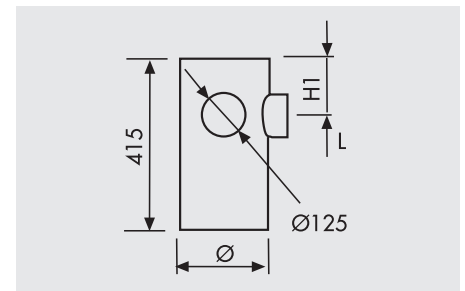
Soundproofed inspection points.
 To attenuate the sound of the fan, sealing of installation guaranteed.

Model	Ø A (mm)	Ø B (mm)	H	h	R
TES 125	125	200	30	140	60
TES 160	160	250	300	140	60
TES 200	200	315	400	190	60
TES 250	250	355	400	190	60
TES 315	315	400	550	260	60
TES 355	355	450	580	280	60



COET

Floor manifolds.
 Enables 1, 2 or 3 Ø 125 mm inserts to be connected.



COET Ø / 1 insert - Ø 125

Model	H1 (mm)
COET 125/1P	130
COET 160/1P	130
COET 200/1P	130
COET 250/1P	130
COET 315/1P	130
COET 355/1P	130
COET 400/1P	170
COET 450/1P	170
COET 500/1P	170
COET 560/1P	170
COET 630/1P	170

COET Ø / 2 inserts to 90° - Ø 125

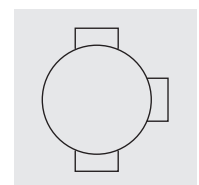
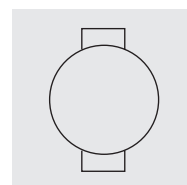
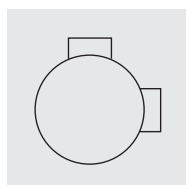
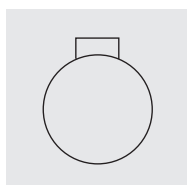
Model	H1 (mm)
COET 125/2P/90	130
COET 160/2P/90	130
COET 200/2P/90	130
COET 250/2P/90	130
COET 315/2P/90	130
COET 355/2P/90	130
COET 400/2P/90	170
COET 450/2P/90	170
COET 500/2P/90	170
COET 560/2P/90	170
COET 630/2P/90	170

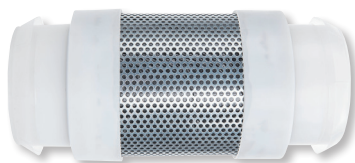
COET Ø / 2 inserts to 180° - Ø 125

Model	H1 (mm)
COET 125/2P/180	130
COET 160/2P/180	130
COET 200/2P/180	130
COET 250/2P/180	130
COET 315/2P/180	130
COET 355/2P/180	130
COET 400/2P/180	170
COET 450/2P/180	170
COET 500/2P/180	170
COET 560/2P/180	170
COET 630/2P/180	170

COET Ø / 3 inserts - Ø 125

Model	H1 (mm)
COET 125/3P	130
COET 160/3P	130
COET 200/3P	130
COET 250/3P	130
COET 315/3P	130
COET 355/3P	130
COET 400/3P	170
COET 450/3P	170
COET 500/3P	170
COET 560/3P	170
COET 630/3P	170

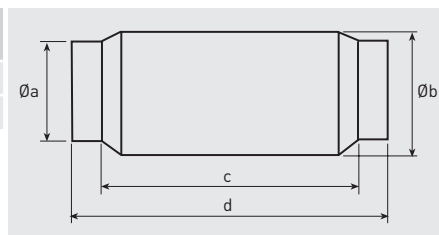




LA

Acoustic connections.
Offering 7 dB attenuation for network of
Ø80 or Ø125 mm.

Model	Øa (mm)	Øb (mm)	c (mm)	d (mm)
LA 80	80	110	280	380
LA 125	125	155	260	360



LAF

Flexible acoustic connections.
Models for Ø from 80 to 160 mm.
Length: 0.5 or 1 m. Thickness: 25mm

Model	Ø flange (mm)	Length (m)	Attenuation in dB							
			63	125	250	500	1000	2000	4000	8000
LAF 80 1M-25	80	1	8	26	35	36	31	33	41	37
LAF 100 1M-25	100	1	7	20	31	29	28	31	34	27
LAF 125 1M-25	125	1	5	18	26	30	25	25	37	26
LAF 160 1M-25	160	1	9	23	30	23	21	23	24	15
LAF 200 1M-25	160	1	6	12	18	18	20	24	15	9
LAF 80 0,5M-25	80	0,5	4	4	18	18	15	16	20	18
LAF 100 0,5M-25	100	0,5	3	10	15	14	14	15	17	13
LAF 125 0,5M-25	125	0,5	3	9	13	15	13	13	18	13
LAF 160 0,5M-25	160	0,5	5	12	15	12	10	12	12	8
LAF 200 0,5M-25	160	0,5	3	6	9	9	10	12	8	4



MRT

Sheet steel pieces allowing the connection
of two ducts of the same diameter.
Length: 88mm.

Model	Diameters (mm)
MRT-100	100
MRT-125	125
MRT-150	150
MRT-160	160
MRT-200	200
MRT-250	250
MRT-315	315



MRT-P

Plastic pieces allowing the connection of
two ducts of the same diameter.

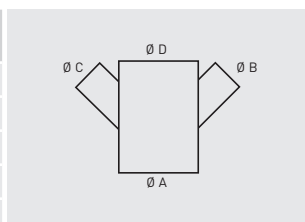
Model	Diameters (mm)
MRT 60 P	60
MRT 80 P	80



DERIV

Plastic sections for the
connection/adaptation of different duct
diameters.

Model	Ø A (mm)	Ø B (mm)	Ø C (mm)	Ø D (mm)
DERIV 80-80 P	80	80	80	
DERIV 125-60-60-125 P	125	60	60	125
DERIV 125-60-60-60 P	125	60	60	60
DERIV 150-125-125 P	150	125	125	
DERIV 150-60-60-125 P	150	60	60	125

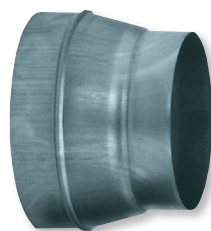


RED / RED-P / RED-AL

Reduction elements to adapt ducts of different diameters.



RED-P Plastic



RED Galvanised sheet metal



RED-AL Aluminium

Model	Diameters (mm)
RED-100/80 P	100-80
RED-125/100 P	125-100
RED-150/125 P	150-125
RED-160/125 P	160-125
RED-200/160 P	200/160

Model	Diameters (mm)
RED-160/125	160-125
RED-200/160	200-160
RED-250/200	250-200

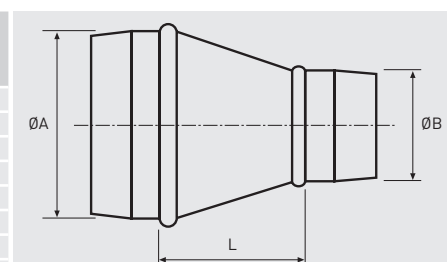
Model	Diameters (mm)
RED-160/125 AL	160-125
RED-200/125 AL	200/125
RED-200/160 AL	200/160
RED-250/160 AL	250-160
RED-250/200 AL	250-200
RED-315/200 AL	315-200
RED-315/250 AL	315-250
RED-355/250 AL	355-250
RED-355/315 AL	355-315
RED-400/315 AL	400-315
RED-400/355 AL	400-355



CRC

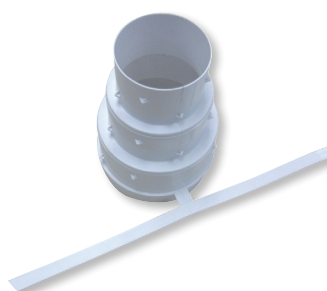
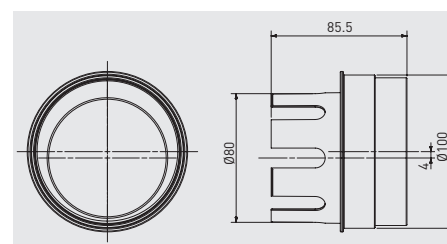
Reduction elements to adapt ducts of different diameters.

Model	Diameters A and B (mm)	Length of visible part (mm)
CRC-250/200	250-200	99
CRC-315/200	315-200	188
CRC-355/250	355-250	174
CRC-355/315	355-315	85
CRC-400/250	400-250	241
CRC-400/315	400-315	152
CRC-400/355	400-355	97
CRC-500/315	500-315	289
CRC-500/400	500-400	177
CRC-500/450	500-450	109



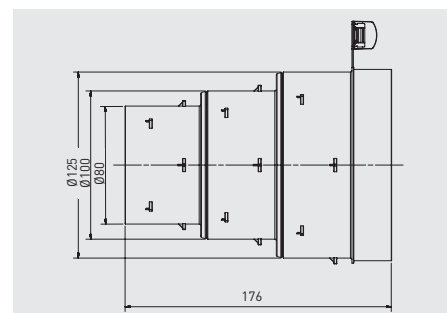
ADRF 100/80

Reduction elements.



ATRF 125/100/80

Reduction elements to adapt flexible ducts of Ø 125-100-80.





EA - EXTRACTION ARM

Extraction arms designed for extracting welding smoke, fumes and dust in workshops.

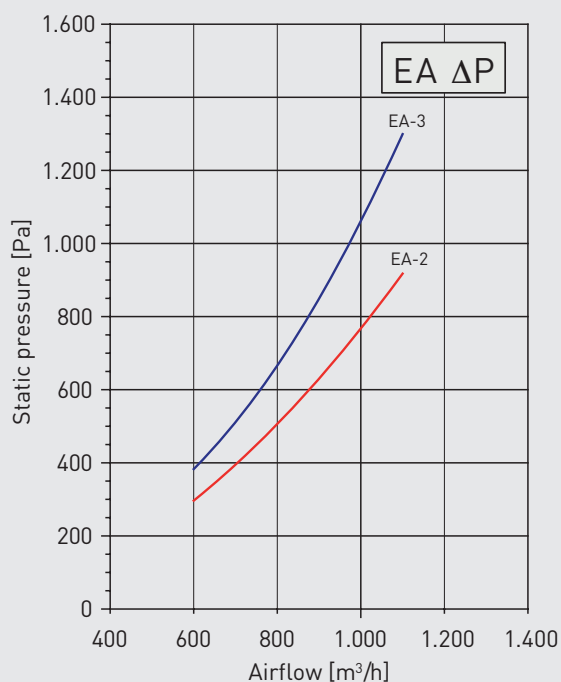
The extractor is suspended by a swivel, which allows the product to rotate 360°. This makes the extraction arm flexible in all directions and very simple to position. The product is equipped with a damper in the hood.

The extractor arm can be wall or ceiling mounted and can be installed together with a fan (see kits table). For internal installations.

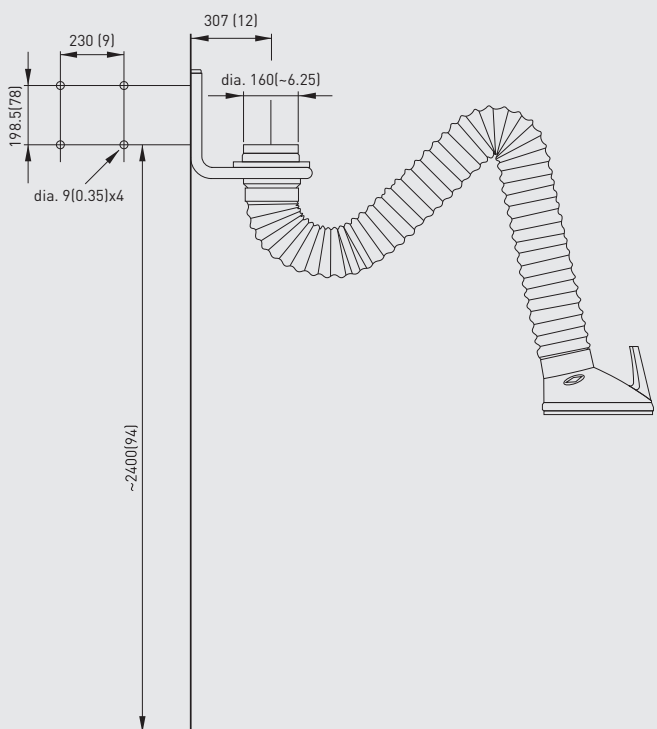


Model	Length (mm)	Airflow (m³/h)	Connection diameter (mm)	Max. air temperature (°C)	Hood sound level (dB(A))	Weight (kg)
EA-2	2	700-1000	150/160	70	63-75	11
EA-3	3	700-1000	150/160	70	63-75	13

Extraction arm pressure losses



Dimensional drawing





EA - EXTRACTION ARM KITS

Extraction arms designed for extracting welding smoke, fumes and dust in workshops. The extractor is suspended by a swivel, which allows the product to rotate 360°. This makes the extraction arm flexible in all directions and very simple to position. The product is equipped with a damper in the hood. The extractor arm can be wall or ceiling mounted and can be installed together with a fan (see kits table). For internal installations.



Kit for exhaust gases applications:

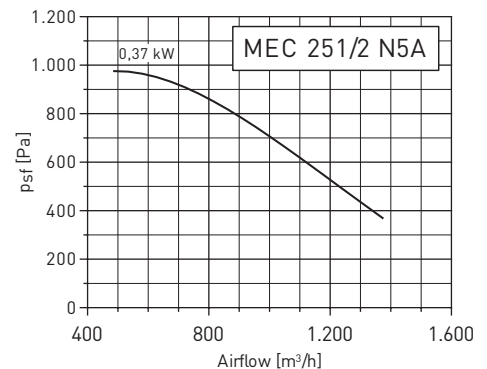
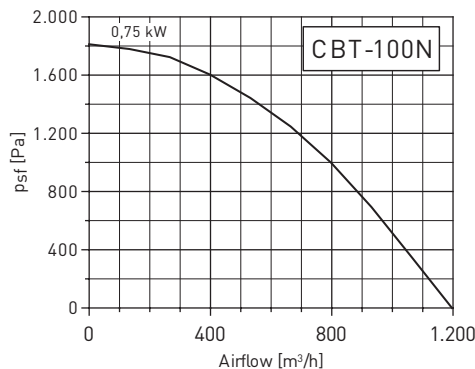
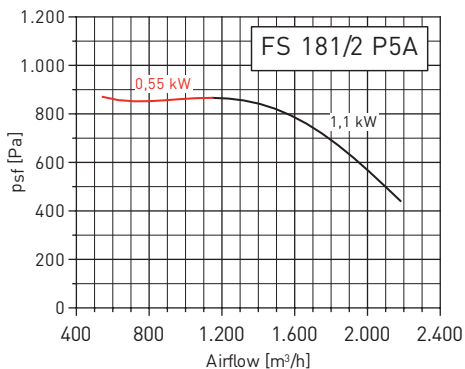
Kit model	Extraction arm	Connection flange	Fan model	Motor power (kW)
KFS-2	EA-2	CBS 160/180	FS 181/2 P5A LG270	0,55
KFS-3	EA-3	CBS 160/180	FS 181/2 P5A LG270	1,1
KCBT-2	EA-2	CBS 160/100	CBT-100N	0,75
KCBT-3	EA-3	CBS 160/100	CBT-100N	0,75



Kit for exhaust dust applications:

Kit model	Extraction arm	Connection flange	Fan model	Motor power (kW)
KMEC-2	EA-2	CBS 160/180	MEC 25 1/2 N5A LG270	0,37
KMEC-3	EA-3	CBS 160/180	MEC 25 1/2 N5A LG270	0,37
KCBT-2	EA-2	CBS 160/100	CBT-100N	0,75
KCBT-3	EA-3	CBS 160/100	CBT-100N	0,75

Performance curves:

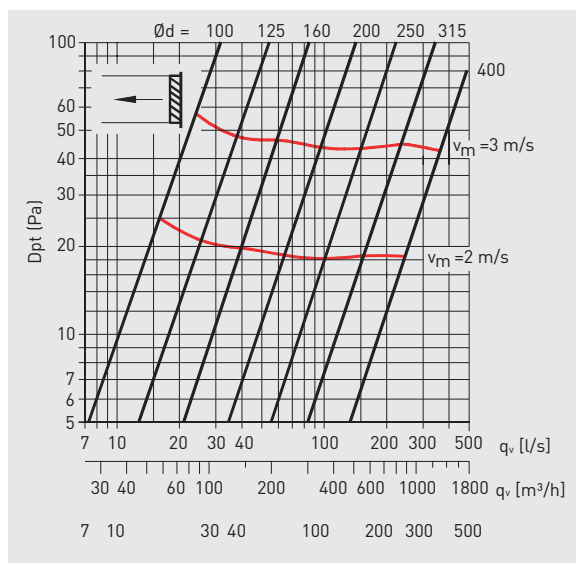
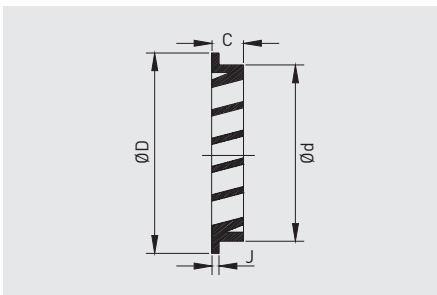




USAV

Outdoor circular grilles. Air intake or outlet. Manufactured from one piece die cast aluminium. Anti-mosquito wire mesh.

Model	Ød	ØD	C	J	Weight (kg)
USAV 100	100	132	25	3	0,19
USAV 125	125	155	25	3	0,24
USAV 180	160	190	25	3	0,39
USAV 200	200	230	25	3	0,59
USAV 250	250	280	28	3	1
USAV 315	315	350	20	3	1,94
USAV 400	400	440	25	3	2,7

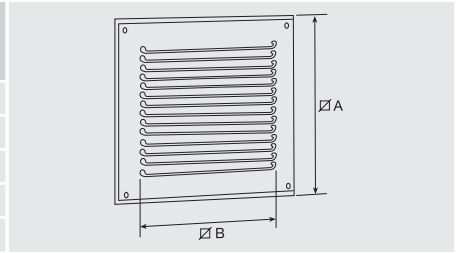




GRA

Aluminium grille. Aluminium externally / internally mounted discharge / supply air grilles.

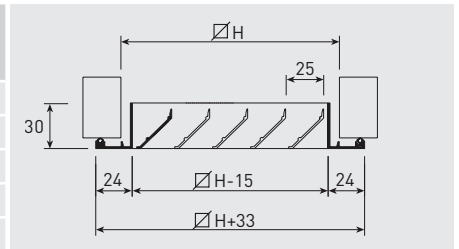
Model	External dimensions ∅ A	Grille area ∅ B
GRA-75	150 x 150	100 x 100
GRA-100	165 x 165	125 x 125
GRA-150	200 x 200	150 x 150
GRA-200	210 x 210	165 x 165
GRA-300	250 x 250	200 x 200



GRI

Extract louvre grilles manufactured from aluminium and finished with an epoxy polyester paint coating.

Model	Available nominal dimensions ∅ H	Free outlet area m ²
GRI-125	125 x 125	0,007
GRI-200	200 x 200	0,022
GRI-250	250 x 250	0,035
GRI-300	300 x 300	0,052
GRI-450	450 x 450	0,121



Recommended air speed

V min. (m/s)	V max. (m/s)
1,5	3

Determining the airflow rate according to the speed Vf (m/s).

Correction values for LwA1

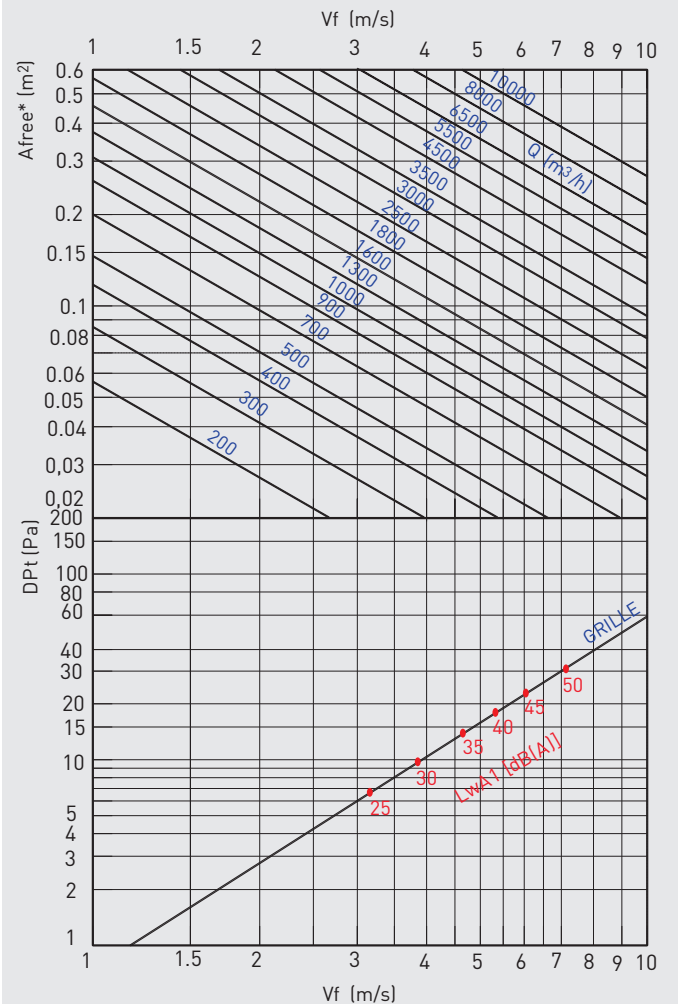
Afree (m ²)	0,01	0,02	0,05	0,1	0,2	0,4
LwA1 (Kf*)	-9	-6	-3	-	+4	+7

* Kf = Correction factor

Diagram values referred to
Afree = 0,1 m²

Lwa = Lwa1 + Kf

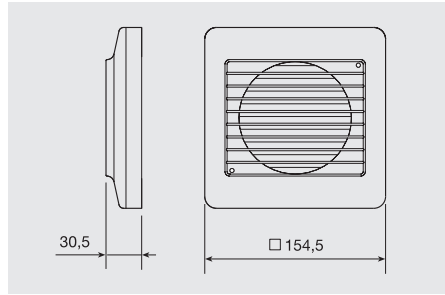
Air velocity, pressure drop and sound power



* Afree = Free area



GR-100



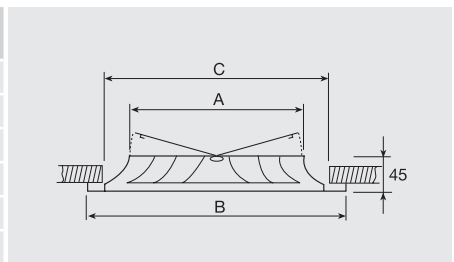
Plastic interior or exterior mounting air discharge grilles. Designed for direct connection to 100 mm diameter ducting.



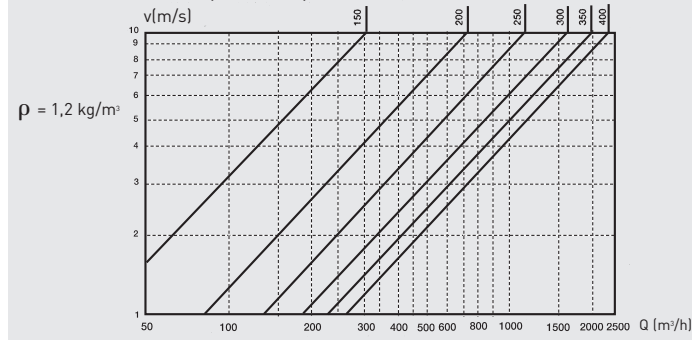
GCI

Circular supply / exhaust grilles.

Model	A	B	C	Net free area (m ²)	Minimum airflow	Maximum airflow
GCI-160	140	250	200	0,0086	70	275
GCI-200	190	300	250	0,0200	120	500
GCI-250	240	350	300	0,0326	200	800
GCI-315	290	400	350	0,0460	275	1100
GCI-350	340	450	400	0,0550	350	1200
GCI-400	390	500	450	0,0702	400	1500

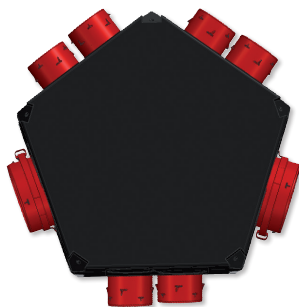


Air volume and air speed comparison (m/s)



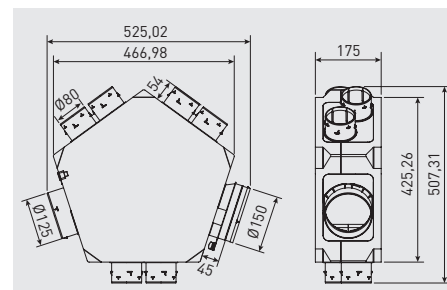
GCI - Pressure drop (Pa) and sound power level (Lw(A))

Airflow (m ³ /h)	Diameter shutter	160		200		250		315		355		400	
		100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%
100	Lw(A)	20	26										
	Dp (Pa)	3	11										
150	Lw(A)	25	33										
	Dp (Pa)	7	29										
200	Lw(A)	32	40	25	36								
	Dp (Pa)	14	54	5	21								
250	Lw(A)	37	46	29	40								
	Dp (Pa)	22	92	8	33								
300	Lw(A)	42	51	33	44	25	35						
	Dp (Pa)	34	138	11	50	5	23						
400	Lw(A)			40	51	31	42	25	31				
	Dp (Pa)			22	99	10	47	5	20				
500	Lw(A)					37	47	30	36	28	39		
	Dp (Pa)					17	76	8	33	4	20		
600	Lw(A)					41	51	34	40	32	43	30	40
	Dp (Pa)					26	116	12	47	5	29	3	13
800	Lw(A)							40	46	37	48	36	46
	Dp (Pa)							22	94	11	55	5	24
1000	Lw(A)									42	53	40	51
	Dp (Pa)									18	93	7	39
1200	Lw(A)											43	54
	Dp (Pa)											11	58
1400	Lw(A)											47	57
	Dp (Pa)											15	85



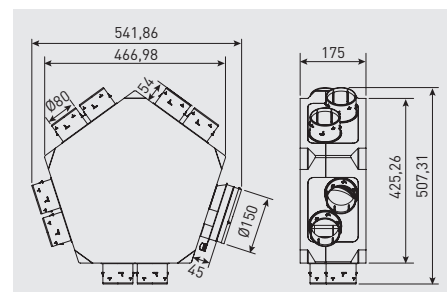
PLENUM UNI EXT 6+1

Insulated extract Plenum with $\varnothing 125/150-160$ mm, 1 $\varnothing 125$ mm mouth for the kitchen and with a maximum of 6 sanitary mouthpieces of $\varnothing 80$ mm. All mouthpieces have clamping flanges included.



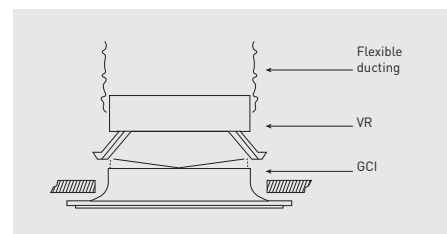
PLENUM UNI IMP 8

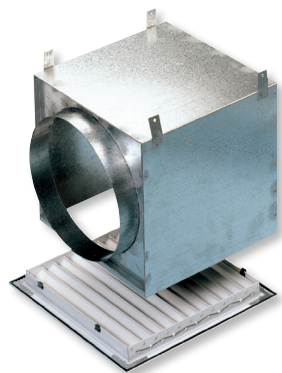
Insulated extract Plenum with $\varnothing 125/150-160$ mm, 1 $\varnothing 125$ mm mouth for the kitchen and with a maximum of 8 mouthpieces of $\varnothing 80$ mm for dry areas (living room, bedroom). All mouthpieces have clamping flanges included.



VR

Mounting support to facilitate the installation of the GCI circular grilles and connection to ducting.

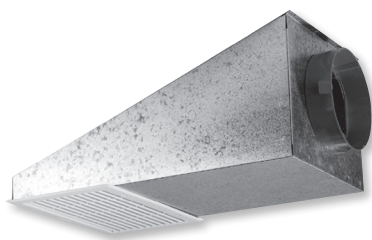
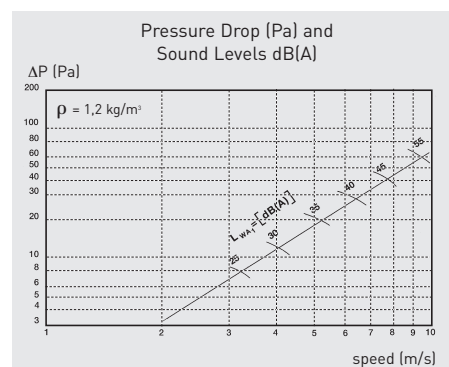
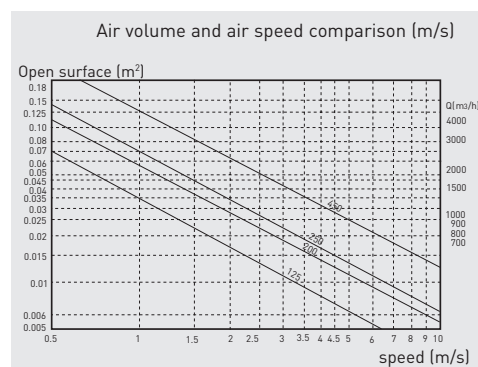
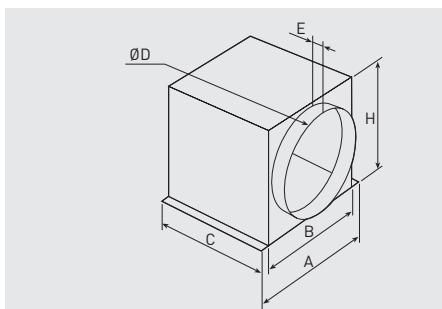




RP

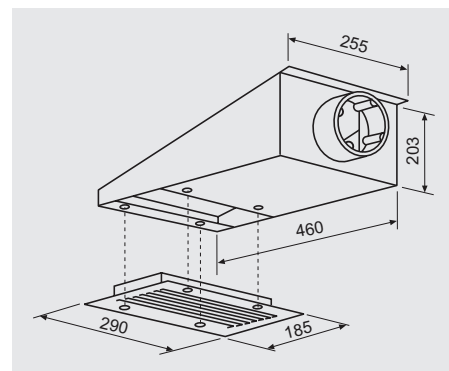
Terminal connector for GRI internal grille. The RP plenums are manufactured from galvanised sheet steel. Six diameters are available for corresponding GRI grilles.

Model		Ø D	H	A	B	C	E
RP-100		95	230	145	133	157	45
RP-200	A	125	230	226	208	208	54
	B	160	230	226	208	208	54
RP-250	A	160	230	276	258	258	54
	B	200	230	276	258	258	54
RP-300	A	200	230	326	308	308	54
	B	250	300	326	308	308	54
RP-450		315	365	460	458	458	54



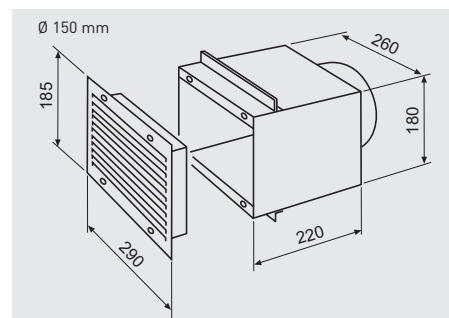
TAT

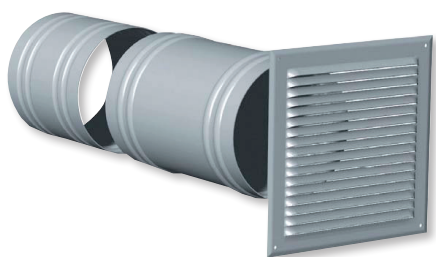
External fresh air grille for dwelling ventilation application with heat recovery system.



TAP

External fresh air grille for dwelling ventilation application with heat recovery system.





PAF

Outlet grille on facade Ø 125 mm.

Model	Ø (mm)	External measures	Internal measures	Larger diameter	Smaller diameter	Airflow section (cm ²)	Airflow in 20 Pa	
							Discharge	Air intake
PAF 125	125	165 x 165	145 x 145	127	122	85	170	120
PAF 150	150	190 x 190	170 x 170	155	150	130	225	185
PAF 160	160	210 x 210	190 x 190	162	157	140	235	195
PAF 200	200	240 x 240	220 x 220	202	197	190	350	290
PAF 250	250	290 x 290	270 x 270	252	247	280	485	400
PAF 315	315	340 x 340	320 x 320	320	315	480	830	680
PAF 355	355	390 x 390	370 x 370	360	355	600	1060	870
PAF 400	400	440 x 440	420 x 420	403	408	930	1610	1320



PAQS

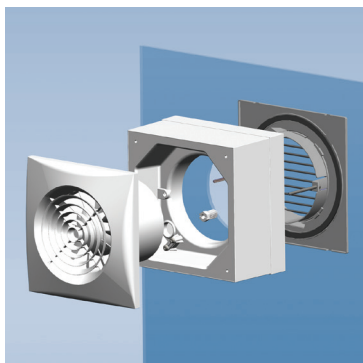
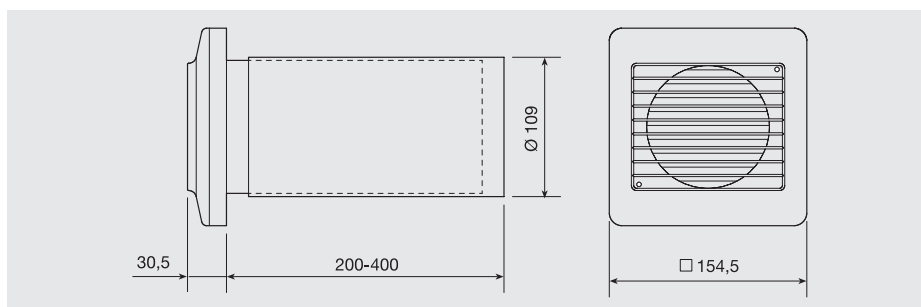
External wall air discharge that includes an anti insect grill.

Model	Ø (mm)
PAQS 100	100
PAQS 125	125
PAQS 150	150
PAQS 160	160



WALL KIT

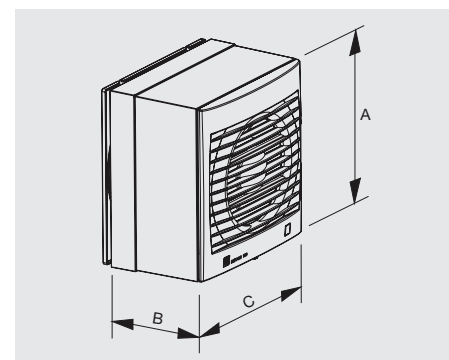
Wall kit with fixed grille for use with EDM-80N, EDM-100, DECOR-100 and SILENT-100. The kit includes a plastic external grille and a telescopic duct wall liner. The kit allows the fan to be installed in walls of 20-42 cm thickness.

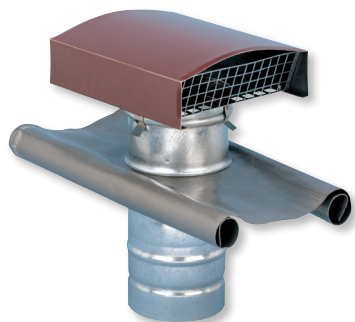


WINDOWS KIT

Accessory to allow SILENT, DECOR and EDM in a window.

Model	A	B	C	Ø glass hole (mm)
WINDOWS KIT 100	158	87	158	110
WINDOWS KIT 200	180	82	180	145



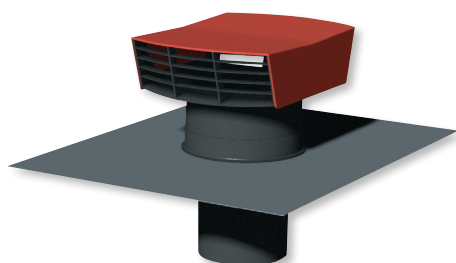


CT

Metallic roof terminal cowl designed for circular duct connection and for use ONLY in systems with continuous operation. The CT roof terminal kit enable air discharge or supply through a flat or pitched roof.

Metallic roof terminal cowl to tile	
Ø (mm)	Model
125	CT-125 TEJA
150	CT-150 TEJA
160	CT-160 TEJA
200	CT-200 TEJA
250	CT-250 TEJA
315	CT-315 TEJA
355	CT-355 TEJA
400	CT-400 TEJA
450	CT-450 TEJA
500	CT-500 TEJA
630	CT-630 TEJA

Metallic roof terminal cowl to slate	
Ø (mm)	Model
125	CT-125 PIZARRA
150	CT-150 PIZARRA
160	CT-160 PIZARRA
200	CT-200 PIZARRA
250	CT-250 PIZARRA
315	CT-315 PIZARRA
355	CT-355 PIZARRA
400	CT-400 PIZARRA
450	CT-450 PIZARRA
500	CT-500 PIZARRA
630	CT-630 PIZARRA

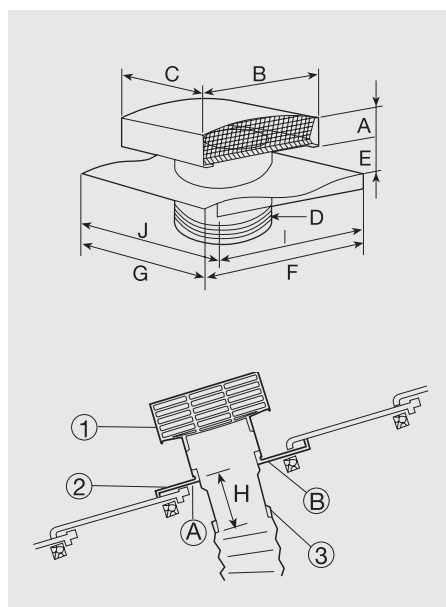


CT-P

Plastic roof terminal cowl designed for circular duct connection and for use ONLY in systems with continuous operation. The CT-P roof terminal kit enable air discharge or supply through a flat or pitched roof.

Model	Discharge 20 Pa	Supply 20 Pa
CT-125 P TEJA	320 m³/h	170 m³/h
CT-150 P TEJA	320 m³/h	210 m³/h
CT-160 P TEJA	320 m³/h	210 m³/h
CT-125 P PIZARRA	320 m³/h	170 m³/h
CT-150 P PIZARRA	320 m³/h	210 m³/h
CT-160 P PIZARRA	320 m³/h	210 m³/h

CT and CT-P Series dimensions



CT Series - Dimensions											
Model	A	B	C	Ø D	E	F	G	H	I	J	Weight (kg)
CT-125	54	200	250	125	70	500	400	-	-	-	-
CT-150	65	248	300	150	70	500	400	-	-	-	-
CT-200	100	333	400	200	85	600	600	160	500	500	8
CT-250	100	333	400	250	85	600	600	160	500	500	8
CT-315	112	420	500	315	85	600	600	140	500	750	9
CT-355	200	550	660	355	150	900	750	225	600	750	17
CT-400	200	550	660	400	150	900	750	225	600	750	17
CT-450	200	550	660	450	150	900	750	225	600	750	17
CT-500	245	650	850	500	160	1200	1000	215	780	997	34
CT-630	320	780	1000	630	160	1200	1000	215	780	997	36

CT-P Series - Dimensions										
Model	A	B	C	D	E	F	G	H	Weight (kg)	
CT-P 125	72	203	280	125	80	500	400	140	3,5	
CT-P 150	72	203	280	150	80	500	400	140	3,5	
CT-P 160	72	203	280	160	80	500	400	140	3,5	

USE: Recommended air volumes (Pressure drop 20 Pa)		
Model	Discharge	Supply
CT-125	350	165
CT-150	425	245
CT-200	900	600
CT-250	1050	850
CT-315	1800	1100

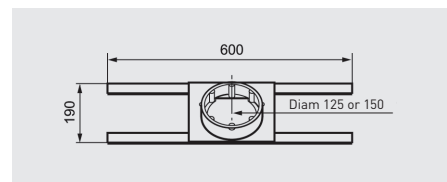
USE: Recommended air volumes (Pressure drop 20 Pa)		
Model	Discharge	Supply air
CT-355	2600	1700
CT-400	3000	2100
CT-450	3600	2600
CT-500	4700	3500
CT-630	8000	4500



BROCHAL

Duct connector enables the easy use of flexible ducting with roof cowl terminal.

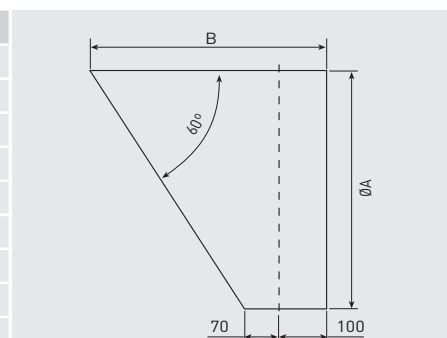
Models:
 Brochal 125
 Brochal 150



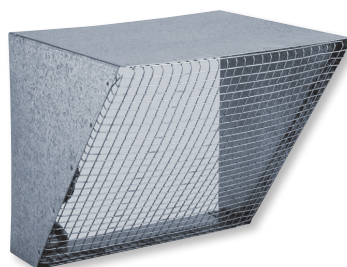
APC

Protection guards for direct connection to the inlet-outlet fan flange connector.

Model	ØA	B
APC-80	80	216
APC-100	100	228
APC-125	125	232
APC-160	160	252
APC-200	200	275
APC-250	250	304
APC-315	315	342
APC-355	355	365
APC-400	400	391
APC-450	450	420
APC-500	500	449
APC-560	560	483
APC-630	630	524
APC-710	710	570
APC-800	800	622



Dimensions (mm)

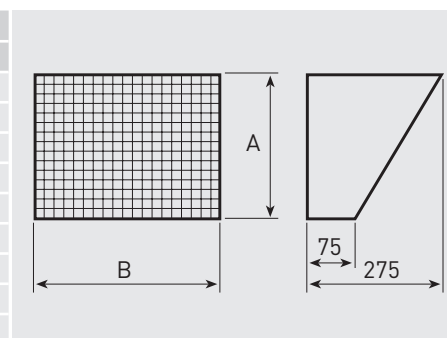


CVA / CVD

Rectangular protective peaks for inlet or exhaust.

CVA - Inlet models
 CVD - Exhaust models

Inlet valve			Outlet valve		
Model	A	B	Model	A	B
CVA-7	329	329	CVD-7	225	235
CVA-9	403	403	CVD-9	263	303
CVA-10	453	453	CVD-10	292	336
CVA-12	503	503	CVD-12	344	399
CVA-15	603	603	CVD-15	406	476
CVA-18	703	703	CVD-18	482	559
CVA-20	803	803	CVD-20	633	633
CVA-22	903	903	CVD-22	698	703
CVA-25	1003	1003	CVD-25	799	803
CVA-30	1203	1203	CVD-30	873	948

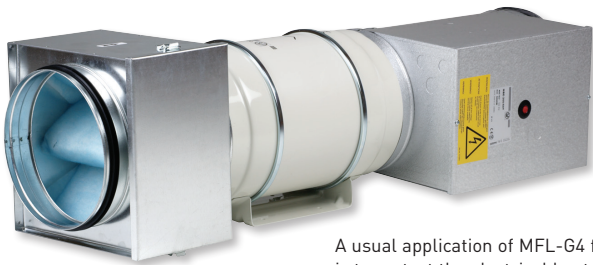


Dimensions (mm)

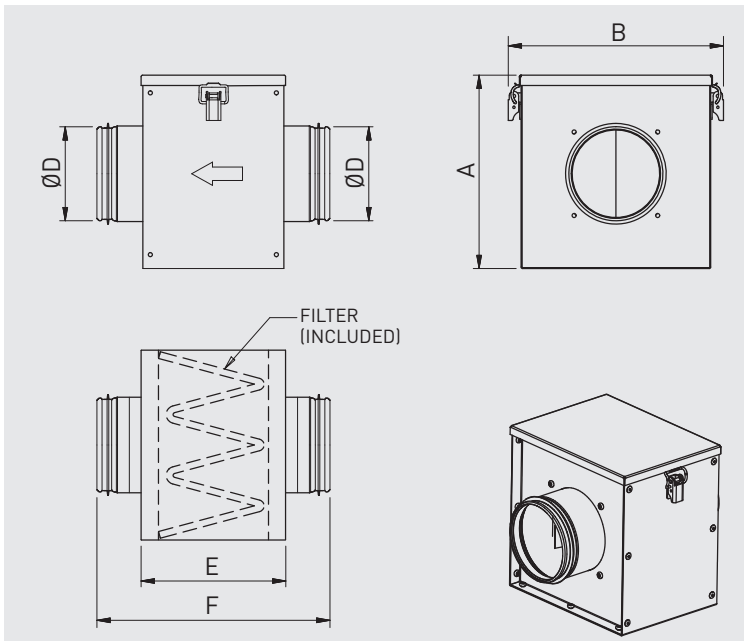


MFL-G4

Filtration box, provided with MFR-G4 filter of type ISO Coarse 60% s/ ISO-16890, G4 gravimetric type s/EN-779, able to filter more than 90% of particles bigger than 10 microns. Suitable to mount outdoors. Manufactured in galvanized steel. Circular flanges with tightness joint. Cover easily removable to quickly replace the filter.



A usual application of MFL-G4 filtration boxes is to protect the electrical heater batteries from the dirt.



Model	A	B	D	E	F	Weight (kg)
MFL-100 G4	206	229	100	154	212	2
MFL-125 G4	206	229	125	154	218	2
MFL-150 G4	206	229	150	154	218	2
MFL-160 G4	206	229	160	154	218	2
MFL-200 G4	246	269	200	154	218	2
MFL-250 G4	296	319	250	154	248	3
MFL-315 G4	346	369	315	154	248	3
MFL-355 G4	446	469	355	154	248	4
MFL-400 G4	446	469	400	154	248	4
MFL-450 G4	546	569	450	154	248	6
MFL-500 G4	546	569	500	154	248	6
MFL-560 G4	606	629	560	154	248	7
MFL-630 G4	666	689	630	154	248	8

Model	Filtration efficiency	
	s/EN-779	s/ISO-16890
MFL-G4	G4	ISO COARSE 60%

Filters made of synthetic polyester fibres

Model	Filter blanket density (gr/m ²)	Filter blanket thickness (mm)	Maximum working temperature (°C)	Maximum relative humidity (%)	Fire resistance according to DIN-53438	Final pressure drop (Pa)
MFL-G4	350	16-18	90	90	F1	250

Filter box	Filters (spares)		Maximum flow rate (m³/h)
	Cod	Filtering surface area (m²)	
MFL-100 G4	MFR-100/125/160 G4	0,10	300
MFL-125 G4	MFR-100/125/160 G4	0,10	450
MFL-150 G4	MFR-100/125/160 G4	0,10	720
MFL-160 G4	MFR-100/125/160 G4	0,10	720
MFL-200 G4	MFR-200 G4	0,12	865
MFL-250 G4	MFR-250 G4	0,18	1.300
MFL-315 G4	MFR-315 G4	0,24	1.730
MFL-355 G4	MFR-355/400 G4	0,42	3.025
MFL-400 G4	MFR-355/400 G4	0,42	3.025
MFL-450 G4	MFR-450/500 G4	0,59	4.250
MFL-500 G4	MFR-450/500 G4	0,59	4.250
MFL-560 G4	MFR-560 G4	0,74	5.330
MFL-630 G4	MFR-630 G4	0,90	6.480

Selection criteria

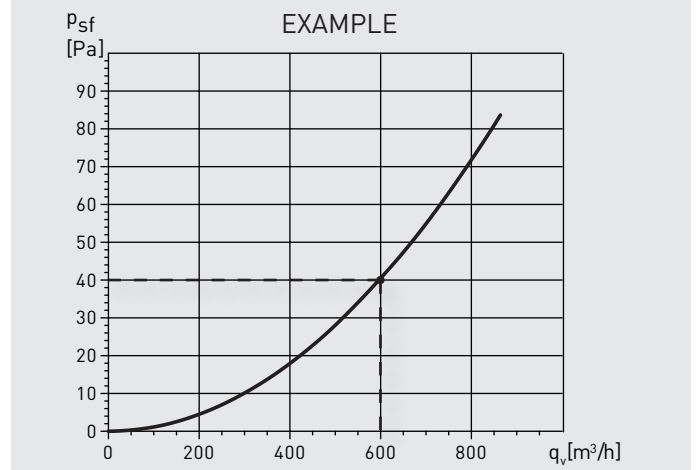
The information displayed in the curves on the following page shows the relationship that exists between the air flow circulating through the filter box and the pressure drop generated by the filter in the initial operating conditions (Clean filter).

When selecting a fan or ventilation unit associated with the filter box, it is essential to add a pressure margin designed to cover fouling of the filters. The value of this pressure depends on multiple factors, such as the particle content of the outside environment, the hours the facility will be operating, sizing criteria and the type of fan associated with the box.

We recommend that the pressure value used in the selection of the fan is between the following values:

- Maximum pressure drop of the filter: 250 Pa (Least energy efficient criterion).
- Half-life pressure of the filter: Average value between the initial and final pressure drop (Most energy efficient criterion).

Example of estimation of the half-life pressure drop

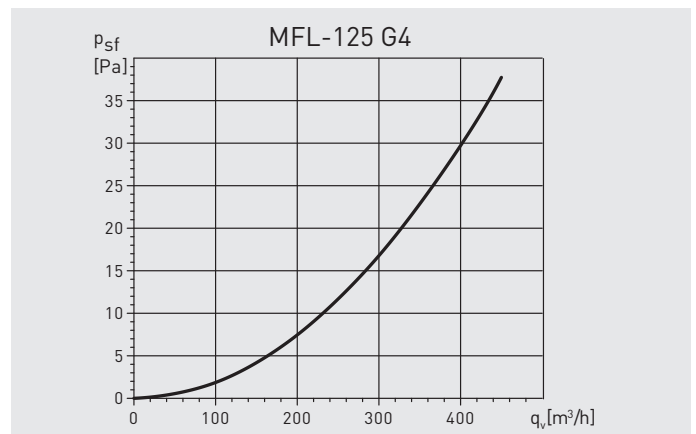
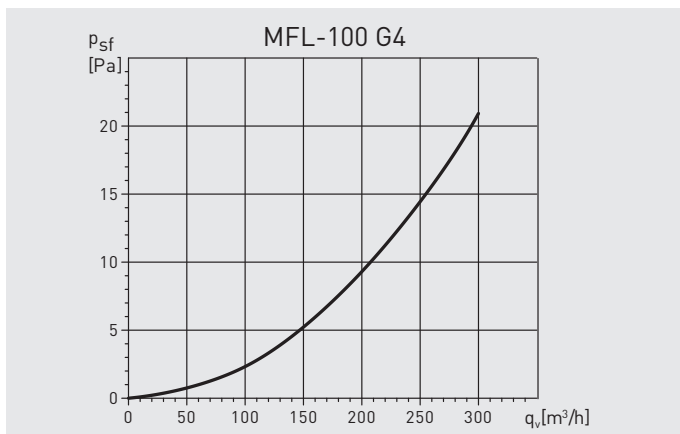


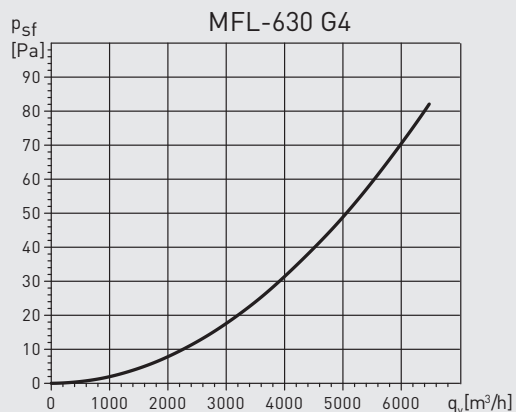
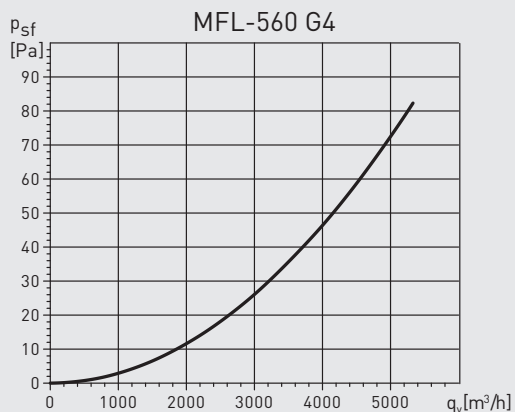
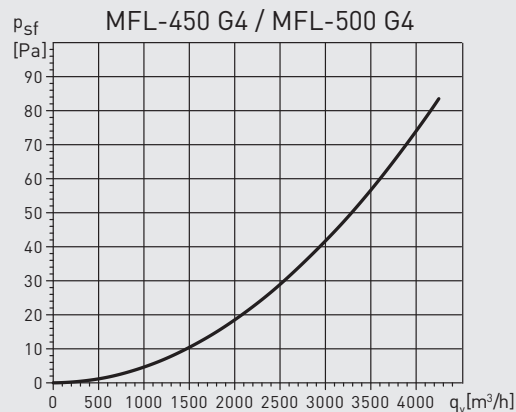
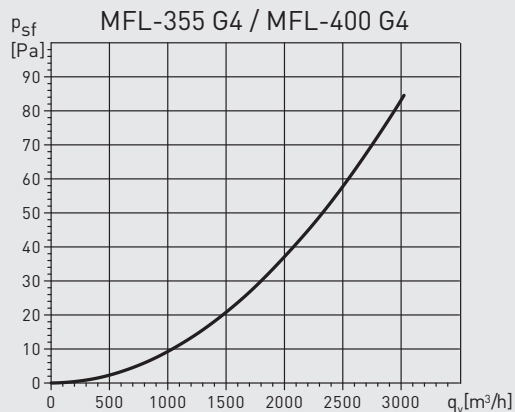
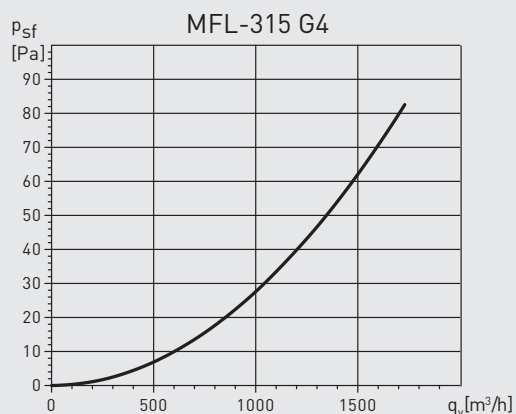
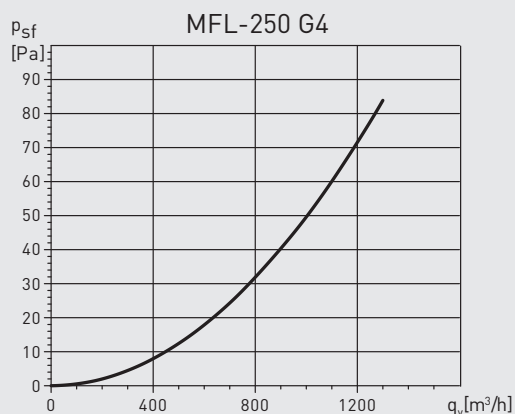
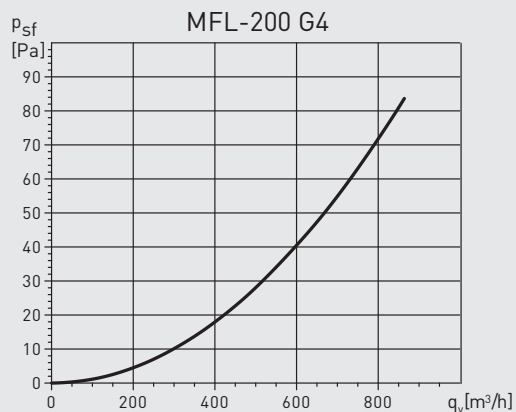
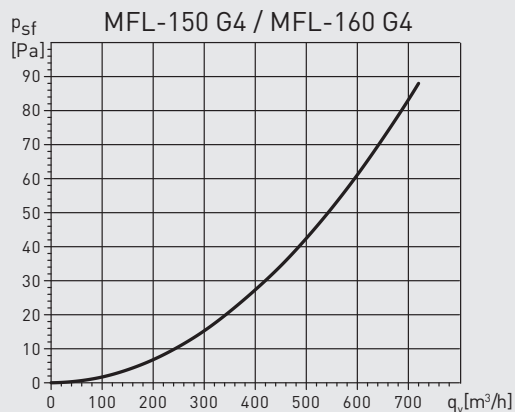
Determine half-life pressure drop of the MFL-200 G4 filter box with a flow rate of 600 m³/h:

- Initial pressure drop: 40 Pa
- Final pressure drop: 250 Pa
- Half-life pressure drop: $(40+250)/2 = 145$ Pa

Pressure drop of MFR filters

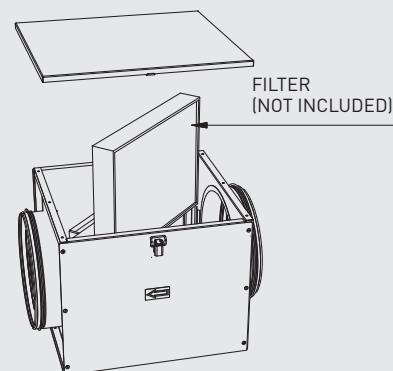
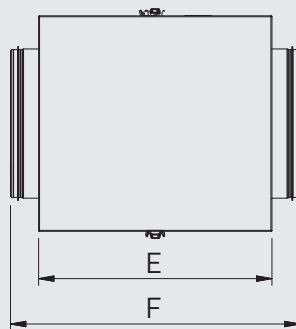
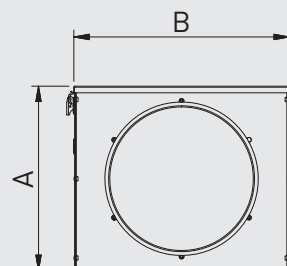
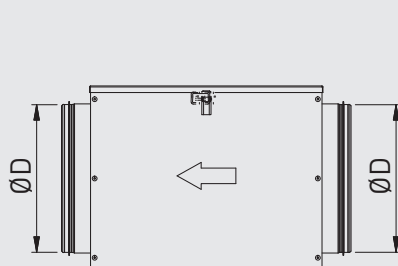
Pressure drop values for clean filter



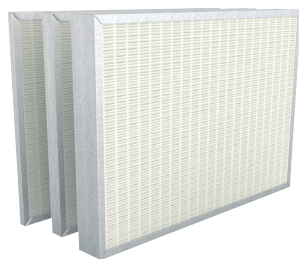


FBL-N

Filtration box, provided without filter, to mount in filters type minipleat AFR-N (2 as a maximum).
Suitable to mount outdoors.
Manufactured in galvanized steel.
Circular flanges with tightness joint.
Cover easily removable to quickly replace the filter.



Model	A	B	D	E	F	Weight (kg)
FBL-125	200	260	125	250	350	3
FBL-160	250	260	160	290	390	4
FBL-200	310	260	200	290	390	5
FBL-250	310	360	250	390	490	8
FBL-315	450	460	315	490	590	10
FBL-355/18	450	510	355	540	640	12
FBL-355/23	480	560	355	590	690	17
FBL-400	480	660	400	690	790	25
FBL-450	550	740	450	770	870	27
FBL-500	600	940	500	970	1070	45
FBL-630	770	1010	630	1040	1140	48



AFR-N M5/F7/F9



AFR-N G4

AFR-N

Minipleat filters to mount in filtration boxes FLB-N

Model	Filtration efficiency	
	s/EN-779	s/ISO-16890
AFR-N G4	G4	ISO COARSE 60%
AFR-N M5	M5	ISO ePM10 50%
AFR-N F7	F7	ISO ePM1 70%
AFR-N F9	F9	ISO ePM1 85%

Filter box FBL-N	Filters			
	AFR-N G4	AFR-N M5	AFR-N F7	AFR-N F9
FBL-N-125	AFR-N-125 G4	AFR-N-125 M5	AFR-N-125 F7	AFR-N-125 F9
FBL-N-160	AFR-N-160 G4	AFR-N-160 M5	AFR-N-160 F7	AFR-N-160 F9
FBL-N-200	AFR-N-200/05 G4	AFR-N-200/05 M5	AFR-N-200/05 F7	AFR-N-200/05 F9
FBL-N-250	AFR-N-250/08 G4	AFR-N-250/08 M5	AFR-N-250/08 F7	AFR-N-250/08 F9
FBL-N-315	AFR-N-315/12 G4	AFR-N-315/12 M5	AFR-N-315/12 F7	AFR-N-315/12 F9
FBL-N-355/18	AFR-N-355/18 G4	AFR-N-355/18 M5	AFR-N-355/18 F7	AFR-N-355/18 F9
FBL-N-355/23	AFR-N-355/23 G4	AFR-N-355/23 M5	AFR-N-355/23 F7	AFR-N-355/23 F9
FBL-N-400	AFR-N-400/30 G4	AFR-N-400/30 M5	AFR-N-400/30 F7	AFR-N-400/30 F9
FBL-N-450	AFR-N-450/45 G4	AFR-N-450/45 M5	AFR-N-450/45 F7	AFR-N-450/45 F9
FBL-N-500	AFR-N-500/55 G4	AFR-N-500/55 M5	AFR-N-500/55 F7	AFR-N-500/55 F9
FBL-N-630	AFR-N-630/80 G4	AFR-N-630/80 M5	AFR-N-630/80 F7	AFR-N-630/80 F9

Characteristics and correspondence between FBL-N filter boxes and AFR-N filters

Model	Frame material	Filter blanket material	Fold thickness (mm)	Maximum working temperature (°C)	Maximum relative humidity (%)	Fire resistance	Final pressure drop (Pa)
AFR-N G4	Galvanised steel	Polyester fibre	-	80	90	F1 s/DIN-53438	200
AFR-N M5		Fibreglass	5	70	90	M1 s/NF-P92-507	250
AFR-N F7		Synthetic polypropylene fibres*	5,5	70	90	F1 s/DIN-53438	250
AFR-N F9			5,5	70	90	F1 s/DIN-53438	250

* F7 and F9 filters are resistant to humidity and are microbiologically inactive.

Filter box	Filters					
	G4			M5		
	Filter	Filtering surface area (m²)	Maximum flow rate (m³/h)	Filter	Filtering surface area (m²)	Maximum flow rate (m³/h)
FBL-125	AFR-N-125 G4	0,12	370	AFR-N-125 M5	0,23	320
FBL-160	AFR-N-160 G4	0,19	560	AFR-N-160 M5	0,40	490
FBL-200	AFR-N-200/05 G4	0,25	750	AFR-N-200/05 M5	0,61	645
FBL-250	AFR-N-250/08 G4	0,42	1.250	AFR-N-250/08 M5	1,14	1.100
FBL-315	AFR-N-315/12 G4	0,72	2.150	AFR-N-315/12 M5	2,09	1.870
FBL-355/18	AFR-N-355/18 G4	0,96	2.900	AFR-N-355/18 M5	2,87	2.500
FBL-355/23	AFR-N-355/23 G4	1,24	3.700	AFR-N-355/23 M5	3,79	3.215
FBL-400	AFR-N-400/30 G4	1,55	4.600	AFR-N-400/30 M5	4,81	4.015
FBL-450	AFR-N-450/45 G4	2,05	6.100	AFR-N-450/45 M5	6,49	5.300
FBL-500	AFR-N-500/55 G4	2,63	7.800	AFR-N-500/55 M5	8,44	6.800
FBL-630	AFR-N-630/80 G4	4,18	12.400	AFR-N-630/80 M5	13,78	10.800

Filter box	Filters					
	F7			F9		
	Filter	Filtering surface area (m ²)	Maximum flow rate (m ³ /h)	Filter	Filtering surface area (m ²)	Maximum flow rate (m ³ /h)
FBL-125	AFR-N-125 F7	0,23	275	AFR-N-125 F9	0,23	275
FBL-160	AFR-N-160 F7	0,40	420	AFR-N-160 F9	0,40	420
FBL-200	AFR-N-200/05 F7	0,55	550	AFR-N-200/05 F9	0,55	550
FBL-250	AFR-N-250/08 F7	1,03	935	AFR-N-250/08 F9	1,03	935
FBL-315	AFR-N-315/12 F7	1,90	1.600	AFR-N-315/12 F9	1,90	1.600
FBL-355/18	AFR-N-355/18 F7	2,61	2.130	AFR-N-355/18 F9	2,61	2.130
FBL-355/23	AFR-N-355/23 F7	3,45	2.750	AFR-N-355/23 F9	3,45	2.750
FBL-400	AFR-N-400/30 F7	4,37	3.450	AFR-N-400/30 F9	4,37	3.450
FBL-450	AFR-N-450/45 F7	5,90	4.550	AFR-N-450/45 F9	5,90	4.550
FBL-500	AFR-N-500/55 F7	7,68	5.820	AFR-N-500/55 F9	7,68	5.820
FBL-630	AFR-N-630/80 F7	12,53	9.200	AFR-N-630/80 F9	12,53	9.200

Selection criteria

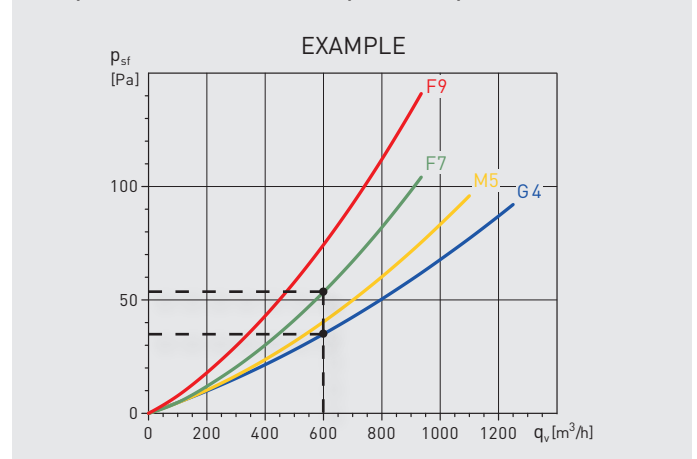
The information displayed in the curves on the following page shows the relationship that exists between the air flow circulating through the filter box and the pressure drop generated by the filter in the initial operating conditions (Clean filter).

When selecting a fan or ventilation unit associated with the filter box, it is essential to add a pressure margin designed to cover fouling of the filters. The value of this pressure depends on multiple factors, such as the particle content of the outside environment, the hours the facility will be operating, sizing criteria and the type of fan associated with the box.

We recommend that the pressure value used in the selection of the fan is between the following values:

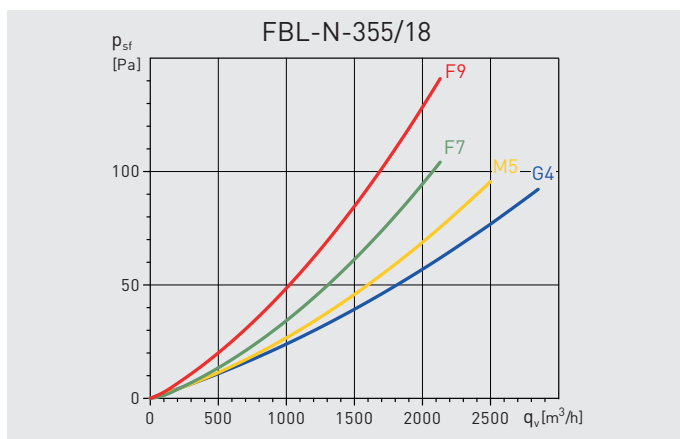
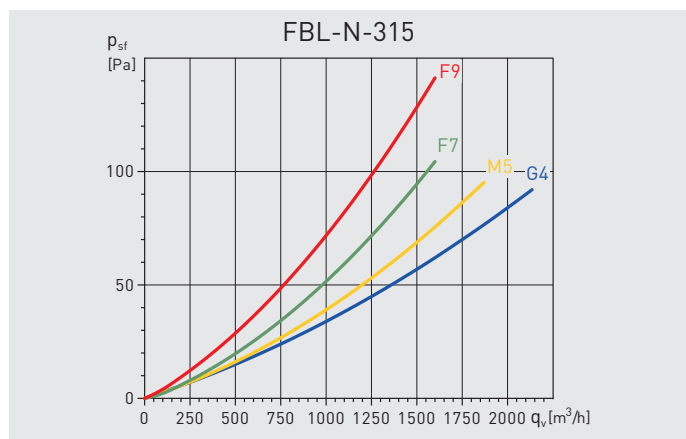
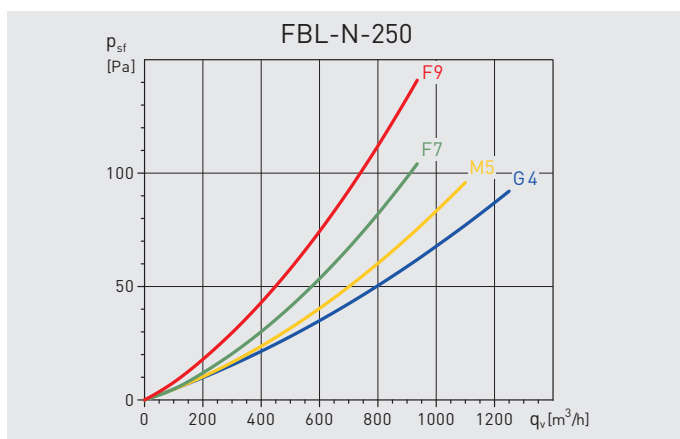
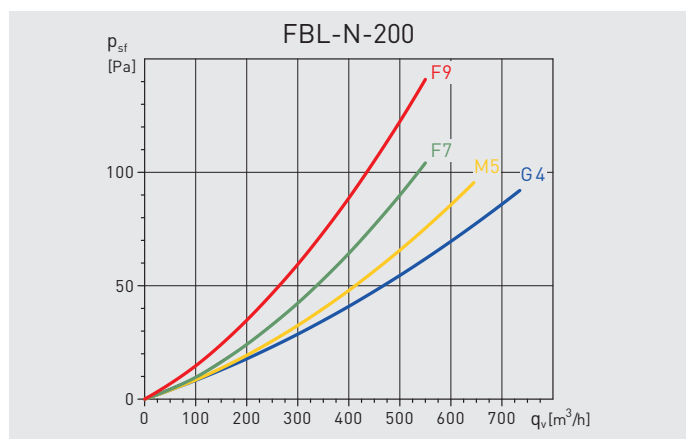
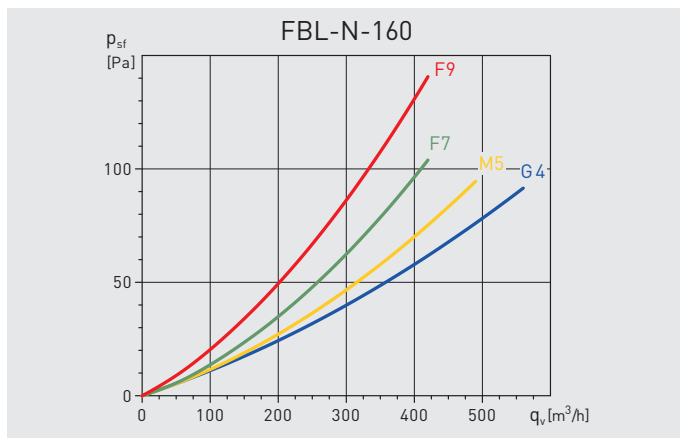
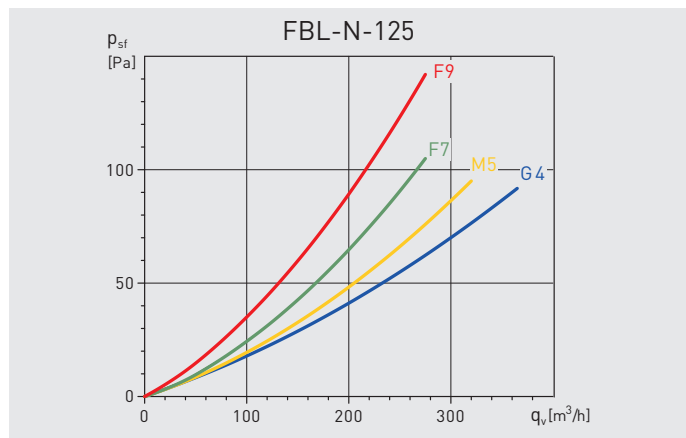
- Maximum pressure drop of the filter: 200 or 250 Pa depending on the filter. (Least energy efficient criterion).
- Half-life pressure of the filter: Average value between the initial and final pressure drop (Most energy efficient criterion).

Example of estimation of the half-life pressure drop

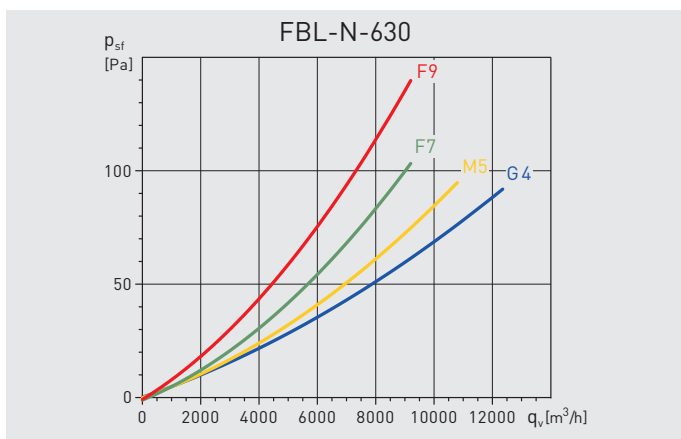
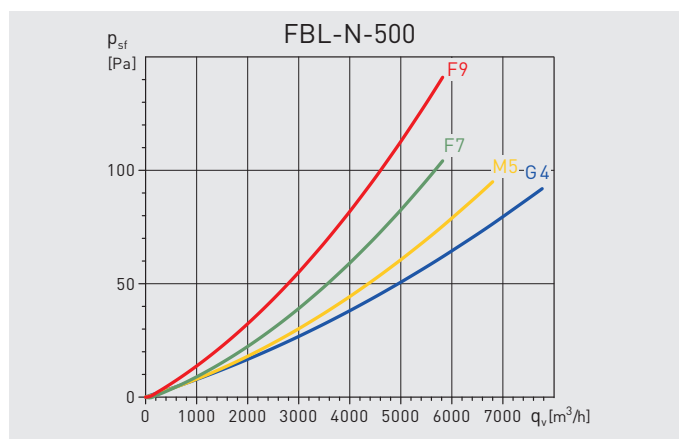
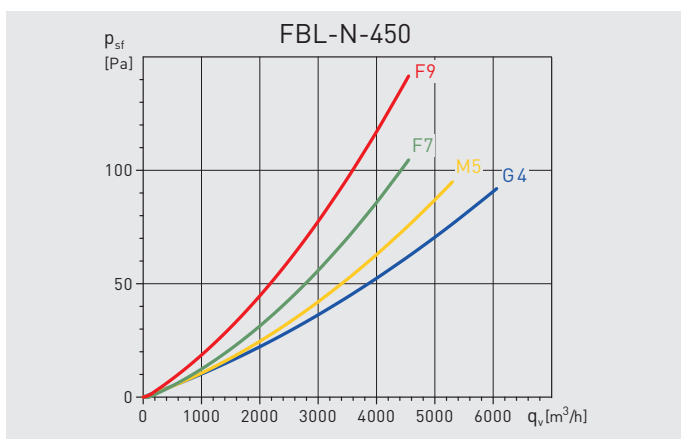
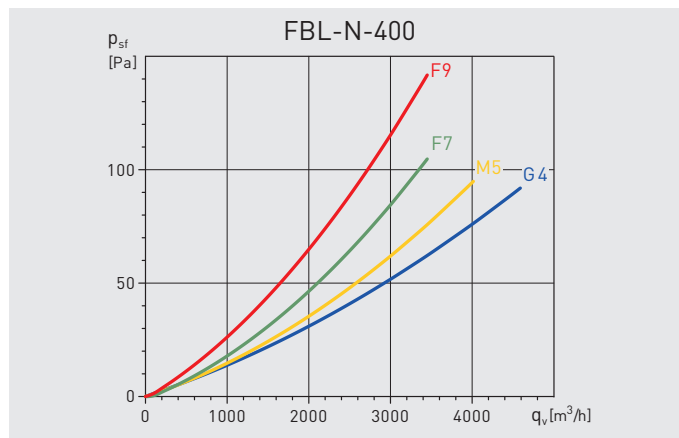
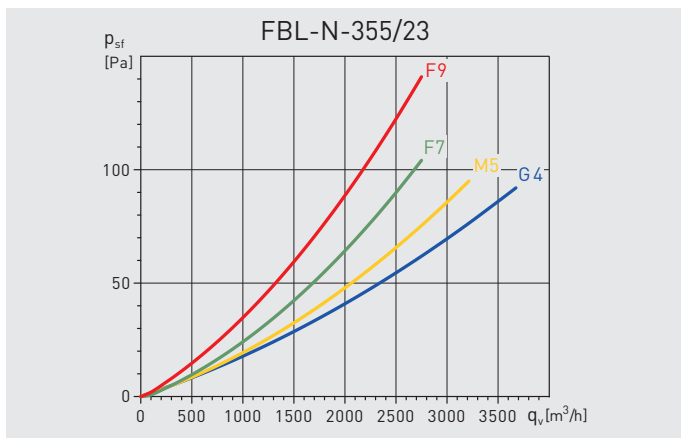


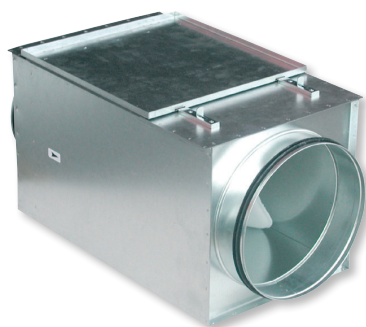
Determine half-life pressure drop of the FBL-250 N set with filters AFR-N-250/08 G4 and AFR-N-250/08 F7 with a flow rate of 600 m³/h:
 Initial pressure drop: 35+55 = 90 Pa
 Final pressure drop: 200+250 = 450 Pa
 Half-life pressure drop: (90+450)/2 = **270 Pa**

Pressure drop (FBL-N)



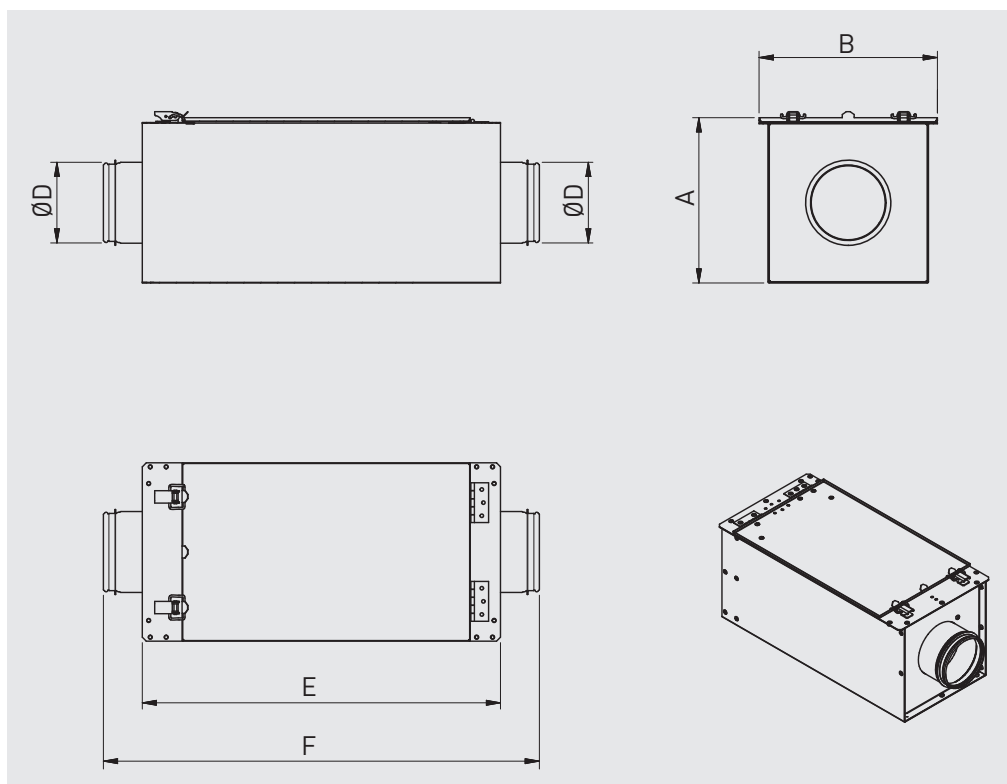
Pressure drop (FBL-N)





MFL-F

Filtration box, provided without filter, suitable to mount MFR-F bag filters.
Suitable to mount outdoors.
Manufactured in galvanized steel.
Circular flanges with tightness joint.
Cover easily removable to quickly replace the filter.



Model	A	B	D	E	F	Weight (kg)
MFL-100 F	216	224	100	450	514	4
MFL-125 F	216	224	125	450	514	4
MFL-150 F	216	224	150	450	514	4
MFL-160 F	216	224	160	450	514	4
MFL-200 F	256	264	200	450	514	5
MFL-250 F	306	314	250	500	600	6
MFL-315 F	356	364	315	550	650	7
MFL-355 F	456	464	355	650	750	11
MFL-400 F	456	464	400	650	750	11
MFL-450 F	556	564	450	700	800	15
MFL-500 F	556	564	500	700	800	15
MFL-560 F	616	624	560	750	850	17
MFL-630 F	676	684	630	800	900	19



MFR-F

Bag filters to mount on MFL-F filter boxes.

Filtration efficiency

Model	Filtration efficiency	
	s/EN-779	s/ISO-16890
MFR M6	M6	ISO ePM10 50%
MFR F7	F7	ISO ePM1 55%
MFR F9	F9	ISO ePM1 75%

Characteristics

Filters made of synthetic polypropylene fibres. Galvanised steel frame.

Model	Filter blanket density (gr/m ²)	Filter blanket thickness (mm)	Maximum working temperature (°C)	Maximum relative humidity (%)	Fire resistance according to DIN-53438	Pérdida de carga final máxima (Pa)
MFR M6	120	1,5 - 1,9	90	90	F1	300
MFR F7	140	1,8 - 2,2				
MFR F9	190	2,4 - 2,8				

Correspondence between MFL-F filter boxes and MFR-F filters

Filter box	Filters (each box fits only one filter)				Maximum air flow rate (m ³ /h)		
	M6	F7	F9	Filtering surface area (m ²)	M6	F7	F9
MFL-100 F	MFR-100/125/160 F6	MFR-100/125/160 F7	MFR-100/125/160 F9	0,27	400	260	260
MFL-125 F	MFR-100/125/160 F6	MFR-100/125/160 F7	MFR-100/125/160 F9	0,27			
MFL-150 F	MFR-100/125/160 F6	MFR-100/125/160 F7	MFR-100/125/160 F9	0,27			
MFL-160 F	MFR-100/125/160 F6	MFR-100/125/160 F7	MFR-100/125/160 F9	0,27			
MFL-200 F	MFR-200 F6	MFR-200 F7	MFR-200 F9	0,33	550	320	320
MFL-250 F	MFR-250 F6	MFR-250 F7	MFR-250 F9	0,6	800	570	570
MFL-315 F	MFR-315 F6	MFR-315 F7	MFR-315 F9	1,21	1.375	1.100	1.100
MFL-355 F	MFR-355/400 F6	MFR-355/400 F7	MFR-355/400 F9	2,39	2.200	2.200	2.200
MFL-400 F	MFR-355/400 F6	MFR-355/400 F7	MFR-355/400 F9	2,39			
MFL-450 F	MFR-450/500 F6	MFR-450/500 F7	MFR-450/500 F9	6,42	3.500	3.500	3.500
MFL-500 F	MFR-450/500 F6	MFR-450/500 F7	MFR-450/500 F9	6,42			
MFL-560 F	MFR-560 F6	MFR-560 F7	MFR-560 F9	9,04			
MFL-630 F	MFR-630 F6	MFR-630 F7	MFR-630 F9	9,31	5.375	5.375	5.375

Selection criteria

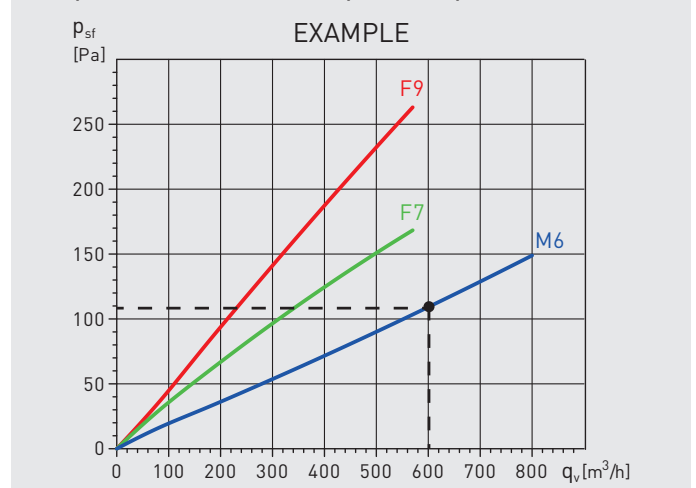
The information displayed in the curves on the following page shows the relationship that exists between the air flow circulating through the filter box and the pressure drop generated by the filter in the initial operating conditions (Clean filter).

When selecting a fan or ventilation unit associated with the filter box, it is essential to add a pressure margin designed to cover fouling of the filters. The value of this pressure depends on multiple factors, such as the particle content of the outside environment, the hours the facility will be operating, sizing criteria and the type of fan associated with the box.

We recommend that the pressure value used in the selection of the fan is between the following values:

- Maximum pressure drop of the filter: 300 Pa (least energy efficient criterion).
- Half-life pressure of the filter: average value between the initial and maximum pressure drop (most energy efficient criterion).

Example of estimation of the half-life pressure drop

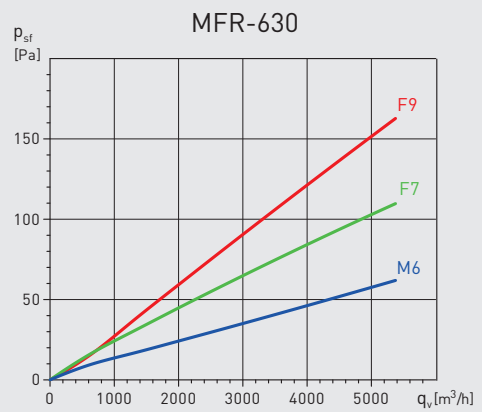
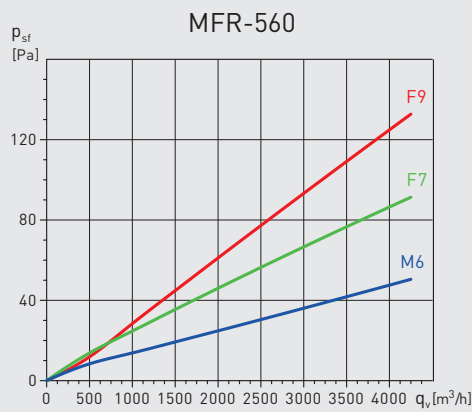
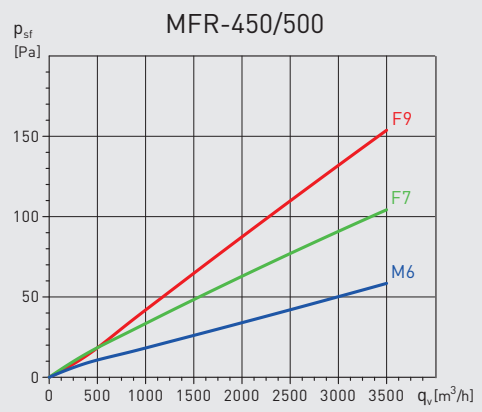
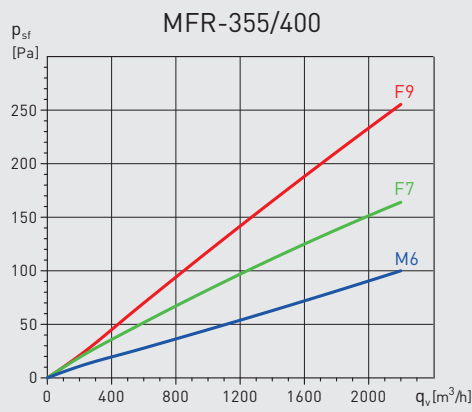
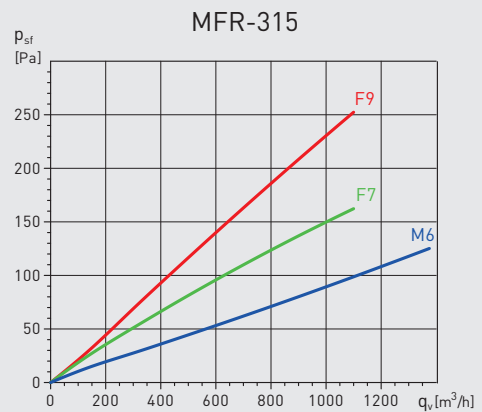
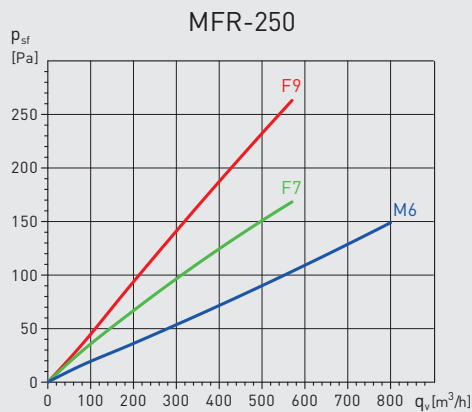
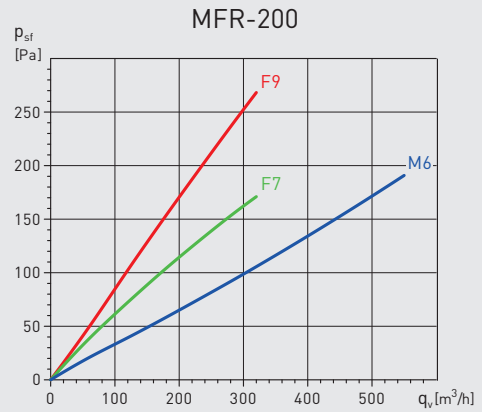
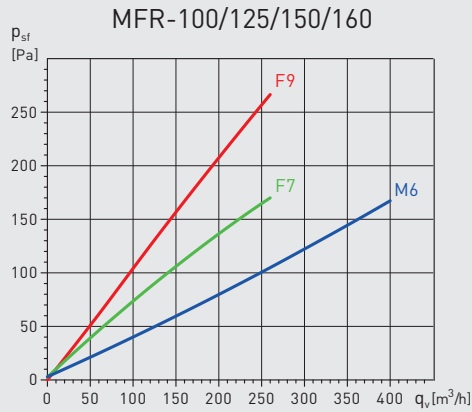


Determine half-life pressure drop of the MFR-250 F6 filter with a flow rate of 600 m³/h:

Initial pressure drop: 110 Pa
 Final pressure drop: 300 Pa
 Half-life pressure drop: (110+300)/2 = **205 Pa**

Pressure drop of MFR filters

Pressure drop values for clean filter





IFL-G4

Filtration box with IFR-G4 filters incorporated

Casing manufactured from galvanised sheet steel and provided with G4 filter type.

Supplied with standard rectangular flanges.

Access door to ease filter replacement.

Can be fitted in any position.

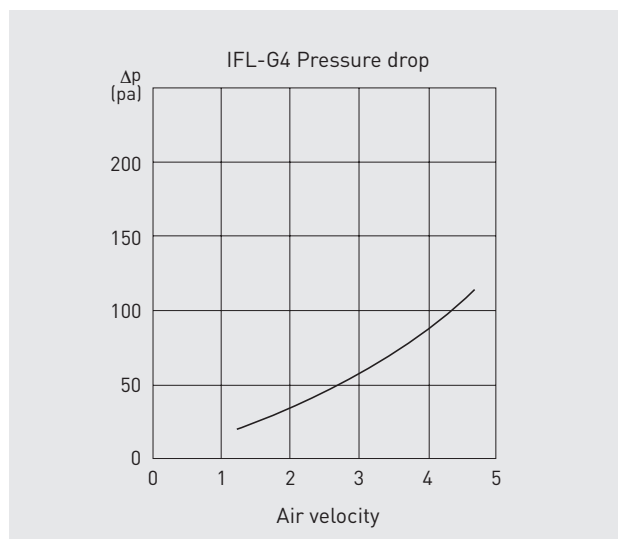
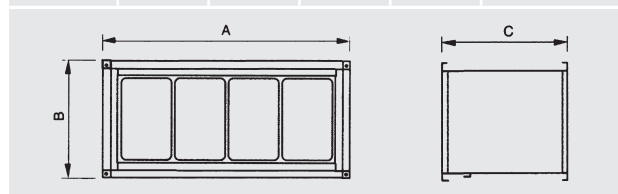
Working temperature up to 80°C.

Maximum recommended differential pressure: 200Pa.

Spare filter: IFR .. G4.

As accessory: Differential pressure switch (DPS 2-30 pressure switch - 20 to 300Pa).

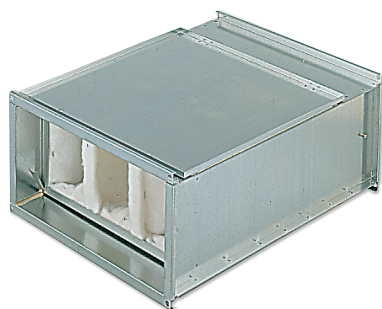
Model	A	B	C	Weight (kg)	Filter
IFL-200 G4	440	240	190	3,5	IFR-200 G4
IFL-225 G4	540	290	190	4,0	IFR-225 G4
IFL-315 G4	640	390	190	5,5	IFR-315 G4
IFL-355 G4	740	440	190	6,0	IFR-355 G4
IFL-400 G4	840	540	190	7,5	IFR-400 G4
IFL-450 G4	1040	540	190	9,0	IFR-450 G4



IFL-F



IFL-F filtration box without filter.



IFL-F filtration box with IFR-F filter installed.

Filtration box, provided without filter, suitable to mount IFR-F bag filters.

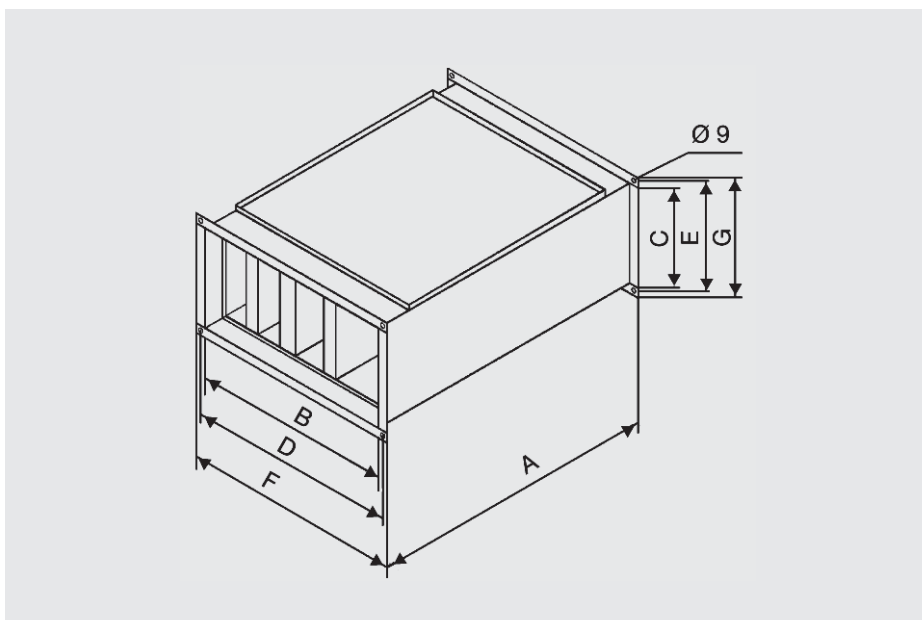
For indoor installation. Low profile design, optimizing its installation in ceiling.

Casing manufactured from galvanised sheet steel.

Supplied with standard rectangular flanges.

Access door to mount the IFR filter and to easy filter replacement.

Differential pressure switch as accessory (DPS 2-30 and 10-100 pressure switches 20 to 300Pa and 100 to 1000Pa).



Model	A	B	C	D	E	F	G	Weight (kg)
IFL-200 F	580	400	200	420	220	440	240	7,8
IFL-225 F	580	500	250	520	270	540	290	9,2
IFL-315 F	580	600	350	620	370	640	390	12,0
IFL-355 F	580	700	400	720	420	740	440	11,8
IFL-400 F	580	800	500	820	520	840	540	16,8
IFL-450 F	580	1000	500	1020	520	1040	540	18,8



IFR-F

Bag filters to mount on IFL-F filter boxes.

Filtration efficiency

Model	Filtration efficiency	
	s/EN-779	s/ISO-16890
IFR F5	M5	ISO ePM10 55%
IFR F7	F7	ISO ePM1 65%
IFR F9	F9	ISO ePM1 85%

Characteristics

Model	Frame material	Filter media material	Maximum working temperature (°C)	Maximum relative humidity [%]	Fire resistance	Final pressure drop (Pa)
IFR F5	Plastic	Fiber glass fibers	80°C	90%	Not declared	250
IFR F7	Plastic	Fiber glass fibers	80°C	90%	Not declared	400
IFR F9	Galvanized steel	Synthetic microfibers	90°C	90%	F1 s/DIN-53438	300

Correspondence between IFL-F filter boxes and IFR-F filters

Filter box	Filters (each box fits only one filter)			Filtering surface area (m²)			Maximum air flow rate (m³/h)		
	M5 ePM10 55%	F7 ePM1 65%	F9 ePM1 85%	M5 ePM10 55%	F7 ePM1 65%	F9 ePM1 85%	M5 ePM10 55%	F7 ePM1 65%	F9 ePM1 85%
IFL-200 F	IFR-200 F5	IFR-200 F7	IFR-200 F9	0,55	0,55	0,78	700	600	750
IFL-225 F	IFR-225 F5	IFR-225 F7	IFR-225 F9	1,80	1,80	1,58	1200	1000	1400
IFL-315 F	IFR-315 F5	IFR-315 F7	IFR-315 F9	2,10	2,10	2,97	2400	2200	2500
IFL-355 F	IFR-355 F5	IFR-355 F7	IFR-355 F9	2,10	2,10	3,40	2600	2200	3100
IFL-400 F	IFR-400 F5	IFR-400 F7	IFR-400 F9	3,00	3,00	5,23	3800	3100	4700
IFL-450 F	IFR-450 F5	IFR-450 F7	IFR-450 F9	3,40	3,40	5,82	4300	3500	5250

Selection criteria

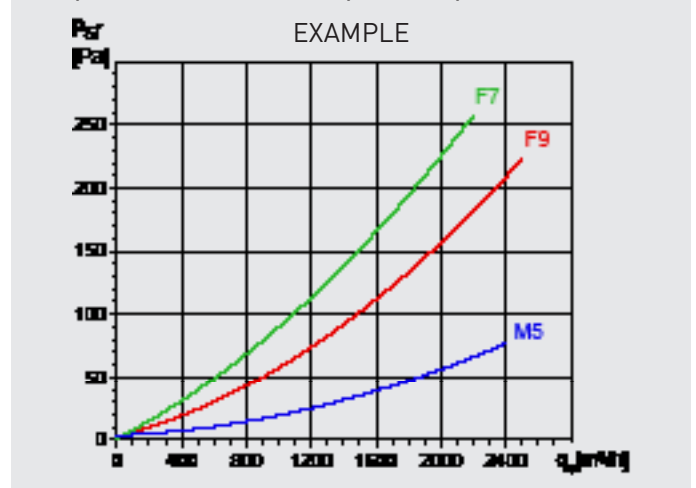
The information displayed in the curves on the following page shows the relationship that exists between the air flow circulating through the filter box and the pressure drop generated by the filter in the initial operating conditions (Clean filter).

When selecting a fan or ventilation unit associated with the filter box, it is essential to add a pressure margin designed to cover fouling of the filters. The value of this pressure depends on multiple factors, such as the particle content of the outside environment, the hours the facility will be operating, sizing criteria and the type of fan associated with the box.

We recommend that the pressure value used in the selection of the fan is between the following values:

- Maximum pressure drop of the filter: 300-400 Pa (least energy efficient criterion).
- Half-life pressure of the filter: average value between the initial and maximum pressure drop (most energy efficient criterion).

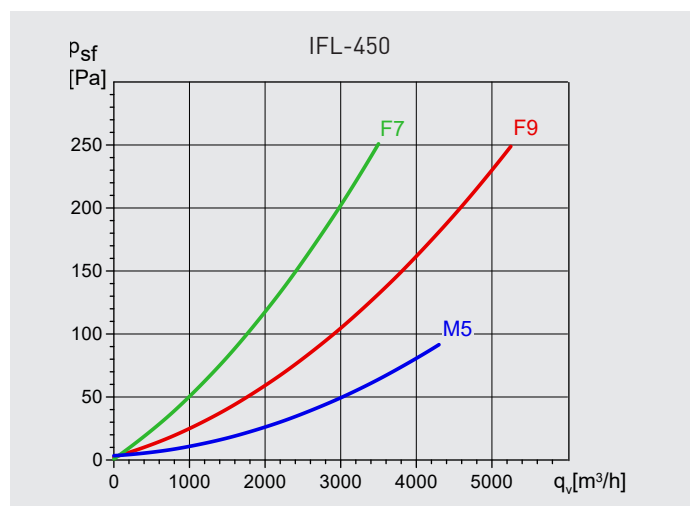
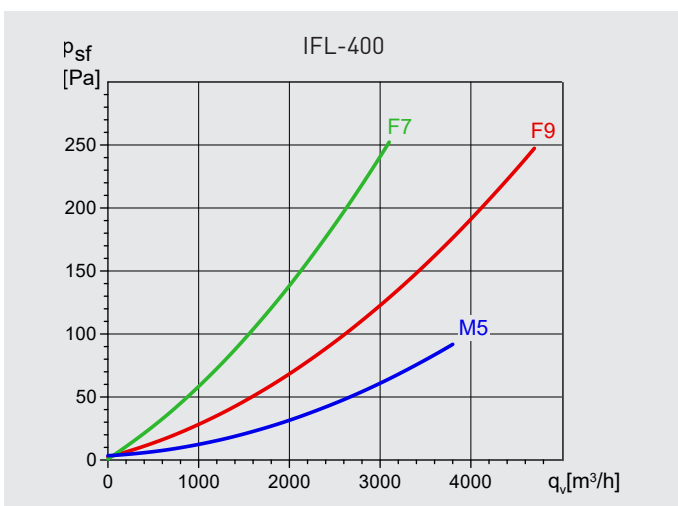
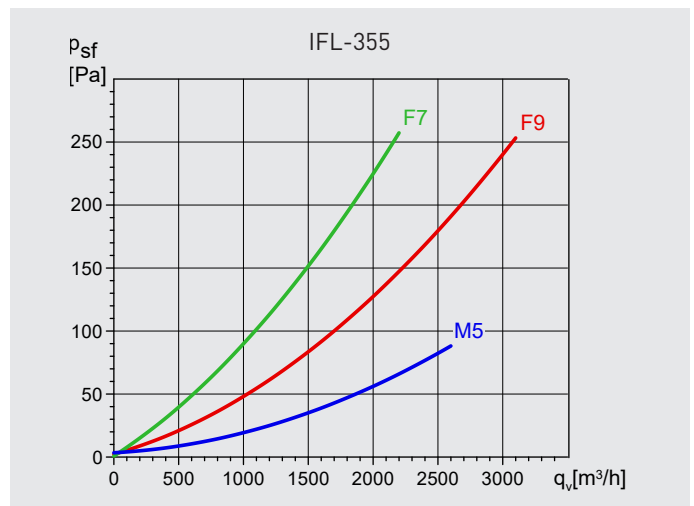
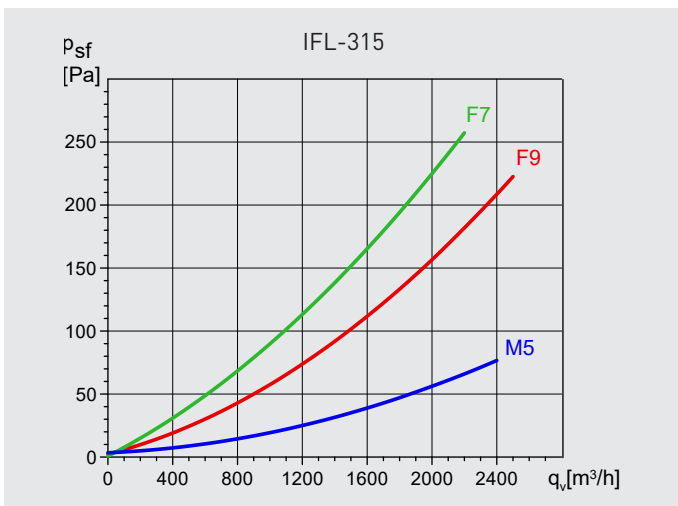
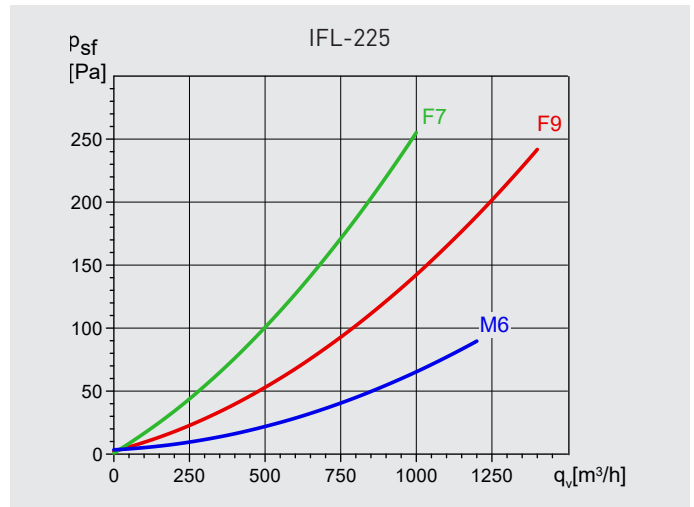
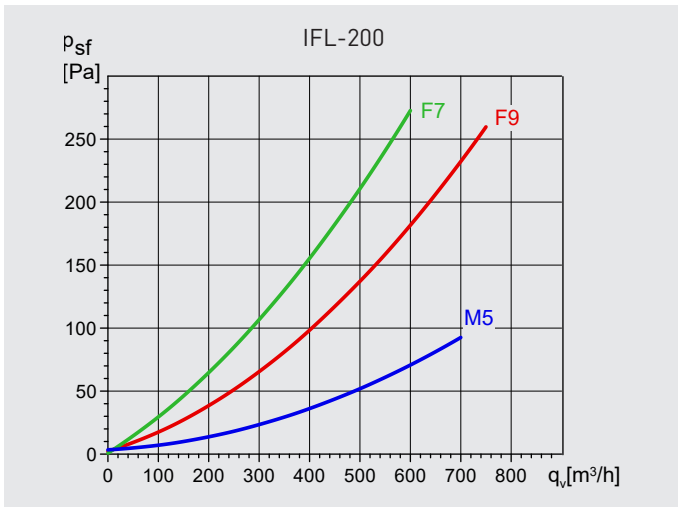
Example of estimation of the half-life pressure drop



Determine half-life pressure drop of the IFR-315 F9 filter with a flow rate of 1500 m³/h:

- Initial pressure drop: 100 Pa
- Final pressure drop: 300 Pa
- Half-life pressure drop: $(100+300)/2 = 200 \text{ Pa}$

Filtration box IFR-F with filter mounted - Pressure drops





AFR-N Spare filter

Spare filter		
Spare filter G4	Spare filter F7	Spare filter F9
AFR-N-200/05 G4	AFR-N-200/05 F7	AFR-N-200/05 F9
AFR-N-250/08 G4	AFR-N-250/08 F7	AFR-N-250/08 F9
AFR-N-315/12 G4	AFR-N-315/12 F7	AFR-N-315/12 F9
AFR-N-355/18 G4	AFR-N-355/18 F7	AFR-N-355/18 F9
AFR-N-355/23 G4	AFR-N-355/23 F7	AFR-N-355/23 F9
AFR-N-400/30 G4	AFR-N-400/30 F7	AFR-N-400/30 F9
AFR-N-450/45 G4	AFR-N-450/45 F7	AFR-N-450/45 F9
AFR-N-500/55 G4	AFR-N-500/55 F7	AFR-N-500/55 F9
AFR-N-630/80 G4	AFR-N-630/80 F7	AFR-N-630/80 F9



PF 60

Passive filter element, illumination and control.

Fitted in combination with any of the kitchen extractors, supplying a perfect finish to the hood installation, as well as providing illumination and filtration.

Fitted with two switches: 1 - On/Off; 2 - Light switch. It also incorporates an easy to clean metal filter.

