Fire Damper
YD343

GMCAIR HVAC SYSTEM&EQUIPMENT LLC
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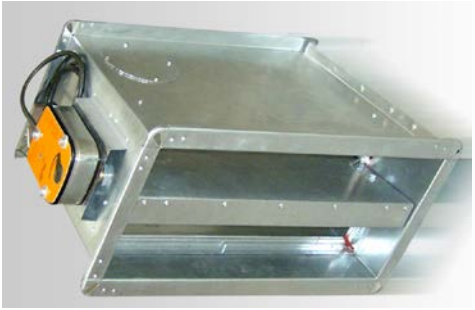


DESCRIPTION:

YD343 fire dampers designed to prevent spreading of fire from the nearby zones in ventilating systems. Mounting on rectangular and circular ducts specially fire zones. As mounting on ventilation ducts, the dampers can be used on brick and concrete walls.

MATERIAL :

Galvanized Metal Sheet

Products casing and blades are manufactured from 1,5 mm galvanized sheet and damper handle is manufactured from 5 mm galvanized DKP sheet. Furthermore, fire resistant rockwool with 70 kg/m density and 20 mm thickness is used between the walls of blades

APPLICATIONS :

At wall connections as split seperators of air-conditioning systems and also related ducts installed at locations exposing fire. It prevents spreading of any fire in the building into closer locations and helps for extinguishing fire by closing any ventilation systems. An optional alarm switch is used to stop air conditioning ducts.

FUNCTION:

- They are made from galvanised sheet body and single blade.
- Moving blades are made from double walled galvanised sheet and between the walls insulation material is used.
- Between blade and body there are fireproof sealing.
- Spring return actuator can be usable which will close the damper by a signal from fire panel.
- Pneumatic applications are also avaiable.
- Damper casing made with universal 25 mm or 35mm flanges as a standard.

STANDARD SIZES (mm):

AVAILABLE SIZES (mm) - Always width x height								
	WIDHT							
HEIGHT	100	200	300	400	500	600	700	800
200	X	X	X	X	X	X	X	X
300	X	X	X	X	X	X	X	X
400	X	X	X	X	X	X	X	X
500	X	X	X	X	X	X	X	X
600	X	X	X	X	X	X	X	X
700	X	X	X	X	X	X	X	X
800	X	X	X	X	X	X	X	X
900	X	X	X	X	X	X	X	X
1000	X	X	X	X	X	X	X	X
1100	X	X	X	X	X	X	X	X
1200	X	X	X	X	X	X	X	X
1300	X	X	X	X	X	X	X	X
1400	X	X	X	X	X	X	X	X
1500	X	X	X	X	X	X	X	X

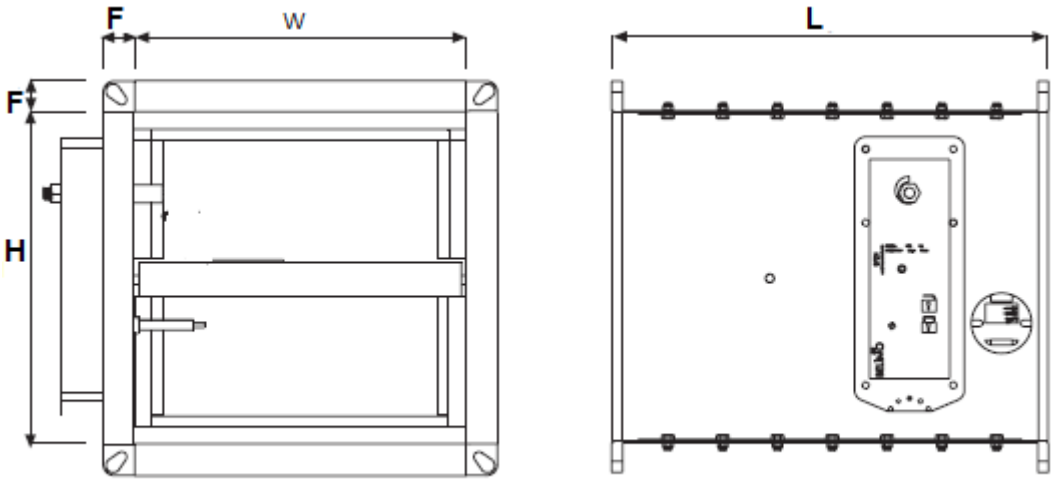
H (mm)
200
250
300
350
400
450
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800

W (mm)
100
200
300
400
500
600
700
800
900
1000

Flange

F (mm)
30
25

DRAWING



The servomotors are supplied for 24 V operation 230 V operation available on request. GMCAIR incorporates motors from different manufacturers (Belimo, Siemens, etc.).

SIEMENS SERVOMOTOR

BELIMO SERVOMOTOR

BELIMO SERVOMOTOR + BSIA

SELECTION TABLES

EFFECTIVE AREA TABLE (m2)

		W (mm)													
		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
H (mm)	150 Aeff f	0,012	0,025	0,034	0,044	0,053	0,063	0,073	0,082	0,092	0,101	0,111	0,121	0,130	0,140
		0,95	0,90	0,90	0,85	0,80	0,80	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75
	200 Aeff f	0,022	0,041	0,055	0,070	0,084	0,099	0,114	0,128	0,143	0,157	0,172	0,187	0,201	0,216
	Aeff f	1,00	0,90	0,90	0,85	0,80	0,80	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75
	300 Aeff f	0,040	0,068	0,093	0,118	0,142	0,167	0,191	0,216	0,241	0,265	0,290	0,314	0,339	0,364
	Aeff f	1,20	1,00	0,95	0,90	0,90	0,85	0,82	0,80	0,80	0,80	0,80	0,80	0,80	0,80
	300 Aeff f	0,058	0,096	0,131	0,165	0,200	0,235	0,269	0,304	0,338	0,373	0,408	0,442	0,477	0,511
	Aeff f	1,30	1,10	1,00	0,95	0,92	0,90	0,85	0,85	0,85	0,85	0,85	0,80	0,80	0,80
	500 Aeff f	0,075	0,124	0,169	0,213	0,258	0,302	0,347	0,392	0,436	0,481	0,525	0,570	0,615	0,659
		1,40	1,20	1,10	1,00	0,95	0,92	0,90	0,90	0,85	0,85	0,80	0,80	0,80	0,80
	600	0,093	0,152	0,206	0,261	0,316	0,370	0,425	0,479	0,534	0,589	0,643	0,698	0,752	0,807
		1,60	1,40	1,20	1,10	1,00	0,95	0,95	0,95	0,90	0,90	0,85	0,85	0,80	0,80
	700	0,111	0,180	0,244	0,309	0,373	0,438	0,503	0.567	0,632	0,696	0,761	0,826	0,890	0,955
		1,70	1,45	1,30	1,20	1,10	1,00	1,00	0,95	0,90	0,90	0,85	0,85	0,85	0,85
	800	0,129	0,207	0,282	0,357	0,431	0,506	0,580	0,655	0,730	0,804	0,879	0,953	1,028	1,103
		1,80	1,60	1,40	1,30	1,20	1,10	1,10	1,00	1,00	0,95	0,90	0,90	0,90	0,85

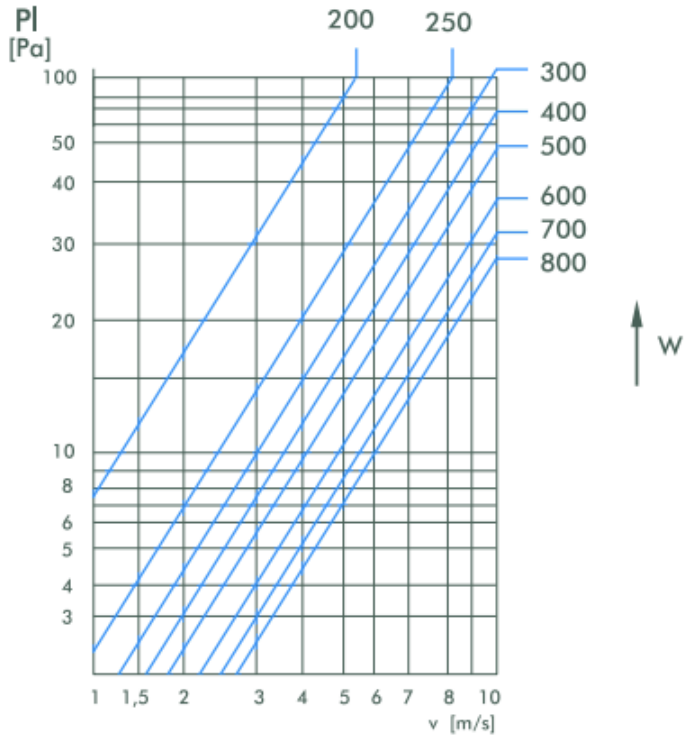
PRESSSURE LOSS DIAGRAM

Pt = Pl*f

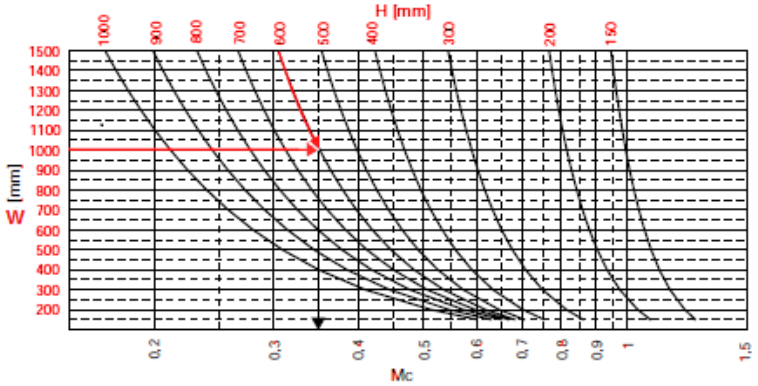
Pt = Corrected pressure loss [Pa]

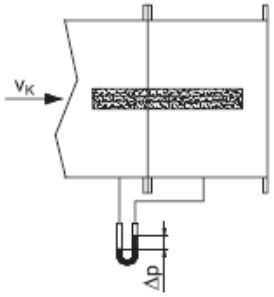
Pl = Pressure loss on the diagram [Pa]

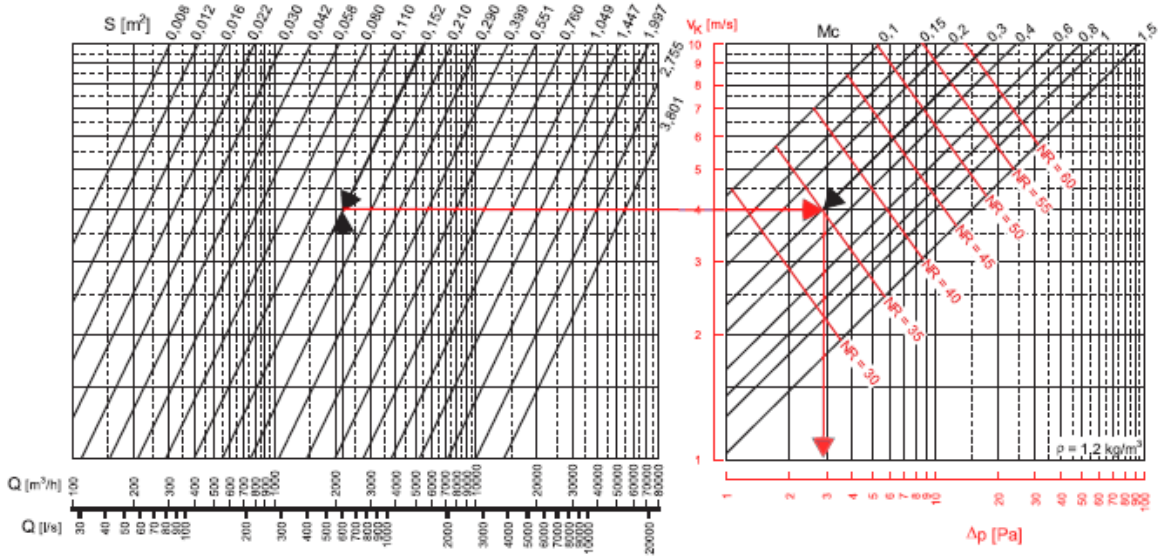
f = Pressure correction factor



PRESSURE DROP AND NOISE LEVELS

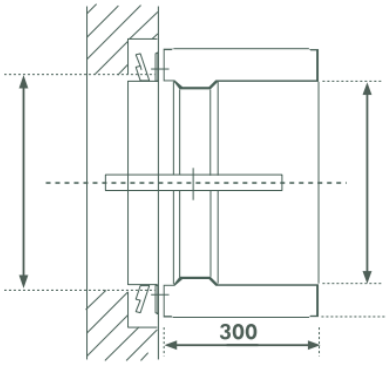




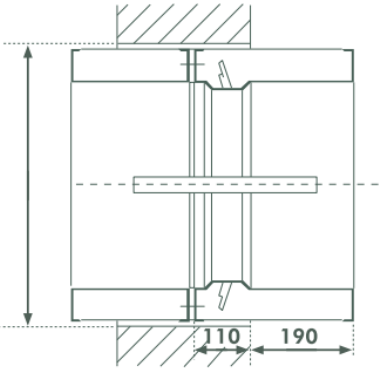


- Q [m³/h] [l/s] airflow rate
- V_k [m/s] air velocity
- S [m²] free surface
- Mc shape coefficient
- ΔP [Pa] pressure loss
- NR noise rate (ISO standard, referred to 10^{-12}) without considering the room attenuation

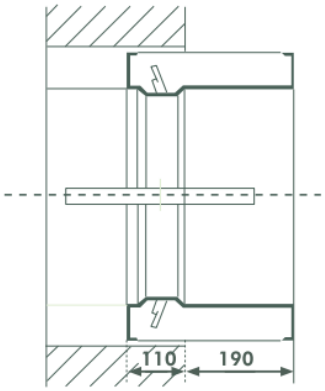
Installation & Assembly



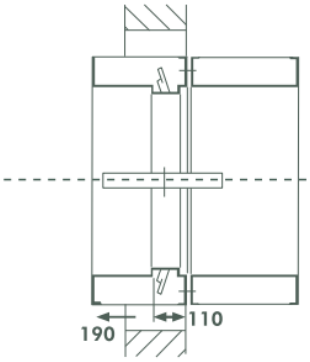
Against wall or floor with masonry subframe



In the wall or floor with addional casing



In the wall or floor

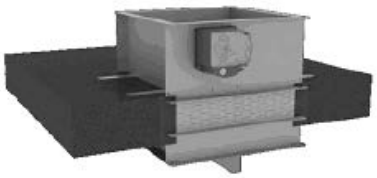


In the wall or floor, duct connection

In wall

In stud wall

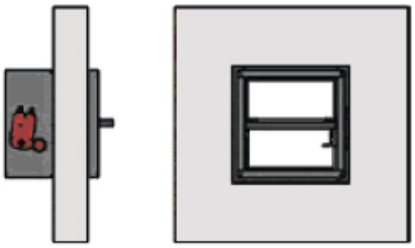
In floor



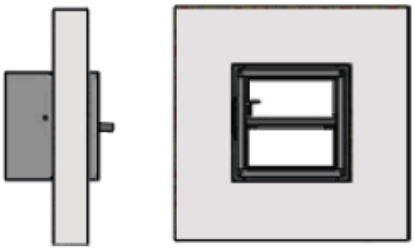
CORRECT INSTALLATION

Motor-driven

Motor-driven device at 0º



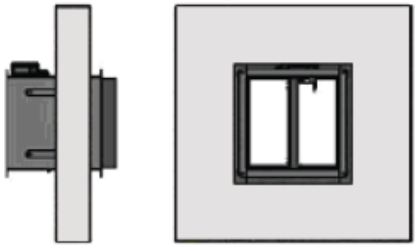
Motor-driven device at 180º



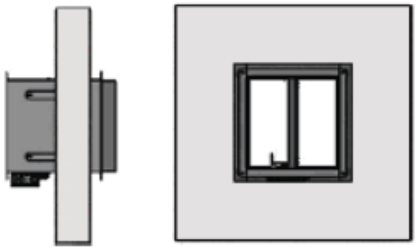
INCORRECT INSTALLATION

Motor-driven

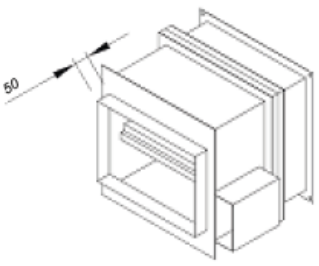
Motor-driven device at top



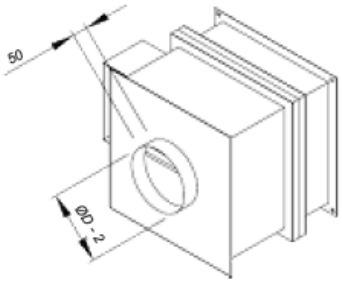
Motor-driven device at bottom



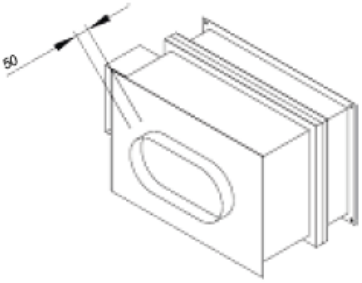
Special finishes with duct connection spigots and truncated conical transformations



Rectangular



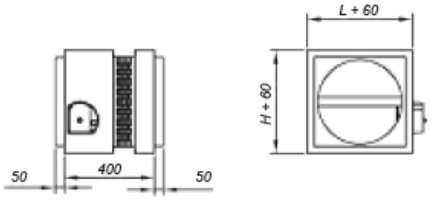
Circular



Oval

Length of the frame assembly in relation to the height of the damper.

Reducers



If H < 250

If H ≥ 300

ORDER CODE

YD-343	F25	01	L750	N 1000X700
FD-343: Rectangular,with motor				WXH N: Neck Size
				S: Standad (H+50mm) L: Requested Product Length (custom choice)
F00: No Flange F25: Flange Width = 25mm F30: Flange Width = 30mm		00: Standard Duct Connection 01: Through Wall Connection		