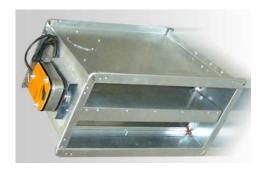






Fire Damper YD343





#### **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.

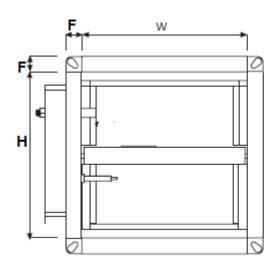


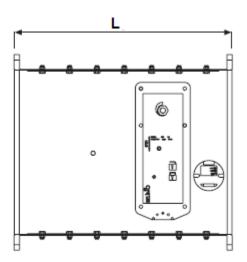
# **STANDARD SIZES (mm):**

AVAIL	ABLE	SIZES	(mm)	- Ah	vays v	width	x hei	ght			
	WIDHT										
HEIGHT	100	200	300	400	500	600	700	800			
200	Х	Х	X	X	Х	X	Х	X			
300	Х	Х	Х	Х	Х	Х	Х	Χ			
400	Х	Х	Х	Х	Х	Х	Х	Х			
500	Х	Х	Х	Х	X	Х	Х	Х			
600	Х	Х	Х	Х	Х	Х	Х	Х			
700	Х	Х	X	Х	Х	Х	Х	Х			
800	Х	Х	X	X	X	X	Х	X			
900	Х	Х	Х	Х	Х	Х	Х	Х			
1000	Х	Х	Х	X	Х	Х	Х	X			
1100	Χ	Х	Χ	Х	Χ	Х	Х	Х			
1200	Х	Х	Х	Х	Х	Х	Х	Х			
1300	Х	Х	Χ	Х	Х	Х	Х	Х			
1400	Х	Х	Х	Х	Х	Х	Х	Х			
1500	Х	Х	Х	Х	Х	Х	Х	Χ			

H (mm)	W (mm)					
200	100					
250	200					
300	300					
350	400					
400	500					
450	600					
500	700					
600	800					
700	900					
800	1000					
900						
1000	Elango					
1100	Flange					
1200						
1300	F (mm)					
1400	30					
1500	25					
1600						
1700						
1800						

### **DRAWING**





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





### **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
		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
	800	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

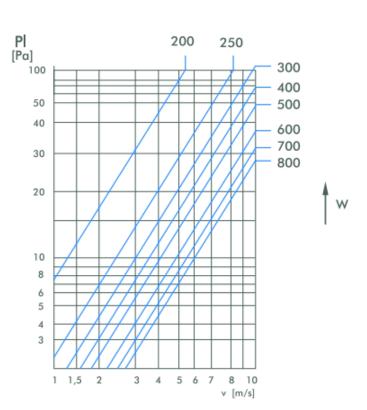


Pt = Corrected pressure loss

PI = Pressure loss on the diagram [Pa]

[Pa]

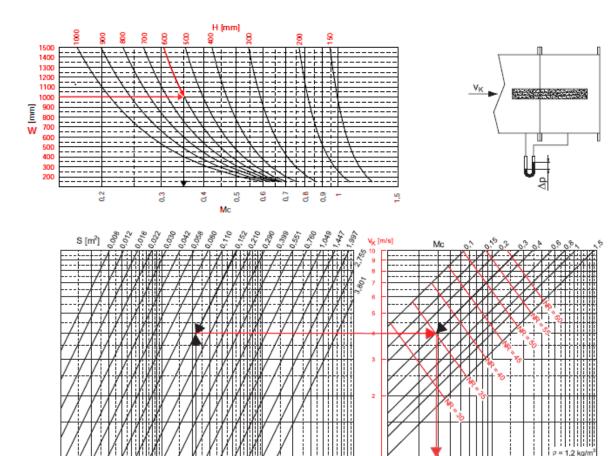
f = Pressure correction factor





∆p [Pa]

### PRESSURE DROP AND NOISE LEVELS



- Q [m³/h] [l/s] airflow rate

Q [l/s] 8 8 8 8 8 8 8 8 8

-  $V_k$  [m/s] air velocity

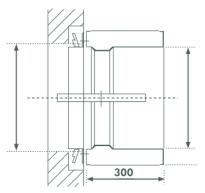
- S [m²] free surface - Mc shape coeffic

- Mc shape coefficient -  $\Delta P$  [Pa] pressure loss

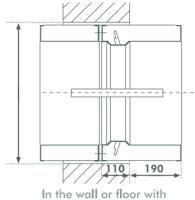
- NR noise rate (ISO standard, referred to 10<sup>-12</sup>) without considering the room attenuation



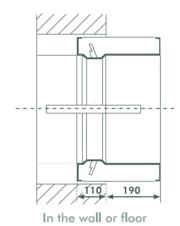
# **Installation & Assembly**

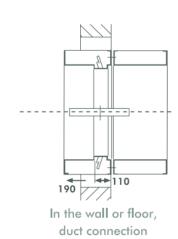


Against wall or floor with masonry subframe



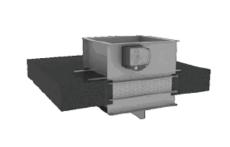
In the wall or floor with addional casing











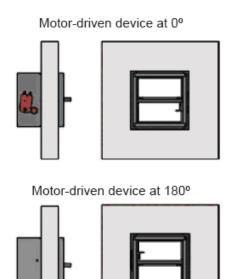
In floor

In stud wall



### **CORRECT INSTALLATION**

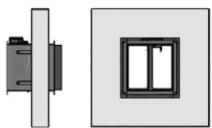
### Motor-driven



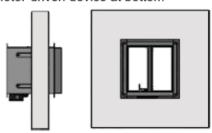
### **INCORRECT INSTALLATION**

#### Motor-driven

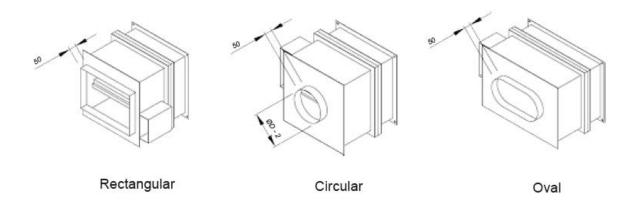
Motor-driven device at top



Motor-driven device at bottom

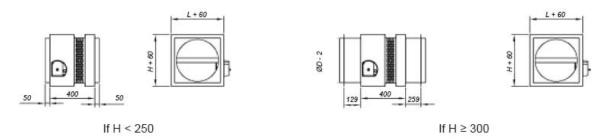


# Special finishes with duct connection spigots and truncated conical transformations



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

#### Reducers





### **ORDER CODE**

