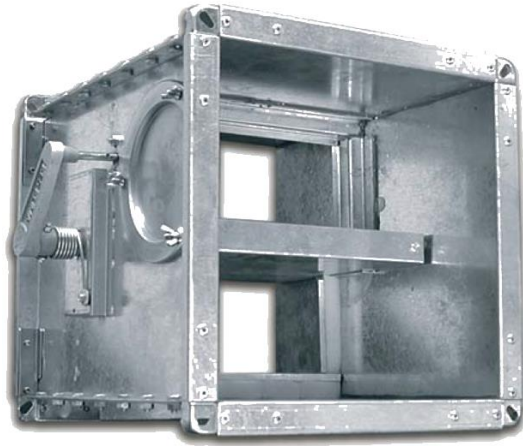


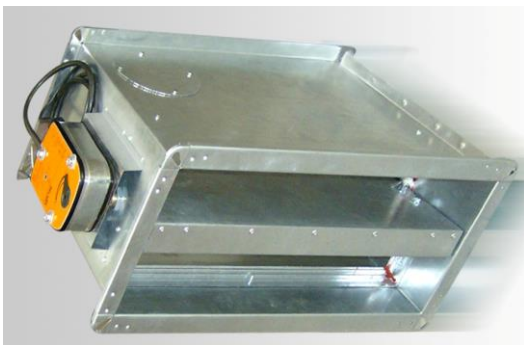
FIRE DAMPERS

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GMC FD-043 PRODUCT SPECIFICATIONS:

- Standard Material: Galvanized steel sheet with isolated damper cover.
- Prevents flame and smoke advancing at air ducting system, during a local fire.
- High resistance against corrosion.
- Two hours resistance at 1000°C.
- Installed on wall partitions/penetration holes where ducting pass through.
- Has four models: Standard Model (FD-143), Circular Model (FD-243), Servo-motorized Model (FD-343), Servo-motorized Circular Model (FD-443).
- Manufactured with electrical driven spring return actuator including electro thermal fuse set at 72°C (+/- 4 °C), or manufactured with manual including mechanical thermal fuse set at 72°C (+/- 4 °C).



HVAC Systems and Equipments Co.
4640 Hedgoxe Road 227 Plano, TX 75024 – US

www.gmcair.com

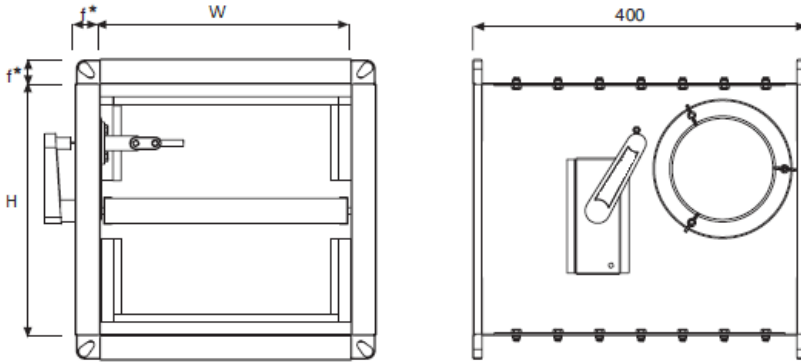
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TECHNICAL DETAILS

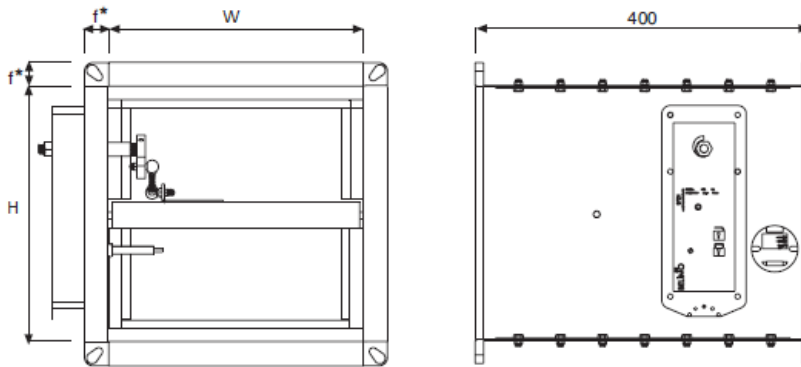
FD-143



Standard Sizes

H (mm)	W (mm)
200	100
250	200
300	300
350	400
400	500
450	600
500	700
600	800
700	900
800	1000

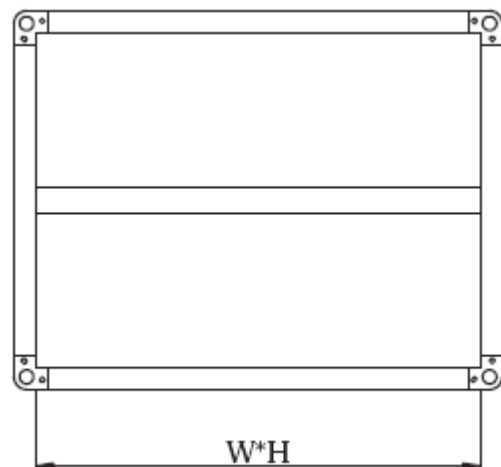
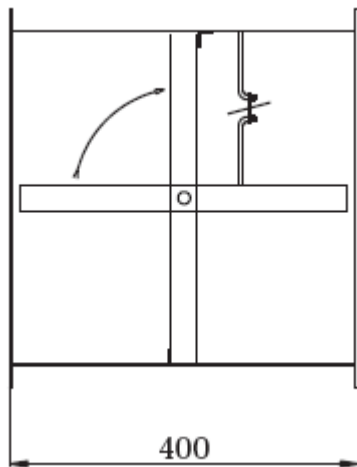
FD-343



Flange

f (mm)
30
35

35mm flange is used when any size of H or W is above 1000mm.

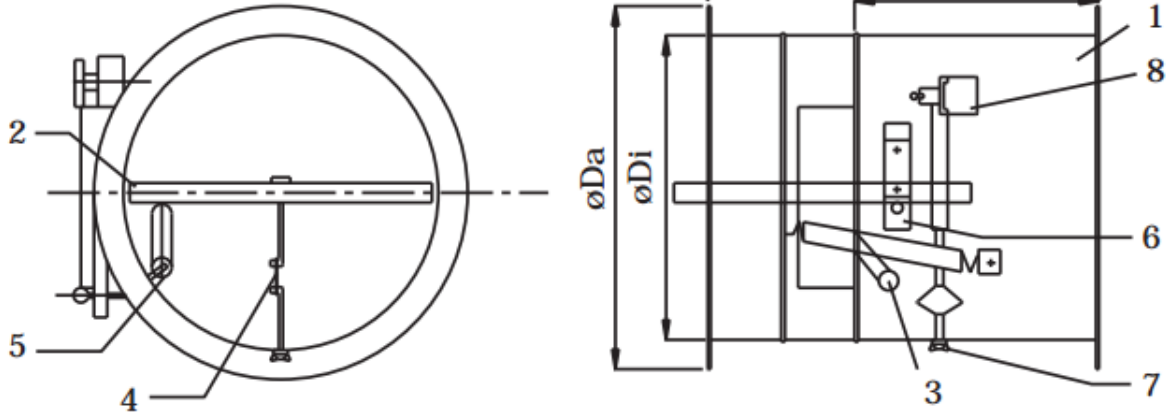


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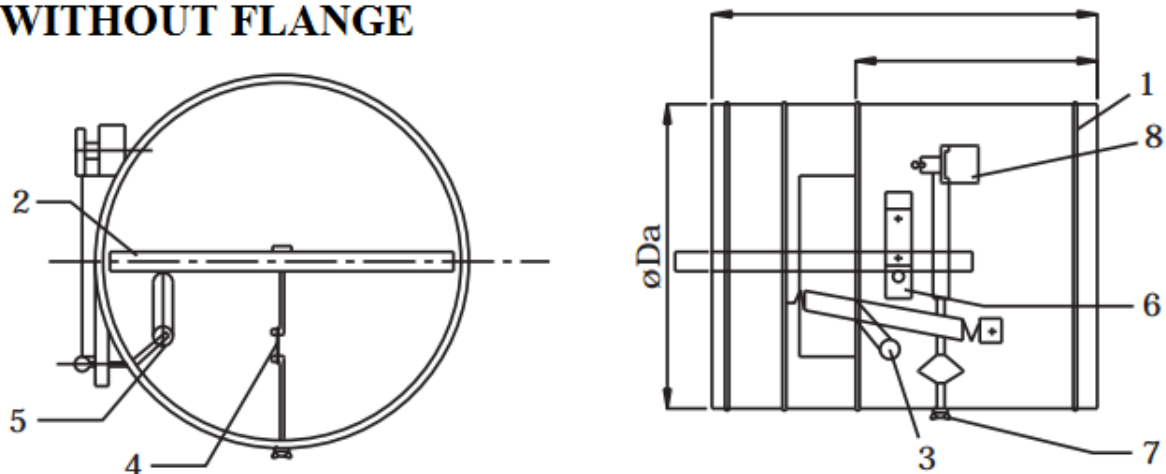


FD-243/443 WITH FLANGE



- 1- Chassis
- 2- Damper Blade
- 3- Manual Lever
- 4- Thermal Release (fusible link 72°C)
- 5- Tension Spring
- 6- Mechanical Interlock
- 7- Tensioning Nut
- 8- Electrical Cut-Out Switch (on request)

FD-243/443 WITHOUT FLANGE



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WITHOUT FLANGE

Standard sizes (mm)	øDa
150	148
200	198
250	248
300	298
350	348
400	398
450	448
500	498
600	598

WITH FLANGE

Standard sizes (mm)	øDa	øDi
700	760	700
800	860	800
900	960	900
1000	1060	1000
1250	1310	1250

FD-143/343, 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
		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
		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
		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

FD-243/443, EFFECTIVE AREA TABLE (m²)

Ø D (mm)	150	200	250	300	350	400	500	600	700	800	900	1000
Aeff [m ²]	0,012	0,024	0,040	0,059	0,083	0,111	0,178	0,260	0,359	0,473	0,602	0,748

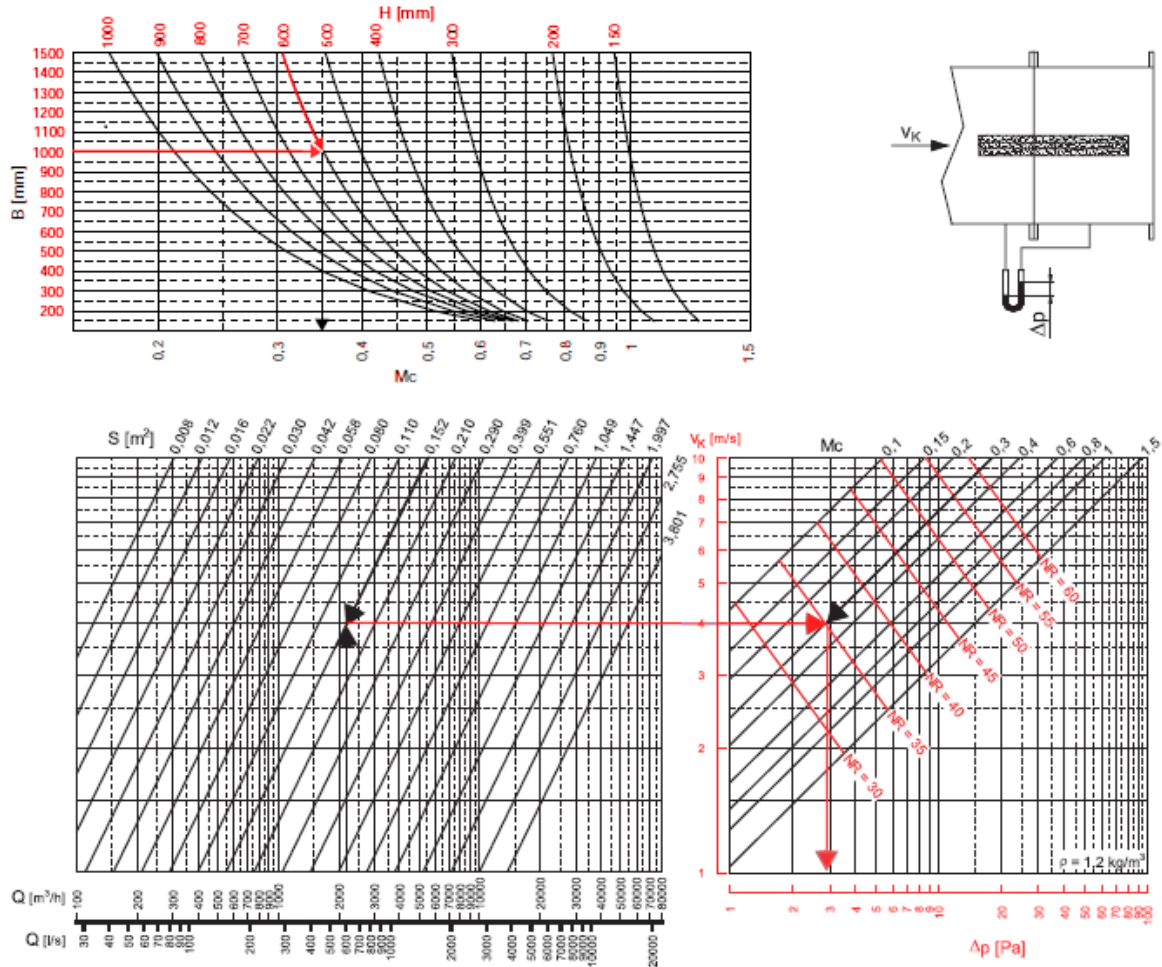


FIRE DAMPERS

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FD-043, PRESSURE DROP AND NOISE LEVELS

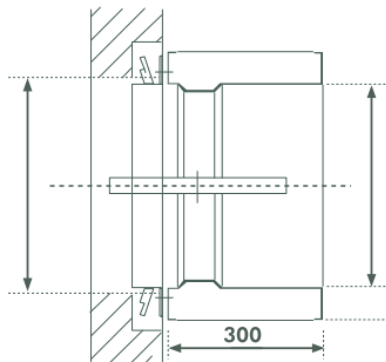


- Q [m³/h] [l/s] airflow rate
- V_k [m/s] air velocity
- S [m²] free surface
- Mc shape coefficient
- ΔP [Pa] pressure loss
- NR noise rate (ISO standard, referred to 10⁻¹²) without considering the room attenuation

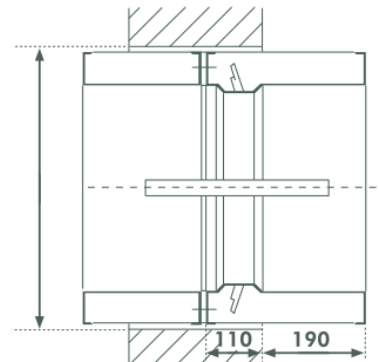


FIRE DAMPERS

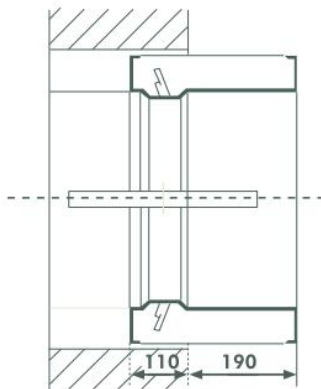
MOUNTING DETAIL FD-143



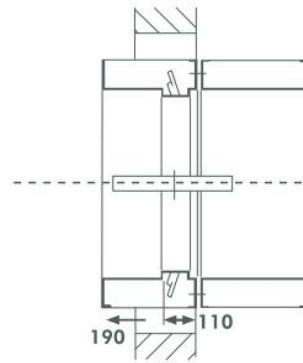
Against wall or floor with
masonry subframe



In the wall or floor with
additional casing



In the wall or floor



In the wall or floor,
duct connection

ORDER PARAMETERS:

FD-043	F00	01	L1200	N 1000X700
<div style="display: flex; justify-content: space-between;"> <div style="background-color: #1a3d4d; color: white; padding: 5px;"> <p>FD-143: Rectangular, 72°C thermal fuse</p> <p>FD-243: Circular, 72°C thermal fuse</p> <p>FD-343: Rectangular, Servo-motorized/spring back</p> <p>FD-443: Circular, Servo-motorized/spring back</p> </div> <div style="background-color: #ff0000; color: white; padding: 5px;"> <p>N: Neck Size</p> <p>D: Neck Diameter</p> </div> </div> <div style="margin-top: 20px; text-align: center;"> <p>L: Requested Product Length</p> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="background-color: #ff0000; color: white; padding: 5px;"> <p>F00: No Flange</p> <p>F30: Flange Width = 30mm</p> <p>F35: Flange Width = 35mm</p> </div> <div style="background-color: #ff0000; color: white; padding: 5px;"> <p>00: Standard Duct Connection</p> <p>01: Through Wall Connection</p> </div> </div>				