

Motorised Fire & Smoke Dampers

With thermal responsive device (manually resettable) & spring return actuator



FD 125

CIVIL DEFENCE APPROVED

Compliance

- UL 555 / UL 555S classified.
- Constructed and tested as per latest versions of UL 555 and UL 555S standards.

Advantages

- Fire resistance: 1.5h.
- Leakage: Class II - 250 °F.
- Dynamic rating: 2000 fpm at 4" w.g.
- Installation: Upstream or downstream; Vertical or Horizontal.
- Suitable for static & dynamic systems.
- Easy maintenance due to motorization.

APPLICATION

- MFSD are designed to be installed in HVAC ductwork at locations that are designated as fire barrier or fire & smoke barrier. It should not be installed in a smoke extraction ductwork for smoke extraction applications.
- It is suitable for vertical installation in walls/partitions and horizontal installation in floors having a fire resistance rating of less than 3 hours (as per NFPA 90A).
- It prevents the spread of fire/smoke inside residential, commercial and industrial buildings.

DESCRIPTION

- Normally open but can be closed through remote signal from Fire Alarm Control Panel / BMS or closed automatically upon detection of heat.
- Protects the integrity of a fire/smoke barrier wherever it is penetrated by HVAC ductwork by preventing the spread of fire/smoke.

CONSTRUCTION

- Casing: 140mm deep, hat-shaped casing manufactured from 16 ga. (1.5mm) galvanised steel.
- Blade: 3V-groove shaped, single skin blades manufactured from 16 ga. (1.5mm) galvanised steel. Parallel blade operation.
- TRD: Manually resettable Thermal Responsive Device that operates at 165°F (74°C).
- Blade tip seal: Silicon rubber seals parallelly bonded to blade edge through self-forming silicon sealant.
- Jamb seal: Stainless steel, spring action type.
- Actuator: UL listed, Spring return, Electric 24VAC / 230VAC, quick opening & closing.
- Jackshaft: 12mm x 12mm square jackshaft to ensure tight grip at the actuator.
- Brass bush: round for spindles and square for jackshaft.
- Sleeve: 400mm long factory installed sleeve (standard supply) manufactured from 16ga (1.5mm) galvanised steel.
- Minimum size: 203mm x 203mm (for ** 150mm x 150mm, see note under Available Sizes table).
- Maximum size: 914mm x 914mm (single section).
- * Larger sizes manufactured in multiple sections.

INSTALLATION

- Jackshaft upstream or jackshaft downstream.
- Vertical in wall/partitions or horizontal in floors.

RANGE

Description	Code
FD 125 - MFSD with G.I. casing & blades	
*FD 125-1 - MFSD with G.I. casing & SS (grade 304) blades	
*FD 125-2 - MFSD with SS (grade 304) casing & blades	

ACCESSORIES

Description	Code
Retaining angles frame – 40 x 40 x 2.3 mm	
Retaining angles lose – 40 x 40 x 2.3 mm	
Duct transitions: rectangular, circular or oval	
Access Doors	

*, ** Not available for UL classified dampers

DIMENSIONS (mm)

DESCRIPTION

1 Casing G.I. 1.5 mm	8 Blade stopper G.I. 1.5 mm
2 3V-groove blades G.I. 1.5 mm	9 Slide Seal S.S. 0.3 mm
3 Spring return actuator	10 (TRD) Thermal responsive device
4 Square Jack Shaft (12mm)	11 Jackshaft lever
5 Sleeve G.I. 1.5 mm	12 Side linkage
6 Square brass bush	13 Rivet Ø 4.8 X 10 mm
7 Silicon rubber tip Seal	14 Round brass bush

INSTALLATION DETAILS

Expansion gap $\frac{1}{8}$ " per foot-min $\frac{1}{4}$ "

Mounting angles or mounting angle frame (40 X 40 X 2.3mm)

Sleeve and mounting angle frame connection by Ø 4.8 X 16 mm rivets or M6 X 16 mm bolts or 12 mm long welds spaced @ 152 mm centres(max)

TRD

Spring return actuator

Blade stopper

Casing

Sleeve

Breakaway joint

Wall(masonry/gypsum)

16" max

6" max

Duct

AVAILABLE SIZES (mm)

W	150**	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
H	150**	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900

** 200W or 200H damper with factory installed sleeve will have rectangular/round/oval duct transition on both sides of sleeve.

• Any combination of W x H. For non-standard sizes, please consult us.