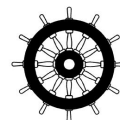




Light Fire Damper (LFD)

Achieve low cost without compromising on performance with the Wozair Light Fire Damper - USCG/MED mark can be supplied.



USCG/
MED



Light Fire Damper

Wozair manufacture LFD fire dampers for installation in light gauge ductwork in aggressive coastal, marine and offshore environments where integrity, strength and corrosion resistance are important considerations.

Designed and type approved for installation in ventilation ducts which penetrate a steel division to maintain integrity of that division rated A-0 to A-60; bulkhead or deck. The damper can be provided in accordance with the Marine Equipment Directive.

Manufactured using modern CNC laser cutting and folding processes, with metal to metal blade tip and blade edge sealing arrangements to achieve blade leakage in without the aid of gasket materials.

The standard casing thickness is 16G, with 14G and 11G options, using a riveted and welded construction. Dampers with multiple blades are configured for parallel blade motion with linkage external to the damper casing.

Technical Information

Minimum Size

4"W x 4"H x 6"/8"D

Maximum Size

39"W x 39"H x 6"/8"D (A-0 / A-60)

Fire Rating

IMO FTP Code Part 3 and IMO 2010 FTP Code Part 3 for A-0 to A-60 bulkhead and deck divisions

Leakage

Closed blade leakage to Class 2 EN1751

Explosive Atmosphere

ATEX/IECEx SGS Baseefa/SGS Fimko Oy

Materials of Construction

Casing and Flanges:

Materials

Galvanised Sheet Steel (GSS)
Stainless Steel 304L/316L (1.4307/1.4404)
Other Stainless Steel grades available on request

Thickness

16G, 14G
Welded and riveted
Flange drilling detail to ISO 15138 standard
Custom flanges as option

Blades:

Materials

Stainless Steel 304L/316L (1.4307/1.4404)
Galvanised Sheet Steel (GSS)

Thickness

Minimum 16G single skin
Riveted to tubular shafts

Bearings:

Oil impregnated sintered bronze

Shafts:

Ø19 mm (3/4") continuous tubular shaft in Stainless Steel
316/316L (1.4401/1.4404)

Side Seals:

Stainless Steel 316L (1.4404)

Linkage:

Stainless Steel 316L (1.4404)
11G thick link bars arranged to provide parallel blade motion

Blade Gasket:

N/A; metal to metal forms the seal



Mechanical Options

The following options can be incorporated if required:

- Transitions; various options for fitting into circular ductwork
- Earth bosses

Type Approval Certification

DNV GL, ABS and Bureau Veritas Marine Equipment Directive (MED) 2014/90/EU USCG (Mutual Recognition Agreement with MED).

Control Options

Wozair dampers can be operated with electric or pneumatic actuators. The pneumatic and electric controls will be selected based on your exacting requirements. Dampers can be designed to close or open on loss of power when fitted with an electric or pneumatic actuator. The electric actuator options are Petz, Schischek, Belimo and Johnson Controls and pneumatic actuator by Powertork.

The actuator is selected following your technical needs:

- Electric or pneumatic actuation system
- Requested closing time (1, 2 or 3 seconds closing time or longer)
- Class I, II, III Division 1 BCDEFG T6 and zone 1, 2, 21, 22
- Class I, II, III Division 2 ABCDEFG T6 and zone 2, 22
- ATEX and IECEx Zone 1, 21 (II 2GD) and 2, 22 (II 3GD) or non hazardous area, based on actuator selection
- Design Temperature (from -40°F/-40°C to +104°F/+40°C)
- NEMA / IP rating
- Environment (High corrosion resistance)

Weights

LFD Bare Shaft Damper Weight Matrix 16G Thick Case - 8"D

lb	H (in)										
	4	8	12	16	20	24	28	32	36	39	
W (in)	4	9	11	15	18	20	22	26	29	31	33
	8	11	13	18	20	24	26	31	33	35	37
	12	15	18	22	24	29	33	37	40	42	46
	16	18	20	26	29	35	37	44	46	51	53
	20	20	22	29	33	40	42	49	53	57	60
	24	22	26	33	37	44	49	55	60	64	66
	28	24	29	37	40	49	53	62	64	71	73
	32	29	31	42	44	53	57	66	71	77	79
	36	31	33	42	46	55	60	71	73	84	86
	39	33	35	46	51	62	64	75	79	90	95

Additional nominal weights:

Manual handle 7lb

Belimo or Johnson Controls actuator with junction box 7lb

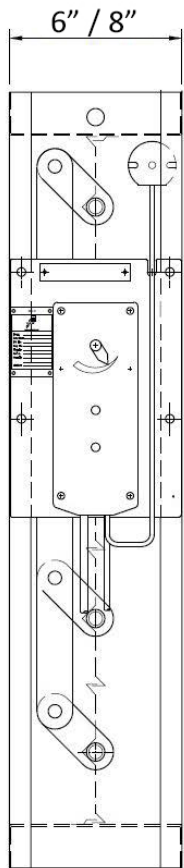
Petz or Schischek actuator with junction box 11lb

Pneumatic actuator and components with controls enclosure 33lb

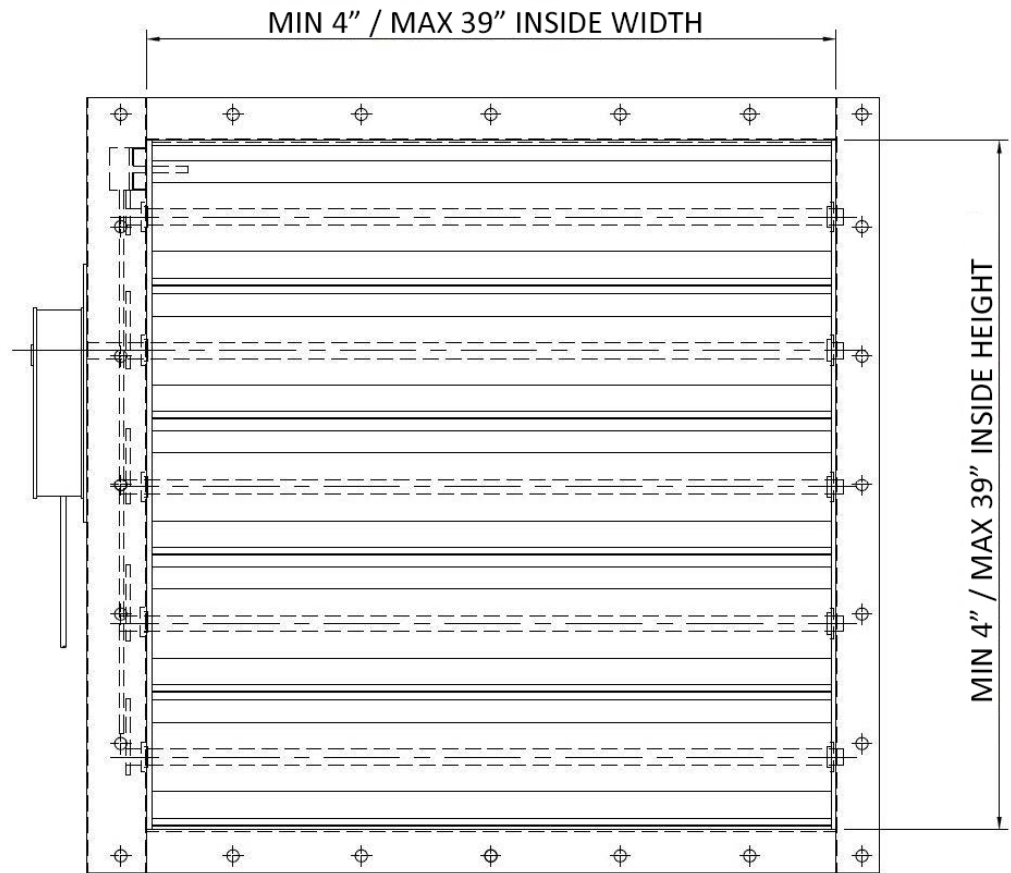
Ordering

Type: LFD	Duct Width: 20"
Duct Height: 12"	Case Depth: 8"
Type Wozair: Light Duty Fire Damper	
Case Material:	
<u>Stainless Steel</u>	
Low Carbon	1.4307 = 304L
Low Carbon	1.4404 = 316L
<u>Mild Steel Sheet</u>	
Pre-Galvanised FeP02 nac = GSS	
Case Thickness: 16G, 14G, 11G	
<u>Controls Options</u>	
P = Pneumatic	
E = Electric	
Nominal: Clear inside duct dimensions	
Duct Size: 'Quote' (Width x Height)	
Order Code Example:	
LFD/316L/16G/20W/12H/8D/E	

Dimension Drawing



END ELEVATION



FRONT ELEVATION

Wozair (USA) Ltd

3601 North Loop
336 West
Conroe
Texas
77304
United States of America

Phone +1 936 521 5990

Email houstonhvac@wozair.com

Wozair Limited

Grosvenor Road
Gillingham Business Park
Gillingham
Kent
ME8 0SA
United Kingdom

Phone +44 (0)1634 790 336

Email hvac@wozair.com

Wozair (Asia) Pte Ltd

2 Venture Drive
8-23 Vision Exchange
608526
Singapore

Phone +65 6890 6506

Email hvac@wozair.com.sg

Wozair Middle East

Office 202
LOB 17 Building JAFZA
Next to Gate 4
Dubai
P.O. Box 262404
United Arab Emirates

Phone +971 (0) 4 887 0147

Email dubaihvac@wozair.com