

Light Fire Damper (LFD)

Achieve low cost without compromising on performance with the unique Wozair Light Fire Damper (LFD).



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 without the aid of gasket materials.

The standard casing thickness is 1.5 mm, with 2.0 mm also an option, 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

100W x 100H x 150/200D mm
150W X 150H X 150/200D mm

Maximum Size

1000W x 1000H x 150/200D mm (A-0 / A-60)

Fire Rating

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

Leakage

Case leakage to ATC 5 EN 1751

Explosive Atmosphere

ATEX/IECEX SGS UK Ltd/SGS Fimko Oy

Materials of Construction

Casing and Flanges:

Materials

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

Thickness

1.5 mm & 2.0 mm
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 1.5 mm single skin
Riveted to tubular shafts

Shafts:

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

Bearings:

Oil impregnated sintered bronze. Low temperature option to
-55°C

Side Seals:

Stainless Steel 316 (1.4401)

Linkage:

Stainless Steel 316L (1.4404)
3.0 mm 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.

- Increased flange thickness
- Transitions; various options for fitting into circular ductwork
- Earth bosses
- Lifting lugs

Control Options

Wozair dampers can be operated with electric or pneumatic actuators. In a fire they will close automatically. The pneumatic and electric controls will be selected based on your exacting requirements.

The four in-house actuator manufacturer options are Pi Safety Components (previously Petz Industries), Rotork Schischek, Belimo and Powertork. Contact us to discuss your requirements and see Controls Datasheet for full details.

Weights

LFD Bare Shaft Damper Weight Matrix - 200D

Kg	H (mm)										
	100	200	300	400	500	600	700	800	900	1000	
W (mm)	100	4	5	7	8	9	10	12	13	14	15
	200	5	6	8	9	11	12	14	15	16	17
	300	7	8	10	11	13	15	17	18	19	21
	400	8	9	12	13	16	17	20	21	23	24
	500	9	10	13	15	18	19	22	24	26	27
	600	10	12	15	17	20	22	25	27	29	30
	700	11	13	17	18	22	24	28	29	32	33
	800	13	14	19	20	24	26	30	32	35	36
	900	14	15	19	21	25	27	32	33	38	39
	1000	15	16	21	23	28	29	34	36	41	43

Please Note:

For Manual handle add 3kg nominally

For Belimo actuator with junction box add 3.5kg nominally

For PI Safety Components or Rotork Shishchek actuator with junction box add 5kg nominally

For Pneumatic actuator and components with controls enclosure add 15kg nominally

Type Approval Certification

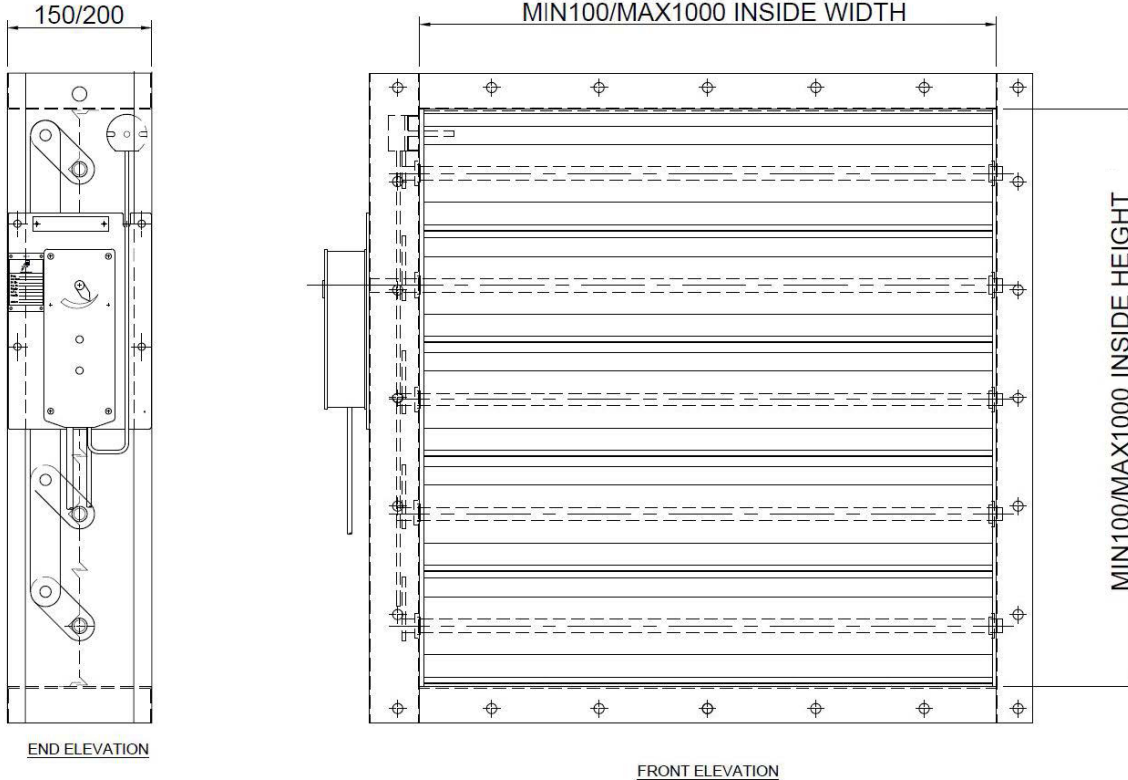
DNV, ABS and Bureau Veritas

Marine Equipment Directive (MED) 2014/90/EU

USCG (Mutual Recognition Agreement with MED)

Marine Equipment Regulation (MER) MSN 1874

Dimension Drawing



Ordering

Type:	LFD	Duct Width:	500
Duct Height:	300	Case Depth:	200
Type Wozair: Light Duty Fire Damper			
Case Material:			
<u>Stainless Steel</u>			
Low Carbon		1.4307 = 304L	
Low Carbon		1.4404 = 316L	
Galvanised sheet steel (GSS)			
Case Thickness: 1.5 or 2.0 mm minimum			
<u>Controls Options</u>			
P = Pneumatic			
E = Electric			
Nominal: Clear inside duct dimensions			
Duct Size: 'Quote' (Width x Height)			
Order Code Example:			
LFD/316L/1.5/500W/300H/200D/E			

END ELEVATION

FRONT ELEVATION



Wozair Limited

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

Phone +44 (0)1634 790 336

Email hvac@wozair.com

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 (Asia) Pte Ltd

203 Woodlands Avenue
9 #06-51 Woodlands
Spectrum 2, 738956
Singapore

Phone +65 6890 6506

Email hvac@wozair.com.sg

Wozair Middle East

JAFZA One
Tower B, Office 1316
Jebel Ali Free Zone
Dubai, UAE
P.O. Box 262404

Phone +971 (0) 4 887 0147

Email dubaihvac@wozair.com