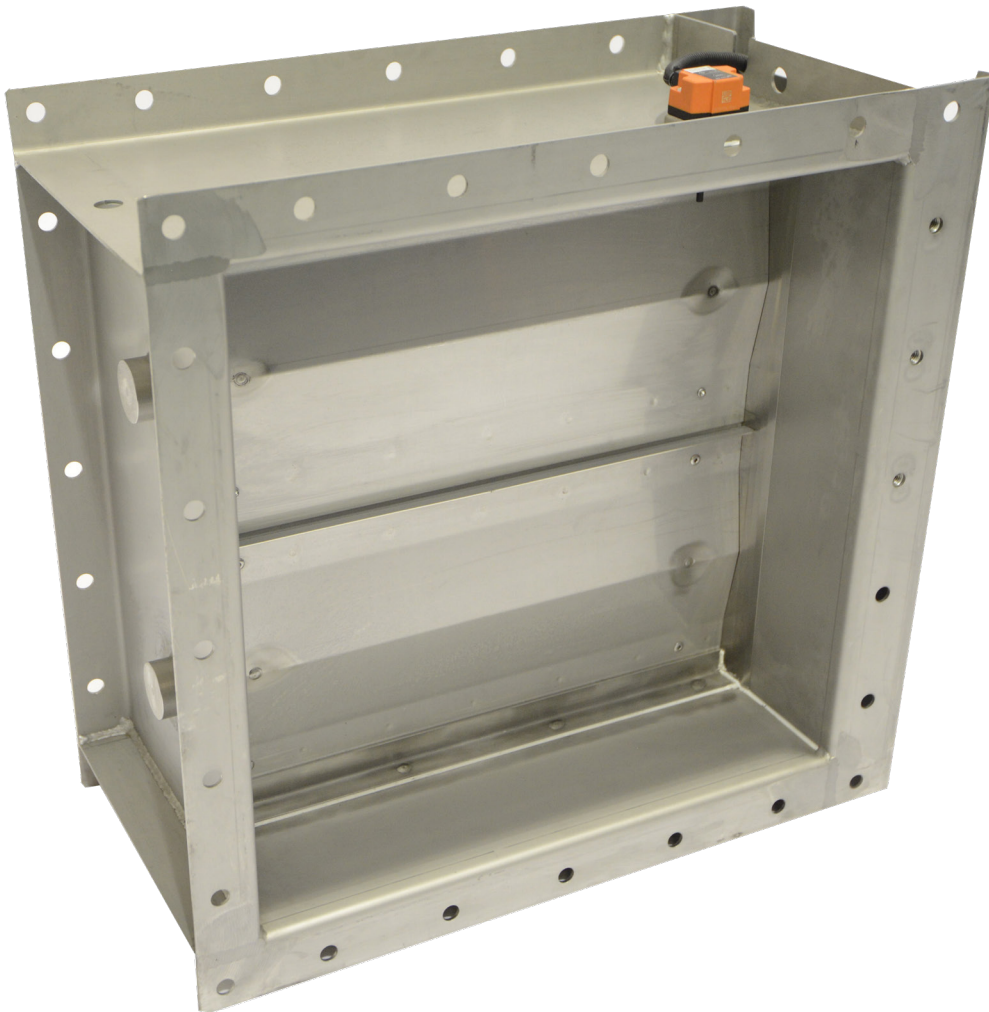


## Nuclear Fire Damper (MFD-N)

Simplicity in design delivers long-life reliability with the Wozair MFD Fire Damper for Nuclear applications.



## Nuclear Fire Damper

The stainless steel isolation seals, oil impregnated bearings and low leakage bearing assemblies prevent fire and smoke spread through ventilation systems.

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

The MFD holds a Constancy of Performance Certificate and can be CE/UKCA marked against the Construction Products Regulation.

### Technical Information

The fire damper has been tested according to EN1366-2 for duct mounted configurations. It can be installed vertically or horizontally.

The fire damper can be fitted to ducts passing through flexible wall constructions or a range of concrete wall constructions.

The fire damper can be fitted to ducts passing through a range of concrete floor & ceiling constructions.

Contact Wozair for specific supporting construction options.

#### Minimum Size

200W x 200H x 300D mm

#### Maximum Size

1000W x 1000H x 300D mm

#### Fire Rating

E60 & E30S (300 Pa differential pressure) according to EN 13501-3

#### Leakage

Closed blade leakage to Class 2 EN1751

Case leakage to ATC 4 EN1751, ATC 3 available on request

#### Certification

CE/UKCA marked in accordance with the Construction Products Regulation

## Materials of Construction

### Casing and Flanges:

#### Materials

Stainless Steel 316L (1.4404)

#### Thickness

3.0 mm

Fully welded

Flange drilling detail to ES (Sellafeld) standard or customer requirements

### Blades:

#### Materials

Stainless Steel 316L (1.4404)

#### Thickness

Double skin 1.5 mm thick.

Plug welded to solid shafts

### Shafts:

Ø19.0 mm (3/4") continuous solid shaft in Stainless Steel 316/316L (1.4401/1.4404)

### Bearings:

Oil impregnated sintered bronze.

### Side Seals:

Stainless Steel 316L (1.4404)

### Linkage:

Stainless Steel 316L (1.4404)

5.0 mm thick link bars arranged to provide opposed blade motion

### Blade Gasket:

N/A; metal to metal forms the seal

## Mechanical Options

The following options can be incorporated if required.

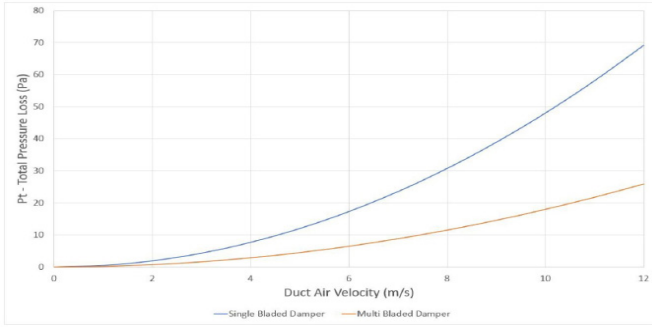
- Increased flange thickness
- Transitions; various options for fitting into circular ductwork
- Earth bosses
- Lifting lugs

## Control Options

Wozair dampers are electrically operated. In a fire they will close automatically when the thermoelectric trip is activated.

The damper is currently offered with Belimo actuators suitable for 24V AC/DC and 230V AC power supply. Contact us to discuss your requirements.

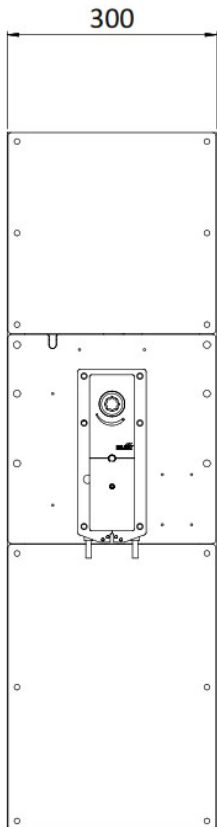
## Performance



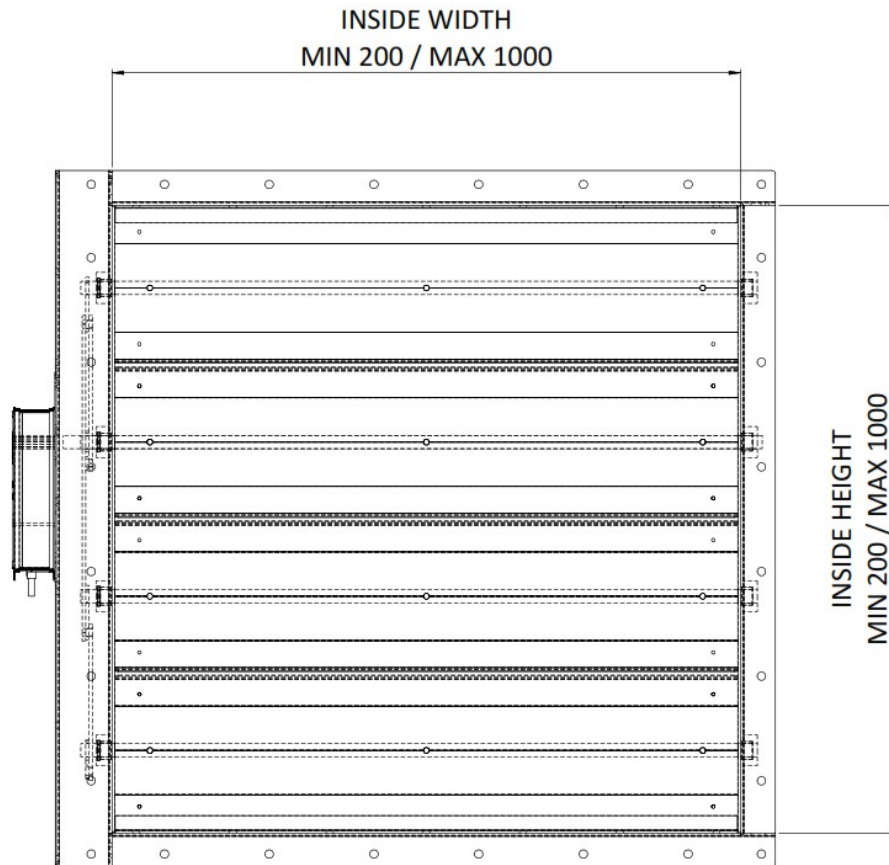
Full aerodynamic performance data is presented above and is based on conclusive tests. Single bladed damper has an internal height up to 259mm.

**Total Pressure Loss** - the difference in pressure measured across the Fire Damper when the blades are fully open.

## Dimension Drawing



END ELEVATION



FRONT ELEVATION

## Ordering

<b>Type:</b> MFD-N	<b>Duct Width:</b> 500
<b>Duct Height:</b> 300	<b>Case Depth:</b> 300
<b>Type Wozair:</b> Nuclear Fire Damper	
<b>Case Material:</b> Stainless Steel 1.4404 = 316L	
<b>Case Thickness:</b> 3.0 mm	
<u>Controls Options</u> E = Electric	
Nominal: Clear inside duct dimensions Duct Size: 'Quote' (Width x Height)	
<b>Order Code Example:</b> MFD-N/316L/3.0/500W/300H/300D/E	

## Weights

### MFD Bare Shaft Damper Weight Matrix - 300D

Kg	H (mm)					
	200	400	600	800	1000	
W (mm)	200	22	33	43	51	62
	400	29	41	53	61	74
	600	35	49	64	71	86
	800	41	57	74	81	98
	1000	47	65	84	91	110

**Please Note:**

For Belimo actuator with junction box add 3.5kg nominally



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