

CR2 European circular fire dampers for large diameters



Description

Circular fire dampers available for large diameters (up to 630 mm) with a fire resistance up to 120 minutes. The galvanised steel casing is lined with refractory material. The fire dampers are CE marked with performance declared according to EN 15650:2010 and with fire resistance determined according to EN 1366-2 up to EI 120 (ve i ↔ o)S - (500Pa) and EI 120 (ho i ↔ o)S - (500Pa) depending on the installation surface. The dampers can be equipped with different types of mechanisms, depending on the specific needs of the project.

Standard version

With thermo-mechanical manual drive: code CR2 + CFTH + FDCU

With ONE RFT electronic servomotor drive: code CR2 + ONE T - 24 / 230 V FDCU

With Belimo servomotor drive: code CR2 + BFLT 24 / 230 V

Versions on request

With electromagnet drive normally energised or normally de-energised, code CR2 + UNIQ VD/VM FDCB

Characteristics

Galvanised steel structure.
50 mm thick refractory blade.
Dimensions: from Ø 200 to Ø 630.
Heat-expanding perimeter seal.
2 microswitches (one start and one end switch) already installed.
Large dimensions.
Easy to install.
Suitable for recessed installation.
Suitable for rigid wall, rigid floor and lightweight wall (plasterboard).
Class B air tightness according to EN1751.
Optimal free surface and minimal pressure drop.
Optimal acoustic performance.
Does not require maintenance.
For indoor use.
Operating temperature: max. 50°C.

ONE RFT actuator characteristics

The microprocessor-controlled servomotor with spring return, ONE Rf-t, is designed to efficiently operate Rf-t fire dampers of any size. The main characteristics of the ONE Rf-t actuator are the following:

- very low stand-by energy consumption (0.12 W) which allows for up to 5 times less energy consumption compared to conventional servomotors installed in fire dampers;
- the opening status of the fire damper is visible via an indicator located on the actuator; in addition to this, an LED indicates whether the device is powered;
- the main thermal activation device allows for operational tests to be performed even if there is no mains power supply;
- a further activation device is integrated in the actuator in order to detect a possible fire outside the duct;
- the fuse can be replaced quickly and easily. The fuse housing is located in the servomotor body and it can also be used as an inspection hole for an endoscopic camera;
- the damper can be reset manually using a common 9 Volt alkaline battery. Up to 50 reset cycles can be performed with a single battery;
- IP54 enclosure made of shock-resistant technical polymer.
- there is a pair of microswitches at the start and at the end. Both power and position cables are oversized and clearly identified.
- Power supply 24 VAC/VDC (-10/+20%) or 230 VAC (-15/+15%).

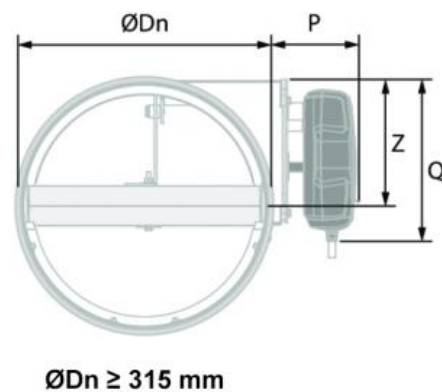
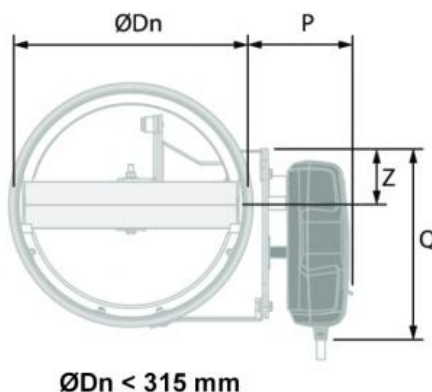
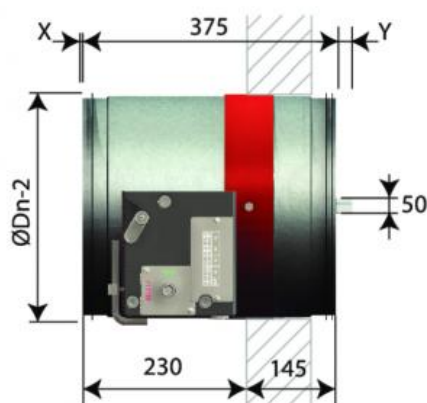
Use and classification with mechanical, magnetic or motorised control

- Rigid wall: EI 120 (ve i ↔ o) S - (500 Pa).
- Lightweight wall: EI 120 (ve i ↔ o) S - (500 Pa) (gypsum blocks).
- Lightweight wall: EI 120 (ve i ↔ o) S - (500 Pa) (plasterboard type F).
- Slab: EI 120 (ho i ↔ o) S - (500 Pa) aerated concrete.

Minimum distance principle

This type of fire damper has been optimised to minimise the installation distance between two dampers and between the damper and the adjacent wall.

CR2 FIRE DAMPERS CAN BE INSTALLED COUPLED AND ADJACENT TO A WALL, CEILING OR FLOOR.



Dimensions:

x: blade coming out on servomotor side
y: blade coming out on wall side

ØDn (mm)	315	355	400	450	500	560	630
x (mm)						15	50
y (mm)	24	44	66	91	116	146	181

	ØDn < 315 mm			ØDn ≥ 315 mm			
	CFTH	ONE	BFL(T)	CFTH	ONE	BFL(T)	BFN(T)
P (mm)	81	105	101	85	105	104	104
Q (mm)	182	199	110	182	199	110	110
Z (mm)	58	60	80	156	157	179	179

Price list

Item normally available from stock

diameter mm	manual	BFL(T) 24V - BFN(T) 24V		BFL(T) 230V - BFN(T) 230V		ONE T 24V	ONE T 230V
	euro	euro		euro		euro	euro
200	✓	✓		✓		✓	✓
250	✓	✓		✓		✓	✓
315	✓	✓		✓		✓	✓
355	✓	✓		✓		✓	✓
400	✓	✓		✓		✓	✓
450	✓	✓		✓		✓	✓
500	✓	✓		✓		✓	✓
560	✓	✓		✓		✓	✓
630	✓	✓		✓		✓	✓

Spare fuses

Item normally available from stock	
Description	Euro
thermo-mechanical manual fuse	✓
ONE T fuse for RFT electronic servomotor	✓
Z-BAT fuse for BELIMO electronic servomotor	✓

