



# **Fire dampers CR120+BFLT230**

Fire dampers Circular EI120S Motorized BELIMO 230V Ø 100 - 315



## Motorized circular fire dampers EI120S type CR120+BFLT230

Circular fire dampers with a fire resistance of 120 minutes. When the temperature of the thermo-electric fuse in the damper rises above 72 °C the damper will close. When closed, the expanding material around the fireblade will assure a fire and air-tight seal against hot air and smoke. The tunnel is made out of galvanized steel. The **CR120 + BFLT230** fire dampers have a automatic operating mechanism with actuator, with indication of the blade position. An end and begin of range switch is included within the actuator.

## Application

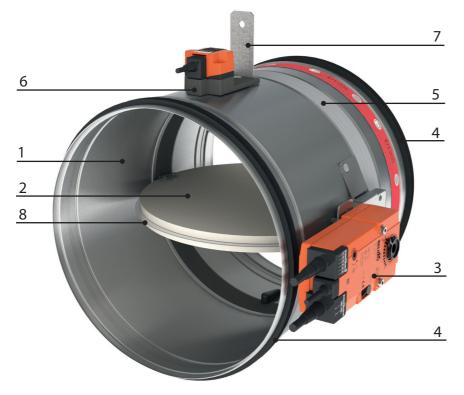
- Fire compartimentation
- To close and seal off ventilation ducts in case of fire
- For air temperatures of -10°C up to temperature of the thermo-electric fuse
- For air with RV 0-96%
- Range of Ø100 up to Ø315 mm
   For Ø355 up to Ø630 see type CR2
- To be mounted horizontally or vertically

## Material

Galvanized steel

## **Fire dampers**

#### Construction



#### Composition

- Galvanized steel tunnel
- Fibersilicate fireproof blade
- Intumescent strip Belimo **BFLT230** Actuator with thermo-electrical fuse
- 1. Refractory casing made of galvanised steel2. Damper blade 20 mm
- 3. Operating mechanism
  4. Rubber sealing ring

- 5. Intumescent strip6. Mounting plate thermo-electric fuse
- 7. Positioning plate8. Sealing ring damper blade

#### Mounting

- To be inserted in fire resistant walls or floors and to be fixed according to the mounting instruction delivered with the valves.
- To be connected with round air ducts
- To be electrically wired to the fire detection system or building system

#### Certification

- Classified El120(v<sub>e</sub>,h<sub>o</sub> i<->o)S at 500Pa according EN 13501-3 in ridid wall and rigid floor
   Classified El60(v<sub>e</sub> i<->o)S at 500Pa according EN 13501-3 in flexible wall
   Certified with test report Efectis 09-A-087 / EFR-19-005412 or WFRG 16127
   Airtight EN 1751 class C
   CE marked

- CE marked

#### **Accessories**

■ Fire resistant plaster, type **BP** 

#### **Other available products**

For bigger sizes see CR2 + BFLT/BFNT 230



**Fire dampers** 

#### **Text for tender**

- The fire dampers shall be of the round type with a fire resistance of 120 minutes, certified according to EN13501-3. They will consist of a galvanized steel tunnel and fireproof fiber silicate valve. The control mechanism will be automatically operated by means of an actuator and shall have a blade position indicator and thermo-electrical link of 72 °C
- type CR120 + BFLT 230

### **Order example**

## CR120 + BFLT230, 160

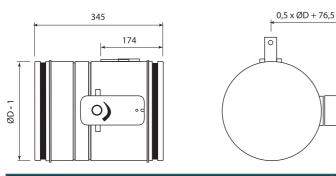
Explanation

- **CR120** = Round fire damper with fire resistance of 120 minutes **BFLT230** = Actuator 230V with thermo-electrical fuse
- **160** = Connection diameter

Quick selection									
Dia	v	3	4	5	6	7	8		
100	Q	85	113	141	170	198	226		
	Vk	5	6.7	8.3	10	11.7	13.4		
	Ps	5	8	13	19	26	33		
	Lw(A)	41	45	47	50	52	54		
125	Q	132	177	221	265	309	353		
	Vk	4.5	6	7.5	9	10.5	12		
	Ps	4	7	11	16	21	28		
	Lw(A)	38	43	46	48	51	52		
160	Q	217	289	362	434	506	579		
	Vk	4	5.4	6.7	8.1	9.4	10.8		
	Ps	3	5	8	12	16	22		
	Lw(A)	37	41	44	46	49	51		
	Q	339	452	565	678	791	904		
200	Vk	3.8	5.1	6.3	7.6	8.9	10.1		
200	Ps	2	4	6	9	12	16		
	Lw(A)	37	41	43	46	48	50		
	Q	530	707	883	1060	1236	1413		
250	Vk	3.6	4.8	6	7.2	8.4	9.6		
250	Ps	2	3	4	6	9	11		
	Lw(A)	36	40	43	45	47	49		
	Q	841	1122	1402	1682	1963	2243		
315	Vk	3.5	4.6	5.8	7	8.1	9.3		
	Ps	1	2	3	4	5	7		
	Lw(A)	35	39	43	44	46	47		

#### Symbols and specifications

- v = Air velocity in the duct in m/s
- Q = Air volume in m<sup>3</sup>/h
- $\dot{Vk}$  = Effective velocity through the damper in m/s
- Ps = Static pressure in Pa
  Lw(A) = Acoustic power in dB(A)
  Dia = Duct diameter in mm



Dimensions								
CR120+BFLT230	ØD [mm]	ØD-1 [mm]	<sup>1</sup> / <sub>2</sub> ØD+76.5 [mm]	Ak [m²]				
100	100	99	126.5	0.0047				
125	125	124	139	0.0082				
160	160	159	156.5	0.0149				
200	200	199	176.5	0.0248				
250	250	249	201.5	0.0407				
315	315	314	234	0.0672				



Fire dampers

### **Electrical connection**

