



E.01

Fire dampers

**CR120+MFUS**

- Fire dampers
- Circular
- EI120S
- With fuse 72°C
- Ø 100 - 315



## Circular fire dampers EI120S type CR120+MFUS

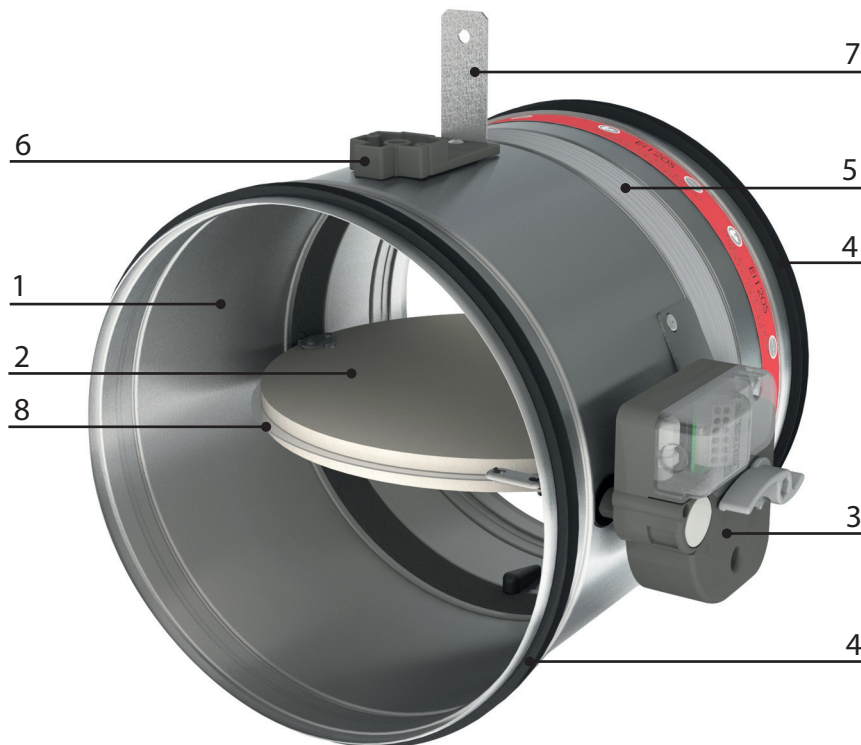
Circular fire dampers with a fire resistance of 120 minutes. When the temperature in the damper rises above 72 °C the fusible link will break and the damper will close. When closed, the expanding material around the fireblade will swell and assure a fire and air-tight seal against hot air and smoke. The tunnel is made out of galvanized steel. The **CR120 + MFUS** fire dampers have a manual operating mechanism with indication of the blade position. Optionally, an end and begin of range switch **FDCU MFUS** can be added to the mechanism. The operating mechanism can be removed easily, for inspection purposes or for replacing the fusible link.

### Application

- Fire compartmentation
- To close and seal off ventilation ducts in case of fire
- For air temperatures of -10°C up to temperature of fusible link
- 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

**Construction**

**Composition**

- Galvanized steel tunnel with rubber duct sealing
- Fibersilicate fireproof blade
- Intumescent strip
- Manual control mechanism MFUS with fusible link 72 °C
  
- 1. Refractory casing made of galvanised steel
- 2. Damper blade 20 mm
- 3. Operating mechanism
- 4. Rubber sealing ring
- 5. Intumescent strip
- 6. Mounting plate for thermo-electrical fuse (not used on manually controlled dampers)
- 7. Positioning plate
- 8. 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

**Certification**

- Classified EI120(v<sub>e</sub>,h<sub>o</sub> i<->o)S at 500Pa according EN 13501-3 in rigid wall and rigid floor
- Classified EI60(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

**Accessories**

- Fire resistant plaster, type **BP**
- End- and begin of range switch, type **FDCU MFUS**

**Other available products**

- For bigger sizes see **CR2 + CFTH**



**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 manually operated and shall have a blade position indicator and fusible link of 72 °C
- type **CR120 + MFUS**

**Order example**

- **CR120 + MFUS, 160**

Explanation

**CR120** = Round fire damper with fire resistance of 120 Minutes

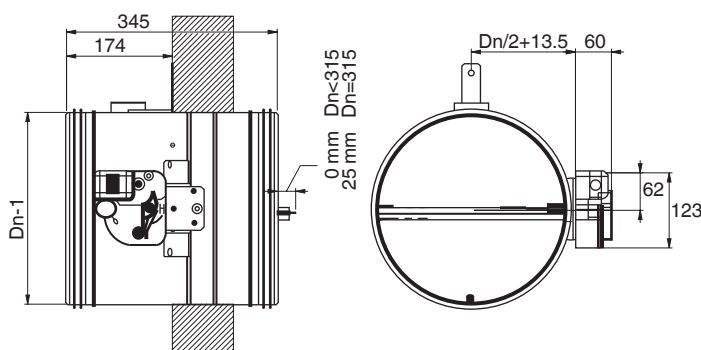
**MFUS** = Mechanism

**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
200	Q	339	452	565	678	791	904
	Vk	3.8	5.1	6.3	7.6	8.9	10.1
	Ps	2	4	6	9	12	16
	Lw(A)	37	41	43	46	48	50
250	Q	530	707	883	1060	1236	1413
	Vk	3.6	4.8	6	7.2	8.4	9.6
	Ps	2	3	4	6	9	11
	Lw(A)	36	40	43	45	47	49
315	Q	841	1122	1402	1682	1963	2243
	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
- 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



CR120+MFUS	Dimensions			
	ØD [mm]	ØD-1 [mm]	1/2ØD+13.5+60 [mm]	Ak [m²]
100	100	99	123.5	0.0047
125	125	124	136	0.0082
160	160	159	153.5	0.0149
200	200	199	173.5	0.0248
250	250	249	198.5	0.0407
315	315	314	231	0.0672