



**E.01** 

## Fire dampers

## CR120-1S+ **MFUS**

Surface mounted fire dampers Circular EI120S With fuse 72°C Ø 100 - 315



# Surface mounted circular fire dampers El120S type CR120-1S+MFUS

Surface mounted circular fire dampers with a fire resistance of 2 hours. The surface mounting ensures a fast (dry) installation. When the temperature in the damper mounting ensures a fast (dry) installation. 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 airtight seal against hot air and smoke. The tunnel is made out of galvanized steel. The **CR120-1S+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

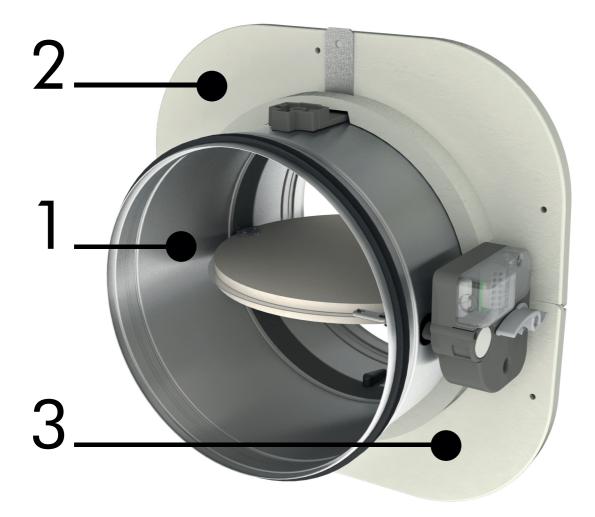
- Fire compartimentation
  To close and seal off ventilation ducts in case of fire
  For air temperatures of -10°C up to temperature of fusible link
- Range of Ø100 up to Ø315 mm
  To be mounted horizontally or vertically
- For indoor use

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### Construction



### Composition

- Galvanized steel tunnel with rubber duct sealing
- Plaster mounting collar Fibersilicate fireproof blade
- Intumescent strip
  Manual control mechanism MFUS with fusible link 72 °C

- 1. fire damper
  2. upper mounting collar
  3. lower mounting collar
  4. graphite strip
  5. sealing cold smoke
  6. tape

### Mounting

- Suitable for surface-mount in rigid wall, rigid floor and light wall (metal stud gypsum plasterboard wall) and to be fixed according to the mounting instruction delivered with the valves.
  To be connected with round air ducts



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### Certification

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

### Accessories

End- and begin of range switch, type FDCU MFUS

### **Text for tender**

- The fire dampers shall be of the round type with a fire resistance of 60 minutes, certified according to EN13501-3. They
  will consist of a galvanized steel tunnel with mounting collar for fast (dry) installation 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
- CAIROX type CR60 + MFUS

### **Order example**

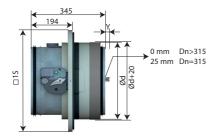
### CR120-1S + MFUS, 160

Explanation CR120-1S = Round fire damper **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				
	Q	132	177	221	265	309	353				
125	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				
	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				
	Ps	2	3	4	6	9	11				
	Lw	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										
CR120-1S +MFUS	1S [mm]	Ød [mm]	Ød +20 [mm]	y [mm]	Ak [m²]					
100	279	160	180	0	0.0047					
125	299	180	200	0	0.0082					
160	339	220	240	0	0.0149					
200	374	255	275	0	0.0248					
250	419	300	320	0	0.0407					
315	474	355	375	25	0.0672					