

Rectangular fire dampers EI120S type CU2+CFTH

Rectangular fire dampers with a fire resistance of 2 hours. When the temperature in the damper rises above 72 °C the fusible link will break and the damper will close. When closed, the 'palusol' expanding material around the fireblade will swell and assure a fire and air-tight seal against hot air and smoke. The tunnel and blade are made out of fire resistant PromatectH®. The **CU2 + CFTH** fire dampers have a manual operating mechanism with indication of the blade position. Optionally, an end or begin of range switch **FDC CFTH** 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 from 200 to 1500 mm in width and 200 to 800 mm in height

Material

- PromatectH®

Composition

- Light-weight PromatectH® fireproof housing
 - PromatectH® fireproof blade
 - Palusol seal around the blade
 - Manual control mechanism CFTH with fusible link 72 °C
 - Standard equipped with duct connection flanges of 30mm (other flange types available upon request)
1. Connection flange
 2. Casing out of refractory material
 3. Damper blade
 4. Operating mechanism
 5. Sealing cold smoke
 6. Blade bumper
 7. Intumescent strip
 8. Transmission with locking (open/closed)
 9. Fusible link 72°C

■ 10. Product identification

Mounting

- To be inserted in fire resistant walls or floors and to be fixed with fireproof mortar
- To be connected with rectangular air ducts by flanges of 30mm

Certification

- Certified according NEN6077 / NBN 713-0 0 / EN 1366-2
- CE-marked

Accessories

- Fire resistant plaster **BP**
- Fire resistant silicone gel **FP402**
- Fire resistant PU-foam **BAP**
- End- or begin of range switch **FDC CFTH** (available as KIT or premounted)

Text for tender

- The fire dampers shall be of the rectangular type with a fire resistance of 2 hours, certified according to NEN6077 / NBN 713-0 0 / EN 1366-2 . They will consist of a fireproof PromatectH® tunnel and valve. The control mechanism will be manually operated and shall have a blade position indicator and fusible link of 72 °C
- type **CU2 + CFTH**

Order example

- **CU2 + CFTH, 400, 200**

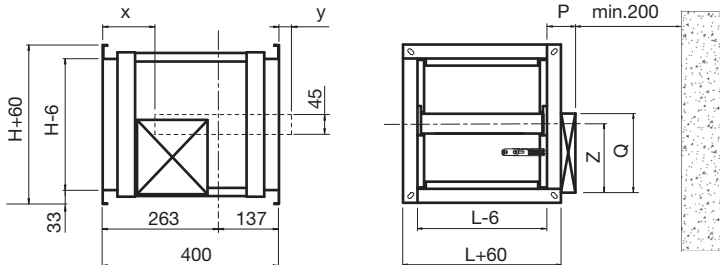
Explanation

CU2 = Rectangular fire damper Rf2h

CFTH = Mechanism

400 = Length damper

200 = Height damper



	Dimensions					
	P	Q	Z (H<300)	Z (H>=300)	x	y
CU2 + CFTH	65	180	60	155	=(H/2)-274	=(H/2)-148
MANO EVO (+ME)	115	190	85	180	=(H/2)-274	=(H/2)-148

L	H	v 3				v 4				v 5				v 6				v 7				v 8			
		Qv	VeFF	Ps	Lw	Qv	VeFF	Ps	Lw	Qv	VeFF	Ps	Lw	Qv	VeFF	Ps	Lw	Qv	VeFF	Ps	Lw	Qv	VeFF	Ps	Lw
200	200	432	6.10	16	20	576	8.20	28	25	720	10.20	44	28	864	12.30	63	31	1008	14.30	85	33	1152	16.40	111	35
200	300	648	5	9	24	864	6.70	15	28	1080	8.40	24	31	1296	10	34	34	1512	11.70	46	36	1728	13.40	61	38
200	400	864	4.60	6	26	1152	6.10	10	30	1440	7.60	16	33	1728	9.20	23	36	2016	10.70	32	38	2304	12.20	42	40
200	500	1080	4.40	4	27	1440	5.80	8	31	1800	7.30	12	34	2160	8.70	18	37	2520	10.20	24	39	2880	11.60	32	41
200	600	1296	4.20	4	28	1728	5.60	6	32	2160	7	10	36	2592	8.50	14	38	3024	9.90	20	41	3456	11.30	26	42
300	200	648	5.70	10	23	864	7.60	17	27	1080	9.50	27	30	1296	11.50	39	33	1512	13.40	53	35	1728	15.30	69	37
300	300	972	4.70	5	26	1296	6.20	9	30	1620	7.80	15	34	1944	9.30	21	36	2268	10.90	29	38	2592	12.50	38	40
300	400	1296	4.30	4	28	1728	5.70	6	32	2160	7.10	10	36	2592	8.50	15	38	3024	10	20	40	3456	11.40	26	42
300	500	1620	4.10	3	30	2160	5.40	5	34	2700	6.80	8	37	3240	8.10	11	40	3780	9.50	15	42	4320	10.80	20	44
300	600	1944	3.90	2	31	2592	5.30	4	35	3240	6.60	6	38	3888	7.90	9	41	4536	9.20	12	43	5184	10.50	16	45
400	200	864	5.50	7	25	1152	7.40	13	29	1440	9.20	20	32	1728	11.10	28	35	2016	12.90	38	37	2304	14.80	50	39
400	300	1296	4.50	4	28	1728	6	7	32	2160	7.50	11	35	2592	9	15	38	3024	10.50	21	40	3456	12	27	42
400	400	1728	4.10	3	30	2304	5.50	5	34	2880	6.90	7	37	3456	8.30	11	40	4032	9.60	14	42	4608	11	19	44
400	500	2160	3.90	2	31	2880	5.20	4	35	3600	6.60	6	39	4320	7.90	8	41	5040	9.20	11	44	5760	10.50	14	46
400	600	2592	3.80	2	32	3456	5.10	3	37	4320	6.40	4	40	5184	7.60	6	42	6048	8.90	9	45	6912	10.20	12	47
400	700	3024	3.70	1	33	4032	5	2	38	5040	6.20	4	41	6048	7.50	5	43	7056	8.70	7	46	8064	9.90	10	48
400	800	3456	3.70	1	34	4608	4.90	2	38	5760	6.10	3	42	6912	7.30	5	44	8064	8.60	6	46	9216	9.80	8	48
500	200	1080	5.40	6	26	1440	7.20	10	30	1800	9.10	15	33	2160	10.90	22	36	2520	12.70	30	38	2880	14.50	39	40
500	300	1620	4.40	3	29	2160	5.90	5	33	2700	7.40	8	37	3240	8.90	12	39	3780	10.30	16	41	4320	11.80	21	43
500	400	2160	4.10	2	31	2880	5.40	4	35	3600	6.80	6	39	4320	8.10	8	41	5040	9.50	11	43	5760	10.80	15	45
500	500	2700	3.90	2	33	3600	5.10	3	37	4500	6.40	4	40	5400	7.70	6	43	6300	9	9	45	7200	10.30	11	47
500	600	3240	3.70	1	34	4320	5	2	38	5400	6.20	4	41	6480	7.50	5	44	7560	8.70	7	46	8640	10	9	48
500	700	3780	3.70	1	35	5040	4.90	2	39	6300	6.10	3	42	7560	7.30	4	45	8820	8.50	6	47	10080	9.70	8	49
500	800	4320	3.60	1	35	5760	4.80	2	40	7200	6	3	43	8640	7.20	4	45	10080	8.40	5	48	11520	9.60	7	50
600	200	1296	5.40	5	27	1728	7.20	8	31	2160	8.90	13	34	2592	10.70	18	37	3024	12.50	25	39	3456	14.30	32	41
600	300	1944	4.40	2	30	2592	5.80	4	34	3240	7.30	7	38	3888	8.70	10	40	4536	10.20	13	42	5184	11.70	18	44
600	400	2592	4	2	32	3456	5.30	3	36	4320	6.70	5	40	5184	8	7	42	6048	9.30	9	44	6912	10.70	12	46
600	500	3240	3.80	1	34	4320	5.10	2	38	5400	6.30	4	41	6480	7.60	5	44	7560	8.90	7	46	8640	10.20	9	48
600	600	3888	3.70	1	35	5184	4.90	2	39	6480	6.10	3	42	7776	7.40	4	45	9072	8.60	6	47	10368	9.80	7	49
600	700	4536	3.60	1	36	6048	4.80	2	40	7560	6	2	43	9072	7.20	4	46	10584	8.40	5	48	12096	9.60	6	50
600	800	5184	3.60	1	36	6912	4.70	1	41	8640	5.90	2	44	10368	7.10	3	47	12096	8.30	4	49	13824	9.50	5	51
600	1000	6480	3.50	1	38	8640	4.60	1	42	10800	5.80	2	45	12960	6.90	2	48	15120	8.10	3	50	17280	9.30	4	52
700	200	1512	5.30	4	28	2016	7.10	7	32	2520	8.90	11	35	3024	10.60	15	38	3528	12.40	21	40	4032	14.20	28	42
700	300	2268	4.30	2	31	3024	5.80	4	35	3780	7.20	6	38	4536	8.70	8	41	5292	10.10	11	43	6048	11.60	15	45
700	400	3024	4	1	33	4032	5.30	3	37	5040	6.60	4	40	6048	7.90	6	43	7056	9.30	8	45	8064	10.60	10	47
700	500	3780	3.80	1	34	5040	5	2	39	6300	6.30	3	42	7560	7.50	4	45	8820	8.80	6	47	10080	10.10	8	49
700	600	4536	3.70	1	36	6048	4.90	2	40	7560	6.10	2	43	9072	7.30	4	46	10584	8.50	5	48	12096	9.70	6	50
700	700	5292	3.60	1	36	7056	4.80	1	41	8820	6	2	44	10584	7.20	3	47	12348	8.30	4	49	14112	9.50	5	51
700	800	6048	3.50	1	37	8064	4.70	1	41	10080	5.90	2	45	12096	7	3	47	14112	8.20	3	50	16128	9.40	5	52
800	200	1728	5.30	3	28	2304	7	6	33	2880	8.80	9	36	3456	10.60	13	39	4032	12.30	18	41	4608	14.10	24	43
800	300	2592	4.30	2	32	3456	5.70	3	36	4320	7.20	5	39	5184	8.60	7	42	6048	10	10	44	6912	11.50	13	46
800	400	3456	3.90	1	34	4608	5.30	2	38	5760	6.60	3	41	6912	7.90	5	44	8064	9.20	7	46	9216	10.50	9	48
800	500	4320	3.70	1	35	5760	5	2	39	7200	6.20	3	43	8640	7.50	4	45	10080	8.70	5	48	11520	10	7	49
800	600	5184	3.60	1	36	6912	4.80	1	40	8640	6.10	2	44	10368	7.30	3	46	12096	8.50	4	49	13824	9.70	5	51
800	700	6048	3.60	1	37	8064	4.70	1	41	10080	5.90	2	45	12096	7.10	3	47	14112	8.30	4	50	16128	9.50	5	52
800	800	6912	3.50	1	38	9216	4.70	1	42	11520	5.80	2	45	13824	7	2	48	16128	8.20	3	50	18432	9.30	4	52
900	200	1944	5.30	3	29	2592	7	5	33	3240	8.80	8	37	3888	10.50	12	39	4536	12.30	16	42	5184	14	21	43
900	300	2916	4.30	2	32	3888	5.70	3	37	4860	7.10	4	40	5832	8.60	6	42	6804	10	9	45	7776	11.40	11	47
900	400	3888	3.90	1	34	5184	5.20	2	39	6480	6.50	3	42	7776	7.80	4	44	9072	9.10	6	47	10368	10.40	8	49
900	500	4860	3.70	1	36	6480	5	2	40	8100	6.20	2	43	9720	7.50	3	46	11340	8.70	5	48	12960	9.90	6	50
900	600	5832	3.60	1	37	7776	4.80	1	41	9720	6	2	44	11664	7.20	3	47	13608	8.40	4	49	15552	9.60	5	51
900	700	6804	3.50	1	38	9072	4.70	1	42	11340	5.90	2	45	13608	7.10	2	48	15876	8.20	3	50	18144	9.40	4	52
900	800	7776	3.50	0	39	10368	4.60	1	43	12960	5.80	1	46	15552	7	2	49	18144	8.10	3	51	20736	9.30	4	53
900	900	8748	3.40	0	39	11664	4.60	1	44	14580	5.70	1	47	17496	6.90	2	49	20412	8	2	52	23328	9.20	3	54
900	1000	9720	3.40	0	40	12960	4.50	1	44	16200	5.70	1	47	19440	6.80	2	50	22680	7.90	2	52	25920	9.10	3	54
1000	200	2160	5.20	3	30	2880	7	5	34	3600	8.70	7	37	4320	10.50	11	40	5040	12.20	15	42	5760	13.90	19	44
1000	300	3240	4.30	1	33	4320	5.70	3	37	5400	7.10	4	40	6480	8.50	6	43	7560	9.90	8	45	8640	11.40	10	47

Symbols and specifications

- A_{eff} = Effective area in m^2
- v = Air velocity in the duct in m/s
- Q_v = Air volume in m^3/h
- v_{eff} = Effective velocity through the damper in m/s
- P_s = Static pressure in Pa
- L_w = Acoustic power in $dB(A)$
- LXH = Duct size in mm