

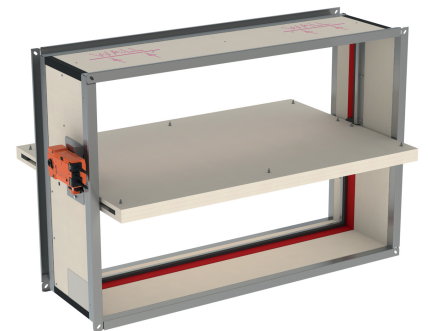
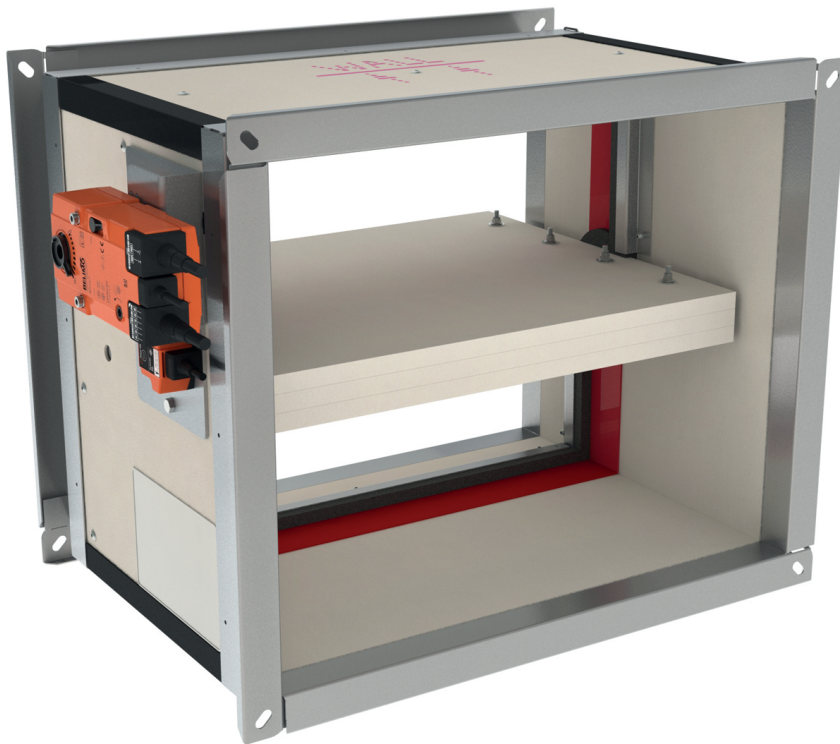


E.01

Fire dampers

**CU2+BFLT/
BFNT 230**

- Fire dampers
- Rectangular
- EI120S
- Motorized
- BELIMO 230V
- LxH: 200x200 - 1500x500



Motorized rectangular fire dampers EI120S type CU2+BFLT/BFNT 230

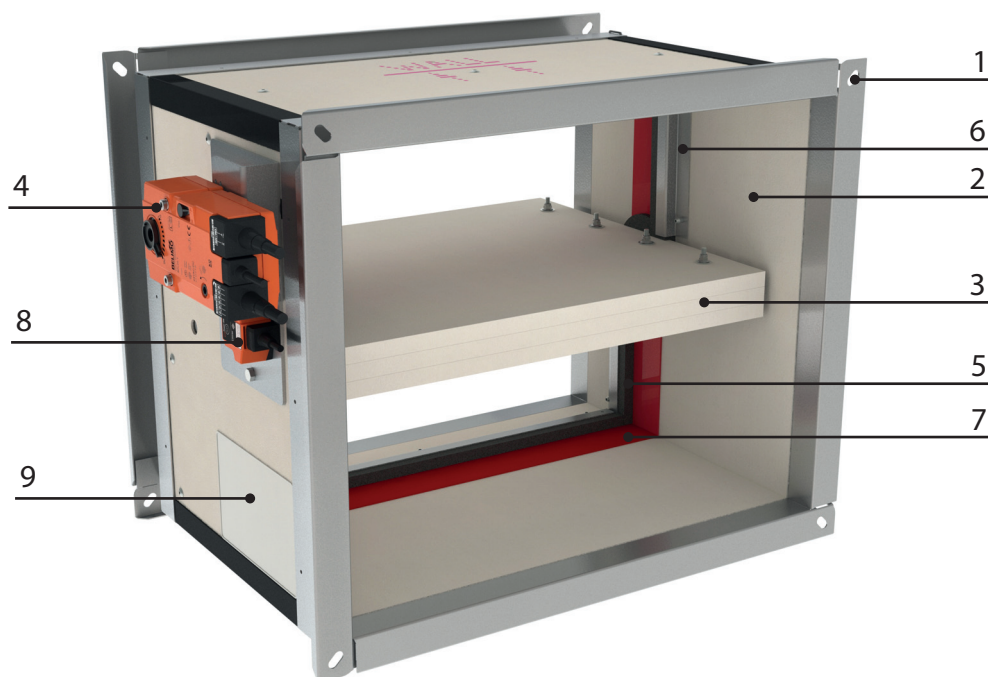
Rectangular fire dampers with a fire resistance of 2 hours. When the temperature in the damper rises above 72 °C the thermo-electrical link gets triggered and the damper will close. When closed, the 'palusol' expanding material around the fireblade will swell and assure a fire and air-tight seal against hot air and smoke. The tunnel and blade are made out of fire resistant PromatectH®. The **CU2 + BFLT/ BFNT230** fire dampers will have an automatic operating mechanism by means of an actuator with indication of the blade position. An end and begin of range switch is included within the actuator.

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®

Construction

Composition

- light-weight PromatectH® fireproof housing
- PromatectH® fireproof blade
- Palusol seal around the blade
- Actuator BELIMO BLFT230 (small dimensions) or BFNT230(Other sizes)
- 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. Thermo-electrical link 72°C
- 9. 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

Accessories

- Fire resistant plaster **BP**
- Fire resistant silicone gel **FP402**
- Fire resistant PU-foam **BAP**

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 automatically operated by means of an actuator and shall have a blade position indicator and thermo-electrical link of 72 °C
- type **CU2 + BFLT/BFNT230**

Order example

- **CU2 + BFLT230, 400, 200**

Explanation

CU2 = Rectangular fire damper Rf2h

BFLT230 = Actuator 230V with thermo-electric fuse

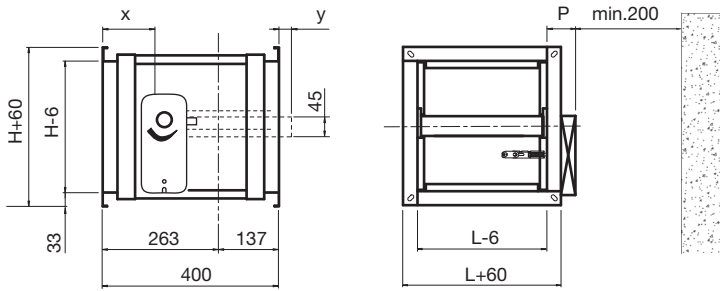
400 = Length damper



Quick selection																										
L	H	Aeff	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	0.02	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	0.036	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	0.052	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	0.069	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	0.085	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	0.031	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	0.058	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	0.084	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	0.111	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	0.137	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	0.043	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	0.08	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	0.116	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	0.153	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	0.189	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	0.225	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	0.262	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	0.055	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	0.102	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	0.148	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	0.194	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	0.241	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	0.287	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	0.334	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	0.067	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	0.124	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	0.18	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	0.236	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	0.293	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	0.349	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	0.406	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	0.518	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	0.079	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	0.145	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	0.212	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	0.278	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	0.345	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	0.411	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	0.477	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	0.091	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	0.167	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	0.244	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	0.32	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	0.397	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	0.473	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	0.549	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	0.103	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	0.189	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	0.276	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	0.362	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	0.448	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	0.535	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	0.621	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	0.708	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	0.794	9720	3.40	0	40																				

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



	Dimensions					
	P	Q	Z (H<300)	Z (H>=300)	x	y
CU2 + BFLT 230	110	210	80	180	$=(H/2)-274$	$=(H/2)-184$

Electrical connection

