



## B-FLAP I PRO - EXPLOSION ISOLATION FLAP



Explosion isolation flap B-FLAP I PRO is a protective system which prevents propagation of dust explosion through the connecting pipeline into subsequent parts of the protected technology.

Installation of flap B-FLAP I PRO is possible regardless of flow direction in the pipeline. Arisen explosion pressure wave closes the B-FLAP I PRO so the technology is separated from its connected parts and propagation of flame front, and explosion pressure is stopped. B-FLAP I PRO is locked in a closed position if an explosion occurs.

Explosion isolation flap B-FLAP I PRO is designed in accordance with European norm 2014/34/EU and certified in accordance with EN 16647, EN 15089, and EN ISO 80079-36. Explosion isolation flap B-FLAP I PRO belongs to equipment group II of explosion protection devices for hazardous areas inside flap as Zone 20 and 1 and outside flap as Zone 21 and 1.

### MATERIAL

Welded body	Structural steel (Stainless Steel optional).
Coating	Powder coating RAL 3000 (different colour optional).
Flange gasket	EPDM supplied with B-FLAP I PRO.
Fasteners	Supplied with B-FLAP I PRO.
Flange	In accordance with DIN EN 12 220 - R1 (DN 100 ÷ DN 500), R2 (DN 560 ÷ DN 800).

### OPTIONAL ACCESSORIES

Position indicator	Indicates position of B-FLAP I PRO (open/closed), indicator is connected to intrinsically safe relay. Certified in accordance with ATEX.
Dust sensor	Indicates dust pollution inside welded body of B-FLAP I PRO, sensor is connected to intrinsically safe relay.
Intrinsically safe relay	Creates an interface between a safe and a dangerous zone.
Special flange gasket	Gasket seal in accordance to customer's need.
B-FLAP I PRO abrasion-resistant finish	Protects the flap against abrasion.
Operating temperature	Possibility to increase operating temperature to 200 °C (DN 710 ÷ DN 800).

### TEMPERATURE SPECIFICATIONS

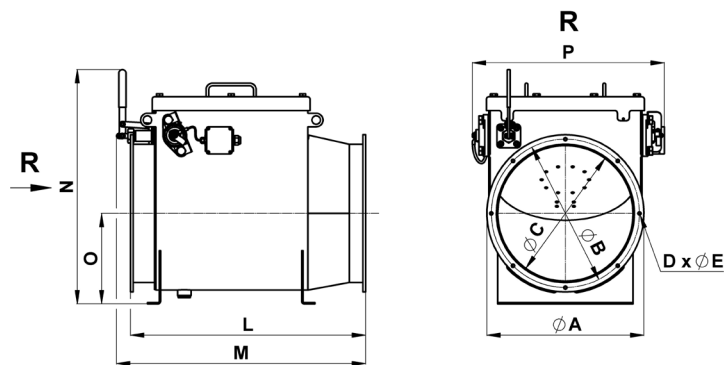
Ambient temperature	-40 °C to 80 °C (-20 °C to 60 °C for versions with electrical accessories)
Operating temperature	-40 °C to 200 °C*
Storage temperature	-10 °C to 40 °C

\*for temperatures > 80 °C using a special coating marked HT for DN 710 and DN 800

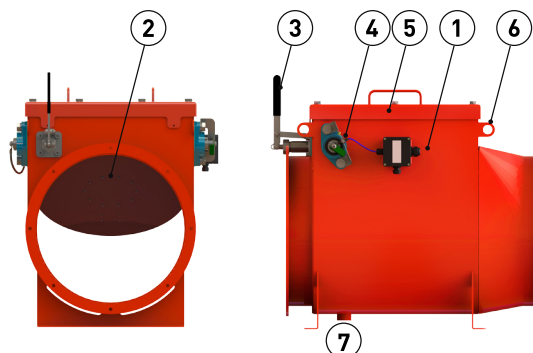
Type	Part number	Explosive class	ØA [mm] [in]	ØB [mm] [in]	ØC [mm] [in]	D x ØE [n x mm]	L [mm] [in]	N [mm] [in]	P [mm] [in]	Weight [kg]
DN 100	P-ZKL-100-ST1	St1	152 (6)	132 (5.2)	100 (3.9)	4 x 9.5	280 (11)	303 (11.9)	244 (9.6)	9
	P-ZKL-100-ST3	St3								
DN 125	P-ZKL-125-ST1	St1	177 (7)	157 (6.2)	125 (4.9)	4 x 9.5	305 (12)	327 (12.9)	269 (10.6)	11
	P-ZKL-125-ST3	St3								
DN 150	P-ZKL-150-ST1	St1	202 (8)	182 (7.2)	150 (5.9)	6 x 9.5	330 (13)	353 (13.9)	294 (11.6)	13
	P-ZKL-150-ST3	St3								
DN 200	P-ZKL-200-ST1	St1	253 (10)	233 (9.2)	200 (7.9)	6 x 9.5	390 (15.4)	403 (15.9)	344 (13.5)	18
	P-ZKL-200-ST3	St3								
DN 250	P-ZKL-250-ST1	St1	303 (11.9)	283 (11.1)	250 (9.8)	6 x 9.5	510 (20.1)	541 (21.3)	417 (16.4)	41
	P-ZKL-250-ST3	St3								
DN 280	P-ZKL-280-ST1	St1	343 (13.5)	317 (12.5)	280 (11)	8 x 9.5	560 (22)	576 (22.7)	447 (17.6)	48
	P-ZKL-280-ST3	St3								
DN 300	P-ZKL-300-ST1	St1	363 (14.3)	337 (13.3)	300 (11.8)	8 x 9.5	580 (22.8)	591 (23.3)	467 (18.4)	51
	P-ZKL-300-ST3	St3								
DN 315	P-ZKL-315-ST1	St1	378 (14.9)	352 (13.9)	315 (12.4)	8 x 9.5	600 (23.6)	606 (23.9)	482 (19)	54
	P-ZKL-315-ST3	St3								
DN 355	P-ZKL-355-ST1	St1	418 (16.5)	392 (15.4)	355 (14)	8 x 9.5	630 (24.8)	646 (25.4)	522 (20.6)	62
	P-ZKL-355-ST3	St3								
DN 400	P-ZKL-400-ST1	St1	464 (18.3)	438 (17.2)	400 (15.7)	8 x 9.5	695 (27.4)	692 (27.2)	567 (22.4)	72
	P-ZKL-400-ST3	St3								
DN 450	P-ZKL-450-ST3	St3	514 (20.2)	488 (19.2)	450 (17.7)	8 x 9.5	750 (29.5)	742 (29.2)	619 (24.4)	88
DN 500	P-ZKL-500-ST3	St3	564 (22.2)	538 (21.2)	500 (19.7)	8 x 9.5	800 (31.5)	792 (31.2)	669 (26.3)	101
DN 560	P-ZKL-560-ST3	St3	664 (26.1)	629 (24.8)	560 (22)	16 x 14	930 (36.6)	876 (34.5)	745 (29.3)	157
DN 630	P-ZKL-630-ST3	St3	734 (28.9)	698 (27.5)	630 (24.8)	16 x 14	1005 (39.6)	946 (37.2)	815 (32.1)	180
DN 710	K-ZKL-710-ST1	St1	814 (32)	775 (30.5)	710 (28)	16 x 14	1156 (45.5)	1102 (43.4)	967 (38.1)	305
DN 800	K-ZKL-800-ST1	St1	904 (35.6)	861 (33.9)	800 (31.5)	24 x 14	1246 (49)	1193 (47)	1057 (41.6)	351

More detailed information in user manual B-FLAP I PRO.

## DIMENSIONS SCHEME



## ESSENTIAL PARTS



1. Welded body
2. Sealing part
3. Locking mechanism
4. Position indicator
5. Welded lid
6. Lifting bolts
7. Dust sensor socket