

# EXPLOSION ISOLATION FLAP B-FLAP I



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

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

Explosion isolation flap B-FLAP I 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 belongs to equipment group II of explosion protection devices for hazardous areas inside flap as Zone 20 and 2 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.
Fasteners	Supplied with B-FLAP I.
Flange	In accordance with DIN EN 12 220 - R1 (DN 100 to DN 500), R2 (DN 560 to DN 800).

## OPTIONAL ACCESSORIES

Position indicator	Indicates position of B-FLAP I (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, 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.
Anti-abrasion coating	Protective coat againsts abrasion.
Operating temperature	Possibility to increase operating temperature to 150 °C (DN 100 to DN 630).

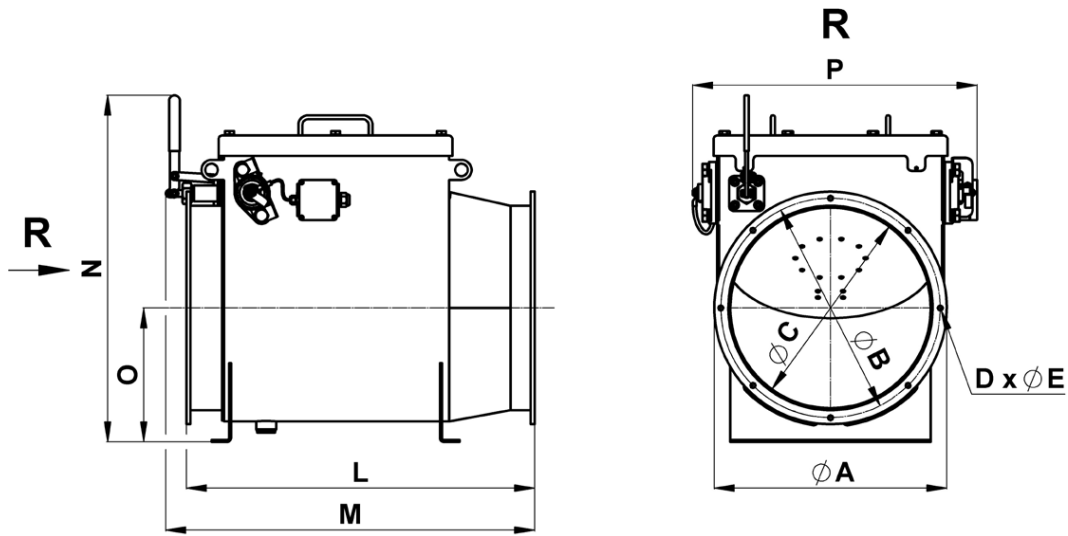
## TEMPERATURE SPECIFICATIONS

Ambient temperature	-40 °C to 80 °C
Operating temperature	-40 °C to 80 °C
Storage temperature	-10 °C to 40 °C

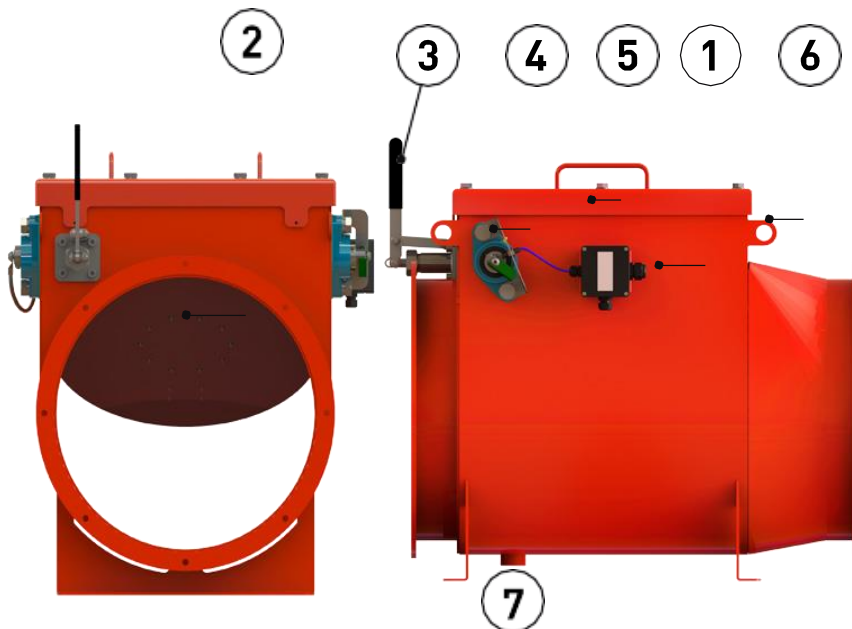
Type	Part Number	ØA [mm] [in]	ØB [mm] [in]	ØC [mm] [in]	D x ØE [mm] [in]	L [mm] [in]	N [mm] [in]	P [mm] [in]	Weight [kg]	predmax [bar]	Explosive class	Instal- - lation distan- ce	Pressur- e resistan- ce pmax [bar]	Pressu- re loss at 20 m/s [Pa]
DN 100	K-ZKL-100-ST1	152 (6)	132 (5,2)	100 (3,9)	4 x 9,5	280 (11)	303 (11,9)	244 (9,6)	9	0,85	St1, St3	2,5-15	3,2	190
DN 125	K-ZKL-125-ST1	177 (7)	157 (6,2)	125 (4,9)	4 x 9,5	305 (12)	327 (12,9)	269 (10,6)	11	0,6	St1, St3	3,2-15	5	200
DN 150	K-ZKL-150-ST1	202 (8)	182 (7,2)	150 (5,9)	6 x 9,5	330 (13)	353 (13,9)	294 (11,6)	13	0,6	St1, St3	3,2-15	5	200
DN 200	K-ZKL-200-ST1	253 (10)	233 (9,2)	200 (7,9)	6 x 9,5	390 (15,4)	403 (15,9)	344 (13,5)	18	0,6	St1, St3	3,2-15	5	200
DN 250	K-ZKL-250-ST1	303 (11,9)	283 (11,1)	250 (9,8)	6 x 9,5	510 (20,1)	541 (21,3)	417 (16,4)	41	0,7	St1, St3	4-15	1,8	210
DN 280	K-ZKL-280-ST1	343 (13,5)	317 (12,5)	280 (11)	8 x 9,5	560 (22)	576 (22,7)	447 (17,6)	48	0,7	St1, St3	4-15	1,8	220
DN 300	K-ZKL-300-ST1	363 (14,3)	337 (13,3)	300 (11,8)	8 x 9,5	580 (22,8)	591 (23,3)	467 (18,4)	51	0,7	St1, St3	4-15	1,8	220
DN 315	K-ZKL-315-ST1	378 (14,9)	352 (13,9)	315 (12,4)	8 x 9,5	600 (23,6)	606 (23,9)	482 (19)	54	0,7	St1, St3	4-15	1,8	230
DN 355	K-ZKL-355-ST1	418 (16,5)	392 (15,4)	355 (14)	8 x 9,5	630 (24,8)	646 (25,4)	522 (20,6)	62	0,7	St1, St3	4-15	1,8	240
DN 400	K-ZKL-400-ST1	464 (18,3)	438 (17,2)	400 (15,7)	8 x 9,5	695 (27,4)	692 (27,2)	568 (22,4)	73	0,7	St1, St3	4-15	1,8	245
DN 450	K-ZKL-450-ST1	514 (20,2)	488 (19,2)	450 (17,7)	8 x 9,5	750 (29,5)	742 (29,2)	619 (24,4)	88	0,35	St1	4-8	0,8	450
DN 500	K-ZKL-500-ST1	564 (22,2)	538 (21,2)	500 (19,7)	8 x 9,5	800 (31,5)	792 (31,2)	669 (26,3)	101	0,35	St1	4-8	0,8	500
DN 560	K-ZKL-560-ST1	664 (26,1)	629 (24,8)	560 (22)	16 x 14	930 (36,6)	876 (34,5)	745 (29,3)	157	0,45	St1	4-8	0,8	500
DN 630	K-ZKL-630-ST1	734 (28,9)	698 (27,5)	630 (24,8)	16 x 14	1005 (39,6)	946 (37,2)	815 (32,1)	180	0,45	St1	4-8	0,8	550
DN 710	K-ZKL-710-ST1	814 (32)	775 (30,5)	710 (28)	16 x 14	1156 (45,5)	1102 (43,4)	967 (38,1)	305	0,45	St1	3 - 8	0,7	500
DN 800	K-ZKL-800-ST1	904 (35,6)	861 (33,9)	800 (31,5)	24 x 14	1246 (49)	1193 (47)	1057 (41,6)	351	0,45	St1	3 - 8	0,7	500

\* More detailed information in UM

**DIMENSIONS SCHEME**



**ESSENTIAL PARTS**



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