

B-FLAP I (PRO): DESIGN SHEET



DN (in)	$K_{st,max}$ [bar.m/s]	B-FLAP I (PRO) version	$P_{red,max}$ [bar]	Pressure resistance [bar]	V_{min} [m ³]	L_{min} [m] without elbows	L_{min} [m] with elbows	L_{max} [m]	Pressure lossat 20 m/s [Pa]	Pressure lossat 20 m/s (in the explosion direction) [Pa]	Max. air velocity in the pipe (in the explosion direction) [m/s]	Weight [kg]
100 (4")	200	St1	0.60	3.20	0.40	3.00	4.00	15.00	190	320	35	9
	370	St3	0.85			2.50	2.50		300	480		
125 (5")	200	St1	0.60	5.00	0.40	3.00	3.00	15.00	200	330	35	11
	370	St3							330	500	30	
150 (6")	200	St1	0.60	5.00	0.40	3.00	3.00	15.00	200	340	35	13
	370	St3							370	520	30	
200 (8")	200	St1	0.60	5.00	0.40	3.00	3.00	15.00	200	220	35	18
	370	St3							400	550	30	
250 (10")	200	St1	0.45	1.80	0.90	4.00	5.00	15.00	210	250	20	41
	370	St3	0.70						420	560	12	
280 (11")	200	St1	0.45	1.80	0.90	4.00	5.00	15.00	220	260	20	48
	370	St3	0.70						440	570	12	
300 (12")	200	St1	0.45	1.80	0.90	4.00	5.00	15.00	220	300	20	51
	370	St3	0.70						450	600	12	
315 (12.5")	200	St1	0.45	1.80	0.90	4.00	5.00	15.00	230	320	20	54
	370	St3	0.70						470	650	12	
355 (14")	200	St1	0.45	1.80	0.90	4.00	5.00	15.00	240	340	20	62
	370	St3	0.70						510	700	12	
400 (16")	200	St1	0.45	1.80	0.90	4.00	5.00	15.00	245	360	20	72
	370	St3	0.70						550	800	12	
450 (18")	200	St1	0.35	0.80	1.60	4.00	5.00	8.00	450	600	10	88
	360	St3	0.97	1.90	3.00	4.50	4.50	13.50				
500 (20")	200	St1	0.35	0.80	1.60	4.00	5.00	8.00	500	650	10	101
	360	St3	0.97	1.90	3.00	4.50	4.50	13.50				
560 (22")	200	St1	0.45	0.80	6.00	4.00	5.00	8.00	500	700	10	157
	360	St3	0.97	1.90	3.00	4.50	4.50	13.50				
630 (25")	200	St1	0.45	0.80	6.00	4.00	5.00	8.00	550	810	10	180
	360	St3	0.97	1.90	3.00	4.50	4.50	13.50				
710 (28")	200	St1	0.45	0.70	6.00	3.00	4.00	8.00	500	850	10	305
800 (32")	200	St1	0.45	0.70	6.00	3.00	4.00	8.00	500	880	10	351

MESG	Dust type and parameters	Flap size	Flap version
≥ 1.10 mm	metal dust and non-metal $K_{st,max} \leq 200 \text{ bar.ms}^{-1}$	DN 100 ÷ DN 400	St1
≥ 1.10 mm	metal dust and non-metal $K_{st,max} \leq 370 \text{ bar.ms}^{-1}$	DN 100 ÷ DN 400	St3
≥ 1.10 mm	metal dust and non-metal $K_{st,max} \leq 360 \text{ bar.ms}^{-1}$	DN 450 ÷ DN 630	St3
≥ 1.27 mm	metal dust and non-metal $K_{st,max} \leq 200 \text{ bar.ms}^{-1}$	DN 450 ÷ DN 800	St1

Certification	EN 16447; EN 15089		
Application	EN 16447	Pull	
	EN 15089	Pull / Push; Reverse flow applications	
Installation position	Horizontal / Vertical (Explosion in downwards direction)		
Elbows	Max. 3 pcs. between vessel and valve		
Dust concentration	There is no limit for dust concentration in the duct		
Duct pressure resistance	Installation at L_{min}	Min. $2 \times p_{red}$ of the protected vessel	
	Installation at L_{max}	Min. pressure resistance of the valve	
Max. air velocity in the pipe	35 m/s - against the explosion direction		

For any other details or if in doubts, please check User Manual or contact RSBP.