

B-FLAP I: DESIGN SHEET

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|-------------------|---|----------------------|
| Non-metallic dust | $K_{St,max} = 200 \text{ bar.m/s}$ (DN 100-800) | B-FLAP I version ST1 |
| Non-metallic dust | $K_{St,max} = 300 \text{ bar.m/s}$ (DN 100-400) | B-FLAP I version ST3 |

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|---------------|---|----------------------|
| Metallic dust | $K_{St,max} = 200 \text{ bar.m/s}$ (DN 100-400) | B-FLAP I version ST1 |
| Metallic dust | $K_{St,max} = 350 \text{ bar.m/s}$ (DN 100-400) | B-FLAP I version ST3 |

| DN (in) | $K_{St,max}$ [bar.m/s] | B-FLAP I version | pred, max [bar] | pmax [bar] | Vmin [m ³] | Lmin [m] without elbows | Lmin [m] with elbows | Lmax [m] | Pressure loss at 20 m/s [Pa] | Max. air velocity in the pipe (in the explosion direction) [m/s] | Weight [kg] |
|-------------|------------------------|------------------|-----------------|------------|------------------------|-------------------------|----------------------|----------|------------------------------|--|-------------|
| 100 (4") | 200 | ST1 | 0.60 | 3.20 | 0.46 | 3.00 | 4.00 | 15.00 | 190 | 35 | 9 |
| | 350 | ST3 | 0.85 | 3.20 | 0.40 | 2.50 | 2.50 | 15.00 | 300 | | |
| 125 (5") | 200 | ST1 | 0.60 | 5.00 | 0.46 | 3.00 | 4.00 | 15.00 | 200 | 35 | 11 |
| | 350 | ST3 | 0.60 | 5.00 | 0.46 | 3.00 | 4.00 | 15.00 | 330 | 30 | |
| | 350 | ST3 | 0.60 | 5.00 | 1.35 | 4.20* | 4.20* | 15.00 | 330 | | |
| 150 (6") | 200 | ST1 | 0.60 | 5.00 | 0.46 | 3.00 | 4.00 | 15.00 | 200 | 35 | 13 |
| | 350 | ST3 | 0.60 | 5.00 | 0.46 | 3.00 | 4.00 | 15.00 | 370 | 30 | |
| | 350 | ST3 | 0.60 | 5.00 | 1.35 | 4.20* | 4.20* | 15.00 | 370 | | |
| 200 (8") | 200 | ST1 | 0.60 | 5.00 | 0.46 | 3.00 | 4.00 | 15.00 | 200 | 35 | 18 |
| | 350 | ST3 | 0.60 | 5.00 | 0.46 | 3.00 | 4.00 | 15.00 | 400 | 30 | |
| | 350 | ST3 | 0.60 | 5.00 | 1.35 | 4.20* | 4.20* | 15.00 | 400 | | |
| 250 (10") | 200 | ST1 | 0.45 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 210 | 20 | 40 |
| | 350 | ST3 | 0.35 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 420 | 12 | |
| | 350 | ST3 | 0.70 | 1.80 | 1.35 | 5.20 | 5.20 | 15.00 | 420 | | |
| 280 (11") | 200 | ST1 | 0.45 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 220 | 20 | 47 |
| | 350 | ST3 | 0.35 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 440 | 12 | |
| | 350 | ST3 | 0.70 | 1.80 | 1.35 | 5.20 | 5.20 | 15.00 | 440 | | |
| 300 (12") | 200 | ST1 | 0.45 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 220 | 20 | 50 |
| | 350 | ST3 | 0.35 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 450 | 12 | |
| | 350 | ST3 | 0.70 | 1.80 | 1.35 | 5.20 | 5.20 | 15.00 | 450 | | |
| 315 (12.5") | 200 | ST1 | 0.45 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 230 | 20 | 53 |
| | 350 | ST3 | 0.35 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 470 | 12 | |

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|--------------|-----|-----|------|------|------|------|------|-----------|-----|----|-----|
| | 350 | ST3 | 0.70 | 1.80 | 1.35 | 5.20 | 5.20 | 15.00 | 470 | | |
| 355 (14") | 200 | ST1 | 0.45 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 240 | 20 | 61 |
| | 350 | ST3 | 0.35 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 510 | 12 | |
| | 350 | ST3 | 0.70 | 1.80 | 1.35 | 5.20 | 5.20 | 15.00 | 510 | | |
| 400 (16") | 200 | ST1 | 0.45 | 1.80 | 0.90 | 4.00 | 5.00 | 15.0 0 | 245 | 20 | 76 |
| | 350 | ST3 | 0.35 | 1.80 | 0.90 | 4.00 | 5.00 | 15.00 | 550 | 12 | |
| | 350 | ST3 | 0.70 | 1.80 | 1.35 | 5.20 | 5.20 | 15.00 | 550 | | |
| 450 (18") | 200 | ST1 | 0.35 | 0.80 | 1.60 | 4.00 | 5.00 | 8.00 | 450 | 10 | 88 |
| 500 (20") | 200 | ST1 | 0.35 | 0.80 | 1.60 | 4.00 | 5.00 | 8.00 | 500 | 10 | 101 |
| 560 (22") | 200 | ST1 | 0.45 | 0.80 | 6.00 | 4.00 | 5.00 | 8.00 | 500 | 10 | 157 |
| 630 (25") | 200 | ST1 | 0.45 | 0.80 | 6.00 | 4.00 | 5.00 | 8.00 | 550 | 10 | 180 |
| 710 (28") | 200 | ST1 | 0.45 | 0.70 | 6.00 | 3.00 | 4.00 | 8.00 | 500 | 10 | 305 |
| 800 (32") | 200 | ST1 | 0.45 | 0.70 | 6.00 | 3.00 | 4.00 | 8.00 | 500 | 10 | 351 |

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| Certification | EN 16447; EN 15089 | |
| MESG | ≥ 1.27 mm | non-metallic dust KSt,max 200/300 bar.m/s |
| | ≥ 2.12 mm | metallic dust KSt,max 350 bar.m/s |
| Application | EN 16447 | Pull |
| | EN 15089 | Pull / Push; Reverse flow applications |
| Installation position | Horizontal / Vertical | |
| Elbows | Max. 3 pcs. between vessel and valve | |
| Dust concentration | There is no limit for dust concentration in the duct | |
| Max. air velocity in the pipe | 35 m/s - against the explosion direction | |