

Safety Valves

Type 06125, Type 06126



**Safety Valves, angle type, cast steel
type tested, TÜV-SV.577. D/G/F**

Standard safety valve
metal to metal seated, with lifting device
Flanged connection acc. to DIN EN 1092-1 PN40

Part No. 06125.X.0000

open bonnet

Part No. 06126.X.0000

closed bonnet

Available options - on request only:

- Disc with soft sealing
- Extended pressure and temperature ranges

Applications:

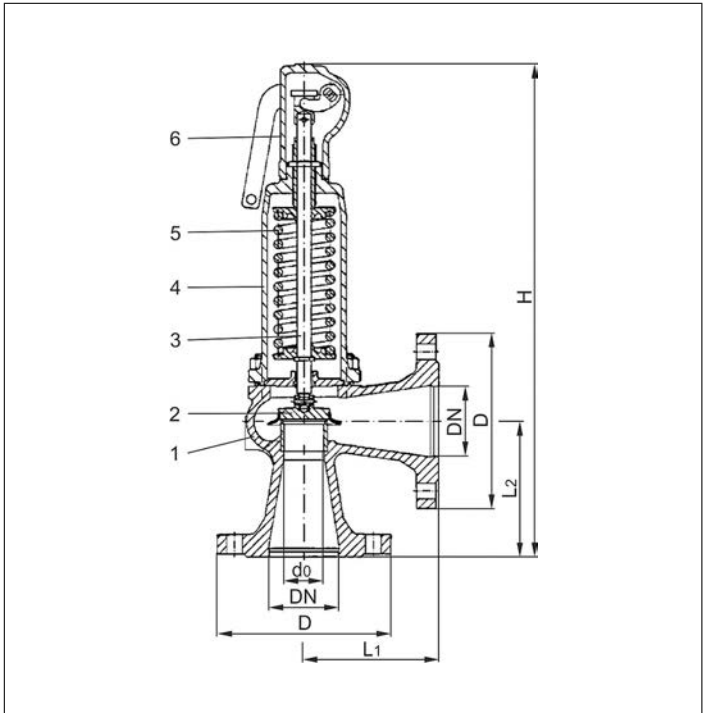
Provided as safety device for protection against excessive pressure in pressure vessels.

Approved for gases, vapours and fluids.

Working temperatures: -85°C / -121°F (188K) up to +450°C / +842°F (723K)



| Materials | DIN EN | ASTM |
|------------------|--------|-----------------------|
| 1 Body | 1.0619 | A 216 Grade WCB |
| 2 Disc | 1.4122 | no reference |
| 3 Stem | 1.4021 | A 276 Grade 420 |
| 4 Spring | 1.1200 | A 227 |
| 5 Bonnet | 1.0619 | A 216 Grade WCB |
| 6 Lifting device | 0.7040 | A 536-87 Gr. 60-40-18 |



Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



| Type 06125, 06126 | Technical data | | | | | | | | | | |
|------------------------------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Nominal size | DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 |
| Orifice | d ₀ | 12 | 18 | 18 | 18 | 23 | 29 | 37 | 46 | 60 | 74 |
| Dimension code | .X. | 0150 | 0200 | 0250 | 0320 | 0400 | 0500 | 0650 | 0800 | 1000 | 1250 |
| Set pressure saturated steam | bar | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-32 | 0.2-24 |
| Set pressure air and fluids | bar | 0.2-40 | 0.2-40 | 0.2-40 | 0.2-40 | 0.2-40 | 0.2-40 | 0.2-34 | 0.2-34 | 0.2-32 | 0.2-32 |
| Flange diameter | D | 95 | 105 | 115 | 140 | 150 | 165 | 185 | 200 | 235 | 270 |
| Height Type 06125 | H | 310 | 315 | 320 | 325 | 335 | 360 | 470 | 525 | 605 | 740 |
| Height Type 06126 | H | 305 | 310 | 315 | 320 | 330 | 355 | 475 | 530 | 590 | 745 |
| Length | L ₁ | 90 | 95 | 100 | 105 | 115 | 125 | 145 | 155 | 175 | 200 |
| Length | L ₂ | 90 | 95 | 100 | 105 | 115 | 125 | 145 | 155 | 175 | 200 |
| Weight | ca. kg | 5.0 | 6.0 | 6.0 | 8.0 | 9.0 | 12.0 | 15.0 | 20.0 | 33.0 | 48.0 |
| Coeff. of discharge gases, vapours | α _w | 0.62 | 0.29 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 |
| Coeff. of discharge fluids | α _w | 0.48 | 0.19 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |

Dimensions in mm.

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Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:

A = Saturated steam in kg/h

B = Air in m³/h at 0°C and 1013.25 mbar

C = Water in kg/h at 20°C

The capacity indicated below is for a fully opened valve.

d₀ - orifice

A₀ - flow area

| Set pressure in bar (g) | DN | 15 | | | 20 | | | 25 & 32 | | | 40 | | | 50 | | |
|-------------------------|-----------------------------------|-------|-------|------|-------|-------|------|---------|-------|------|-------|-------|------|-------|-------|---|
| | d ₀ (mm) | 12 | | | 18 | | | 18 | | | 23 | | | 29 | | |
| | A ₀ (mm ²) | 113.1 | | | 254.5 | | | 254.5 | | | 415.5 | | | 660.6 | | |
| | Medium | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C |
| 0.2 | - | - | - | - | - | - | 34 | 39 | 1770 | 55 | 63 | 2890 | 88 | 101 | 4600 | |
| 0.5 | 55 | 67 | 2140 | 30 | 35 | 1900 | 63 | 74 | 2510 | 102 | 120 | 4090 | 163 | 191 | 6510 | |
| 1.0 | 78 | 93 | 2900 | 67 | 80 | 2580 | 101 | 121 | 3390 | 165 | 197 | 5540 | 263 | 313 | 8810 | |
| 2.0 | 125 | 151 | 4100 | 129 | 156 | 3650 | 170 | 206 | 4800 | 278 | 336 | 7840 | 442 | 534 | 12500 | |
| 3.0 | 168 | 206 | 5020 | 177 | 217 | 4470 | 232 | 284 | 5880 | 379 | 463 | 9600 | 603 | 737 | 15300 | |
| 4.0 | 210 | 258 | 5790 | 221 | 272 | 5160 | 290 | 356 | 6790 | 473 | 582 | 11100 | 752 | 925 | 17600 | |
| 5.0 | 251 | 311 | 6480 | 265 | 327 | 5770 | 347 | 429 | 7590 | 566 | 700 | 12400 | 900 | 1113 | 19700 | |
| 6.0 | 293 | 363 | 7090 | 308 | 382 | 6320 | 404 | 501 | 8310 | 659 | 818 | 13600 | 1048 | 1301 | 21600 | |
| 7.0 | 333 | 416 | 7660 | 350 | 438 | 6820 | 459 | 574 | 8980 | 750 | 936 | 14700 | 1192 | 1489 | 23300 | |
| 8.0 | 374 | 468 | 8190 | 394 | 493 | 7300 | 516 | 646 | 9600 | 842 | 1055 | 15700 | 1339 | 1677 | 24900 | |
| 9.0 | 415 | 521 | 8690 | 437 | 548 | 7740 | 572 | 718 | 10200 | 934 | 1173 | 16600 | 1485 | 1865 | 26400 | |
| 10.0 | 456 | 573 | 9160 | 480 | 604 | 8160 | 629 | 791 | 10700 | 1026 | 1291 | 17500 | 1632 | 2053 | 27900 | |
| 12.0 | 538 | 679 | 10000 | 566 | 714 | 8930 | 741 | 936 | 11800 | 1210 | 1528 | 19200 | 1924 | 2429 | 30500 | |
| 16.0 | 699 | 889 | 11600 | 736 | 935 | 10300 | 964 | 1225 | 13600 | 1574 | 2001 | 22200 | 2503 | 3181 | 35200 | |
| 20.0 | 863 | 1099 | 13000 | 908 | 1156 | 11500 | 1190 | 1515 | 15200 | 1942 | 2474 | 24800 | 3088 | 3933 | 39400 | |
| 24.0 | 1024 | 1309 | 14200 | 1078 | 1377 | 12600 | 1412 | 1805 | 16600 | 2306 | 2947 | 27100 | 3665 | 4685 | 43200 | |
| 28.0 | 1189 | 1519 | 15300 | 1251 | 1599 | 13600 | 1639 | 2095 | 18000 | 2676 | 3420 | 29300 | 4254 | 5437 | 46600 | |
| 32.0 | 1354 | 1729 | 16400 | 1425 | 1820 | 14600 | 1867 | 2384 | 19200 | 3049 | 3893 | 31300 | 4847 | 6189 | 49800 | |
| 36.0 | - | 1939 | 17400 | - | 2041 | 15500 | - | 2674 | 20400 | - | 4366 | 33200 | - | 6941 | 52900 | |
| 40.0 | - | 2149 | 18300 | - | 2262 | 16300 | - | 2964 | 21500 | - | 4839 | 35000 | - | 7693 | 55700 | |

| Set pressure in bar (g) | DN | 65 | | | 80 | | | 100 | | | 125 | | |
|-------------------------|-----------------------------------|--------|-------|-------|--------|--------|-------|--------|--------|-------|--------|--------|---|
| | d ₀ (mm) | 37 | | | 46 | | | 60 | | | 74 | | |
| | A ₀ (mm ²) | 1075.3 | | | 1662.1 | | | 2827.8 | | | 4300.7 | | |
| | Medium | A | B | C | A | B | C | A | B | C | A | B | C |
| 0.2 | 142 | 165 | 7500 | 220 | 255 | 11600 | 375 | 431 | 19700 | 570 | 660 | 30000 | |
| 0.5 | 265 | 311 | 10600 | 410 | 481 | 16400 | 697 | 819 | 27800 | 1060 | 1245 | 42400 | |
| 1.0 | 428 | 510 | 14300 | 661 | 788 | 22200 | 1125 | 1341 | 37700 | 1711 | 2039 | 57400 | |
| 2.0 | 720 | 870 | 20300 | 1113 | 1344 | 31300 | 1893 | 2287 | 53300 | 2880 | 3478 | 81100 | |
| 3.0 | 981 | 1199 | 24800 | 1517 | 1854 | 38400 | 2581 | 3153 | 65300 | 3926 | 4797 | 99300 | |
| 4.0 | 1224 | 1505 | 28700 | 1892 | 2327 | 44300 | 3218 | 3958 | 75400 | 4895 | 6021 | 115000 | |
| 5.0 | 1465 | 1811 | 32100 | 2265 | 2800 | 49600 | 3853 | 4763 | 84300 | 5861 | 7245 | 128000 | |
| 6.0 | 1706 | 2117 | 35100 | 2636 | 3273 | 54300 | 4485 | 5568 | 92400 | 6823 | 8469 | 140000 | |
| 7.0 | 1940 | 2423 | 37900 | 2999 | 3746 | 58600 | 5102 | 6373 | 99800 | 7761 | 9694 | 152000 | |
| 8.0 | 2179 | 2729 | 40600 | 3368 | 4219 | 62700 | 5730 | 7177 | 107000 | 8717 | 10918 | 162000 | |
| 9.0 | 2418 | 3035 | 43000 | 3737 | 4692 | 66500 | 6358 | 7982 | 113000 | 9671 | 12142 | 172000 | |
| 10.0 | 2656 | 3342 | 45300 | 4105 | 5165 | 70100 | 6984 | 8787 | 119000 | 10624 | 13366 | 181000 | |
| 12.0 | 3132 | 3954 | 49700 | 4842 | 6111 | 76800 | 8237 | 10397 | 131000 | 12530 | 15815 | 199000 | |
| 16.0 | 4074 | 5178 | 57400 | 6297 | 8003 | 88700 | 10714 | 13616 | 151000 | 16296 | 20711 | 229000 | |
| 20.0 | 5027 | 6402 | 64100 | 7770 | 9895 | 99100 | 13218 | 16835 | 169000 | 20107 | 25608 | 257000 | |
| 24.0 | 5967 | 7626 | 70200 | 9222 | 11788 | 109000 | 15690 | 20055 | 185000 | 23866 | 30505 | 281000 | |
| 28.0 | 6925 | 8851 | 75900 | 10704 | 13680 | 117000 | 18211 | 23274 | 200000 | - | 35402 | 304000 | |
| 32.0 | 7890 | 10075 | 81100 | 12195 | 15572 | 125000 | 20748 | - | - | - | 40299 | 324000 | |
| 34.0 | - | 10687 | 83600 | - | 16518 | 129000 | - | - | - | - | - | - | |
| 36.0 | - | 11299 | 86000 | - | - | - | - | - | - | - | - | - | |
| 40.0 | - | 12523 | 90700 | - | - | - | - | - | - | - | - | - | |