

spring loaded safety valves for liquids, gases and steam with open or closed spring cap

| Materials up to DN 150 | |
|------------------------|--|
| 1 Body | GG-25 / GS-C 25 / 1.4408 |
| 5 Seat | 1.4404 |
| 7 Cone | 1.4122 / 1.4404 |
| 8 Guide | 0.7040 / 1.0501 / 1.4104 / 1.4404 |
| 9 Spring Cap | 0.7040 (0.7043 / 1.0619) / 1.4408 / 1.4571 |
| 12 Spindle | 1.4021 / 1.4404 |
| 16 Spring Plate | 1.0718 / 1.4404 |
| 18 Adjusting Screw | 1.4404 / 1.4104 with PTFE-bush |
| 54 Spring | up to 200 °C 1.1200 / 1.7102 / 1.8159 / 1.4310 from 200 °C 1.7102 / 1.8159 / 1.4310 |

| Materials from DN 200 | |
|-----------------------|---|
| 1 Body | GGG-40.3 / C22.8 / H11 / St 35.8 / 1.4571 |
| 5 Seat | 1.4404 DN 200 - 250: 1.0305 / 1.4571 DN 300 - 400: 1.0460 / 1.4571 |
| 7 Cone | 1.4122 / 1.4571 |
| 8 Guide | 1.0038 / 1.4571 |
| 9 Spring Cap | 0.0743 / 1.4571 |
| 12 Spindle | 1.4021 / 1.4404 |
| 16 Spring Plate | 1.0570 / 1.4571 |
| 18 Adjusting Screw | 1.4404 with PTFE-bush |
| 54 Spring | up to 200 °C 1.7102 / 1.8159 / 1.4310 from 200 °C 1.7102 / 1.8159 / 1.4310 |

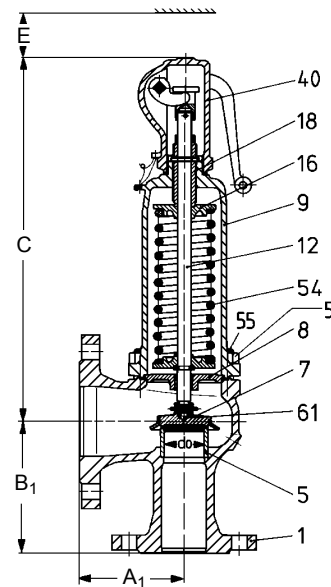
| Dimensions [mm] | | | | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| DN Inlet | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
| DN Outlet | 40 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 |
| do | 18 | 23 | 29 | 37 | 46 | 60 | 74 | 92 | 98 | 125 | 165 | 200 | 235 |
| A1 | 95 | 100 | 110 | 115 | 120 | 140 | 160 | 180 | 200 | 225 | 300 | 325 | 394 |
| B1 | 85 | 105 | 115 | 140 | 150 | 170 | 195 | 220 | 250 | 285 | 305 | 340 | 330 |
| C (O/G) * | 217 | 232 | 315 | 356 | 403 | 481 | 558 | 615 | 615 | 735 | 1105 | 1115 | 1240 |
| C (M/N) * | 218 | 233 | 325 | 366 | 413 | 526 | 603 | 660 | 660 | 735 | 1105 | 1115 | 1240 |
| C (M/G) * | 219 | 234 | 331 | 372 | 419 | 529 | 606 | 663 | 663 | 735 | 1105 | 1115 | 1240 |
| E | 150 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 450 | 450 | 700 | 700 | 850 |

- *O/G = without lifting device, gastight cap
- *M/N = with lifting device, not gastight
- *M/G = with lifting device, gastight cap

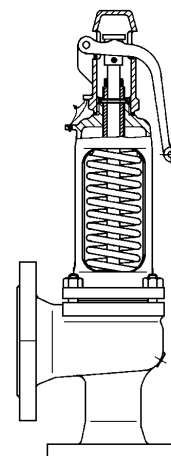
Dimensions for CrNiMo-steel design on request.

| Weights [kg] | | | | | | | | | | | | | |
|---------------------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|--|
| nominal diameter DN | | | | | | | | | | | | | |
| 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | |
| 9 | 9 | 12 | 16 | 22 | 32 | 56 | 75 | 85 | 131 | 285 | 335 | 384 | |

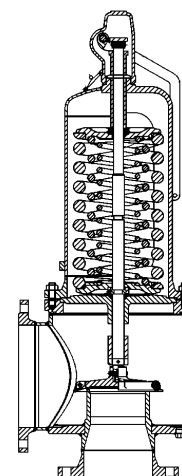
Special designs on request.
The pressure has always been indicated as overpressure.
Mankenberg reserves the right, to alter or improve the designs or specifications of the products described herein without notice.



SV 6



SV 60



from DN 200 welded design

spring loaded safety valves for liquids, gases and steam
with open or closed spring cap

| Type | Medium | Set Pressure [bar] | Nominal Diameter DN | | | | | | | | |
|---------|------------------------|--------------------|---------------------|-------|-------|-------|--------|--------|---------|---------|---------|
| | | | 25/40 | 32/50 | 40/65 | 50/80 | 65/100 | 80/125 | 100/150 | 125/200 | 150/250 |
| 6 60 | Saturated steam [kg/h] | 0.5 | 212 | 337 | 549 | 849 | 1440 | 2190 | 3390 | 3850 | 6260 |
| | | 1 | 308 | 490 | 798 | 1230 | 2090 | 3190 | 4930 | 5590 | 9100 |
| | | 2 | 493 | 783 | 1270 | 1970 | 3350 | 5100 | 7880 | 8940 | 14500 |
| | | 3 | 663 | 1050 | 1710 | 2650 | 4510 | 6860 | 10600 | 12000 | 19500 |
| | | 4 | 827 | 1310 | 2140 | 3300 | 5620 | 8560 | 13200 | 15000 | 24400 |
| | | 5 | 990 | 1570 | 2560 | 3960 | 6740 | 10200 | 15800 | 17900 | 29200 |
| | | 6 | 1150 | 1830 | 2980 | 4610 | 7840 | 11900 | 18400 | 20900 | 34000 |
| | | 7 | 1310 | 2090 | 3400 | 5260 | 8950 | 13600 | 21000 | 23800 | 38800 |
| | | 8 | 1470 | 2340 | 3820 | 5910 | 10000 | 15200 | 23600 | 26800 | 43600 |
| | | 9 | 1630 | 2600 | 4240 | 6550 | 11100 | 16900 | 26200 | 29700 | 48400 |
| | | 10 | 1800 | 2860 | 4660 | 7200 | 12200 | 18600 | 28800 | 32600 | 53100 |
| | | 12 | 2120 | 3370 | 5490 | 8490 | 14400 | 21900 | 33900 | 38500 | 62700 |
| | | 14 | 2440 | 3890 | 6330 | 9780 | 16600 | 25300 | 39100 | 44400 | 72200 |
| | | 16 | 2770 | 4400 | 7170 | 11000 | 18800 | 28600 | 44300 | 50300 | 81800 |
| | | 18 | 3090 | 4910 | 8000 | 12300 | 21000 | 32000 | 49500 | 56100 | 91400 |
| | | 24 | 4070 | 6470 | 10500 | 16200 | 27700 | 42100 | 65100 | 73900 | 120000 |
| | 28 | 4720 | 7510 | 12200 | 18900 | 32100 | 48900 | 75600 | - | - | |
| | 32 | 5380 | 8560 | 13900 | 21500 | 36600 | 55700 | 86200 | - | - | |
| | Air [Nm³/h] | 0.5 | 260 | 414 | 673 | 1040 | 1770 | 2690 | 4160 | 4720 | 7680 |
| | | 1 | 387 | 616 | 1000 | 1540 | 2630 | 4000 | 6190 | 7030 | 11400 |
| | | 2 | 627 | 997 | 1620 | 2500 | 4260 | 6490 | 10000 | 11300 | 18500 |
| | | 3 | 852 | 1350 | 2200 | 3400 | 5790 | 8810 | 13600 | 15400 | 25100 |
| | | 4 | 1060 | 1700 | 2760 | 4270 | 7270 | 11000 | 17100 | 19400 | 31500 |
| | | 5 | 1280 | 2040 | 3330 | 5140 | 8760 | 13300 | 20500 | 23300 | 38000 |
| | | 6 | 1500 | 2390 | 3890 | 6020 | 10200 | 15500 | 24000 | 27300 | 44400 |
| | | 7 | 1720 | 2730 | 4450 | 6890 | 11700 | 17800 | 27500 | 31200 | 50800 |
| | | 8 | 1940 | 3080 | 5020 | 7760 | 13200 | 20000 | 31000 | 35200 | 57300 |
| | | 9 | 2150 | 3430 | 5580 | 8630 | 14600 | 22300 | 34500 | 39100 | 63700 |
| | | 10 | 2370 | 3770 | 6150 | 9500 | 16100 | 24600 | 38000 | 43100 | 70100 |
| | | 12 | 2810 | 4470 | 7270 | 11200 | 19100 | 29100 | 44900 | 51000 | 83000 |
| | | 14 | 3240 | 5160 | 8400 | 12900 | 22100 | 33600 | 51900 | 58900 | 95900 |
| | | 16 | 3680 | 5850 | 9530 | 14700 | 25000 | 38100 | 58900 | 66800 | 108000 |
| 18 | | 4110 | 6540 | 10600 | 16400 | 28000 | 42600 | 65900 | 74700 | 121000 | |
| 22 | | 4990 | 7930 | 12900 | 19900 | 33900 | 51600 | 79800 | 90600 | 149000 | |
| 24 | 5420 | 8620 | 14000 | 21700 | 36900 | 56100 | 86800 | 99800 | 162000 | | |
| 32 | 7160 | 11300 | 18500 | 28600 | 48700 | 74200 | 116000 | - | - | | |
| 36 | 8040 | 12700 | 20800 | 32100 | 55400 | 84300 | - | - | - | | |
| 40 | 8910 | 14100 | 23000 | 35600 | 61400 | 93500 | - | - | - | | |
| 6 | Water [m³/h] | 0.5 | 7.37 | 11.7 | 19.1 | 29.5 | 50.1 | 76.3 | 118 | 134 | 218 |
| | | 1 | 9.97 | 15.9 | 25.8 | 39.9 | 67.9 | 103 | 160 | 181 | 295 |
| | | 2 | 14.1 | 22.4 | 36.5 | 56.4 | 96 | 146 | 226 | 256 | 417 |
| | | 3 | 17.3 | 27.5 | 44.7 | 69.1 | 118 | 179 | 276 | 314 | 510 |
| | | 4 | 19.9 | 31.7 | 51.6 | 79.8 | 136 | 206 | 319 | 362 | 589 |
| | | 5 | 22.3 | 35.5 | 57.7 | 89.2 | 152 | 231 | 357 | 405 | 659 |
| | | 6 | 24.4 | 38.8 | 63.2 | 97.7 | 166 | 253 | 391 | 444 | 722 |
| | | 7 | 26.4 | 42 | 68.3 | 106 | 180 | 273 | 422 | 479 | 779 |
| | | 8 | 28.2 | 44.8 | 73 | 113 | 192 | 292 | 451 | 512 | 833 |
| | | 9 | 29.9 | 47.6 | 77.4 | 120 | 204 | 310 | 479 | 543 | 884 |
| | | 10 | 31.5 | 50.1 | 81.6 | 126 | 215 | 326 | 505 | 573 | 932 |
| | | 12 | 34.6 | 54.9 | 89.4 | 138 | 235 | 358 | 553 | 627 | 1020 |
| | | 14 | 37.3 | 59.3 | 96.6 | 149 | 254 | 386 | 597 | 678 | 1100 |
| | | 16 | 39.9 | 63.4 | 103 | 160 | 271 | 413 | 638 | 724 | 1170 |
| | | 22 | 46.8 | 74.4 | 121 | 187 | 318 | 484 | 748 | 849 | 1380 |
| | | 28 | 52.8 | 83.9 | 137 | 211 | 359 | 546 | 844 | - | - |
| 32 | 56.4 | 89.7 | 146 | 226 | 384 | 584 | 903 | - | - | | |
| 36 | 59.8 | 95.1 | 155 | 239 | 407 | 619 | - | - | - | | |
| 40 | 63.1 | 100 | 163 | 252 | 429 | 653 | - | - | - | | |

Special designs on request.

The pressure has always been indicated as overpressure.

Mankenberg reserves the right, to alter or improve the designs or specifications of the products described herein without notice.