

■ High pressure swing check valves ■ DRI 26 ■ 640 AB ■ PD 25 / PD 40 ■ DN 65-300



| Range of application                                                                               |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|----------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| BW-<br>Version<br>Material                                                                         | PD | Admissible operating pressure [bar] at design temperature [°C] <sup>1)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|                                                                                                    |    | 20                                                                           | 50  | 100 | 120 | 150 | 200 | 250 | 300 | 350 | 400 | 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 | 640 | 650 |  |
| 1.0460                                                                                             | 25 | 250                                                                          | 250 | 250 | 250 | 250 | 235 | 206 | 184 | 155 | 125 | 119 | 113 | 107 | 102 | 96  | 85  | 71  | 58  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 1.5415                                                                                             | 25 | 300                                                                          | 300 | 300 | 300 | 300 | 280 | 258 | 221 | 213 | 206 | 205 | 203 | 202 | 200 | 199 | 197 | 196 | 194 | 170 | 132 | 101 | 79  | 64  |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 1.7335                                                                                             | 25 | 300                                                                          | 300 | 300 | 300 | 300 | 300 | 294 | 272 | 258 | 243 | 240 | 237 | 234 | 231 | 228 | 227 | 225 | 224 | 222 | 202 | 170 | 134 | 109 | 88  | 69  | 57  | 46  |     |     |     |     |     |     |     |     |  |
| 1.7383                                                                                             | 25 | 300                                                                          | 300 | 300 | 300 | 300 | 300 | 294 | 272 | 258 | 255 | 252 | 249 | 246 | 243 | 240 | 237 | 234 | 224 | 199 | 174 | 152 | 132 | 115 | 100 | 85  | 75  | 65  | 56  | 49  |     |     |     |     |     |     |  |
| 1.6368                                                                                             | 25 | 410                                                                          | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 402 | 360 | 309 | 257 | 205 | 153 | 102 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 1.4903                                                                                             | 25 | 425                                                                          | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 418 | 383 | 372 | 344 | 316 | 290 | 263 | 238 | 213 | 191 | 169 | 150 | 132 | 115 | 100 | 85  | 75  | 64  |     |  |
| 1.4901                                                                                             | 25 | 425                                                                          | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 423 | 397 | 370 | 345 | 320 | 297 | 275 | 252 | 230 | 208 | 186 | 166 | 147 | 127 | 110 | 95  | 82  |  |
| 1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

| Range of application                                                                               |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|----------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| BW-<br>Version<br>Material                                                                         | PD | Admissible operating pressure [bar] at design temperature [°C] <sup>1)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|                                                                                                    |    | 20                                                                           | 50  | 100 | 120 | 150 | 200 | 250 | 300 | 350 | 400 | 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 | 640 | 650 |  |
| 1.0460                                                                                             | 40 | 400                                                                          | 400 | 400 | 400 | 400 | 377 | 330 | 295 | 248 | 200 | 190 | 181 | 172 | 162 | 153 | 135 | 113 | 93  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 1.5415                                                                                             | 40 | 480                                                                          | 480 | 480 | 480 | 480 | 447 | 412 | 353 | 341 | 330 | 327 | 325 | 322 | 320 | 318 | 315 | 313 | 311 | 271 | 212 | 161 | 127 | 101 |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 1.7335                                                                                             | 40 | 481                                                                          | 481 | 481 | 481 | 481 | 481 | 471 | 436 | 412 | 388 | 384 | 379 | 374 | 370 | 365 | 363 | 360 | 358 | 355 | 322 | 271 | 215 | 175 | 141 | 110 | 90  | 73  |     |     |     |     |     |     |     |     |  |
| 1.7383                                                                                             | 40 | 480                                                                          | 480 | 480 | 480 | 480 | 480 | 480 | 471 | 436 | 412 | 407 | 403 | 398 | 393 | 388 | 384 | 379 | 374 | 358 | 318 | 278 | 242 | 212 | 183 | 160 | 136 | 120 | 103 | 89  | 79  |     |     |     |     |     |  |
| 1.6368                                                                                             | 40 | 657                                                                          | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 643 | 577 | 495 | 412 | 328 | 245 | 163 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 1.4903                                                                                             | 40 | 680                                                                          | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 669 | 612 | 596 | 551 | 506 | 464 | 421 | 381 | 341 | 306 | 271 | 240 | 212 | 183 | 160 | 136 | 120 | 103 |     |  |
| 1.4901                                                                                             | 40 | 680                                                                          | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 677 | 635 | 592 | 552 | 512 | 475 | 440 | 404 | 369 | 334 | 298 | 265 | 235 | 204 | 176 | 152 | 131 |  |
| 1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

## ■ High pressure swing check valves ■ DRI 26 ■ 640 AB ■ PD 25 / PD 40 ■ DN 65-300

### Standard features

- Valve body made of forged steel
- Swing check valve with internal hinge pin
- Lever rests in separate support ring
- Pressure sealing bonnet acc. VGB-guidelines

### Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C

### Materials

- 1.0460
- 1.4901
- 1.4903
- 1.5415
- 1.6368
- 1.7335
- 1.7383

Further materials on request.

### Media

Depending on the material swing check valves are suitable for water, gas, oil and other non aggressive media

### Fields of application

Chemical industries, power plants, ship building and other

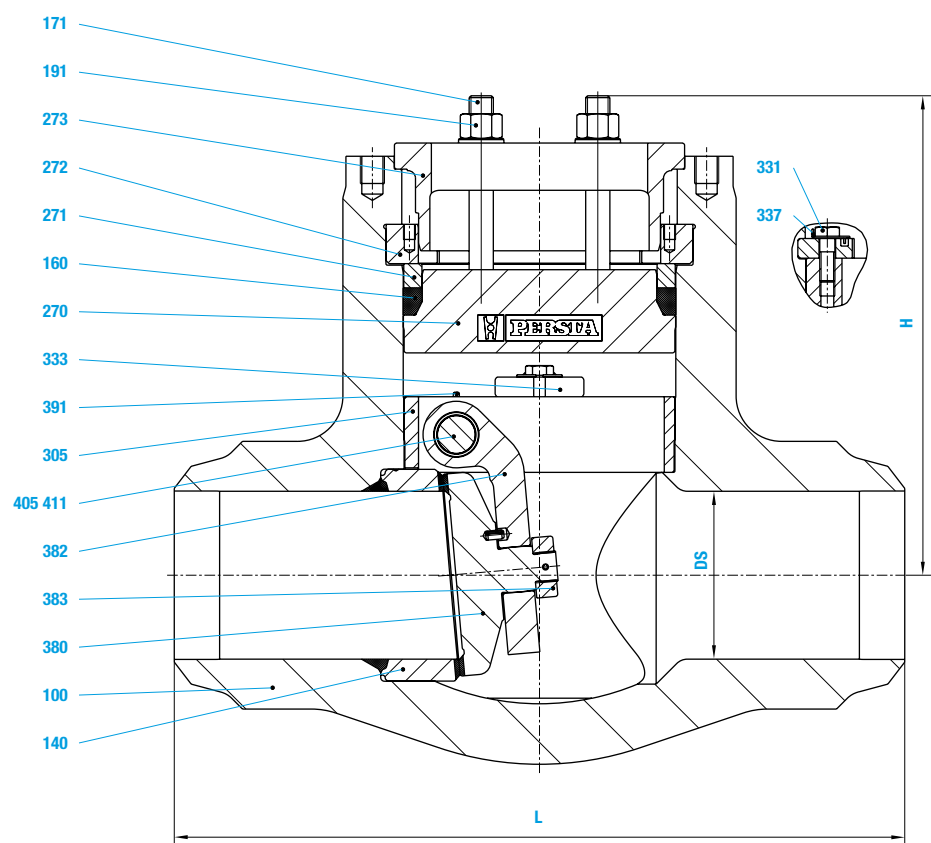
### Design Highlights

- Valve body made of forged steel
- Tubular forged body
- Seats faced with stellite
- Lever rests in a separate support ring
- Shut-off disc with curved journal
- Pressure sealing bonnet
- Cover can be used for dismantling of the cover fastener

### Benefits

- Free from porosity and shrink holes
- No pressure retaining weldseams
- Extremely resistant to wear
- The setting of the disc can be examined before installing the bonnet cover
- Optimum adjustment of the disc to the body seat
- Best possible sealing function
- No special tools are necessary for dismantling the disc fastener

■ High pressure swing check valves ■ DRI 26 ■ 640 AB ■ PD 25 / PD 40 ■ DN 65-300



■ **High pressure swing check valves** ■ **DRI 26** ■ **640 AB** ■ **PD 25 / PD 40** ■ **DN 65-300**

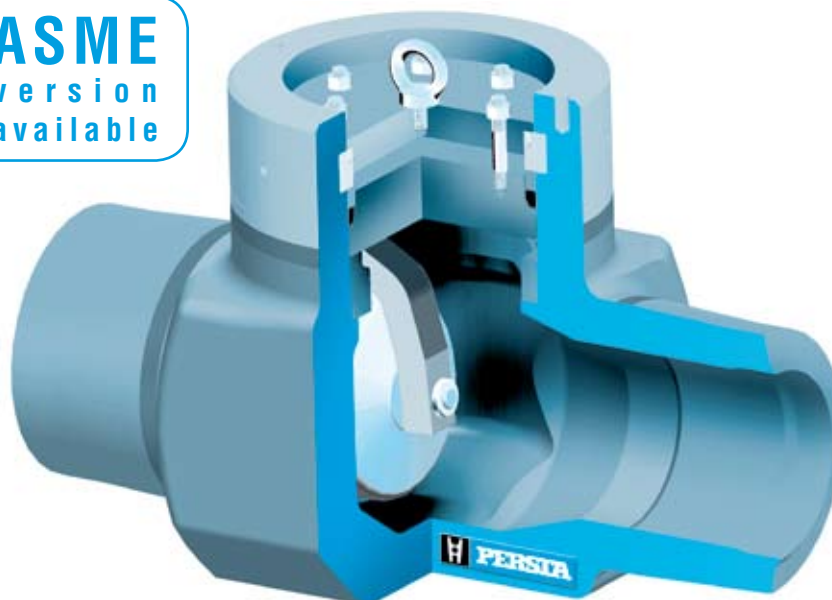
| Materials |                  |             |             |             |             |             |             |             |
|-----------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Pos.      | Component        | 1.0460 (21) | 1.5415 (42) | 1.7335 (44) | 1.7383 (45) | 1.6368 (46) | 1.4903 (63) | 1.4901 (66) |
| 100       | Body             | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
| 140       | Seat ring        | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
|           | welded on with   | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    |
| 160       | ▶ Gasket         | Graphite    | Graphite    | Graphite    | Graphite    | Graphite    | Graphite    | Graphite    |
| 171       | Stud             | A 193 B7    | A 193 B7    | A 193 B7    | A 193 B7    | A 193 B7    | A 193 B7    | A 193 B7    |
| 191       | Hexagonal nut    | A 194 2H    | A 194 2H    | A 194 2H    | A 194 2H    | A 194 2H    | A 194 2H    | A 194 2H    |
| 270       | Cover            | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      | 1.4903      | 1.4901      |
| 271       | Ring             | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      | 1.4903      | 1.4901      |
| 272       | Segmentring      | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      | 1.4903      | 1.4901      |
| 273       | Cover            | 1.0460      | 1.0460      | 1.0460      | 1.0460      | 1.0460      | 1.0460      | 1.0460      |
| 305       | Supportring      | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      | 1.4903      |
| 331       | Hexagonal screw  | A4          | A4          | A4          | A4          | A4          | A4          | A4          |
| 333       | ▶ Flange         | 1.4903      | 1.4903      | 1.4903      | 1.4903      | 1.4903      | 1.4903      | 1.4903      |
| 337       | ▶ Retaining ring | 1.4301      | 1.4301      | 1.4301      | 1.4301      | 1.4301      | 1.4301      | 1.4301      |
| 380       | ▶ Disc           | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      | 1.4903      | 1.4901      |
|           | welded on with   | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    |
| 382       | Hinge            | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      | 1.4903      |
| 383       | ▶ Washer         | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      |
| 391       | ▶ Tension pin    | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      |
| 405       | ▶ Hinge pin      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      |
| 411       | ▶ Guide bushing  | 5.3106      | 5.3106      | 5.3106      | 5.3106      | 5.3106      | 5.3106      | 5.3106      |
|           | ▶ Spare parts    |             |             |             |             |             |             |             |

| Dimensions/mm and Weights/kg |     |     |     |      |
|------------------------------|-----|-----|-----|------|
| DRI 26.25<br>DN              | DS  | L   | H   | kg   |
| 80                           | 70  | 305 | 230 | 49   |
| 100                          | 90  | 406 | 257 | 83   |
| 125                          | 111 | 483 | 317 | 137  |
| 150                          | 136 | 559 | 357 | 265  |
| 200                          | 178 | 711 | 445 | 401  |
| 250                          | 222 | 864 | 530 | 744  |
| 300                          | 263 | 991 | 603 | 1182 |

| Dimensions/mm and Weights/kg |     |      |     |      |
|------------------------------|-----|------|-----|------|
| DRI 26.40<br>DN              | DS  | L    | H   | kg   |
| 65                           | 50  | 330  | 231 | 59   |
| 80                           | 57  | 368  | 246 | 91   |
| 100                          | 72  | 457  | 278 | 150  |
| 125                          | 90  | 533  | 337 | 288  |
| 150                          | 111 | 609  | 431 | 445  |
| 200                          | 146 | 762  | 479 | 796  |
| 250                          | 185 | 1270 | 587 | 1542 |

■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600

**ASME**  
version  
available



**Range of application**

| BW-<br>Version<br>Material                                                                         | Admissible operating pressure [bar] at design temperature [°C] <sup>1)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------------------|--|--|------------------|--|--|
|                                                                                                    | PD                                                                           | 120 | 150 | 200 | 250 | 300 | 350 | 400 | 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 | 640 | 650                              |  |  |                  |  |  |
| 1.0460                                                                                             | 16                                                                           | 160 | 160 | 151 | 132 | 118 | 99  | 80  | 76  | 73  | 69  | 65  | 61  | 54  | 45  | 37  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 250 | 250 | 235 | 206 | 184 | 155 | 125 | 119 | 113 | 107 | 102 | 96  | 85  | 71  | 58  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 320 | 320 | 302 | 264 | 236 | 198 | 160 | 153 | 145 | 138 | 130 | 123 | 109 | 91  | 75  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 400 | 400 | 377 | 330 | 295 | 248 | 200 | 191 | 182 | 172 | 163 | 153 | 136 | 113 | 93  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
| 1.5415                                                                                             | 16                                                                           | 192 | 192 | 179 | 165 | 141 | 137 | 132 | 131 | 130 | 129 | 128 | 127 | 126 | 125 | 124 | 109 | 85  | 64  | 51  | 41  |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 300 | 300 | 280 | 258 | 221 | 213 | 206 | 205 | 203 | 202 | 200 | 199 | 197 | 196 | 194 | 170 | 132 | 101 | 79  | 64  |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 385 | 385 | 358 | 330 | 283 | 273 | 264 | 262 | 260 | 258 | 256 | 255 | 253 | 251 | 249 | 217 | 170 | 129 | 102 | 81  |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 480 | 480 | 448 | 413 | 354 | 342 | 330 | 328 | 325 | 323 | 321 | 318 | 316 | 314 | 311 | 272 | 212 | 161 | 127 | 102 |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
| 1.7335                                                                                             | 16                                                                           | 192 | 192 | 192 | 189 | 174 | 165 | 156 | 154 | 152 | 150 | 148 | 146 | 145 | 144 | 143 | 142 | 129 | 109 | 86  | 70  | 57  | 44  | 36  | 29  |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 300 | 300 | 300 | 294 | 272 | 258 | 243 | 240 | 237 | 234 | 231 | 228 | 227 | 225 | 224 | 222 | 202 | 170 | 134 | 109 | 88  | 69  | 57  | 46  |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 385 | 385 | 385 | 377 | 349 | 330 | 311 | 307 | 304 | 300 | 296 | 292 | 290 | 289 | 287 | 285 | 258 | 217 | 172 | 140 | 113 | 88  | 72  | 59  |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 481 | 481 | 481 | 471 | 436 | 413 | 389 | 384 | 380 | 375 | 370 | 365 | 363 | 364 | 358 | 356 | 323 | 272 | 215 | 175 | 141 | 110 | 91  | 74  |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
| 1.7383                                                                                             | 16                                                                           | 192 | 192 | 192 | 192 | 189 | 174 | 165 | 163 | 161 | 159 | 157 | 156 | 154 | 152 | 150 | 143 | 127 | 111 | 97  | 85  | 74  | 64  | 55  | 48  | 41  | 36  | 32  |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 300 | 300 | 300 | 300 | 294 | 272 | 258 | 255 | 252 | 249 | 246 | 243 | 240 | 237 | 234 | 224 | 199 | 174 | 152 | 132 | 115 | 100 | 85  | 75  | 65  | 56  | 49  |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 384 | 384 | 384 | 384 | 377 | 349 | 330 | 326 | 322 | 319 | 315 | 311 | 307 | 304 | 300 | 287 | 255 | 223 | 194 | 170 | 147 | 128 | 109 | 96  | 83  | 72  | 63  |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 480 | 480 | 480 | 480 | 471 | 436 | 413 | 408 | 403 | 398 | 384 | 389 | 384 | 379 | 375 | 358 | 318 | 278 | 243 | 212 | 184 | 160 | 137 | 120 | 104 | 90  | 79  |     |     |     |     |                                  |  |  |                  |  |  |
| 1.6368                                                                                             | 16                                                                           | 263 | 263 | 263 | 263 | 263 | 263 | 263 | 263 | 263 | 257 | 231 | 198 | 165 | 131 | 98  | 65  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 402 | 360 | 309 | 257 | 205 | 153 | 102 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 525 | 525 | 525 | 525 | 525 | 525 | 525 | 525 | 525 | 515 | 482 | 396 | 330 | 262 | 196 | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 657 | 657 | 657 | 627 | 657 | 657 | 657 | 657 | 657 | 657 | 643 | 577 | 495 | 412 | 328 | 245 | 163 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                  |  |  |                  |  |  |
| 1.4903                                                                                             | 16                                                                           | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 268 | 245 | 239 | 221 | 203 | 186 | 169 | 153 | 137 | 123 | 108 | 96  | 85  | 74  | 64  | 55  | 48  | 41                               |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 418 | 383 | 372 | 344 | 316 | 290 | 263 | 238 | 213 | 191 | 169 | 150 | 132 | 115 | 100 | 85  | 75  | 65                               |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 536 | 490 | 477 | 441 | 405 | 371 | 338 | 305 | 273 | 245 | 217 | 192 | 170 | 147 | 128 | 109 | 96  | 83                               |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 669 | 613 | 596 | 552 | 507 | 464 | 422 | 382 | 342 | 306 | 271 | 240 | 212 | 184 | 160 | 137 | 120 | 104                              |  |  |                  |  |  |
| 1.4901                                                                                             | 16                                                                           | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 272 | 271 | 254 | 237 | 221 | 205 | 190 | 176 | 161 | 147 | 133 | 119 | 106 | 94  | 81  | 70  | 61  | 52  |                                  |  |  |                  |  |  |
|                                                                                                    | 25                                                                           | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 423 | 397 | 370 | 345 | 320 | 297 | 275 | 252 | 230 | 208 | 186 | 166 | 147 | 127 | 110 | 95  | 82  |                                  |  |  |                  |  |  |
|                                                                                                    | 32                                                                           | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 544 | 542 | 508 | 474 | 442 | 410 | 380 | 352 | 323 | 295 | 267 | 239 | 212 | 188 | 163 | 141 | 122 | 105 |                                  |  |  |                  |  |  |
|                                                                                                    | 40                                                                           | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 677 | 635 | 592 | 552 | 512 | 475 | 440 | 404 | 369 | 334 | 298 | 265 | 235 | 204 | 176 | 152 | 131 |                                  |  |  |                  |  |  |
| 1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | Design according to working data |  |  | PD 63 on request |  |  |

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. Design according to working data PD 63 on request

## ■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600

### Standard features

- Valve body made of forged steel
- Swing check valve with internal hinge pin
- Lever rests in a separate support ring
- Welded seat ring
- Pressure sealing bonnet acc. VGB-guidelines

### Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C
- Higher ratings on request

### Materials

- 1.0460
- 1.4901
- 1.4903
- 1.5415
- 1.6368
- 1.7335
- 1.7383

Further materials on request.

### Media

Depending on the material swing check valves are suitable for water, gas, oil and other non aggressive media

### Fields of application

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries

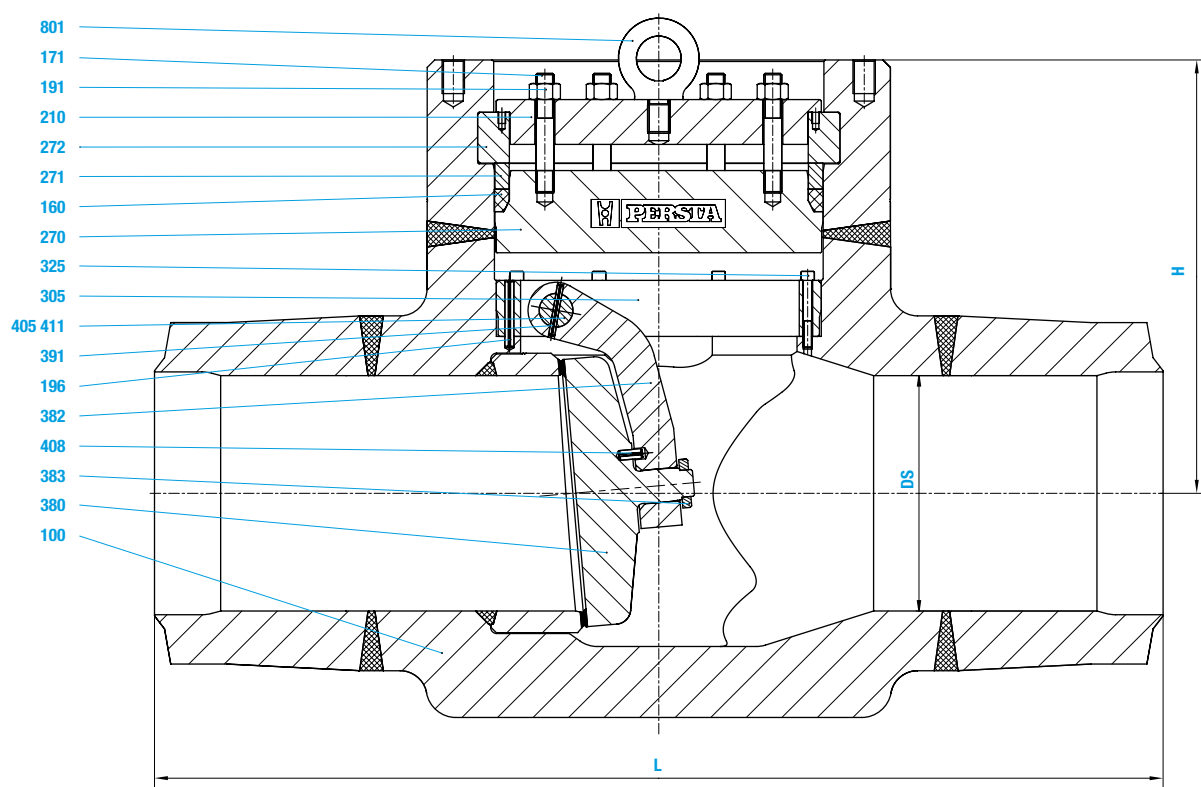
### Design Highlights

- Valve body made of forged steel
- Seats faced with stellite
- Lever rests in a separate support ring
- Shut-off device with curved journal
- Pressure sealing bonnet

### Benefits

- Free from porosity and shrink holes
- Extremely resistant to wear
- The setting of the disc can be examined before installing the bonnet cover
- Optimum alignment of the disc to the body seat
- Best possible sealing function

■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600



■ **High pressure swing check valves** ■ **DRI 16-63** ■ **640 AB** ■ **PD 16-63** ■ **DN 50-600**

| Materials |                  |             |             |             |             |             |             |             |
|-----------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Pos.      | Component        | 1.0460 (21) | 1.5415 (42) | 1.7335 (44) | 1.7383 (45) | 1.6368 (46) | 1.4903 (63) | 1.4901 (66) |
| 100       | Body             | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
| 160       | ▶ Gasket         | Graphite    | Graphite    | Graphite    | Graphite    | Graphite    | Graphite    | Graphite    |
| 171       | Stud             | 1.7709      | 1.7709      | 1.7709      | 1.7709      | 1.7709      | 1.7709      | 1.4923      |
| 191       | Hexagonal nut    | 1.7218      | 1.7218      | 1.7218      | 1.7218      | 1.7218      | 1.7218      | 1.4923      |
| 196       | ▶ Tension pin    | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      |
| 210       | Bonnet           | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.7383      | 1.4903      |
| 270       | Cover            | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
| 271       | Ring             | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
| 272       | Segmentring      | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
| 305       | ▶ Supportring    | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.7383      | 1.4903      | 1.4901      |
| 325       | Headcap screw    | A4          | A4          | A4          | A4          | A4          | A4          | A4          |
| 380       | ▶ Disc           | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.6368      | 1.4903      | 1.4901      |
|           | welded on with   | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    | Stellite    |
| 382       | ▶ Hinge          | 1.0460      | 1.5415      | 1.7335      | 1.7383      | 1.7383      | 1.4903      | 1.4903      |
| 383       | ▶ Washer         | 1.0460      | 1.0460      | 1.7335      | 1.7383      | 1.6368      | 1.4923      | 1.4923      |
| 391       | ▶ Tension pin    | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      |
| 405       | ▶ Hinge pin      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      | 1.4923      |
| 408       | ▶ Tension pin    | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      | 1.4310      |
| 411       | ▶ Guide bushing  | 5.3106      | 5.3106      | 5.3106      | 5.3106      | 5.3106      | 5.3106      | 5.3106      |
| 801       | Lifting eye bolt | 1.0401      | 1.0401      | 1.0401      | 1.0401      | 1.0401      | 1.0401      | 1.0401      |
|           | ▶ Spare parts    |             |             |             |             |             |             |             |

| Dimensions/mm and Weights/kg |       |                   |     |      |                   |     |      |                   |            |    |
|------------------------------|-------|-------------------|-----|------|-------------------|-----|------|-------------------|------------|----|
| DN                           | DS    | DRI 16            |     |      | DRI 25            |     |      | DRI 32            |            |    |
|                              |       | L                 | H   | kg   | L                 | H   | kg   | L                 | H          | kg |
| 65-200                       |       |                   |     |      |                   |     |      |                   |            |    |
| 225                          | 202,5 |                   |     |      |                   |     |      | Version DRI 26.40 |            |    |
| 250 / 225                    | 202,5 |                   |     |      |                   |     |      | 1050 450 910      |            |    |
| 250                          | 225,0 | Version DRI 26.25 |     |      | Version DRI 26.25 |     |      | 1150 450          |            |    |
| 300 / 250                    | 225,0 |                   |     |      |                   |     |      | 1150 515 1300     | On request |    |
| 300                          | 270,0 |                   |     |      |                   |     |      | 1350 515          |            |    |
| 350 / 300                    | 270,0 |                   |     |      |                   |     |      | 1350 605 2300     |            |    |
| 350                          | 315,0 | 1200              | 540 | 2300 | 1550              | 580 | 2300 | 1550 605          |            |    |
| 400 / 350                    | 315,0 | 1200              | 540 |      | 1750              | 580 |      | 1550 785 4000     |            |    |
| 400                          | 360,0 | 1350              | 600 | 3600 | 1750              | 660 | 3600 | 1750 785          |            |    |
| 450 / 400                    | 360,0 | 1350              | 600 |      | 1950              | 660 |      | On request        |            |    |
| 450                          | 405,0 | 1500              | 690 | 5400 | 1950              | 750 | 5400 |                   |            |    |
| 500 / 450                    | 405,0 | 1500              | 692 |      | 2150              | 750 |      |                   |            |    |
| 500                          | 450,0 | 1650              |     |      |                   |     |      |                   |            |    |
| 600 / 500                    | 540,0 | 1650              |     |      | On request        |     |      |                   |            |    |
| 600                          | 540,0 | On request        |     |      |                   |     |      |                   |            |    |

■ High pressure stop check valve ■ DRA 26 ■ 640 ST ■ PD 25 / 40 ■ DN 80-200



| Range of application                                                                                                                        |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| BW-<br>Version<br>Material                                                                                                                  | PD | Admissible operating pressure [bar] at design temperature [°C] <sup>1)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|                                                                                                                                             |    | 20                                                                           | 50  | 100 | 120 | 150 | 200 | 250 | 300 | 350 | 400 | 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 | 640 | 650 |  |  |
| 1.0460                                                                                                                                      | 25 | 250                                                                          | 250 | 250 | 250 | 250 | 235 | 206 | 184 | 155 | 125 | 119 | 113 | 107 | 102 | 96  | 85  | 71  | 58  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 1.5415                                                                                                                                      | 25 | 300                                                                          | 300 | 300 | 300 | 300 | 280 | 258 | 221 | 213 | 206 | 205 | 203 | 202 | 200 | 199 | 197 | 196 | 194 | 170 | 132 | 101 | 79  | 64  |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 1.7335                                                                                                                                      | 25 | 300                                                                          | 300 | 300 | 300 | 300 | 300 | 294 | 272 | 258 | 243 | 240 | 237 | 234 | 231 | 228 | 227 | 225 | 224 | 222 | 202 | 170 | 134 | 109 | 88  | 69  | 57  | 46  |     |     |     |     |     |     |     |     |  |  |
| 1.7383                                                                                                                                      | 25 | 300                                                                          | 300 | 300 | 300 | 300 | 300 | 300 | 294 | 272 | 258 | 255 | 252 | 249 | 246 | 243 | 240 | 237 | 234 | 224 | 199 | 174 | 152 | 132 | 115 | 100 | 85  | 75  | 65  | 56  | 49  |     |     |     |     |     |  |  |
| 1.6368                                                                                                                                      | 25 | 410                                                                          | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 410 | 402 | 360 | 309 | 257 | 205 | 153 | 102 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 1.4903                                                                                                                                      | 25 | 425                                                                          | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 418 | 383 | 372 | 344 | 316 | 290 | 263 | 238 | 213 | 191 | 169 | 150 | 132 | 115 | 100 | 85  | 75  | 64  |     |  |  |
| 1.4901                                                                                                                                      | 25 | 425                                                                          | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 425 | 423 | 397 | 370 | 345 | 320 | 297 | 275 | 252 | 230 | 208 | 186 | 166 | 147 | 127 | 110 | 95  | 82  |  |  |
| 1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980 |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980

| Range of application                                                                                                                        |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| BW-<br>Version<br>Material                                                                                                                  | PD | Admissible operating pressure [bar] at design temperature [°C] <sup>1)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|                                                                                                                                             |    | 20                                                                           | 50  | 100 | 120 | 150 | 200 | 250 | 300 | 350 | 400 | 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 | 640 | 650 |  |  |
| 1.0460                                                                                                                                      | 40 | 400                                                                          | 400 | 400 | 400 | 400 | 377 | 330 | 295 | 248 | 200 | 190 | 181 | 172 | 162 | 153 | 135 | 113 | 93  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 1.5415                                                                                                                                      | 40 | 480                                                                          | 480 | 480 | 480 | 480 | 447 | 412 | 353 | 341 | 330 | 327 | 325 | 322 | 320 | 318 | 315 | 313 | 311 | 271 | 212 | 161 | 127 | 101 |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 1.7335                                                                                                                                      | 40 | 481                                                                          | 481 | 481 | 481 | 481 | 471 | 436 | 412 | 388 | 384 | 379 | 374 | 370 | 365 | 363 | 360 | 358 | 355 | 322 | 271 | 215 | 175 | 141 | 110 | 90  | 73  |     |     |     |     |     |     |     |     |     |  |  |
| 1.7383                                                                                                                                      | 40 | 480                                                                          | 480 | 480 | 480 | 480 | 480 | 471 | 436 | 412 | 407 | 403 | 398 | 393 | 388 | 384 | 379 | 374 | 358 | 318 | 278 | 242 | 212 | 183 | 160 | 136 | 120 | 103 | 89  | 79  |     |     |     |     |     |     |  |  |
| 1.6368                                                                                                                                      | 40 | 657                                                                          | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 657 | 643 | 577 | 495 | 412 | 328 | 245 | 163 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 1.4903                                                                                                                                      | 40 | 680                                                                          | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 669 | 612 | 596 | 551 | 506 | 464 | 421 | 381 | 341 | 306 | 271 | 240 | 212 | 183 | 160 | 136 | 120 | 103 |     |  |  |
| 1.4901                                                                                                                                      | 40 | 680                                                                          | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 680 | 677 | 635 | 592 | 552 | 512 | 475 | 440 | 404 | 369 | 334 | 298 | 265 | 235 | 204 | 176 | 152 | 131 |  |  |
| 1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980 |    |                                                                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980

■ **High pressure stop check valve** ■ DRA 26 ■ 640 ST ■ PD 25 / 40 ■ DN 80-200

### Standard features

- Body hollow-forged in a closed die
- Double-sided high-pressure shut-off system
  - Function of a check valve
  - Function of a gate valve
- Internal hinge pin, pivoted in a separate retaining ring
- Movable shut-off system guided in a groove
- Defined stop of the check disc
- Pressure sealing bonnet acc. to VGB-guidelines
- Generally stellited seats

### Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C

### Materials

- 1.0460 ■ 1.5415 ■ 1.7335 ■ 1.7383
- 1.6368 ■ 1.4903 ■ 1.4901

Further materials and nominal sizes on request

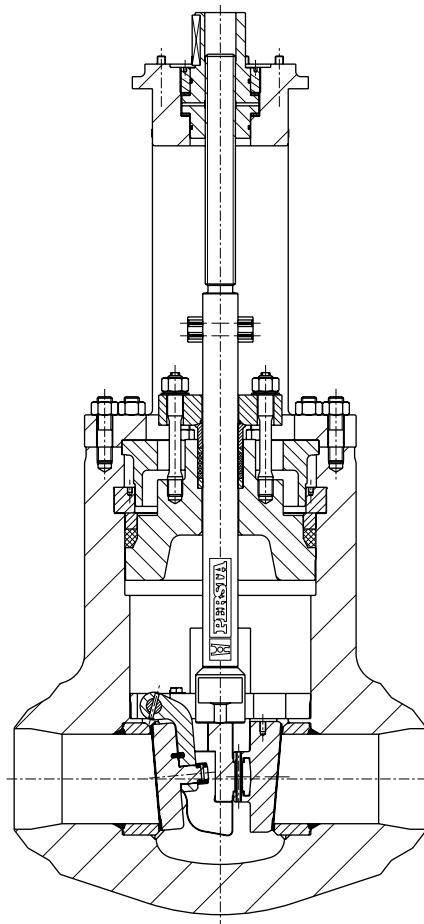
### Media

Depending on the material the globe valves are suitable for water, gas, oil and other non aggressive media

### Fields of application

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries

### High pressure stop check valve



### Design-Highlights

- Operating mode as a check valve and a gate valve
- Sealing in both flow directions
- Full straight seat passage
- Full opening angle of the check disk
- Flexible-mounted non-return and shut-off disc
- Shut-off system guided in a groove
- Shut-off discs with anti-twist safeguard

### Benefits

- Possible savings:
  - One valve
  - Two welding seams in pipeline
  - Space and weights
  - Less insulation time and effort
  - Less maintenance and inspection requirements
- Secure protection of relevant and complex parts of the plant
- Better flow characteristics than non-return valves
- Minimizing pressure drop
- Better smoothness of running and adjustment of the valves in the body seats
- Prevention of positional deviations of the shut-off disc and protection against damage
- Effective adjustment to the body seats with constant repetitive contact