

- Gate valves
- High pressure gate valve DSK 10
- 700 JT
- PD 10
- DN 50-150



| | | Range of application | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | Admissible operating pressure [bar] at design temperature [°C] ¹⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BW-Version | Material | 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 | |
| 1.0460 | 10 | 100 | 100 | 94 | 82 | 74 | 62 | 50 | 48 | 45 | 43 | 41 | 38 | 34 | 28 | 23 | | | | | | | | | | | | | | |
| 1.5415 | 10 | 120 | 120 | 112 | 103 | 88 | 85 | 82 | 82 | 81 | 81 | 80 | 79 | 79 | 78 | 78 | 68 | 53 | 40 | 32 | 25 | | | | | | | | | |
| 1.7335 | 10 | 120 | 120 | 120 | 118 | 109 | 103 | 97 | 96 | 95 | 94 | 92 | 91 | 91 | 90 | 89 | 89 | 81 | 68 | 54 | 44 | 35 | 28 | 23 | 18 | | | | | |
| 1.7383 | 10 | 120 | 120 | 120 | 120 | 118 | 109 | 103 | 102 | 101 | 99 | 98 | 97 | 96 | 95 | 94 | 89 | 79 | 69 | 61 | 53 | 46 | 40 | 34 | 30 | 26 | 22 | 20 | | |

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

■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 50-150

Standard features

- Split disc gate valve
- Die-forged body and bonnet
- Full bore (Except DN 65/50 and DN 125/100)
- Outside screw and yoke
- Non-turning, rising stem
- Yoke sleeve supported by needle bearings
- Pressure sealing bonnet acc. VGB-guidelines

Pressure and temperature ratings

- Pressure rating up to 120 bar
- Temperature rating up to 600 °C

Materials

- 1.0460
- 1.5415
- 1.7335
- 1.7383

Further materials on request.

Media

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

Fields of application

Chemical industries, power plants, ship building and other

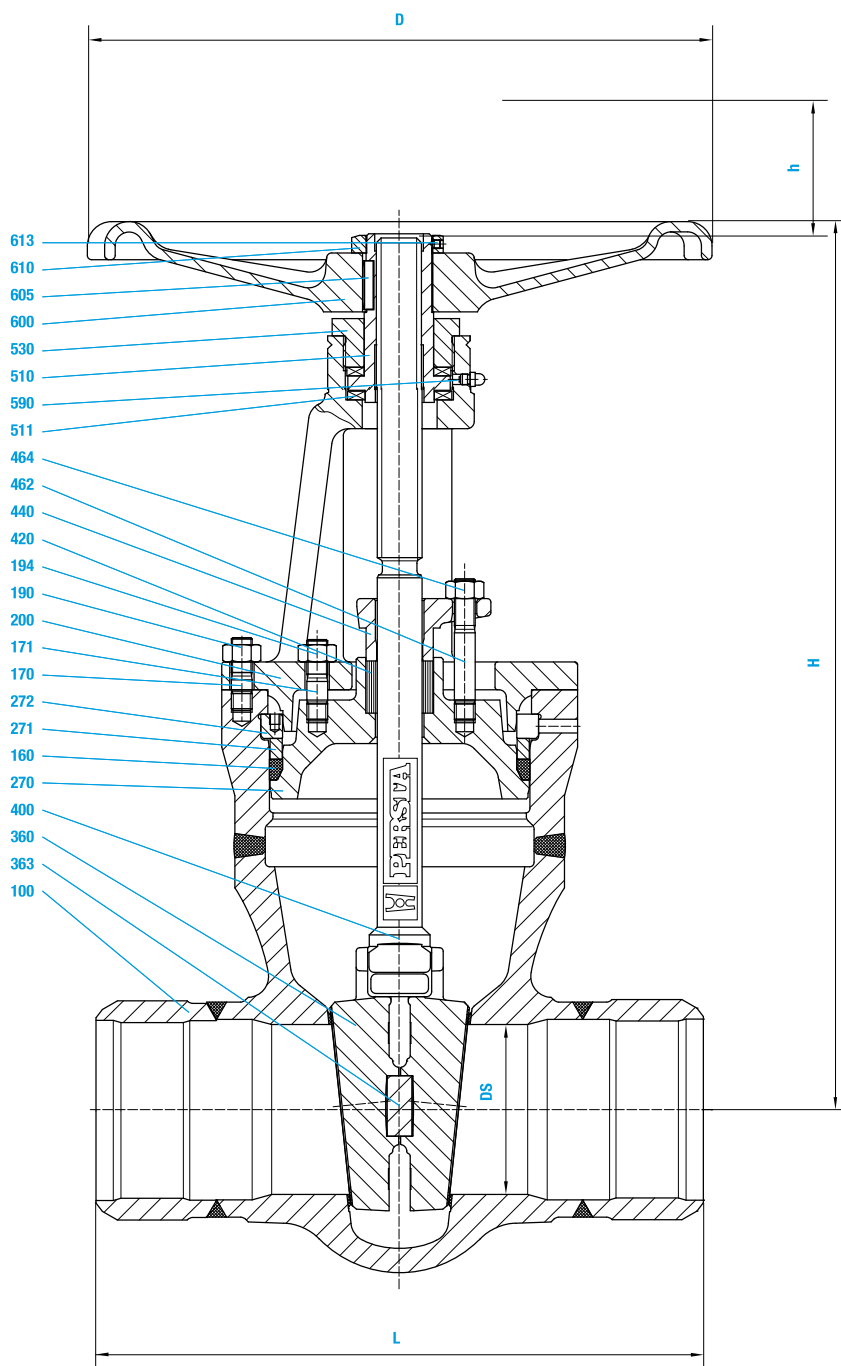
Design Highlights

- Die-forged valve body with integral seats
- Hard faced seats
- Full bore, except DN 65/50 and DN 125/100
- Non-turning rising stem with burnished shaft
- Rolled stem thread
- Pressure sealing bonnet
- Possibility to add an actuator flange

Benefits

- Compared to cast steel, robust and highly stressable
- Best possible sliding performance, minimum wear
- No reduction in seat area
- Minimum wear of the gland packing
- Optimal surface with higher surface hardness and therefore better wear resistance than cut threads
- Best possible sealing function
- Simple retrofitting of an actuator without welding

■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 50-150



■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 50-150

| Materials | | | | | |
|-----------|-----------------------|---------------------|--------------------|--------------------|--------------------|
| Pos. | Component | 1.0460 (21) | 1.5415 (42) | 1.7335 (44) | 1.7383 (45) |
| 100 | Body welded on with | 1.0460 Cr17 | 1.5415 Stellite | 1.7335 Stellite | 1.7383 Stellite |
| 160 | ▶ Gasket | Graphite | Graphite | Graphite | Graphite |
| 170 | Stud | 1.7709 | 1.7719 | 1.7709 | 1.7709 |
| 171 | Stud | 1.7709 | 1.7719 | 1.7709 | 1.7709 |
| 190 | Hexagonal nut | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 194 | Hexagonal nut | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 200 | Bonnet | 1.5419 | 1.5419 | 1.5419 | 1.5419 |
| 270 | Cover | 1.0460 | 1.5415 | 1.7335 | 1.7383 |
| 271 | Ring | 1.0460 | 1.5415 | 1.7335 | 1.7383 |
| 272 | Segmentring | 1.0460 | 1.5415 | 1.7335 | 1.7383 |
| 360 | ▶ Disc welded on with | 1.0460 18/8 (40) | 1.5415 Stellite | 1.7335 Stellite | 1.7383 Stellite |
| 363 | ▶ Pressure piece | 1.4021 | 1.4021 | 1.4021 | 1.4021 |
| 400 | ▶ Stem | 1.4021 | 1.4122 | 1.4122 | 1.4122 |
| 420 | ▶ Packing | Graphite | Graphite | Graphite | Graphite |
| 440 | Gland flange | 1.0460 | 1.0460 | 1.0460 | 1.0460 |
| 462 | Stud | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 464 | Hexagonal nut | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 510 | ▶ Yoke sleeve | 1.0718 | 1.0718 | 1.0718 | 1.0718 |
| 511 | ▶ Roller bearing | WLS1 | WLS1 | WLS1 | WLS1 |
| 530 | Screwing | 1.0718 | 1.0718 | 1.0718 | 1.0718 |
| 590 | Grease nipple | 5.8 | 5.8 | 5.8 | 5.8 |
| 600 | Handwheel | 0.7040 | 0.7040 | 0.7040 | 0.7040 |
| 605 | Key | 1.0060 | 1.0060 | 1.0060 | 1.0060 |
| 610 | Hexagonal nut | St | St | St | St |
| 613 | Screw pin | 45H | 45H | 45H | 45H |

▶ Spare parts

| Dimensions/mm | | | | | |
|---------------|-----|-----|-----|-------------|-----|
| DN | DS | L | H | Stroke h | D |
| 50 | 50 | 250 | 337 | 63 | 180 |
| 65 / 50 | 50 | 290 | 337 | 63 | 180 |
| 80 | 78 | 310 | 410 | 90 | 280 |
| 100 | 98 | 350 | 515 | 110 | 360 |
| 125 / 100 | 98 | 400 | 515 | 110 | 360 |
| 150 | 150 | 450 | 685 | 165 | 450 |

| Weights/kg and Kvs-values | | | |
|---------------------------|-------|-------|----------------------------|
| DN | FL | BW | Kvs (m ³ /h) |
| 50 | 26,5 | 15,5 | 258,0 |
| 65 / 50 | 30,5 | 16,0 | 258,0 |
| 80 | 45,0 | 31,0 | 628,0 |
| 100 | 71,0 | 47,0 | 991,0 |
| 125 / 100 | 89,0 | 49,0 | 991,0 |
| 150 | 155,0 | 100,0 | 2323,0 |

- Gate valves
- High pressure gate valve DSK 10
- 700 JT
- PD 10
- DN 200-350/300



Range of application

| BW-Version Material | PD | Admissible operating pressure [bar] at design temperature [°C] ¹⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 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 |
| 1.0460 | 10 | 100 | 100 | 94 | 82 | 74 | 62 | 50 | 48 | 45 | 43 | 41 | 38 | 34 | 28 | 23 | | | | | | | | | | | | |
| 1.5415 | 10 | 120 | 120 | 112 | 103 | 88 | 85 | 82 | 82 | 81 | 81 | 80 | 79 | 79 | 78 | 78 | 68 | 53 | 40 | 32 | 25 | | | | | | | |
| 1.7335 | 10 | 120 | 120 | 120 | 118 | 109 | 103 | 97 | 96 | 95 | 94 | 92 | 91 | 91 | 90 | 89 | 89 | 81 | 68 | 54 | 44 | 35 | 28 | 23 | 18 | | | |
| 1.7383 | 10 | 120 | 120 | 120 | 120 | 118 | 109 | 103 | 102 | 101 | 99 | 98 | 97 | 96 | 95 | 94 | 89 | 79 | 69 | 61 | 53 | 46 | 40 | 34 | 30 | 26 | 22 | 20 |

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

■ **Gate valves** ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 200-350/300

Standard features

- Split disc gate valve
- Die-forged body and bonnet
- Full bore
- Outside screw and yoke
- Non-turning, rising stem
- Yoke sleeve supported by needle bearing
- Pressure sealing bonnet acc. VGB-guidelines

Pressure and temperature ratings

- Pressure rating up to 120 bar
- Temperature rating up to 600 °C

Materials

- 1.0460
- 1.5415
- 1.7335
- 1.7383

Further materials on request.

Media

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

Fields of application

Chemical industries, power plants, ship building and other

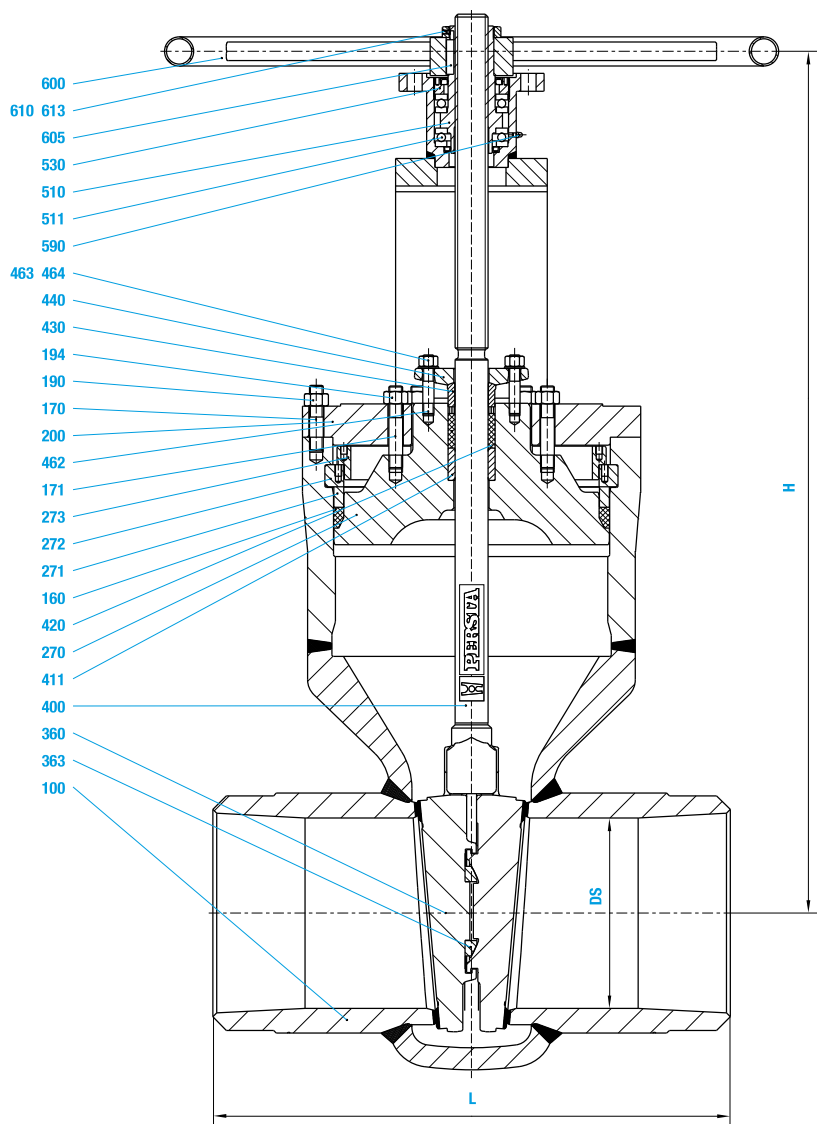
Design Highlights

- Die-forged body and bonnet
- Seats and wedge faced with stellite
- Full bore
- Gland ring and gland flange in two separate pieces
- Yoke sleeve supported by needle bearing
- Pressure sealing bonnet

Benefits

- Free from porosity and shrink holes compared to cast steel, robust and highly stressable
- Extremely resistant to wear
- No reduction in seat area
- Damage to the stem by irregular tightening of gland bolts is avoided
- Minimize the expenditure of effort when operating valve
- Best possible sealing function

■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 200-350/300



■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 200-350/300

| Materials | | | | | |
|-----------|-----------------------|-------------|---------------|---------------|-------------|
| Pos. | Component | 1.0460 (21) | 1.5415 (42) | 1.7335 (44) | 1.7383 (45) |
| 100 | Body welded on with | 1.0460 | 1.7383/1.5415 | 1.7383/1.7335 | 1.7383 |
| 160 | ▶ Gasket | Graphite | Graphite | Graphite | Graphite |
| 170 | Stud | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 171 | Stud | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 190 | Hexagonal nut | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 194 | Hexagonal nut | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 200 | Bonnet | 1.5415 | 1.5415 | 1.5415 | 1.5415 |
| 270 | Cover | 1.0460 | 1.5415 | 1.7335 | 1.7383 |
| 271 | Ring | 1.0460 | 1.5415 | 1.7335 | 1.7383 |
| 272 | Segmentring | 1.0460 | 1.5415 | 1.7335 | 1.7383 |
| 273 | Cover | 1.7383 | 1.5415 | 1.7335 | 1.7383 |
| 360 | ▶ Disc welded on with | 1.7383 | 1.7383 | 1.7383 | 1.7383 |
| 363 | ▶ Pressure piece | Cr17 | Stellite | Stellite | Stellite |
| 400 | ▶ Stem | 1.4122 | 1.4122 | 1.4122 | 1.4122 |
| 411 | ▶ Guide bushing | 1.4021 | 1.4122 | 1.4122 | 1.4122 |
| 420 | ▶ Packing | 1.8507 | 1.8507 | 1.8507 | 1.8507 |
| 430 | Gland ring | Graphite | Graphite | Graphite | Graphite |
| 440 | Gland flange | 1.0718 | 1.0718 | 1.0718 | 1.0718 |
| 462 | Stud | 1.0460 | 1.0460 | 1.0460 | 1.0460 |
| 463 | Washer | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 464 | Hexagonal nut | St | St | St | St |
| 510 | ▶ Yoke sleeve | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 511 | ▶ Bearing | CW 713 R | CW 713 R | CW 713 R | CW 713 R |
| 530 | Screwing | WLSt | WLSt | WLSt | WLSt |
| 590 | Grease nipple | 1.0718 | 1.0718 | 1.0718 | 1.0718 |
| 600 | Handwheel | 5.8 | 5.8 | 5.8 | 5.8 |
| 605 | Key | 0.7040 | 0.7040 | 0.7040 | 0.7040 |
| 610 | Hexagonal nut | 1.0060 | 1.0060 | 1.0060 | 1.0060 |
| 613 | Screw pin | St | St | St | St |
| | ▶ Spare parts | 45H | 45H | 45H | 45H |

| Dimensions/mm | | | | | |
|---------------|-----|-----|------|--------|-----|
| DN | DS | L | H | Stroke | D |
| 200 | 198 | 550 | 920 | 210 | 600 |
| 225 / 200 | 198 | 600 | 920 | 210 | 600 |
| 250 / 200 | 198 | 650 | 920 | 210 | 600 |
| 225 / 250 | 235 | 600 | 1130 | 265 | 720 |
| 250 | 235 | 650 | 1130 | 265 | 720 |
| 300 / 250 | 235 | 750 | 1130 | 265 | 720 |
| 300 | 276 | 750 | 1300 | 310 | 900 |
| 350 / 300 | 276 | 850 | 1300 | 310 | 900 |

| Weights/kg and Kvs-values | | |
|---------------------------|-----|-------------------------|
| DN | BW | Kvs (m ³ /h) |
| 200 | 260 | 4000 |
| 225 / 200 | 270 | |
| 250 / 200 | 280 | |
| 225 / 250 | 530 | |
| 250 | 550 | 6247 |
| 300 / 250 | 580 | |
| 300 | 850 | 8997 |
| 350 / 300 | 870 | 9257 |

- Gate valves
- High pressure gate valve DSK 10
- 700 JT
- PD 10
- DN 350-700



Range of application

| BW-Version Material | Admissible operating pressure [bar] at design temperature [°C] ¹⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| | 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 | | | |
| 1.0425 | 10 | 100 | 100 | 94 | 82 | 74 | 62 | 50 | 48 | 45 | 43 | 41 | 38 | 34 | 28 | 23 | | | | | | | | | | | | | | | | | | | | |
| 1.5415 | 10 | 120 | 120 | 112 | 103 | 88 | 85 | 82 | 82 | 81 | 81 | 80 | 79 | 79 | 78 | 78 | 68 | 53 | 40 | 32 | 25 | | | | | | | | | | | | | | | |
| 1.7335 | 10 | 120 | 120 | 120 | 118 | 109 | 103 | 97 | 96 | 95 | 94 | 92 | 91 | 91 | 90 | 89 | 89 | 81 | 68 | 54 | 44 | 35 | 28 | 23 | 18 | | | | | | | | | | | |
| 1.7383 | 10 | 120 | 120 | 120 | 120 | 118 | 109 | 103 | 102 | 101 | 99 | 98 | 97 | 96 | 95 | 94 | 89 | 79 | 69 | 61 | 53 | 46 | 40 | 34 | 30 | 26 | 22 | 20 | | | | | | | | |
| 1.4903 | 10 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 136 | 134 | 122 | 119 | 110 | 101 | 93 | 84 | 76 | 68 | 61 | 54 | 48 | 42 | 37 | 32 | 27 | 24 | 21 | | | |

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

■ **Gate valves** ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 350-700

Standard features

- Split disc gate valve
- Outside screw and yoke
- Non-turning, rising stem
- Yoke sleeve supported by needle bearings
- Pressure sealing bonnet acc. VGB-guidelines
- Easy assembly of an E-actuator

Pressure and temperature ratings

- Pressure rating up to 136 bar
- Temperature rating up to 650 °C

Materials

- 1.0425
- 1.5415
- 1.7335
- 1.7383
- 1.4903

Further materials on request.

Media

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

Fields of application

Chemical industries, power plants, ship building and other

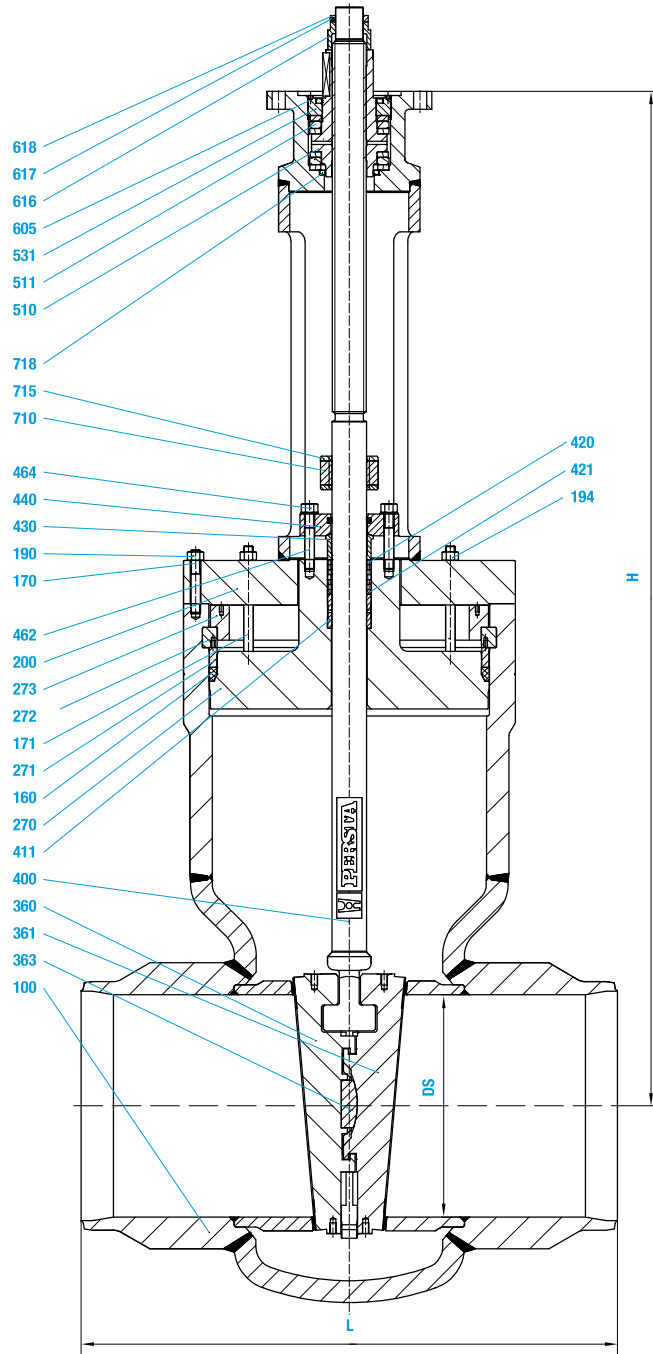
Design Highlights

- Seats and disc faced with stellite
- Non-turning, rising stem
- Gland ring and gland flange in two separate pieces
- Yoke sleeve supported by needle bearing
- Pressure sealed bonnet

Benefits

- Best possible sliding performance, minimum wear
- Minimum wear to the gland packing
- Damage to the stem by irregular tightening of gland bolts is avoided
- Minimize the expenditure of effort when operating valve
- Best possible sealing function

■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 350-700



■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 350-700

| Materials | | | | | | |
|-----------|-----------------------|-------------|-------------|-------------|-------------|-----------------|
| Pos. | Component | 1.0425 (22) | 1.5415 (42) | 1.7335 (44) | 1.7383 (45) | 1.4903 (63) |
| 100 | Body welded on with | 1.0425 | 1.5415 | 1.7335 | 1.7383 | 1.4903 |
| | ▶ Gasket | Stellite | Stellite | Stellite | Stellite | Stellite |
| 160 | ▶ Stud | Graphite | Graphite | Graphite | Graphite | Graphite |
| 170 | ▶ Stud | 1.7709 | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 171 | ▶ Stud | 1.7709 | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 190 | ▶ Hexagonal nut | 1.7218 | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 194 | ▶ Hexagonal nut | 1.7255 | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 200 | ▶ Bonnet | 1.5415 | 1.5415 | 1.5415 | 1.5415 | 1.5415 |
| 270 | ▶ Cover | 1.0460 | 1.5415 | 1.7335 | 1.7383 | 1.4903 |
| 271 | ▶ Ring | 1.0460 | 1.5415 | 1.7335 | 1.7383 | 1.4903 |
| 272 | ▶ Segmentring | 1.0460 | 1.5415 | 1.7335 | 1.7383 | 1.4903 |
| 273 | ▶ Cover | 1.0460 | 1.0460 | 1.0460 | 1.0460 | 1.0460 |
| 360 / 361 | ▶ Disc welded on with | 1.0460 | 1.5415 | 1.7335 | 1.7383 | 1.4903 |
| | ▶ Pressure piece | Stellite | Stellite | Stellite | Stellite | Stellite |
| 363 | ▶ Stem | 1.4122 | 1.4122 | 1.4122 | 1.4122 | 1.4122 |
| 400 | ▶ Guide bushing | 1.4021 | 1.4923 | 1.4923 | 1.4923 | 1.4923 / 1.4980 |
| 411 | ▶ Packing | 1.8507 | 1.8507 | 1.8507 | 1.8507 | 1.8507 |
| 420 | ▶ Gland ring | Graphite | Graphite | Graphite | Graphite | Graphite |
| 430 | ▶ Gland flange | 1.5415 | 1.5415 | 1.5415 | 1.5415 | 1.5415 |
| 440 | ▶ Stud | 1.0460 | 1.5415 | 1.7335 | 1.7383 | 1.7383 |
| 462 | ▶ Hexagonal nut | 1.7709 | 1.7709 | 1.7709 | 1.7709 | 1.7709 |
| 464 | ▶ Yoke sleeve | 1.7218 | 1.7218 | 1.7218 | 1.7218 | 1.7218 |
| 510 | ▶ Bearing | CW 713 R | CW 713 R | CW 713 R | CW 713 R | CW 713 R |
| 511 | ▶ Yoke nut | WLSst | WLSst | WLSst | WLSst | WLSst |
| 531 | ▶ Key | 1.7335 | 1.7335 | 1.7335 | 1.7335 | 1.7335 |
| 605 | ▶ Screw pin | 1.0060 | 1.0060 | 1.0060 | 1.0060 | 1.0060 |
| 616 | ▶ Screw pin | 1.0460 | 1.0460 | 1.0460 | 1.0460 | 1.0460 |
| 617 | ▶ Hexagonal nut | 45H | 45H | 45H | 45H | 45H |
| 618 | ▶ Switch bracket | St | St | St | St | St |
| 710 | ▶ Key | 1.0425 | 1.0425 | 1.0425 | 1.0425 | 1.0425 |
| 715 | ▶ Washer | 1.4021 | 1.4021 | 1.4021 | 1.4021 | 1.4021 |
| 718 | ▶ Washer | 1.0038 | 1.0038 | 1.0038 | 1.0038 | 1.0038 |

▶ Spare parts

| Dimensions/mm | | | | |
|---------------|-----|------|------|--------|
| DN | DS | L | H | Stroke |
| 350 | 330 | 850 | 1730 | 365 |
| 400 | 375 | 950 | 1850 | 415 |
| 450 | 419 | 1050 | 2070 | 465 |
| 500 | 464 | 1150 | 2300 | 515 |
| 600 | 559 | 1350 | 2765 | 625 |
| 700 | 640 | 1550 | 2895 | 690 |

| Weights/kg and Kvs-values | | |
|---------------------------|------|-------------------------|
| DN | BW | Kvs (m ³ /h) |
| 350 | 995 | 11243 |
| 400 | 1600 | 14521 |
| 450 | 2000 | 18105 |
| 500 | 2490 | 22353 |
| 600 | 4550 | 32188 |
| 700 | 5750 | 41773 |