# BS FLANGED PRESSURE REDUCING VALVE

**Type: SK720X** **Doc No: DS-922-SK720X-01-E-S**

## 1.0 PRODUCT OVERVIEW

Pressure reducing valve is a diaphragm hydraulic control valve driven by the hydraulic pressure of the pipeline itself. The hydrostatic pressure and dynamic pressure of the outlet are stable at the set value regardless of the fluctuation of the inlet pressure or the change of the outlet flow rate. The outlet pressure can be adjusted within a certain range to meet clients' requirement.

### Dimensions:

2"(DN50)-24"(DN600)

### Design Standard:

CJ/T 219, CJ/T 256, JB/T 10674, BS EN 558 series 10

### Connection Standard:

BS EN 1092-2

### Working Pressure:

PN25、PN16、PN10

### Application:

The flanged pressure reducing valve is mainly applied in the waterworks system, working temperature is from 0℃ to 80℃

### Material of Matching Products:

Ductile iron flange: BS EN 1092-2;
Cast iron flange: BS EN 1092-2;

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Steel flange: BS EN 1092-1；

### Surface Treatment:

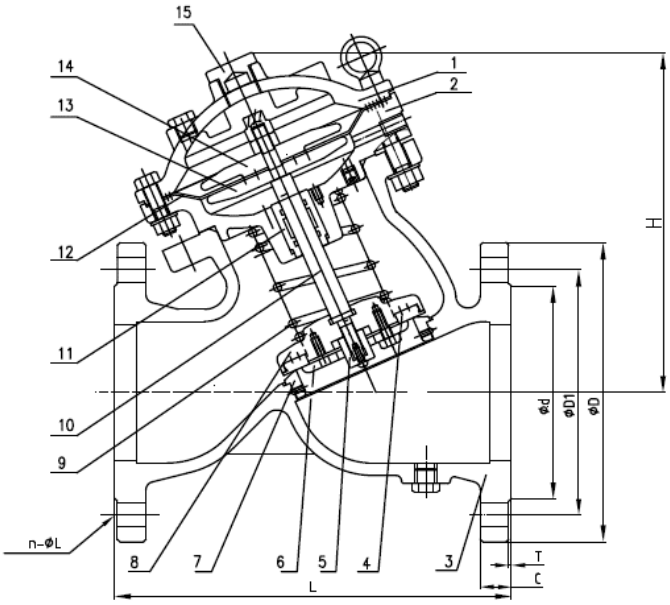
☐ Epoxy power painting (color numbers as RAL5015, RAL5005, etc)
☐ Painting (color numbers as RAL5005, etc)
☐ Others would be available upon clients' detailed request

## 2.0 APPROVALS

CE

## 3.0 SPECIFICATIONS

### Product Sketch:

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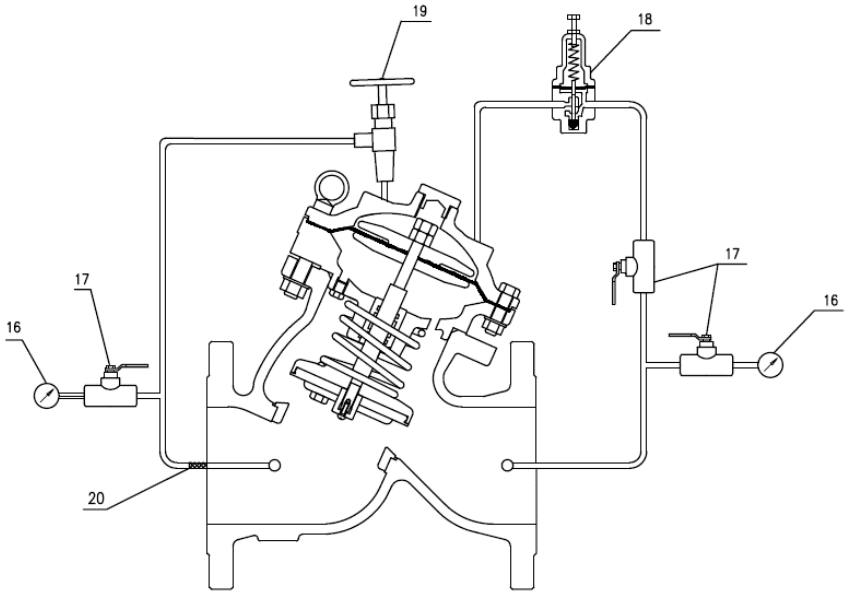


| Part No. | Part | Standard Specification | Options |
|---|---|---|---|
| 1 | Up Bonnet | EN-GJS-450-10 | |
| 2 | Middle Bonnet | EN-GJS-450-10 | |
| 3 | Valve Body | EN-GJS-450-10 | |
| 4 | Main Gasket | EPDM | |
| 5 | Disc head | SS304 | |
| 6 | Gland of Main Disc | EN-GJS-450-10 | |
| 7 | Seat | SS304 | |
| 8 | Main Disc | EN-GJS-450-10 | |
| 9 | Spring | SS304 | |
| 10 | Stem | SS304 | |
| 11 | Bushing | Bronze | |
| 12 | Diaphragm | EPDM | |
| 13 | Bottom Gland | EN-GJS-450-10 | |
| 14 | Up Gland | EN-GJS-450-10 | |
| 15 | Cap Plug | Bronze | |
| 16 | Pressure Gauge | | |
| 17 | Ball Valve | | |
| 18 | Pilot Valve | | |
| 19 | Needle Valve | | |
| 20 | Built-in Strainer | | |

## 4.0 DIMENSIONS AND PERFORMANCE

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Location:_____ Date:_____Approved& Date: _____

## 4.1 Dimensions

| DN | | PN | Dimensions （mm） | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | L | H | D | D1 | d | C | T | n-ΦL |
| 2" | 50 | 10/16 | 203 | 170 | 165 | 125 | 99 | 19 | 3 | 4-Φ19 |
| 2.5" | 65 | 10/16 | 216 | 195 | 185 | 145 | 118 | 19 | 3 | 4-Φ19 |
| 3" | 80 | 10/16 | 241 | 215 | 200 | 160 | 132 | 19 | 3 | 8-Φ19 |
| 4" | 100 | 10/16 | 292 | 255 | 220 | 180 | 156 | 19 | 3 | 8-Φ19 |
| 5" | 125 | 10/16 | 330 | 290 | 250 | 210 | 184 | 19 | 3 | 8-Φ19 |
| 6" | 150 | 10/16 | 356 | 360 | 280 | 240 | 211 | 19 | 3 | 8-Φ23 |
| 8" | 200 | 10 | 495 | 450 | 340 | 295 | 266 | 20 | 3 | 8-Φ23 |
| | | 16 | 495 | | 340 | 295 | 266 | 20 | 3 | 12-Φ23 |
| 10" | 250 | 10 | 622 | 550 | 405 | 350 | 319 | 22 | 3 | 12-Φ23 |
| | | 16 | 622 | | 405 | 355 | 319 | 22 | 3 | 12-Φ28 |
| 12" | 300 | 10 | 698 | 645 | 460 | 400 | 370 | 24.5 | 4 | 12-Φ23 |
| | | 16 | 698 | | 460 | 410 | 370 | 24.5 | 4 | 12-Φ28 |
| 14" | 350 | 10 | 787 | 700 | 520 | 460 | 429 | 24.5 | 4 | 16-Φ23 |
| | | 16 | 787 | | 520 | 470 | 429 | 26.5 | 4 | 16-Φ28 |
| 16" | 400 | 10 | 914 | 790 | 580 | 515 | 480 | 28 | 4 | 16-Φ28 |
| | | 16 | 914 | | 580 | 525 | 480 | 28 | 4 | 16-Φ31 |
| 18" | 450 | 10 | 978 | 850 | 615 | 565 | 530 | 25.5 | 4 | 20-Φ28 |
| | | 16 | 978 | | 640 | 580 | 548 | 30 | 4 | 20-Φ31 |
| 20" | 500 | 10 | 978 | 900 | 670 | 620 | 582 | 26.5 | 4 | 20-Φ28 |
| | | 16 | 978 | | 715 | 625 | 609 | 31.5 | 4 | 20-Φ34 |
| 24" | 600 | 10 | 1295 | 1030 | 780 | 725 | 682 | 30 | 5 | 20-Φ31 |
| | | 16 | 1295 | | 840 | 770 | 720 | 36 | 5 | 20-Φ37 |

## 4.2 KV rates

| DN | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kv | 41 | 53 | 105 | 175 | 285 | 402 | 730 | 1160 | 1400 | 1770 | 3010 | 3225 | 3395 | 4272 |

| | NOMINAL PRESSURE (MPa) | INLET PRESSURE (MPa) | OUTLET PRESSURE (MPa) |
|---|---|---|---|
| PN10 | 1.0 | 1.0 | 0.2-0.8 |
| PN16 | 1.6 | 1.6 | 0.2-1.2 |
| PN25 | 2.5 | 2.5 | 0.2-1.6 |

The pressure reduction ratio should not exceed 3:1 to avoid cavitation, noise, and valve failure.

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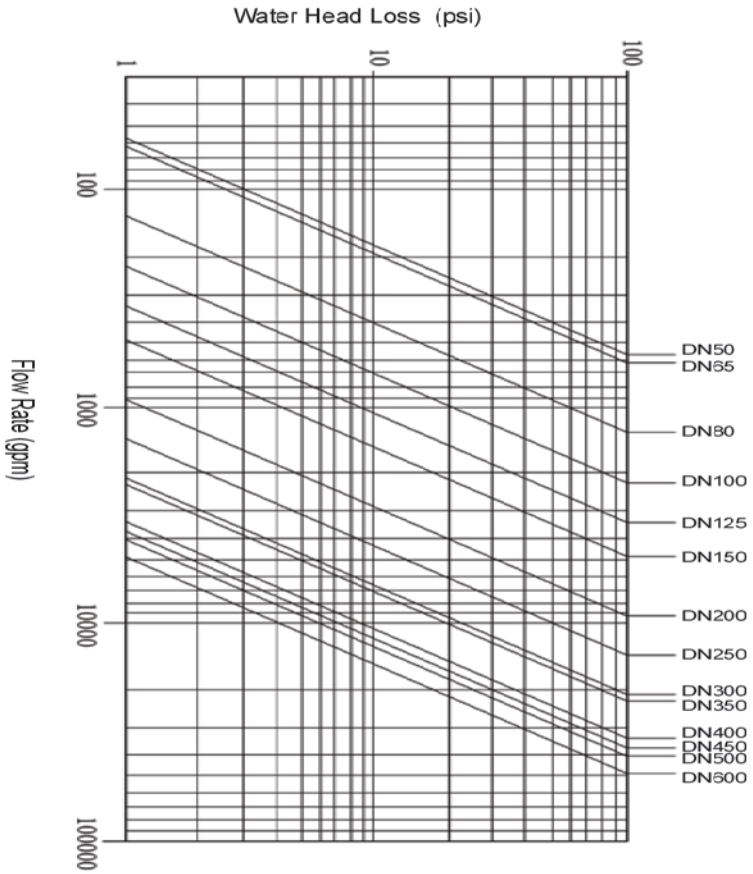


## 5.0 REFERENCE MATERIALS

Approved certification for Pressure Reducing Valve

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