

### SPECIFICATIONS



|                    |                                                                                                                                                                            |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DN mm              | DN 40 - DN1600                                                                                                                                                             |
| DN inch            | 1½" - 64"                                                                                                                                                                  |
| Temperature        | Water : 0°C - 70°C<br>Fuel : -40°C - 70°C                                                                                                                                  |
| Type of connection | Threaded and flange                                                                                                                                                        |
| Application        | Pressure, Flow, Level control, Smart control in municipality. Water, pumping station, building, fire protection, irrigation, water treatment. Fuel, Sea water, Clear water |
| Pressure range     | ISO PN10/ PN16/PN25<br>ANSI Class 125/150/300<br>JIS 10K/16K<br>KS Table D/E,<br>KS4087 PN16                                                                               |
| Flange standard    | EN 1092-2<br>ISO 7005-2<br>ANSI or JIS<br>KS2129 or KS4087                                                                                                                 |
| Design standard    | EN 1074-5                                                                                                                                                                  |
| Test standard      | ISO 5208 and EN12266-1*<br>(* Resistance and tightness of the body (1.5 x allowable operating pressure), Tightness of the seat, (1.1 x allowable operating pressure))      |

### DESCRIPTION

It is used to discharge excess pressure and keep the pressure as setting requirement in the upstream.

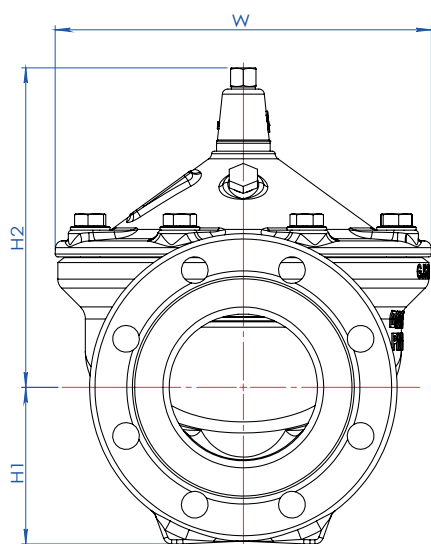
Pressure control accuracy:

Opening pressure: + 0.2 bar; Opening speed: < 0.5 seconds

Full close Pressure: -1 bar

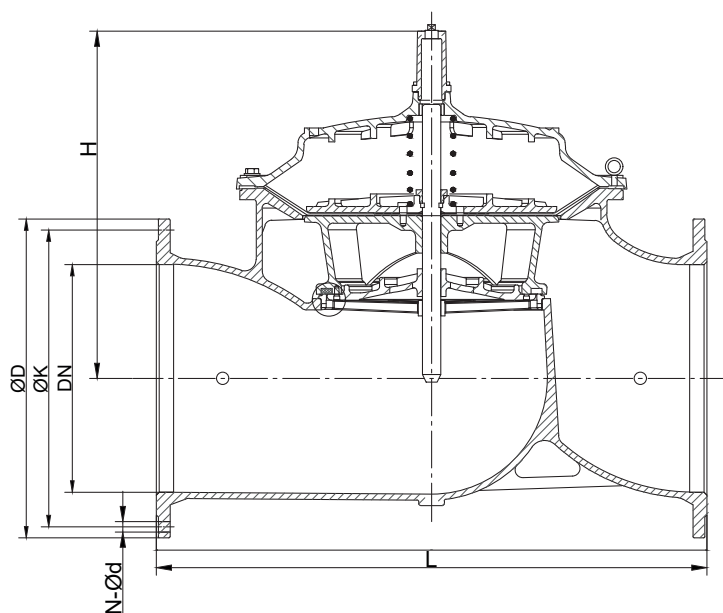
### ADVANTAGES

- Two designs of body
  - Full bore (FB)
    - Large flow capacity
    - Low head loss
    - Seal at Zero flow rate
  - Reduced bore (RB)
    - Lower flow capacity, suitable for building services and pressure reduction
    - Cavitation resistance
    - Seal at Zero flow rate
- Large choices of valve body material: SS304, SS316, SS316L, Duplex, Carbon steel, Bronze, Aluminium
- Large choices of pilot material: SS304, SS316, SS316L, Brass, Bronze
- Stainless steel 304 or 316 pilot circuit and valves.
- Robust design: seat in stainless steel.
- High flow capacity thanks to larger diameter of seat.
- Stable working even if the flow is close to Zero.
- High performance and strength Nylon enforced diaphragm.
- Personalized product: functions, color...
- Easy operation and maintenance: without disassembly from the pipeline



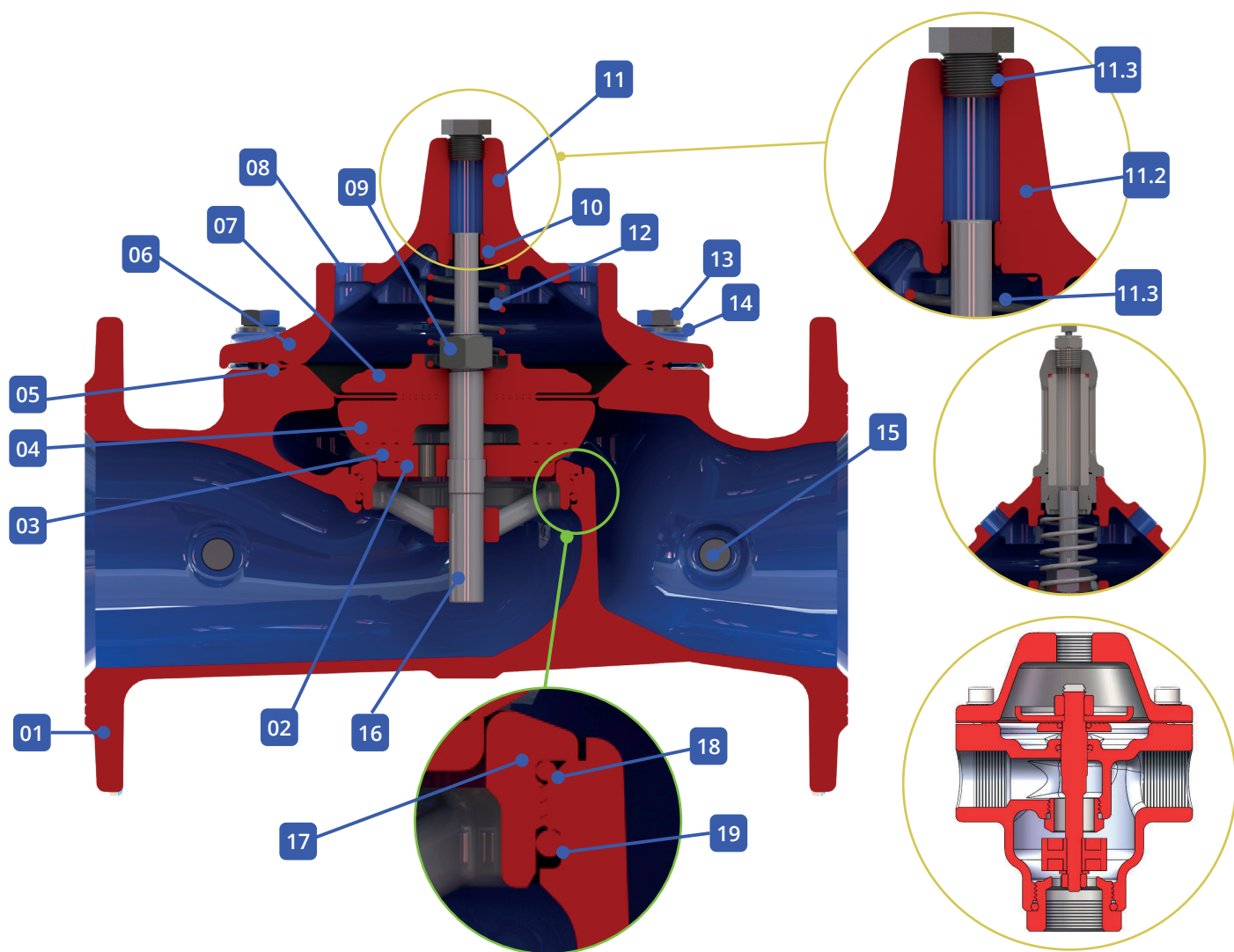
Main valve - Full Bore (BH) and Reduce Bore (RB)

| DN  | L<br>Mm | Ø D<br>Mm | H1<br>Mm | H2<br>Mm |       | W<br>Mm |       |
|-----|---------|-----------|----------|----------|-------|---------|-------|
|     |         |           |          | BH       | RB    | BH      | RB    |
| 40  | 200     | 165       | 85       | 150      | -     | 155     | -     |
| 50  | 230     | 165       | 85       | 170      | 150   | 165     | 155   |
| 65  | 290     | 185       | 95       | 185      | 170   | 205     | 165   |
| 80  | 310     | 200       | 102      | 220      | 185   | 230     | 205   |
| 100 | 350     | 220       | 112      | 230      | 220   | 270     | 230   |
| 125 | 400     | 250       | 127      | -        | (230) | -       | (270) |
| 150 | 480     | 285       | 145      | 300      | 230   | 355     | 270   |
| 200 | 600     | 340       | 172      | 405      | 300   | 455     | 355   |
| 250 | 730     | 405       | 205      | 530      | 405   | 530     | 455   |
| 300 | 850     | 460       | 232      | 510      | 460   | 620     | 530   |



Main valve - Full Bore (BH) - Reduce Bore (RB)

| DN   | H    |      | Seat/DN |      | L    | ØD   |      |      | ØK   |      |      | N-Ød   |        |        |
|------|------|------|---------|------|------|------|------|------|------|------|------|--------|--------|--------|
|      | FB   | RB   | FB      | RB   |      | PN10 | PN16 | PN25 | PN10 | PN16 | PN25 | PN10   | PN16   | PN25   |
| 400  | 670  | 580  | 400     | 300  | 1100 | 580  | 580  | 620  | 515  | 525  | 550  | 16-Ø28 | 16-Ø31 | 16-Ø37 |
| 450  | -    | 670  | -       | 400  | 1200 | 640  | 640  | 670  | 565  | 585  | 600  | 20-Ø28 | 20-Ø31 | 20-Ø37 |
| 500  | 790  | 670  | 500     | 400  | 1250 | 715  | 715  | 730  | 620  | 650  | 660  | 20-Ø28 | 20-Ø34 | 20-Ø37 |
| 600  | 930  | 790  | 600     | 500  | 1450 | 780  | 840  | 845  | 725  | 770  | 770  | 20-Ø31 | 20-Ø37 | 20-Ø40 |
| 700  | 1000 | 930  | 700     | 600  | 1650 | 910  | 910  | -    | 840  | 840  | -    | 24-Ø31 | 24-Ø37 | -      |
| 800  | 1170 | 930  | 800     | 600  | 1850 | 1025 | 1025 | -    | 950  | 950  | -    | 24-Ø34 | 24-Ø41 | -      |
| 900  | -    | 1170 | -       | 800  | 1850 | 1115 | 1125 | -    | 1050 | 1050 | -    | 28-Ø34 | 28-Ø41 | -      |
| 1000 | 1460 | -    | 1000    | -    | 2250 | 1230 | 1255 | -    | 1160 | 1170 | -    | 28-Ø37 | 28-Ø44 | -      |
| 1200 | 1750 | 1460 | 1200    | 1000 | 2450 | 1455 | 1485 | -    | 1380 | 1390 | -    | 32-Ø40 | 32-Ø49 | -      |
| 1400 | -    | 1750 | -       | 1200 | 2650 | 1685 | 1685 | -    | 1590 | 1590 | -    | 36-Ø43 | 36-Ø49 | -      |
| 1600 | -    | 1750 | -       | 1200 | 2850 | 1930 | 1930 | -    | 1820 | 1820 | -    | 40-Ø49 | 32-Ø56 | -      |



| Item | Part name       | Materials                                                        | Norme                |
|------|-----------------|------------------------------------------------------------------|----------------------|
| 01   | Body            | Stainless steel 316/1.4401                                       | Option* NF EN 1563   |
| 02   | Seal guide      | EPDM                                                             | NF EN 10088          |
| 03   | Seal            | Stainless steel 316 DN50-150<br>DN 200-DN1600: DI+ epoxy coating |                      |
| 04   | Seal retainer   | EPDM                                                             |                      |
| 05   | Diaphragm       | Ductile iron GLS-500-7                                           |                      |
| 06   | Valve bonnet    | Stainless steel 316 DN50-150<br>DN200-DN1600: DI+ epoxy coating  | Option* NF EN 1563   |
| 07   | Diaphragm plate | Stainless steel/1.4310                                           |                      |
| 08   | Plug            | Stainless steel/1.4310                                           | NF EN 10088          |
| 09   | Stem nut        | EPDM                                                             | NF EN 10088          |
| 10   | Oring           | Composite                                                        |                      |
| 11   | Cap             | Bronze CuSn5Zn5Pb5-C                                             |                      |
| 11.1 | Guide brushing  | Stainless steel/CF8                                              | EN 1503-4            |
| 11.2 | Cap             | Stainless steel 316/1.4401                                       | EN 10213-4           |
| 11.3 | ARV             | Stainless steel 316/1.4401                                       | Option** NF EN 10088 |
| 12   | Spring          | Stainless steel 316/1.4401                                       | Option** NF EN 10088 |
| 13   | Bolt            | Stainless steel 316/1.4401                                       | Option** NF EN 10088 |
| 14   | Washer          | Stainless steel 316/1.4401                                       | Option** NF EN 10088 |
| 15   | Plug            | Stainless steel 420                                              | Option** NF EN 10088 |
| 16   | Stem            | Stainless steel/CF8                                              |                      |
| 17   | Seat            | EPDM                                                             | EN 10213-4           |
| 18   | Oring NBR       | EPDM                                                             |                      |
| 19   | Oring NBR       | NBR                                                              |                      |

**\* Option Body and bonnet :**

- Stainless steel 304
- Stainless steel 316
- Stainless steel 316L
- Duplex
- Carbon Steel: DN40 - DN400
- Bronze: DN40 - DN400
- Aluminium (AL): DN40 - DN200

**\*\* Option internal mobile parts :**

- Stainless steel 304
- Stainless steel 316
- DUPLEX

## INSTALLATION

- The recommended equipment is vital for safety during filing and maintenance, as well as for the satisfactory operation of the valve.
- For the purposes of illustration, we will look at the case of a Neptune pressure reducing valve. In the case, the air valve is fitted downstream if the pipe runs downwards to the stabiliser or upstream if the pipe runs upwards to the stabiliser.



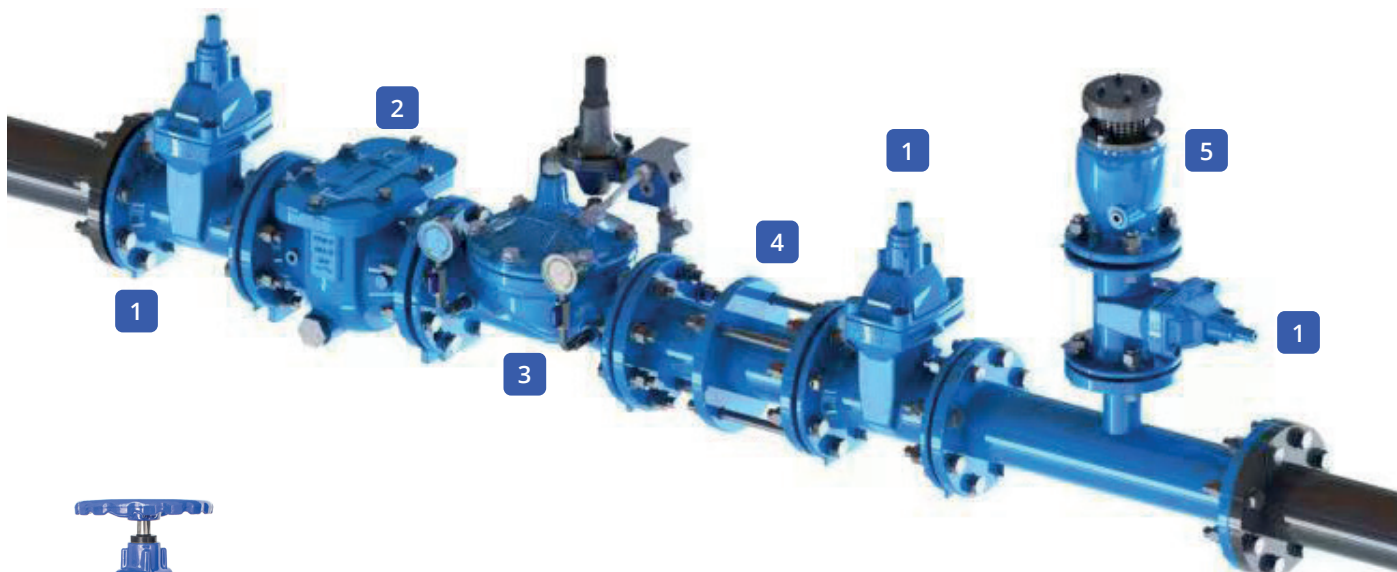
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**Mud boxes -  
basket strainers**



3

**Control valves**



1

**Gate valves**



4

**Dismantling joints**



5

**Air valve**