

**PRESSURE RELIEF VALVE**

(or OVERFLOW VALVE)

**SPRINGLOADED - MODEL S3**
**VALVE FEATURES**

DN15 to DN100 (DN125 and DN150 consult)

 DIN PN25 Nodular Iron GJS-400-18-LT (0.7043)  
 DIN PN25 Bronze RG-10 (EN-1982 CuSn10-CC480K)  
 DIN PN40 Carbon steel GP240GHN (1.0619)  
 DIN PN40 Stainless steel CF3M (1.4404)

Stainless steel AISI 316L trim

Top guided standard construction

 Connection Flanged EN and ANSI  
 On request: Threaded BSP or NPT, BW, SW, ...

Shut off capabilities:

- Class IV (metal to metal)
- Class VI (PTFE+GR seat)

On request, PEEK, NBR, EPDM seal, stellited faced seat, ...

Full port as standard. Reduced port on request

Setting pressure 0,5 - 20 barg (with different springs)

|                              |                   |              |
|------------------------------|-------------------|--------------|
| Max. permissible temperature | 0.7043 and 1.0619 | -10 to 250°C |
|                              | 1.4408            | -30 to 250°C |

|                          |                           |
|--------------------------|---------------------------|
| Seal / Packing / Gaskets | VIRGIN PTFE UP TO 180°C   |
|                          | PTFE+GRAPHITE UP TO 220°C |

Special features

Handwheel regulation, specials gaskets, Super Duplex construction, bronze construction, ...

Approvals

Quality system ISO 9001

Pressure equipment Directive according 2014/68/UE

ATEX Directive according 2014/34/UE (pending to include).



Pressure relief valve it's used to maintain the pressure upstream of the valve to an adjusted set point.

When upstream pressure rises above a set point, the valve opens proportionally pressure rising.

This series of regulators is suitable for steam, gases (group 1 and 2) and liquids.

A relief pressure valve is not a safety valve, and then if necessary, an overpressure protection must be installed.



| PRESSURE – TEMPERATURE RATINGS (according to EN12516-1 and EN 1092-2) |   |                  |     |     |    |     |     |     |     |     |     |
|---|---|------------------|-----|-----|----|-----|-----|-----|-----|-----|-----|
| Nominal Pressure  | Body material                                   | Services temp.   | °C  | -10 | 50 | 100 | 150 | 200 | 250 | 300 | 350 |
| PN25 – Class 150  | Nodular Iron (0.7043)<br>EN-GJS-400-18          | Working pressure | bar | 25  | 25 | 25  | 24  | 23  | 21  | 20  | 17  |
| PN40 – Class 300  | Carbon steel GP240GH<br>(1.0619)                |                  | bar | 40  | 40 | 36  | 35  | 34  | 33  | 30  | 29  |
| PN40 – Class 300  | Stainless steel A351<br>CF3M (AISI 316L-1.4404) |                  | bar | 40  | 38 | 33  | 30  | 28  | 26  | 25  | 24  |

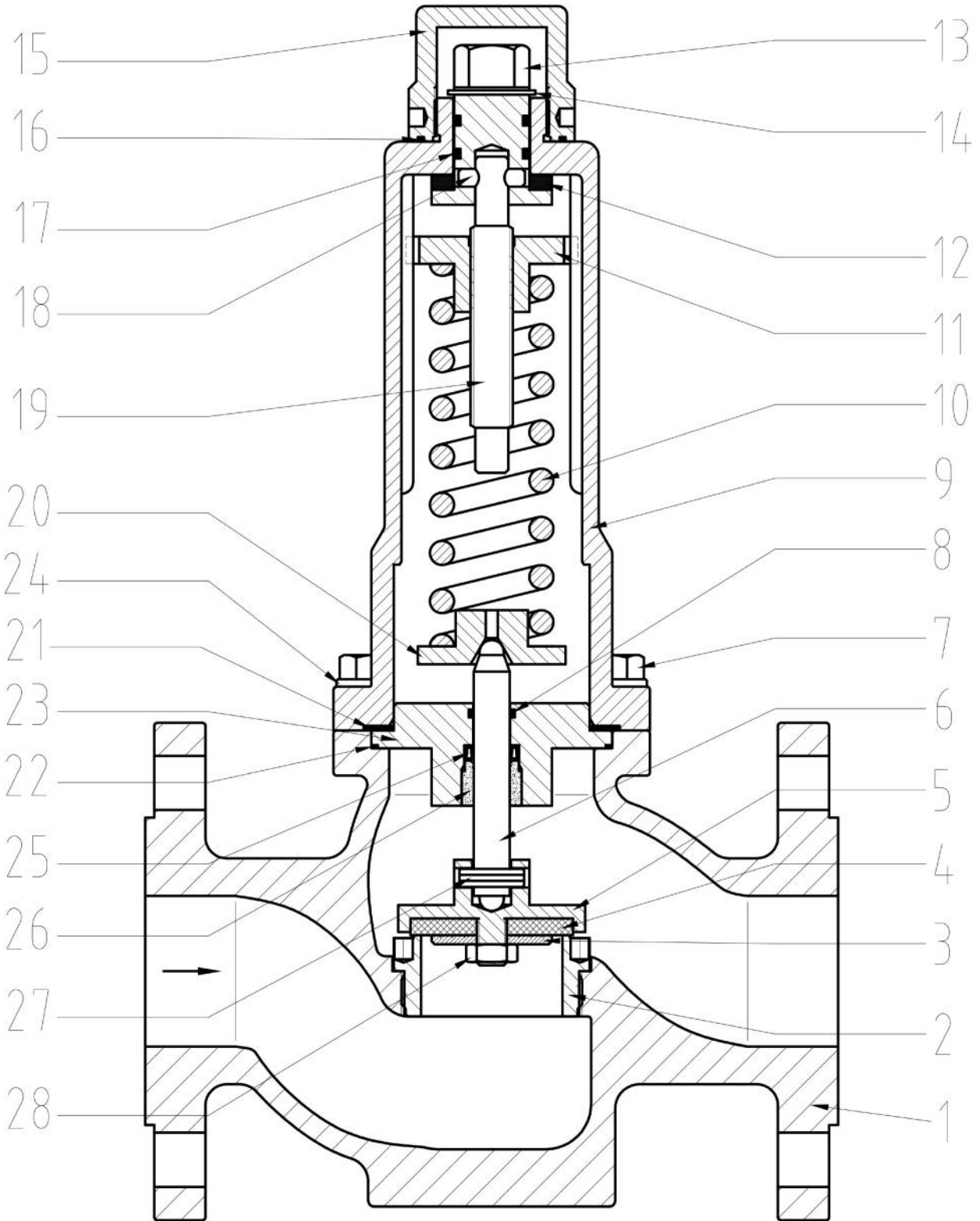
| Description |                     | Material                             | Description |                   | Material                      |
|-------------|---------------------|--------------------------------------|-------------|-------------------|-------------------------------|
| 1           | Body                | Nodular Iron GGG40.3 (1)             | 19          | Regulation stem B | Stainless steel A2-70         |
|             |                     | Carbon steel WCB (1)                 | 20          | Up support Spring | Zinc plated steel 1.1191      |
|             |                     | Stainless steel A351 CF3M (316L) (2) | 21          | Flat gasket       | PTFE                          |
| 2           | Seat                | Stainless steel AISI 316L            | 22          | O-ring            | FKM (or NBR, EPDM)            |
| 3           | Guide               | Stainless steel AISI 316L            | 23          | Bonnet            | Stainless steel AISI 316L     |
| 4           | Seal                | PTFE+Graphite / SS AISI 316L         | 24          | Washer            | Zinc plated steel 8.8 (1)     |
|             |                     | Or EPDM, NBR, FKM, PEEK, ...         |             |                   | Stainless steel A2-70 (2)     |
| 5           | Support seal        | Stainless steel AISI 316L            | 25          | Isolation gasket  | PTFE+GR+SS302                 |
| 6           | Stem                | Stainless steel AISI 316L            | 26          | Stem guide        | Bronze / SS316L+Ni            |
| 7           | Bolts               | Zinc plated steel 8.8 (1)            | 27          | Block Pin         | A2-70                         |
|             |                     | Stainless steel A2-70 (2)            | 28          | Nut               | A2-70                         |
| 8           | O-ring              | FKM (or NBR, EPDM)                   |             |                   |                               |
| 9           | Spring cover        | Stainless steel A351 CF3M (316L) (2) |             |                   |                               |
| 10          | Regulation Spring   | Spring steel painted                 | 110         | Handwheel         | Steel painted                 |
| 11          | Down support Spring | Zinc plated steel 1.1191             | 111         | Bolt              | A2-70                         |
| 12          | Bearing             | PTFE+GR                              | 112         | Washer            | A2-70                         |
| 13          | Regulation stem A   | Stainless steel AISI 316L            | 113         | Regulation stem A | Stainless steel AISI 316L     |
| 14          | Washer              | A2-70                                | 114         | Washer            | PTFE                          |
| 15          | Cover cap           | Zinc plated steel 1.1191 (1)         | 115         | Cover cap         | Zinc plated steel 1.1191 (1)  |
|             |                     | Stainless steel AISI 316L (2)        |             |                   | Stainless steel AISI 316L (2) |
| 16          | O-ring              | FKM (or NBR, EPDM, PTFE)             | 116         | Isolation gasket  | PTFE+GR+SS302                 |
| 17          | O-ring              | FKM (or NBR, EPDM)                   |             |                   |                               |
| 18          | Block Pin           | Steel                                |             |                   |                               |

Recommended spare parts

HANDWHEEL COMPONENTS

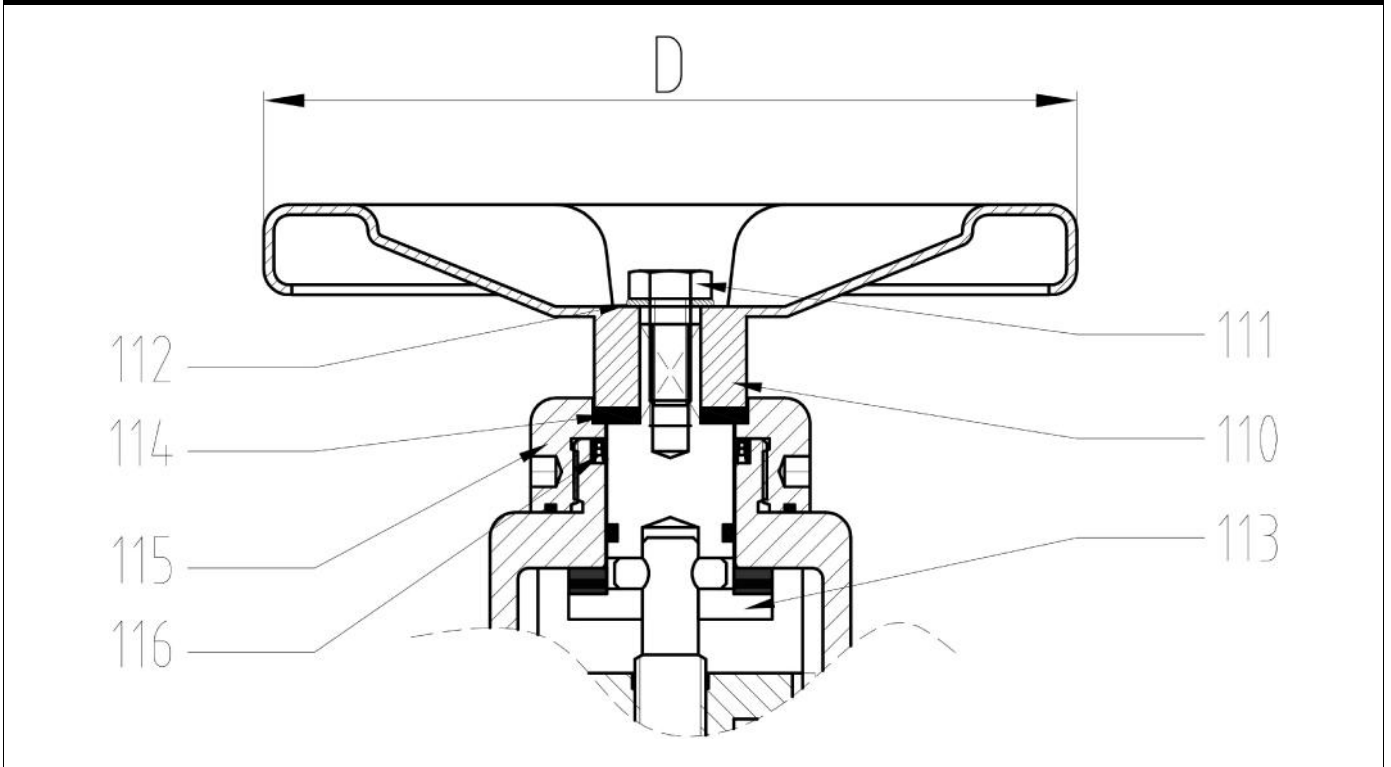


VALVE PARTS





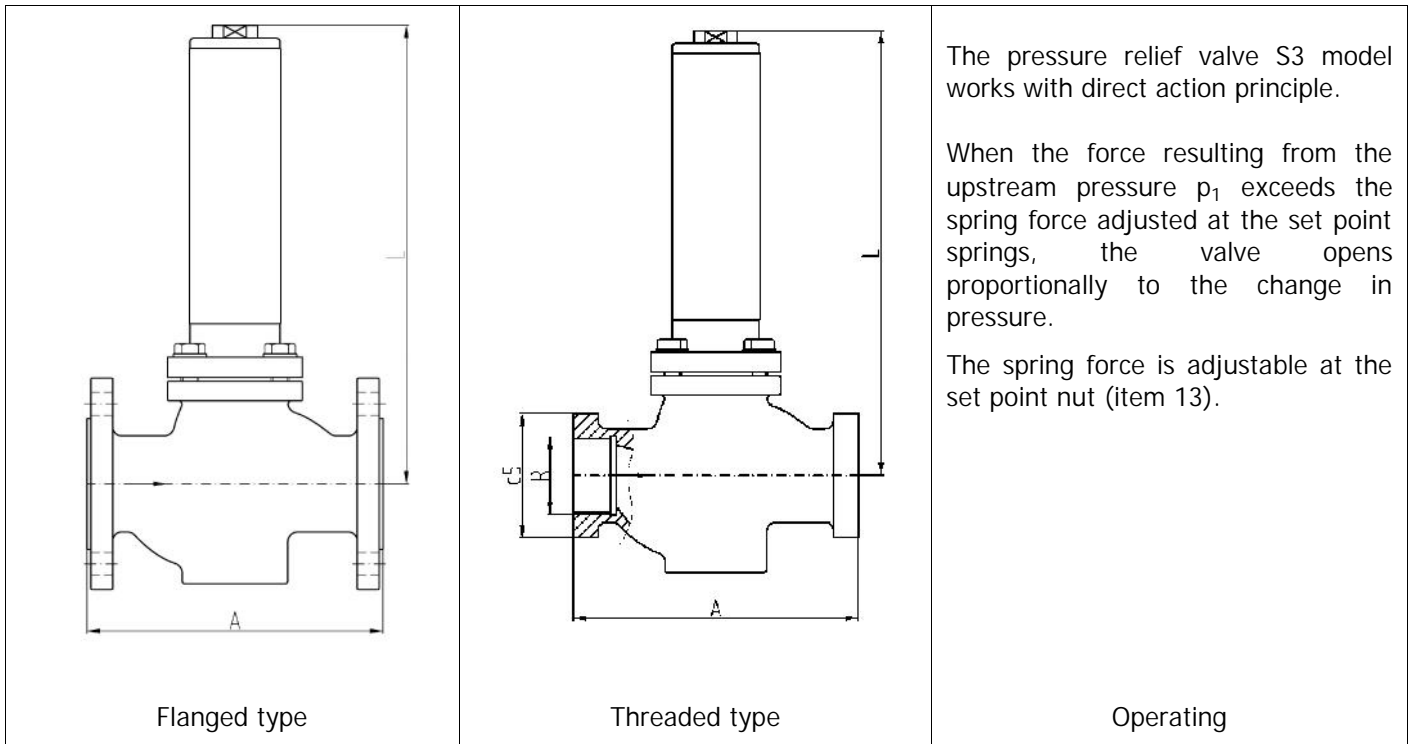
HANDWHEEL OPTION



VALVE DIMENSIONS, WEIGHT AND Kv VALUES

| DN              |                     | 15  | 20  | 25           | 32   | 40           | 50            | 65            | 80              | 100             |
|-----------------|---------------------|-----|-----|--------------|------|--------------|---------------|---------------|-----------------|-----------------|
| Kv              | (m <sup>3</sup> /h) | 3.5 | 5   | 9            | 15   | 22           | 35            | 60            | 85              | 130             |
| Cv              | (gpm)               | 4   | 5.8 | 10.4         | 17.5 | 25           | 41            | 70            | 100             | 152             |
| A (EN 558-1)    | (mm)                | 130 | 150 | 160          | 180  | 200          | 230           | 290           | 310             | 350             |
| A ANSI150       | (mm)<br>(inches)    |     |     | 184<br>7,25" | -    | 222<br>8,75" | 254<br>10"    | 276<br>10,86" | 298.5<br>11,75" | 352.5<br>13,88" |
| A ANSI300       | (mm)<br>(inches)    |     |     | 197<br>7,76" | -    | 235<br>9,25" | 267<br>10,51" | 292<br>11,5"  | 317.5<br>12,50" | 368<br>14,49"   |
| L (sealing cap) | (mm)                | 260 | 260 | 267          | 267  | 321          | 321           | 450           | 450             | 520             |
| L (Handwheel)   | (mm)                |     |     |              |      |              |               |               |                 |                 |
| Weight          | (kg)                | 10  | 10  | 12           | 13   | 16           | 18            | 30            | 40              | 50              |

Available under request



**TYPICAL INSTALLATION S3 RELIEF VALVE**

