

**INTERMITTENT BLOWDOWN VALVES  
 VPA26/2**

**DESCRIPTION**

The VPA26/2 blowdown valve series were specially designed for application on steam boilers, to remove sludge sediments which naturally settle on the bottom of the boiler. These intermittent valves operate manually or automatically with timed control. This valve is available with a diaphragm actuator and/or manual operation lever.

**MAIN FEATURES**

- High quality hardened valve seat and plug.
- Manual or automatic intermittent timed control.
- Lockable in open position if supplied with manual operation lever.
- Practical foot operated lever.
- Maintenance free stem sealing.
- Tool-free quick exchangeable clamped-in seats, allowing fast and easy in-site maintenance procedures.

**OPTIONS AND**

- ACCESSORIES:**
- Air filter regulator.
  - Solenoid valve with timer control unit.
  - Mechanical limit switches.
  - Inductive limit switch box.
  - Water actuated version.

**USE:** Intermittent blowdown of steam boilers.

**AVAILABLE**

- MODELS:**
- VPA26/2S – carbon steel.
  - VPA26/2I – stainless steel.

**SIZES:** 3/4" to 2" – DN 20 to DN 50.

- CONNECTIONS:**
- Flanged EN 1092-1 PN 40.
  - Flanged ASME B16.5 Class 300.

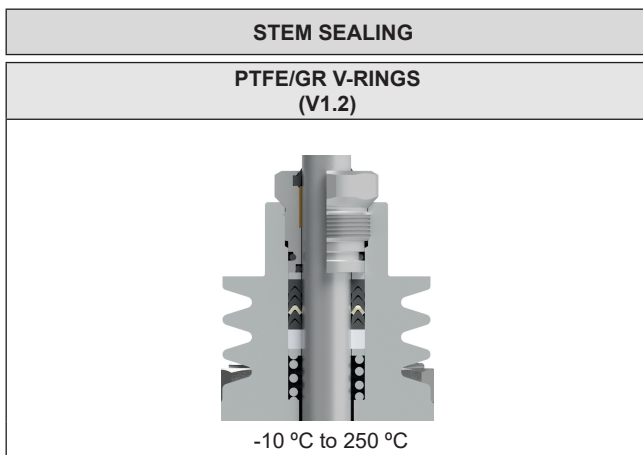


**CE MARKING – GROUP 2 (PED – European Directive)**

| PN 40                      | Category      |
|----------------------------|---------------|
| 3/4" to 1" – DN 20 to 32   | SEP           |
| 1 1/2" to 2" – DN 40 to 50 | 1 (CE Marked) |

| BODY LIMITING CONDITIONS |                     |                      |                     |                    |                     |
|--------------------------|---------------------|----------------------|---------------------|--------------------|---------------------|
| VPA26/2S                 |                     |                      |                     | VPA26/2I           |                     |
| FLANGED PN 40 *          |                     | FLANGED CLASS 300 ** |                     | FLANGED PN 40 *    |                     |
| ALLOWABLE PRESSURE       | RELATED TEMPERATURE | ALLOWABLE PRESSURE   | RELATED TEMPERATURE | ALLOWABLE PRESSURE | RELATED TEMPERATURE |
| 40 bar                   | -10 °C/50 °C        | 50 bar               | -10/50 °C           | 40 bar             | -10 °C/50 °C        |
| 33,3 bar                 | 200 °C              | 43,9 bar             | 200 °C              | 33,7 bar           | 200 °C              |
| 30,4 bar                 | 250 °C              | 36,9 bar             | 350 °C              | 31,8 bar           | 250 °C              |
| 27,6 bar                 | 300 °C              | 34,6 bar             | 400 °C              | 29,7 bar           | 300 °C              |
| 23,8 bar                 | 400 °C              | –                    | –                   | 27,4 bar           | 400 °C              |

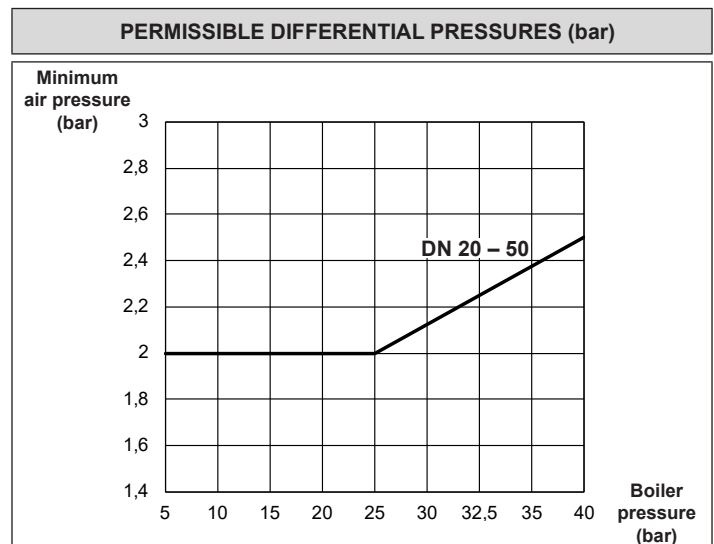
\* Rating according to EN 1092-1:2018; \*\* Rating according to EN 1759-1:2004.



**FLOW RATE COEFFICIENTS (m<sup>3</sup>/h)**

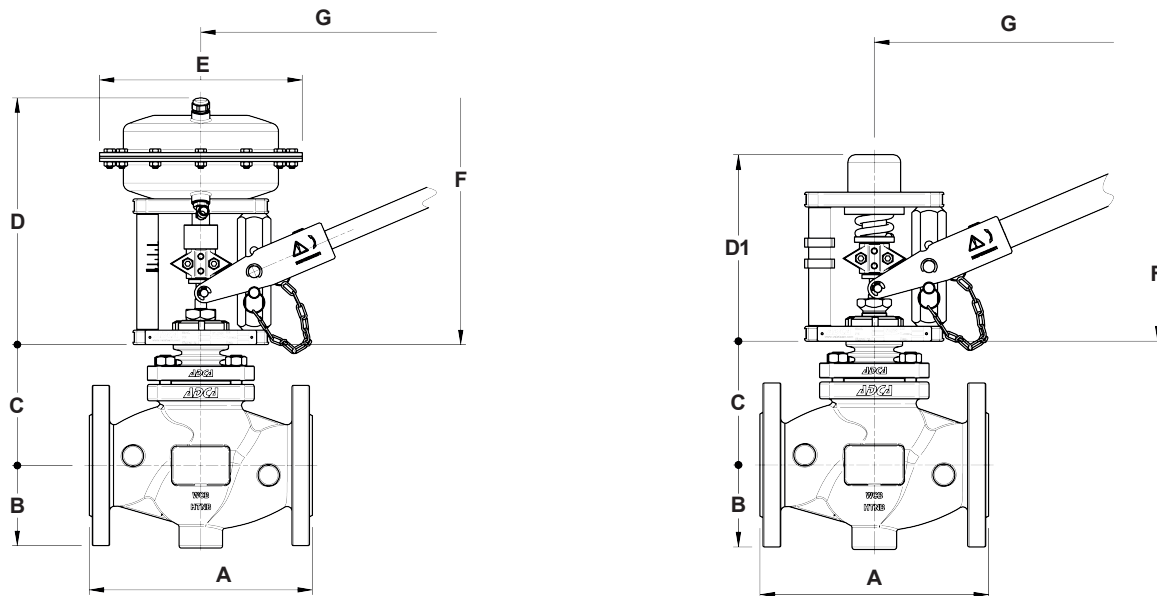
|            | SIZES        |            |       |                |            |
|------------|--------------|------------|-------|----------------|------------|
|            | 3/4" – DN 20 | 1" – DN 25 | DN 32 | 1 1/2" – DN 40 | 2" – DN 50 |
| <b>Kvs</b> | 6,3          | 6,3        | 6,3   | 16             | 16         |

For conversion  $Kvs = Cv (US) \times 0,855$ .



**ACTUATOR DATA**

|  |                 |
|--|-----------------|
| <b>DIAPHRAGM AREA (cm<sup>2</sup>)</b> | 140             |
| <b>SPRING RANGE (bar)</b>              | 0,7 to 1,2      |
| <b>STROKE (mm)</b>                     | 12              |
| <b>DEAD VOLUME (L)</b>                 | 0,3             |
| <b>TRAVEL VOLUME (L)</b>               | 0,16            |
| <b>AMBIENT TEMPERATURE</b>             | -20 °C to 70 °C |



**DIMENSIONS (mm)**

| DIMENSION  |      | SIZE         |            |       |                |            |
|------------|------|--------------|------------|-------|----------------|------------|
|            |      | 3/4" – DN 20 | 1" – DN 25 | DN 32 | 1 1/2" – DN 40 | 2" – DN 50 |
| A          | EN   | 150          | 160        | 180   | 200            | 230        |
|            | ASME | 194 a)       | 197        | –     | 235            | 267        |
| B          |      | 53           | 58         | 70    | 75             | 83         |
| C          |      | 104,5        | 109,5      | 109,5 | 113            | 124,5      |
| D          |      | 252          |            |       |                |            |
| D1         |      | 188          |            |       |                |            |
| E          |      | 210          |            |       |                |            |
| HAND LEVER | F    | 216          |            |       | 297            |            |
|            | G    | 415          |            |       | 655            |            |
| FOOT LEVER | F    | 211          |            |       |                |            |
|            | G    | 417          |            |       |                |            |

a) With welded-on flanges.

**WEIGHTS (kg)**

|         | SIZE         |            |       |                |            |
|---------|--------------|------------|-------|----------------|------------|
|         | 3/4" – DN 20 | 1" – DN 25 | DN 32 | 1 1/2" – DN 40 | 2" – DN 50 |
| EN a)   | 15,1         | 15,9       | 19,1  | 24,1           | 27,8       |
| EN b)   | 11,5         | 12,4       | 15,5  | 20,5           | 24,3       |
| ASME a) | 15,2         | 16,4       | –     | 25,4           | 29         |
| ASME b) | 11,6         | 12,9       | –     | 21,8           | 25,5       |

a) Valve with pneumatic actuator only; b) Valve with hand lever only.

VPA26/2 VERSIONS AND ACCESSORIES

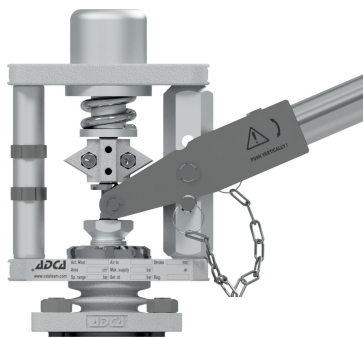
VALVE WITH  
 PNEUMATIC ACTUATOR ONLY



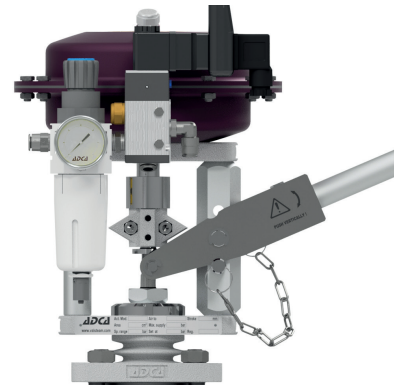
VALVE WITH PNEUMATIC ACTUATOR  
 AND MANUAL OPERATION LEVER



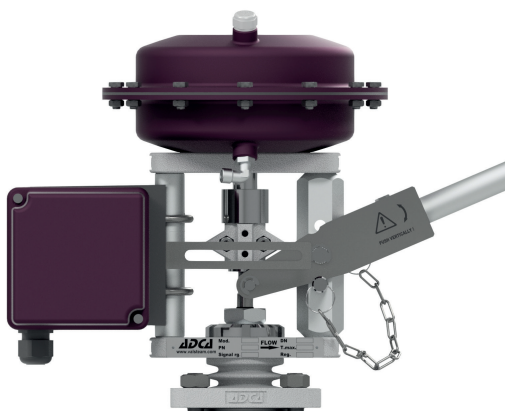
VALVE WITH  
 MANUAL OPERATION ONLY



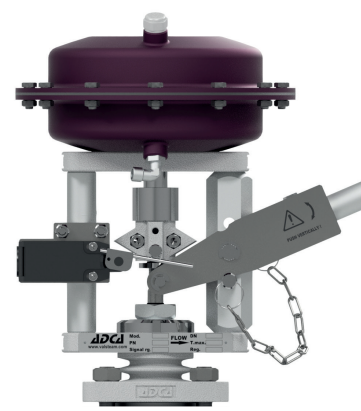
SOLENOID VALVE AND  
 AIR FILTER REGULATOR



INDUCTIVE LIMIT SWITCH BOX

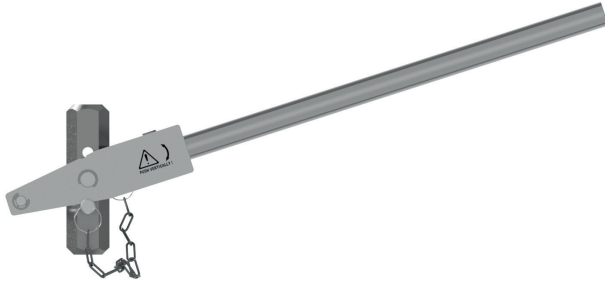


MECHANICAL LIMIT SWITCHES



MANUAL OPERATION OPTIONS

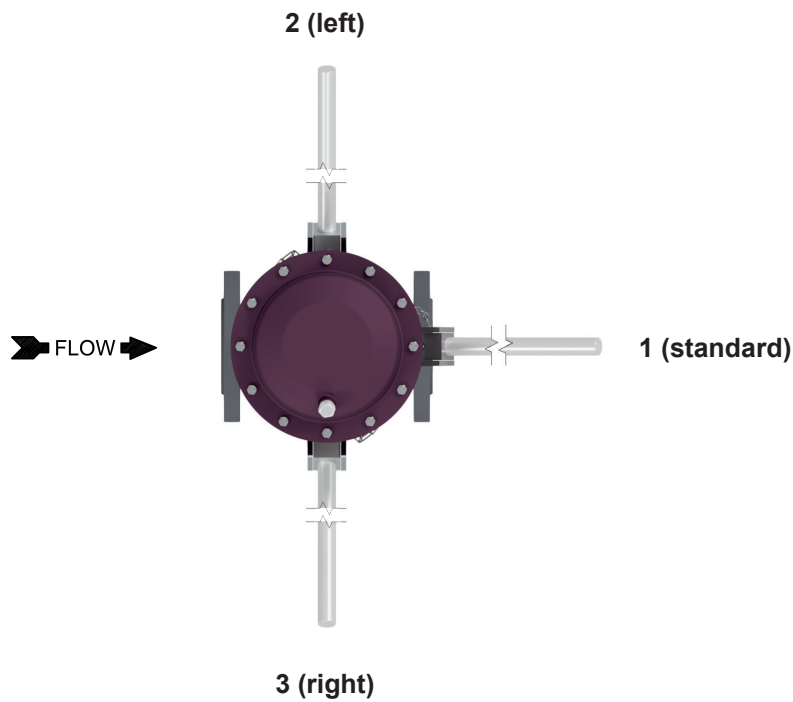
HAND LEVER



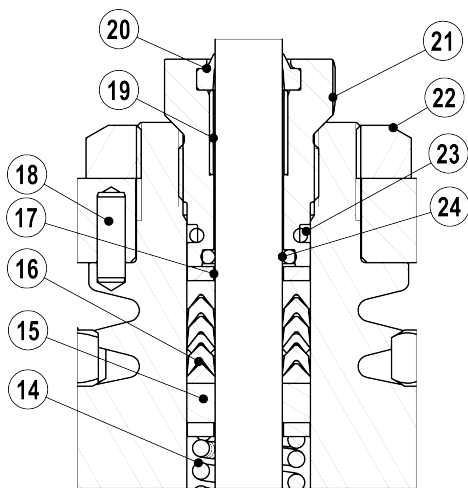
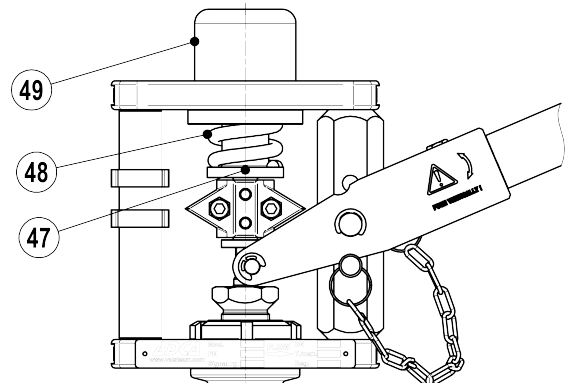
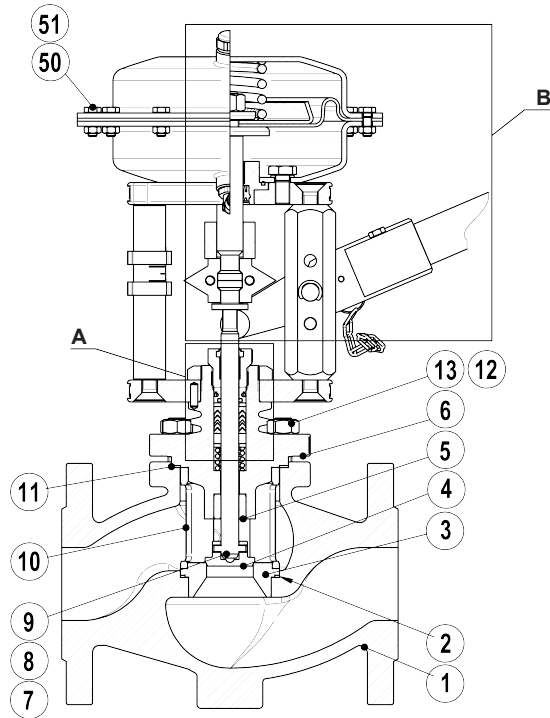
FOOT LEVER



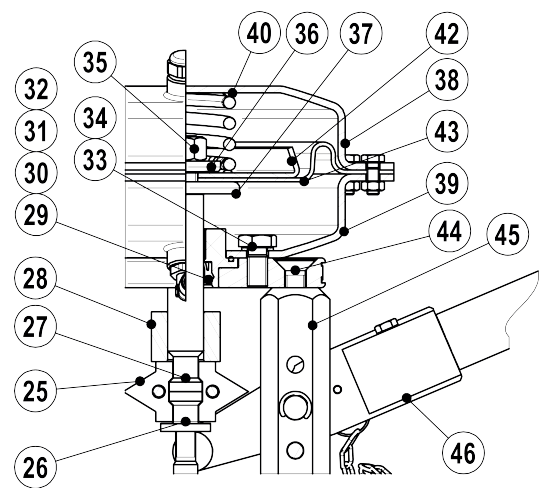
LEVER ORIENTATION ALTERNATIVES



The manual operation lever can be supplied with different orientations to better suit the valve's installation position. Orientations not shown in the image above are available under request.



**Detail A**



**Detail B**

| MATERIALS |                       |                            |
|-----------|-----------------------|----------------------------|
| POS. N°   | DESIGNATION           | MATERIAL                   |
| 1         | Valve body (VPA26/2S) | A216 WCB / 1.0619          |
|           | Valve body (VPA26/2I) | A351 CF8M / 1.4408         |
| 2         | * Seat gasket         | Stainless steel / Graphite |
| 3         | * Seat                | AISI 420 / 1.4034          |
| 4         | * Valve plug          | AISI 440B / 1.4112         |
| 5         | Stem guide bushing    | Bronze                     |
| 6         | Bonnet                | A351 CF8M / 1.4408         |
| 7         | Ball                  | AISI 440C / 1.4125         |
| 8         | * Spring pin          | AISI 301 / 1.4310          |
| 9         | Stem                  | AISI 316L / 1.4404         |
| 10        | Seat retainer         | A351 CF8M / 1.4408         |
| 11        | * Gasket              | Stainless steel / Graphite |

| MATERIALS |  |                            |
|-----------|--|----------------------------|
| POS. N°   | DESIGNATION                            | MATERIAL                   |
| 12        | Studs (VPA26/2S)                       | 34CrNiMo6 / 1.6582         |
|           | Studs (VPA26/2I)                       | Stainless steel A2-70      |
| 13        | Nuts (VPA26/2S)                        | Steel 8.8                  |
|           | Nuts (VPA26/2I)                        | Stainless steel A2-70      |
| 14        | * Spring                               | AISI 302 / 1.4310          |
| 15        | * Wiper ring                           | Stainless steel / PTFE     |
| 16        | * Chevron packing set                  | PTFE; Graphite filled PTFE |
| 17        | Washer                                 | AISI 304 / 1.4301          |
| 18        | Cylindrical pin                        | AISI 303 / 1.4305          |
| 19        | * Plain bearing                        | Bronze / PTFE              |
| 20        | * Scraper ring                         | Viton                      |
| 21        | * Gland nut                            | AISI 303 / 1.4305          |
| 22        | Lock nut                               | A351 CF8 / 1.4308          |
| 23        | * O-ring                               | EPDM                       |
| 24        | * O-ring                               | Viton                      |
| 25        | Coupling / Travel indicator            | A351 CF8 / 1.4308          |
| 26        | Adapter                                | AISI 304 / 1.4301          |
| 27        | Stem                                   | AISI 316 / 1.4401          |
| 28        | Stroke limiter                         | AISI 304 / 1.4301          |
| 29        | * Seal ring                            | Polyurethane               |
| 30        | * Stem guide                           | AISI 304 / 1.4301          |
| 31        | * Plain bearing                        | Steel / PTFE               |
| 32        | * O-ring                               | NBR                        |
| 33        | Bolts                                  | Steel 8.8                  |
| 34        | Washer                                 | Steel 8.8                  |
| 35        | Nut                                    | Steel 8.8                  |
| 36        | Upper diaphragm disc                   | C45E / 1.1191              |
| 37        | Lower diaphragm disc                   | C45E / 1.1191              |
| 38        | Upper actuator cover (steel)           | DD12 / 1.0398              |
|           | Upper actuator cover (stainless steel) | AISI 304 / 1.4301          |
| 39        | Lower actuator cover (steel)           | DD12 / 1.0398              |
|           | Lower actuator cover (stainless steel) | AISI 304 / 1.4301          |
| 40        | Springs                                | Spring steel               |
| 42        | Diaphragm plate                        | DD12 / 1.0398              |
| 43        | * Diaphragm                            | NBR 70                     |
| 44        | Bolts (steel)                          | Steel 8.8                  |
|           | Bolts (stainless steel)                | Stainless steel A2-70      |
| 45        | Yoke (steel)                           | C45E / 1.1191              |
|           | Yoke (stainless steel)                 | AISI 303 / 1.4305          |
| 46        | Lever assembly set                     | AISI 316 / 1.4401          |
| 47        | Lower spring guide                     | C45E / 1.1191              |
| 48        | Spring                                 | Spring steel               |
| 49        | Upper spring carrier                   | C45E / 1.1191              |
| 50        | Bolts (steel)                          | Steel 8.8                  |
|           | Bolts (stainless steel)                | Stainless steel A2-70      |
| 51        | Nuts (steel)                           | Steel 8.8                  |
|           | Nuts (stainless steel)                 | Stainless steel A2-70      |

\* Available spare parts.

| ORDERING CODES VPA26/2  |      |   |   |    |   |    |   |    |   |    |    |
|---|------|---|---|----|---|----|---|----|---|----|----|
| <b>Valve model</b>  | VP26 | 2 | S | AX | 0 | SX | 1 | FE | N | 20 |    |
| Intermittent bottom blowdown valve, two way, straight body                                  | VP26 |   |   |    |   |    |   |    |   |    |    |
| <b>Valve series</b>   |      |   |   |    |   |    |   |    |   |    |    |
| Series 2  |      | 2 |   |    |   |    |   |    |   |    |    |
| <b>Body material</b>  |      |   |   |    |   |    |   |    |   |    |    |
| A216 WCB / 1.0619 carbon steel  |      |   | S |    |   |    |   |    |   |    |    |
| A351 CF8M / 1.4408 stainless steel  |      |   | I |    |   |    |   |    |   |    |    |
| <b>Versions</b>   |      |   |   |    |   |    |   |    |   |    |    |
| Valve with actuator only  |      |   |   | AX |   |    |   |    |   |    |    |
| Valve with actuator and hand lever  |      |   |   | AH |   |    |   |    |   |    |    |
| Valve with actuator and foot lever  |      |   |   | AF |   |    |   |    |   |    |    |
| Valve with hand lever only  |      |   |   | XH |   |    |   |    |   |    |    |
| Valve with foot lever only  |      |   |   | XF |   |    |   |    |   |    |    |
| <b>Lever orientation</b>  |      |   |   |    |   |    |   |    |   |    |    |
| Without lever   |      |   |   |    | 0 |    |   |    |   |    |    |
| Standard position   |      |   |   |    | 1 |    |   |    |   |    |    |
| Lever rotated 90° to the left (relative to the flow direction)                              |      |   |   |    | 2 |    |   |    |   |    |    |
| Lever rotated 90° to the right (relative to the flow direction)                             |      |   |   |    | 3 |    |   |    |   |    |    |
| <b>Actuator</b>   |      |   |   |    |   |    |   |    |   |    |    |
| Steel construction  |      |   |   |    |   | SX |   |    |   |    |    |
| Stainless steel construction  |      |   |   |    |   | IX |   |    |   |    |    |
| Steel construction – water actuated   |      |   |   |    |   | SW |   |    |   |    |    |
| Stainless steel construction – water actuated   |      |   |   |    |   | IW |   |    |   |    |    |
| Without actuator  |      |   |   |    |   | XX |   |    |   |    |    |
| <b>Stem sealing</b>   |      |   |   |    |   |    |   |    |   |    |    |
| PTFE/GR V-rings (V1.2)  |      |   |   |    |   |    | 1 |    |   |    |    |
| <b>Flow rate coefficient</b>  |      |   |   |    |   |    |   |    |   |    |    |
| Kvs 6,3 (available only for 3/4" to 1" and DN 20 to DN 32)                                  |      |   |   |    |   |    |   | FE |   |    |    |
| Kvs 16 (available only for 1 1/2" to 2" and DN 40 to DN 50)                                 |      |   |   |    |   |    |   | FG |   |    |    |
| <b>Pipe connection</b>  |      |   |   |    |   |    |   |    |   |    |    |
| Flanged EN 1092-1 PN 40   |      |   |   |    |   |    |   |    | N |    |    |
| Flanged ASME B16.5 Class 300 a)   |      |   |   |    |   |    |   |    | V |    |    |
| <b>Size</b>   |      |   |   |    |   |    |   |    |   |    |    |
| 3/4" or DN 20   |      |   |   |    |   |    |   |    |   |    | 20 |
| 1" or DN 25   |      |   |   |    |   |    |   |    |   |    | 25 |
| DN 32   |      |   |   |    |   |    |   |    |   |    | 32 |
| 1 1/2" or DN 40   |      |   |   |    |   |    |   |    |   |    | 40 |
| 2" or DN 50   |      |   |   |    |   |    |   |    |   |    | 50 |
| <b>Special valves / Extras</b>  |      |   |   |    |   |    |   |    |   |    |    |
| Full description or additional codes have to be added in case of a non-standard combination |      |   |   |    |   |    |   |    |   |    | E  |

a) Not available for A351 CF8M / 1.4408 stainless steel version.