

## 2/2-way valves DN 15 to DN 50

For aggressive gases and liquids

Pressure actuated by external fluid

Seat valves

Internal thread G 1/2 to G 2 or 1/2 NPT to 2 NPT

Operation pressure 0 – 16 bar (see table)

82380

82390

### Description (standard valve)

Switching function: normally closed  
 Flow direction: determined  
 Mounting position: as required

82480

82490

### Process fluid characteristics / Valve material

Fluid temperature: -10 °C up to max. +180 °C  
 Ambient temperature: -10 °C up to max. + 60 °C  
 Material body: Stainless steel (1.4408)  
 Seat seal: PTFE  
 Internal parts: Stainless steel  
 Spindle sealing: PTFE / FPM; self-adjustable



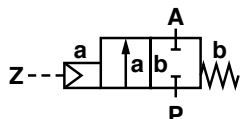
### Pilot fluid characteristics / Actuator material

Pilot connection: G 1/4 resp. 1/4 NPT  
 Pilot fluid: neutral gases  
 Fluid temperature: max. +60 °C  
 Actuator: Body: Stainless steel, Aluminium  
 Bottom: WEMA-Kor coated  
 Seat seals: NBR  
 Internal parts: Coated steel

### Features

- Suitable for contaminated process fluids
- High flow rate
- For robust industry applications
- Damped closing (valve closes against flow direction)
- Suitable for vacuum up to max. 90 %

### Symbol



### Ordering information

To order, quote model number from table overleaf, e. g. 8238400.0000 for a DN 25 valve.

## Characteristic Data

### Valves

| Part Number ◊                | Nominal Diameter (mm) | Connection Size      | Operating Pressure * |            | k <sub>v</sub> -value ** (Base m <sup>3</sup> /h) | Weight Total (kg) *** |
|------------------------------|-----------------------|----------------------|----------------------|------------|---|-----------------------|
|                              |                       |                      | min. (bar)           | max. (bar) |   |                       |
| <b>Actuator Ø 70 mm</b>      |                       |                      |                      |            |   |                       |
| 8238200.0000<br>8239200.0000 | 15                    | G 1/2<br>1/2 NPT     | 0                    | 16.0       | 4.8   | 1.3                   |
| 8238300.0000<br>8239300.0000 | 20                    | G 3/4<br>3/4 NPT     | 0                    | 10.0       | 10.0  | 1.4                   |
| 8238400.0000<br>8239400.0000 | 25                    | G 1<br>1 NPT         | 0                    | 10.0       | 14.0  | 1.7                   |
| 8238500.0000<br>8239500.0000 | 32                    | G 1 1/4<br>1 1/4 NPT | 0                    | 7.0        | 23.0  | 2.4                   |
| 8238600.0000<br>8239600.0000 | 40                    | G 1 1/2<br>1 1/2 NPT | 0                    | 4.5        | 30.0  | 2.6                   |
| 8238700.0000<br>8239700.0000 | 50                    | G 2<br>2 NPT         | 0                    | 3.0        | 37.0  | 3.8                   |
| <b>Actuator Ø 125 mm</b>     |                       |                      |                      |            |   |                       |
| 8248500.0000<br>8249500.0000 | 32                    | G 1 1/4<br>1 1/4 NPT | 0                    | 16.0       | 27.0  | 5.1                   |
| 8248600.0000<br>8249600.0000 | 40                    | G 1 1/2<br>1 1/2 NPT | 0                    | 10.0       | 37.0  | 5.5                   |
| 8248700.0000<br>8249700.0000 | 50                    | G 2<br>2 NPT         | 0                    | 10.0       | 53.0  | 7.0                   |

\* for gases and liquid fluids up to 600 mm<sup>2</sup>/s (cSt)

\*\* C<sub>v</sub>-value (US) ≈ k<sub>v</sub>-value x 1.2

\*\*\* without pilot valve

State voltage [V] and frequency [Hz]

◊ Note: **0000** without pilot valve

Pilot pressure 3.5 – 8 bar, Pilot connection Z2

Pilot pressure 1 – 6 bar, Pilot connection Z1

## Notes

### for 3/2-way pilot valve 84660 / 84680

Material body brass

Pilot fluid temperature max. +60 °C

Pilot pressure: 1 – 10 bar

Standard voltages: 24 V DC, 24 V AC, 230 V AC

## Electrical Data

### for 3/2-way pilot valve 84660 / 84680

Design acc. to DIN VDE 0580

Voltage range ±10 %

Duty cycle (ED) 100 %

Protection class to EN 60529 IP65 with mounted Socket

Socket acc. to DIN EN 175301-803A

## Further Options (Valves)

XXXXX01.XXXX Normally open, closes with pilot pressure and opens with spring force (pilot pressure 1 – 6 bar)

XXXXX03.XXXX Seat seals FPM T<sub>max.</sub> +180 °C

XXXXX22.XXXX Operating pressure G 1/2 25 bar, G 3/4 16 bar

XXXXX40.XXXX Double electrical position indicator with 2 solenoid switches

XXXXX52.XXXX Optical position indicator

XXXXX59.XXXX T<sub>max.</sub> +200 °C

XXXXX60.XXXX Stainless steel impulse

XXXXX80.XXXX Spindle seal with stainless steel

On request Further versions

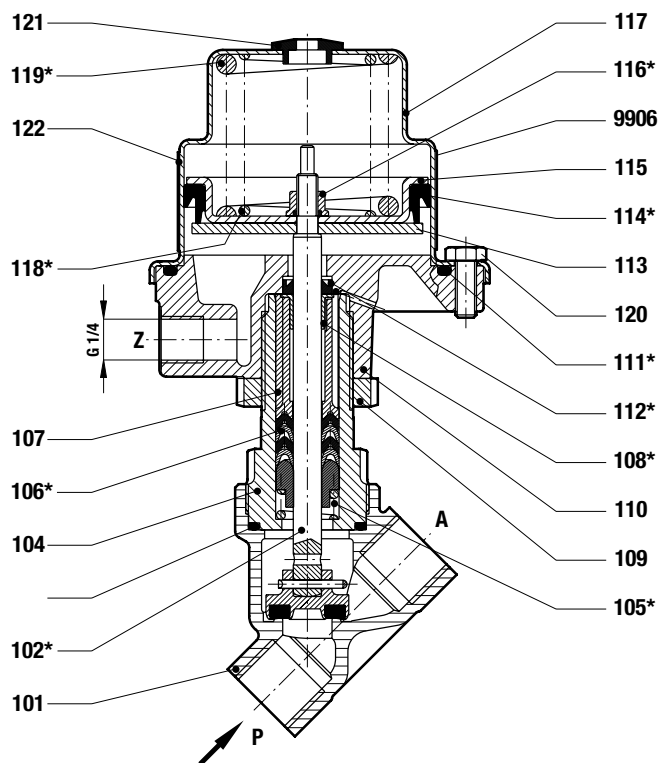
## Options (Solenoids)

XXXXXXX.9101 with assembled standard pilot valve 8466000.9101 DC / AC

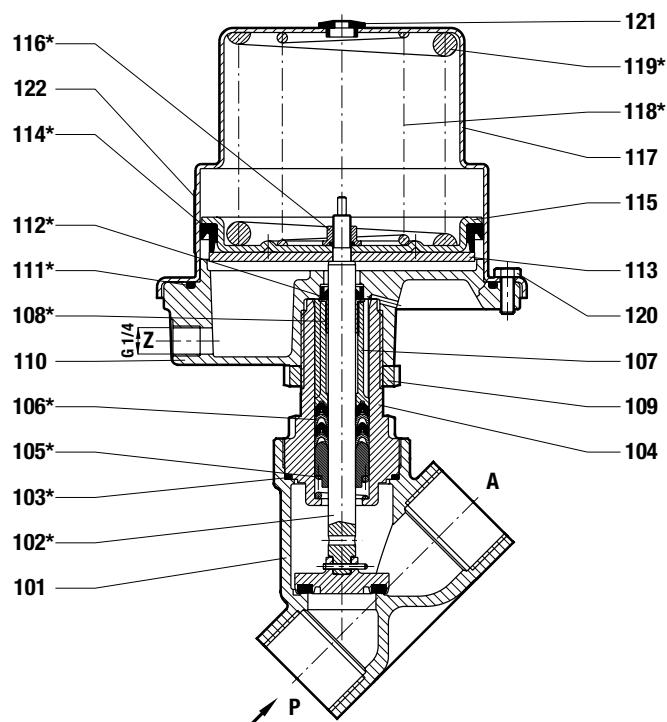
On request Further versions

## Section View

Actuator Ø 70 mm



Actuator Ø 125 mm



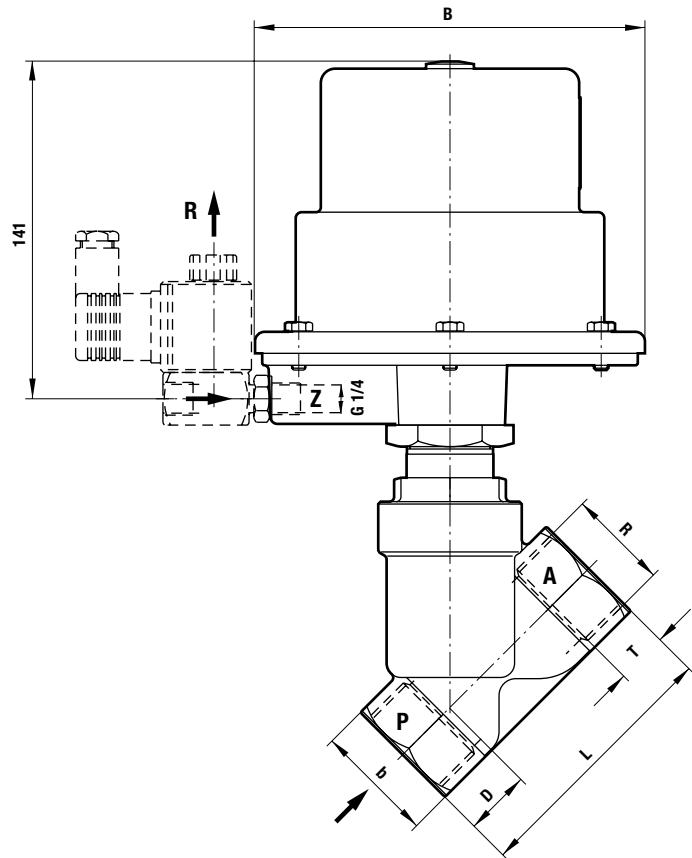
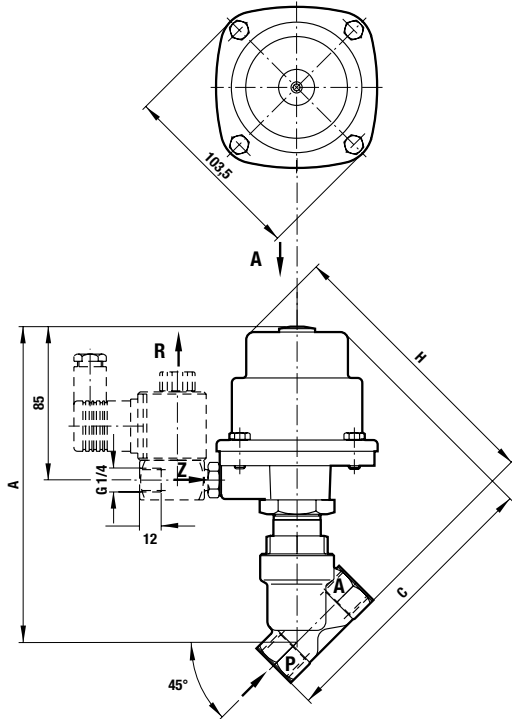
- 101 Valve body
- \*102 Valve spindle assembly
- \*103 Gasket
- 104 Screw piece
- \*105 Pressure spring
- \*106 Spindle sealing
- 107 Spacer sleeve
- \*108 Sleeve bearing
- 109 Nut
- 110 Bottom of control head housing
- \*111 O-ring
- \*112 FPM lip seal

- 113 Round plate
- \*114 Lip seal
- 115 Round plate
- \*116 Seal-Lock® nut
- 117 Control head housing
- \*118 Pressure spring - for G 1 and G 2 only
- \*119 Pressure spring
- 120 Hexagon screw
- 121 Plug

\* These individual parts form a complete wearing unit.  
When ordering spare parts please state Cat. No. and Series No.

### General Dimensions

Actuator may be rotated 360°



| Part Number $\phi$           | Nominal Diameter (mm) | Connection Size      | A (mm) | b     | B (mm) | C (mm) | H (mm) | L (mm) | T (mm) |
|------------------------------|-----------------------|----------------------|--------|-------|--------|--------|--------|--------|--------|
| Actuator $\phi$ 70 mm        |                       |                      |        |       |        |        |        |        |        |
| 8238200.0000<br>8239200.0000 | 15                    | G 1/2<br>1/2 NPT     | 175    | SW 27 | 89.5   | 159    | 154    | 65     | 15.0   |
| 8238300.0000<br>8239300.0000 | 20                    | G 3/4<br>3/4 NPT     | 182    | SW 32 | 89.5   | 165    | 160    | 75     | 16.5   |
| 8238400.0000<br>8239400.0000 | 25                    | G 1<br>1 NPT         | 190    | SW 41 | 89.5   | 175    | 171    | 90     | 19.0   |
| 8238500.0000<br>8239500.0000 | 32                    | G 1 1/4<br>1 1/4 NPT | 205    | SW 50 | 89.5   | 189    | 186    | 110    | 21.5   |
| 8238600.0000<br>8239600.0000 | 40                    | G 1 1/2<br>1 1/2 NPT | 207    | SW 55 | 89.5   | 193    | 190    | 120    | 21.5   |
| 8238700.0000<br>8239700.0000 | 50                    | G 2<br>2 NPT         | 219    | SW 70 | 89.5   | 211    | 206    | 150    | 26.0   |
| Actuator $\phi$ 125 mm       |                       |                      |        |       |        |        |        |        |        |
| 8248500.0000<br>8249500.0000 | 32                    | G 1 1/4<br>1 1/4 NPT | 270    | SW 50 | 163.0  | 253    | 250    | 110    | 21.5   |
| 8248600.0000<br>8249600.0000 | 40                    | G 1 1/2<br>1 1/2 NPT | 272    | SW 55 | 163.0  | 257    | 255    | 120    | 21.5   |
| 8248700.0000<br>8249700.0000 | 50                    | G 2<br>2 NPT         | 284    | SW 70 | 163.0  | 275    | 270    | 150    | 26.0   |

#### Note to Pressure Equipment Directive (PED):

The valves of this series are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG.

This means interpretation and production are in accordance with engineers practice wellknown in the member countries.

The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

#### Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Guideline (2004/108/EC) satisfied.