

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

For aggressive gases and liquid fluids

Pressure actuated by external fluid

Seat valves

Connection DIN 11850

Operating pressure 0 to 16 bar (see table)

DIN
84580
84880

Description (standard valve)

Switching function: normally closed
Flow direction: determined
Mounting position: optional

ISO
84590
84890

Process fluid characteristics / Valve material

Fluid temperature: 0 °C to max. +180 °C
Ambient temperature: 0 °C to max. +60 °C
Material Body: Stainless steel (1.4581)
Seat seal: PTFE
Internal parts: Sandvik 1802 Stainless steel
Seal packing: PTFE / FPM, self-adjustable



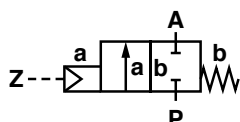
Pilot fluid characteristics / Actuator material

Pilot connection: G 1/4
Pilot fluid: neutral gases
Fluid temperature: max. +80 °C
Material body: Stainless steel, WEMA-Kor coated aluminium
Seals: NBR
Internal parts: Coated steel

Features

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

Symbol



Order information

For order no. see page 2; e. g. 8458400.0000 for a DN 25 valve with DIN welded ends without pilot valve.

Characteristic Data

Valves

| Part Number ◊ | Nominal Diameter (mm) | Connection to | Operating pressure * | | k _v -value ** (Base m ³ /h) | Weight total (kg) *** |
|------------------------------|-----------------------|----------------------|----------------------|------------|---|-----------------------|
| | | | min. (bar) | max. (bar) | | |
| Actuator Ø 70 mm | | | | | | |
| 8458200.0000 8459200.0000 | 15 | DIN, Series 1 ISO | 0 | 16.0 | 4.80 | 1.3 |
| 8458300.0000 8459300.0000 | 20 | DIN, Series 1 ISO | 0 | 10.0 | 10.0 | 1.4 |
| 8458400.0000 8459400.0000 | 25 | DIN, Series 2 ISO | 0 | 10.0 | 14.0 | 1.7 |
| 8458500.0000 8459500.0000 | 32 | DIN, Series 2 ISO | 0 | 7.0 | 23.0 | 2.4 |
| 8458600.0000 8459600.0000 | 40 | DIN, Series 2 ISO | 0 | 4.5 | 30.0 | 2.6 |
| 8458700.0000 8459700.0000 | 50 | DIN, Series 3 ISO | 0 | 3.0 | 37.0 | 3.8 |
| Actuator Ø 125 mm | | | | | | |
| 8488500.0000 8489500.0000 | 32 | DIN, Series 2 ISO | 0 | 10.0 | 27.0 | 5.1 |
| 8488600.0000 8489600.0000 | 40 | DIN, Series 2 ISO | 0 | 10.0 | 37.0 | 5.5 |
| 8488700.0000 8489700.0000 | 50 | DIN, Series 3 ISO | 0 | 10.0 | 53.0 | 7.0 |

* For gases and liquid fluids up to 600 mm²/s (cSt)

** Cv-value (US) ≈ k_v-value x 1,2

*** without pilot valve

State voltage [V] and frequency [Hz]

◊ Note: **0000** without pilot valve
0164 with pilot valve for DC
0165 with pilot valve für AC

Pilot pressure 3.5 - 8 bar, Pilot connection Z2
Pilot pressure 1 - 6 bar, Pilot connection Z1

Notes for 3/2-way pilot valve

Material body brass 2.0402

Pilot fluid temperature max. +60 °C

Pilot pressure: p_{max} = 8 bar

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

Data for 3/2-way pilot valve

Technical data see publication D107902

Design acc. to DIN VDE 0580

Voltage range ± 10 %

Duty cycle (ED) 100 %

Protection class to EN 60529 IP 65

Socket Form A acc. to DIN EN 175301-803 (included)

Further Options (Valves)

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

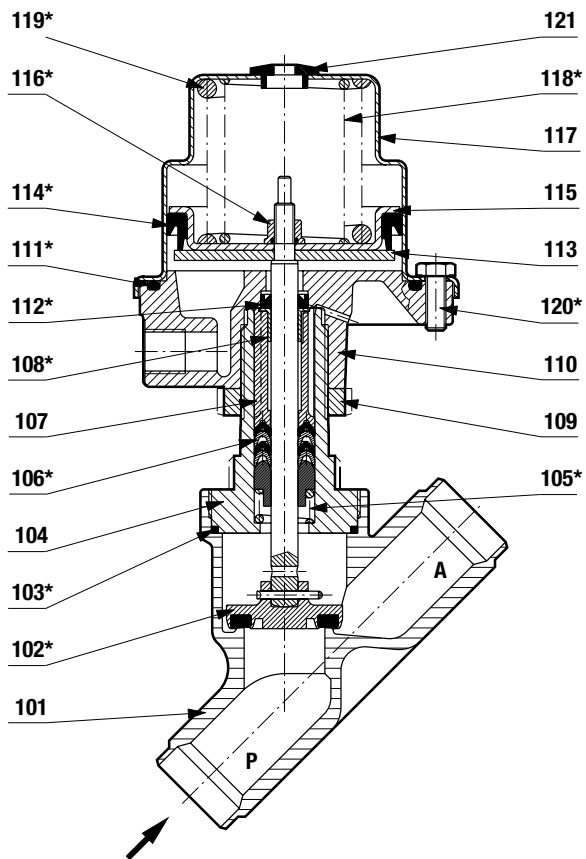
XXXXX23.XXXX Double electrical position indicator with solenoid switches

XXXXX60.XXXX Actuator stainless steel; max. fluid temperature +200 °C

On Request Further versions e. g. optical position indicator

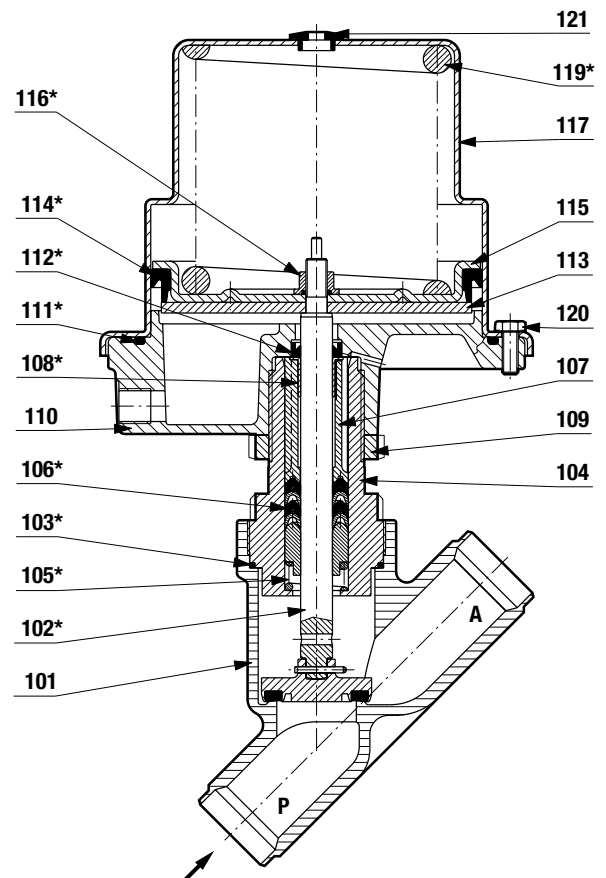
Section view

Actuator Ø 70 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

Actuator Ø 125 mm

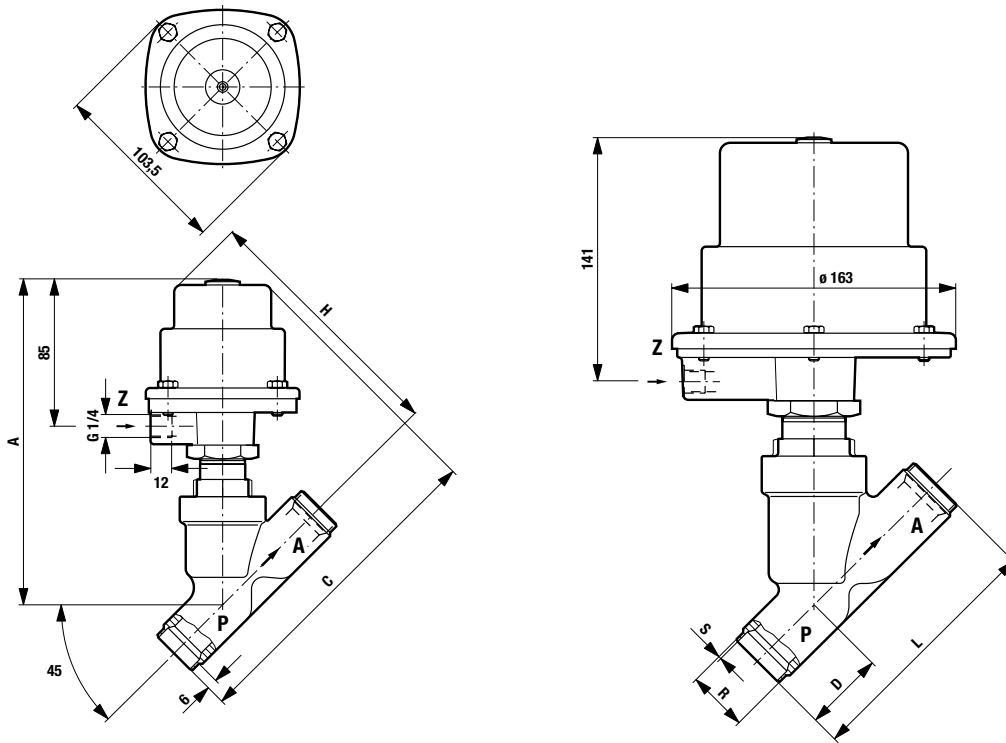


- *111 O-ring
- *112 FPM lip seal
- 113 Round plate
- *114 Lip seal
- 115 Round plate
- *116 Seal-lock-nut
- 117 Control head housing
- *118 Pressure spring (only for DN 50)
- *119 Pressure spring
- 120 Hexagon screw
- 121 Plug

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

General Dimensions

Actuator may be rotatable 360°



| Part Number | Nominal Diameter (mm) | Connection to | R (mm) | S (mm) | A (mm) | C (mm) | D (mm) | H (mm) | L (mm) |
|-------------------|-----------------------|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Actuator Ø 70 mm | | | | | | | | | |
| 8458200.0000 | 15 | DIN, Series 1 ISO | 21.3 | 1.6 | 176 | 175 | 35.0 | 140.0 | 100 |
| 8459200.0000 | 15 | ISO | 21.3 | 1.6 | 176 | 175 | 35.0 | 140.0 | 100 |
| 8458300.0000 | 20 | DIN, Series 1 ISO | 26.9 | 1.6 | 182 | 184 | 39.0 | 145.0 | 110 |
| 8459300.0000 | 20 | ISO | 26.9 | 1.6 | 182 | 184 | 39.0 | 145.0 | 110 |
| 8458400.0000 | 25 | DIN, Series 2 ISO | 33.7 | 2.0 | 190 | 190 | 40.0 | 150.5 | 120 |
| 8459400.0000 | 25 | ISO | 33.7 | 2.0 | 190 | 190 | 40.0 | 150.5 | 120 |
| 8458500.0000 | 32 | DIN, Series 2 ISO | 42.4 | 2.0 | 205 | 207 | 46.0 | 161.0 | 143 |
| 8459500.0000 | 32 | ISO | 42.4 | 2.0 | 205 | 207 | 46.0 | 161.0 | 143 |
| 8458600.0000 | 40 | DIN, Series 2 ISO | 48.3 | 2.0 | 207 | 213 | 51.0 | 162.0 | 160 |
| 8459600.0000 | 40 | ISO | 48.3 | 2.0 | 207 | 213 | 51.0 | 162.0 | 160 |
| 8458700.0000 | 50 | DIN, Series 3 ISO | 60.3 | 2.0 | 219 | 226 | 55.5 | 171.0 | 181 |
| 8459700.0000 | 50 | ISO | 60.3 | 2.0 | 219 | 226 | 55.5 | 171.0 | 181 |
| Actuator Ø 125 mm | | | | | | | | | |
| 8488500.0000 | 32 | DIN, Series 2 ISO | 42.4 | 2.0 | 270 | 271 | 46.0 | 221.0 | 143 |
| 8489500.0000 | 32 | ISO | 42.4 | 2.0 | 270 | 271 | 46.0 | 221.0 | 143 |
| 8488600.0000 | 40 | DIN, Series 2 ISO | 48.3 | 2.0 | 272 | 277 | 51.0 | 223.0 | 160 |
| 8489600.0000 | 40 | ISO | 48.3 | 2.0 | 272 | 277 | 51.0 | 223.0 | 160 |
| 8488700.0000 | 50 | DIN, Series 3 ISO | 60.3 | 2.0 | 284 | 290 | 55.5 | 231.0 | 181 |
| 8489700.0000 | 50 | ISO | 60.3 | 2.0 | 284 | 290 | 55.5 | 231.0 | 181 |

Note to Pressure Equipment Directive (PED):

The valves of this series, including the connection size DN 25 (G 1), are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG. This means interpretation and production are in accordance to engineers practice wellknown in the member countries.

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

For valves > DN 25 (G 1) Art. 3 § (1) No.1.4 applies.

The basic requirements of the Enclosure I of the PED must be fulfilled.

The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

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 Compatibility Guideline (2004/108/EG) satisfied.