

- > Port size: DN 15 ... 50, 1/2 ... 2 (ISO G/NPT)
- > Easy rebuilding into »normally open« or »double-acting« without tools
- > Optical position indicator is standard
- > Damped closing (Valves closes against flow direction)
- > Suitable for contaminated flow fluid
- > Suitable for vacuum up to max. 90%
- > Reversed flow direction optional
- > Option pressure actuated by external liquid fluid
- > International approvals



Technical features

Medium:

Aggressive gases and liquids

Pilot fluid:

Neutral gases max. +60°C (+140°F)

Switching function:

Normally closed

Operation:

Pressure actuated by external fluid

Mounting position:

Optional

Flow direction:

Determined

Port size:

G1/2, G3/4, G1, G1 1/4, G1 1/2, G2 1/2 NPT, 3/4 NPT, 1 NPT, 1 1/4 NPT, 1 1/2 NPT, 2 NPT

Pilot connection:

G1/4 or 1/4 NPT

Operating pressure:

See table

Pilot pressure:

3,5 ... 10 bar (51 ... 145 psi)

Fluid temperature:

-10 ... +180°C (+14 ... +356°F)

Ambient temperature:

-10 ... +60°C (+14 ... +140°F)

Material:

Process fluid characteristics:

Body: Stainless steel (1.4581)

Seat seal: PTFE

Internal parts: Stainless steel

Spindle sealing: PTFE / FPM;

self-adjustable

Pilot fluid characteristics:

Body: Polyamid 66 with

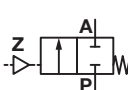
glass fibre 30%

Seat Seals: NBR

Internal parts: Brass,

Stainless steel, 1.8159, 1.1200

Technical data - standard models

| Symbol | Port size | Orifice (mm) | Flow kv value *1) (m³/h) | Operating pressure *2) (bar) (psi) | | Weight (kg) *3) | Model *3) |
|---|-----------|--------------|--------------------------|------------------------------------|-----------------|-----------------|--------------------|
|  | G1/2 | 15 | 4,8 | 0 ... 16 (25) | 0 ... 232 (362) | 1,4 | 8452200.0000.00000 |
| | 1/2 NPT | 15 | 4,8 | 0 ... 16 (25) | 0 ... 232 (362) | 1,4 | 8453200.0000.00000 |
| | G3/4 | 20 | 10 | 0 ... 10 (16) | 0 ... 145 (362) | 1,5 | 8452300.0000.00000 |
| | 3/4 NPT | 20 | 10 | 0 ... 10 (16) | 0 ... 145 (362) | 1,5 | 8453300.0000.00000 |
| | G1 | 25 | 14 | 0 ... 10 | 0 ... 145 | 1,8 | 8452400.0000.00000 |
| | 1 NPT | 25 | 14 | 0 ... 10 | 0 ... 145 | 1,8 | 8453400.0000.00000 |
| | G1 1/4 | 32 | 23 | 0 ... 7 | 0 ... 101 | 2,4 | 8452500.0000.00000 |
| | 1 1/4 NPT | 32 | 23 | 0 ... 7 | 0 ... 101 | 2,4 | 8453500.0000.00000 |
| | G1 1/2 | 40 | 30 | 0 ... 4,5 | 0 ... 65 | 2,7 | 8452600.0000.00000 |
| | 1 1/2 NPT | 40 | 30 | 0 ... 4,5 | 0 ... 65 | 2,7 | 8453600.0000.00000 |
| | G2 | 50 | 37 | 0 ... 3 | 0 ... 43 | 3,9 | 8452700.0000.00000 |
| | 2 NPT | 50 | 37 | 0 ... 3 | 0 ... 43 | 3,9 | 8453700.0000.00000 |

*1) Cv-value (US) ≈ kv value x 1,2

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

*3) Without pilot valve

Option selector

845****.0000.00000

| Thread form | Substitute |
|-------------|------------|
| ISO G | 2 |
| NPT | 3 |
| Port size | Substitute |
| 1/2 | 2 |
| 3/4 | 3 |
| 1 | 4 |
| 1 1/4 | 5 |
| 1 1/2 | 6 |
| 2 | 7 |

| Valve options | Substitute |
|--|------------|
| Normally open (NO), closes with pilot pressure and opens with spring force (pilot pressure 1 ... 10 bar) | 01 |
| Double acting, 4/2 or 5/2-way-pilot valve required | 08 |
| Electrical position indicator with 2 micro-switches protection class IP 67, LED, 2 m cabel LifYY 2 x 0,25 qmm Type: NAMUR DIN EN 60947-5-6 | 23 |
| NAMUR interface plate | 50 |

Notes

for 3/2-way pilot valve 84660 / 84680

| | |
|--------------------------------|----------------------------------|
| Material | Body Aluminium |
| Pilot fluid temperature | max. +60°C |
| Pilot pressure | 1 ... 10 bar |
| Standard voltages | 24 V d.c., 24 V a.c., 230 V a.c. |

Notes

for 3/2-way pilot vale 97100 hole pattern NAMUR

| | |
|--------------------------------|----------------------------------|
| Material | Body Aluminium elox |
| Pilot fluid temperature | -10 ... +50°C (+14 ... +122°F) |
| Pilot pressure | 2 ... 8 bar |
| Standard voltages | 24 V d.c., 24 V a.c., 230 V a.c. |

Electrical Data

for 3/2-way pilot valve 84660 / 84680

| | |
|-------------------------|---|
| Design acc. to | DIN VDE 0580 |
| Voltage range | ±10% |
| Duty cycle | 100% ED |
| Protection class | EN 60529 IP65 with mounted socket |
| Socket | Form A acc. to DIN EN 175301-803 (included) |
| Technical data | See publication N/en 5.8.640 |

Electrical Data

for 3/2-way pilot valve 97100 hole pattern NAMUR

| | |
|-------------------------|---|
| Design acc. to | DIN VDE 0580 |
| Voltage range | ±10% |
| Duty cycle | 100% ED |
| Protection class | EN 60529 IP65 with mounted socket |
| Socket | Form A acc. to DIN EN 175301-803 (included) |
| Technical data | See publication N/en 5.4.372 |

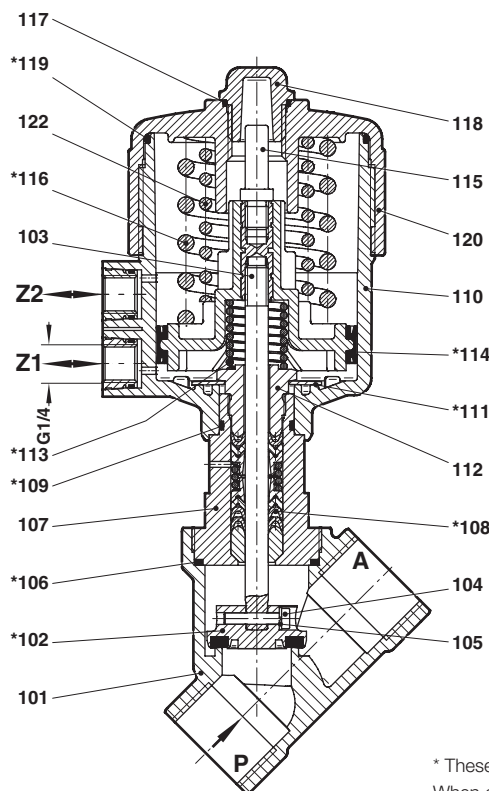
Further versions on request!

Mounting accessories (NAMUR)

Interface plate NAMUR hole pattern for retrofit (Part-Number 1256566) consist of:
1x NAMUR-interface plate; 2x Adapter screw; 2x O-ring

Section View

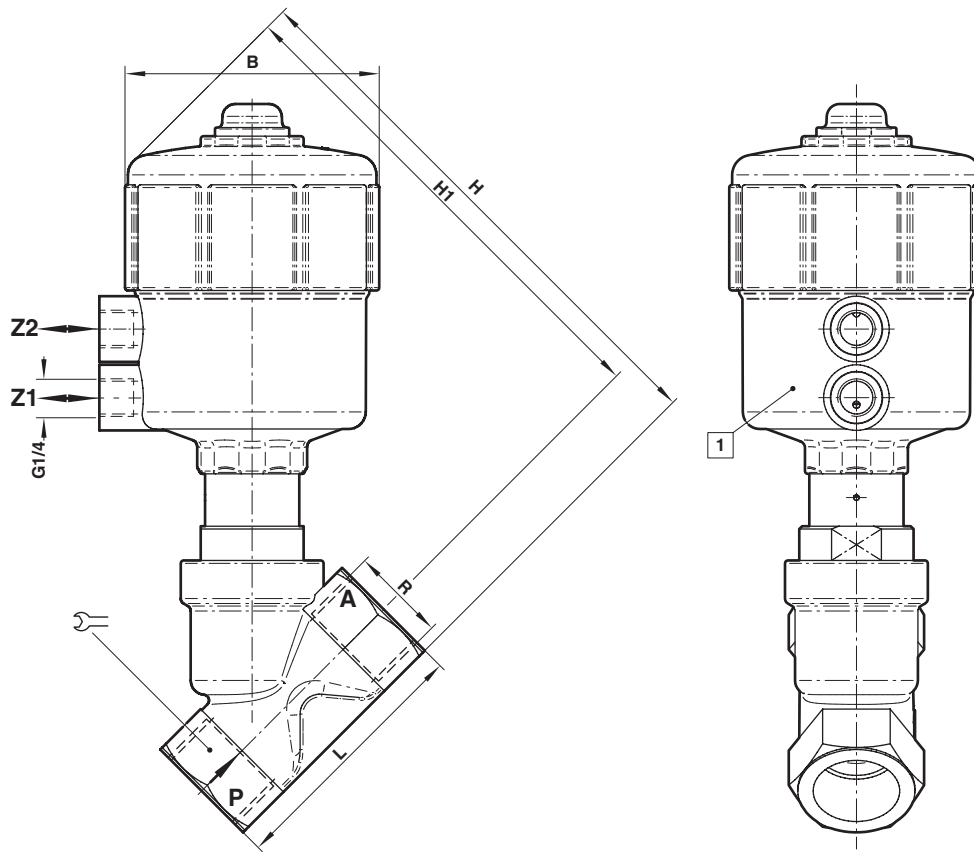
G1/2 ... 2
1/2 ... 2 NPT




| No. | Description |
|------|---|
| 101 | Valve body |
| *102 | Valve plate |
| 103 | Valve spindle, complete |
| 104 | Cheese head cap screw |
| 105 | Spring washer |
| *106 | Seal ring |
| 107 | Screw piece |
| *108 | Seal packing |
| *109 | O-ring |
| 110 | Control head housing cover, bottom part |
| *111 | Cup spring |
| 112 | Screw piece |
| *113 | Pressure spring |
| *114 | Cylinder packing |
| 115 | Signal pin |
| *116 | Pressure spring |
| *117 | O-ring |
| 118 | Cover cap |
| *119 | O-ring |
| 120 | Control head housing cover |
| 122 | Pressure spring |

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

Dimensions
G1/2 ... 2
1/2 ... 2 NPT

 Dimensions in mm
 Projection/First angle


1 Actuator may be rotated 360°

| Port size | B | H | H1 | L |  | Model |
|-----------|------|-------|-------|-----|---|--------------------|
| G1/2 | 89,5 | 177,5 | 164 | 65 | 27 | 8452200.0000.00000 |
| 1/2 NPT | 89,5 | 177,5 | 164 | 65 | 27 | 8453200.0000.00000 |
| G3/4 | 89,5 | 184 | 168 | 75 | 32 | 8452300.0000.00000 |
| 3/4 NPT | 89,5 | 184 | 168 | 75 | 32 | 8453300.0000.00000 |
| G1 | 89,5 | 194,5 | 174 | 90 | 41 | 8452400.0000.00000 |
| 1 NPT | 89,5 | 194,5 | 174 | 90 | 41 | 8453400.0000.00000 |
| G1 1/4 | 89,5 | 209,5 | 184,5 | 110 | 50 | 8452500.0000.00000 |
| 1 1/4 NPT | 89,5 | 209,5 | 184,5 | 110 | 50 | 8453500.0000.00000 |
| G1 1/2 | 89,5 | 208,5 | 186 | 120 | 55 | 8452600.0000.00000 |
| 1 1/2 NPT | 89,5 | 208,5 | 186 | 120 | 55 | 8453600.0000.00000 |
| G2 | 89,5 | 229,5 | 194,5 | 150 | 70 | 8452700.0000.00000 |
| 2 NPT | 89,5 | 229,5 | 194,5 | 150 | 70 | 8453700.0000.00000 |

Note to Pressure Equipment Directive (PED):

The valves of this series up to and including DN 25 (G1) are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to 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.

For valves > DN 25 (G1) Art. 4 § (1) Letter d) 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 (2014/30/EU) satisfied.

Note to EAC marking:

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.