

2/2-way valves DN 15 to DN 50

for neutral gases and liquids

pressure actuated by external fluid

Seat valves

Internal threads G 1/2 to G 2 or 1/2" NPT to 2" NPT

Operating pressure see table page 2

82180

82190

82280

82290

Description (standard valve)

Flow direction:	fixed
Mounting position:	optional
Flow fluid range	
Fluid temperature:	-10°C up to max. +180°C
Ambient temperature:	-10°C up to max. +60°C
Material body:	dezincification brass (CW602N)
Seat seal:	PTFE
Internal parts:	brass, stainless steel
Spindle sealing:	PTFE / FPM; self-adjustable

Pilot fluid range

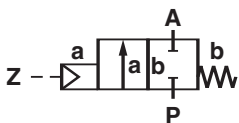
Pilot connection:	G 1/4 resp. 1/4" NPT
Pilot fluid:	neutral gaseous fluids
Fluid temperature:	max. +60°C
Material body:	stainless steel, aluminium WEMA-Kor coated
Seat seals:	NBR
Internal parts:	coated steel



Features

- High flow rate
- Suitable for contaminated flow fluid
- Damped closing (Valves closes against flow direction)
- Robust design
- Suitable for vacuum up to max. 90%

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 8218200.0000 for a G 1/2 valve without pilot valve

Characteristic data See page 2 valve and solenoid informations.

NPT - connection available: change (e.g.) 8218200 in 8219200; 8228500 in 8229500

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Characteristic data

Valves

Part Number	Nominal Diameter (mm)	Port size	Pilot pressure		Operating pressure *		kv-value *** (Base m³/h)	Weight ** (kg)
			min.	max. (bar)	min	max (bar)		
8218200.0000 8219200.0000	15	G 1/2 1/2" NPT	3.5	8	0	16.0	4.8	1.4
8218300.0000 8219300.0000	20	G 3/4 3/4" NPT	3.5	8	0	10.0	10.0	15
8218400.0000 8219400.0000	25	G 1 1" NPT	3.5	8	0	10.0	14.0	1.8
8218500.0000 8219500.0000	32	G 1 1/4 1 1/4" NPT	3.5	8	0	7.0	23.0	2.4
8218600.0000 8219600.0000	40	G 1 1/2 1 1/2" NPT	3.5	8	0	4.5	30.0	2.7
8218700.0000 8219700.0000	50	G 2 2" NPT	3.5	8	0	3.0	37.0	3.9
8228500.0000 8229500.0000	32	G 1 1/4 1 1/4" NPT	3.5	8	0	16.0	27.0	5.3
8228600.0000 8229600.0000	40	G 1 1/2 1 1/2" NPT	3.5	8	0	10.0	37.0	5.5
8228700.0000 8229700.0000	50	G 2 2" NPT	3.5	8	0	10.0	53.0	7.0

* with gaseous and liquid fluids up to 600 mm²/s (cSt)

State voltage [V] and frequency [Hz]

** without pilot valve

*** C_V-value (US) = k_V-value x 1.2

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

Material body brass 2.0402

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

Technical data see publication D111402

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

Options

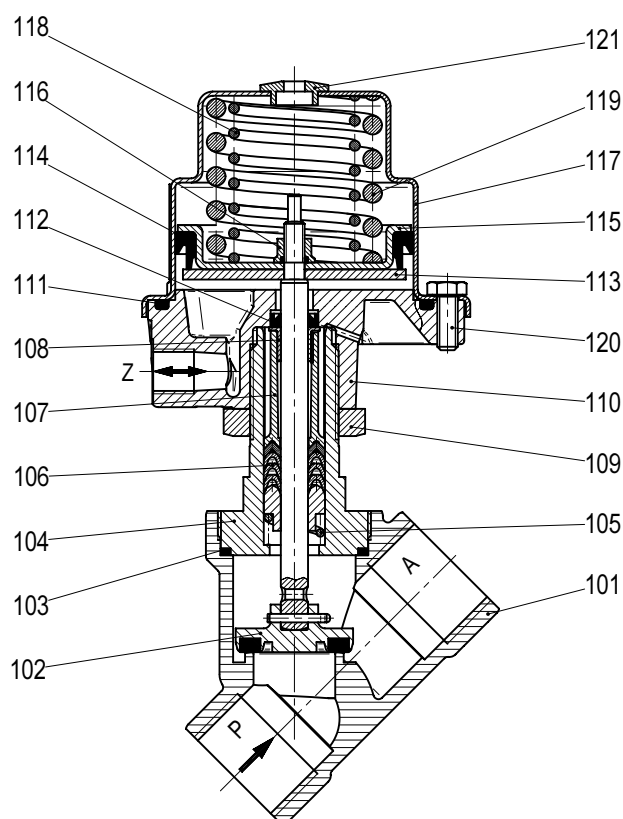
available at extra cost

- XXXXX01.XXXX Normally open, closes with pilot pressure and und opens with spring force (pilot pressure 1 – 6 bar)
- XXXXX22.XXXX Operating pressure G 1/2 25 bar, G 3/4 16 bar
- XXXXX23.XXXX Double electrical position indicator with 2 solenoid switches
- XXXXX52.XXXX Optical position indicator
- XXXXX59.XXXX Fluid temperature max. 200 °C

On Request

- Further versions
- For hazardous area

Section view



- | | | | |
|------|---|------|----------------------|
| 101 | Valve body | *114 | Grooved ring |
| *102 | Valve spindle, complete | 115 | Round plate |
| *103 | Seal ring | *116 | Seal-lock-nut |
| 104 | Screw piece | 117 | Control head housing |
| *105 | Pressure spring | *118 | Pressure spring |
| *106 | Seal packing | *119 | Pressure spring |
| 107 | Spacer bush | 120 | Hexagon screw |
| *108 | Plain bearing | 121 | Plug |
| 109 | Nut | | |
| 110 | Control head housing cover, bottom part | | |
| *111 | O-ring | | |
| *112 | Grooved ring | | |
| 113 | Round plate | | |

* These individual parts form a complete wearing unit.
When ordering spare parts please state Cat no and series no.

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.

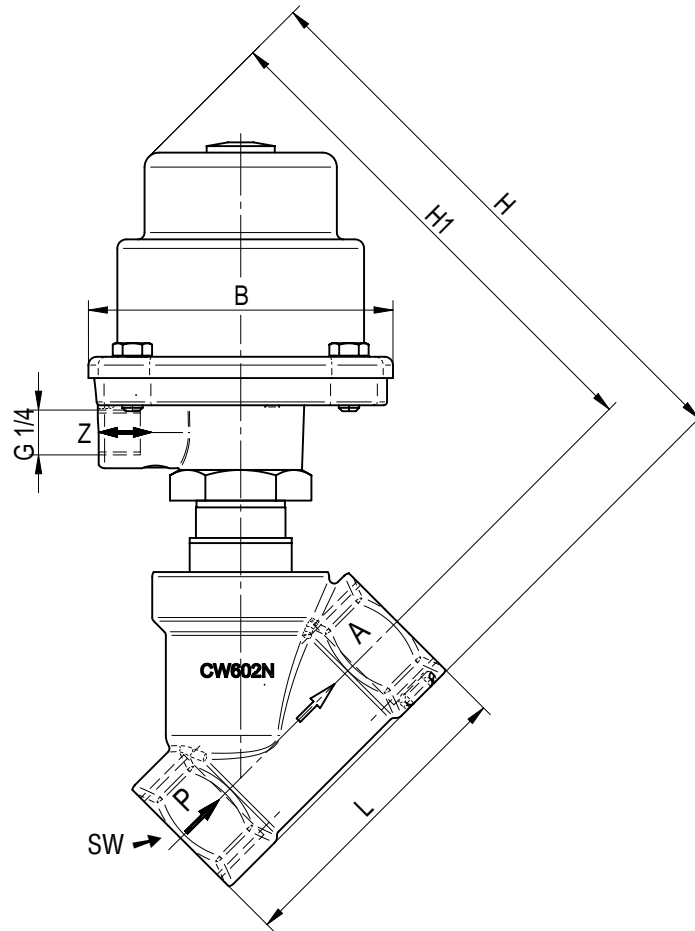
The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 50081-1 and EN 50082-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (89/336/EEC) satisfied.

General Dimensions

Actuator may be rotated 360°



Part Number	Connection	L mm	B mm	H mm	H1 mm	SW mm
8218200.0000 8219200.0000	G 1/2 1/2" NPT	65	89.5	154.0	140.5	27
8218300.0000 8219300.0000	G 3/4 3/4" NPT	75	89.5	160.0	144.0	32
8218400.0000 8219400.0000	G 1 1" NPT	90	89.5	171.0	150.5	41
8218500.0000 8219500.0000	G 1 1/4 1 1/4" NPT	110	89.5	186.0	161.0	50
8218600.0000 8219600.0000	G 1 1/2 1 1/2" NPT	120	89.5	190.0	162.5	55
8218700.0000 8219700.0000	2 2" NPT	150	89.5	206.0	171.0	70
8228500.0000 8229500.0000	G 1 1/4 1 1/4" NPT	110	163.0	250.0	225.0	50
8228600.0000 8229600.0000	G 1 1/2 1 1/2" NPT	120	163.0	255.0	227.5	55
8228700.0000 8229700.0000	G 2 2" NPT	150	163.0	270.0	235.0	70