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)

82180
82190

82280
82290

Description (standard valve)

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

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:	Dezincification brass (CW602N)
Seat seal:	PTFE
Internal parts:	Brass, Stainless steel
Spindle sealing:	PTFE / FPM; self-adjustable

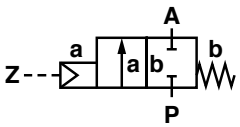
Pilot fluid characzeristics / Actuator material

Pilot connection:		G 1/4 resp. 1/4 NPT
Pilot fluid:		neutral gases
Fluid temperature:		max. +80 °C
Actuator:	Body:	Stainless steel, Aluminium
	Bottom:	WEMA–Kor coated
Seat seals:		NBR
Internal parts:		Coated steel

Features

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

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 8218400.0000 for a DN 25 valve.

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Characteristic data

Valves

Part-Number	Nominal Diameter (mm)	Connection size	Pilot pressure min. (bar)	Pilot pressure max. (bar)	Operating pressure * min. (bar)	Operating pressure * max. (bar)	kv-value ** (Base m^3/h)	Weight *** (kg)
8218200.0000 8219200.0000	15	G 1/2 1/2 NPT	3.5	8	0	16	4.8	1.4
8218300.0000 8219300.0000	20	G 3/4 3/4 NPT	3.5	8	0	10	10.0	1.5
8218400.0000 8219400.0000	25	G 1 1 NPT	3.5	8	0	10	14.0	1.8
8218500.0000 8219500.0000	32	G 1 1/4 1 1/4 NPT	3.5	8	0	7	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	37.0	3.9
8228500.0000 8229500.0000	32	G 1 1/4 1 1/4 NPT	3.5	8	0	16	27.0	5.3
8228600.0000 8229600.0000	40	G 1 1/2 1 1/2 NPT	3.5	8	0	10	37.0	5.5
8228700.0000 8229700.0000	50	G 2 2 NPT	3.5	8	0	10	53.0	7.7

* for gases and liquid fluids up to 600 mm^2/s (cSt)
** Cv-value (US) ≈ kv-value x 1.2
*** without pilot valve

State voltage [V] and frequency [Hz]

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

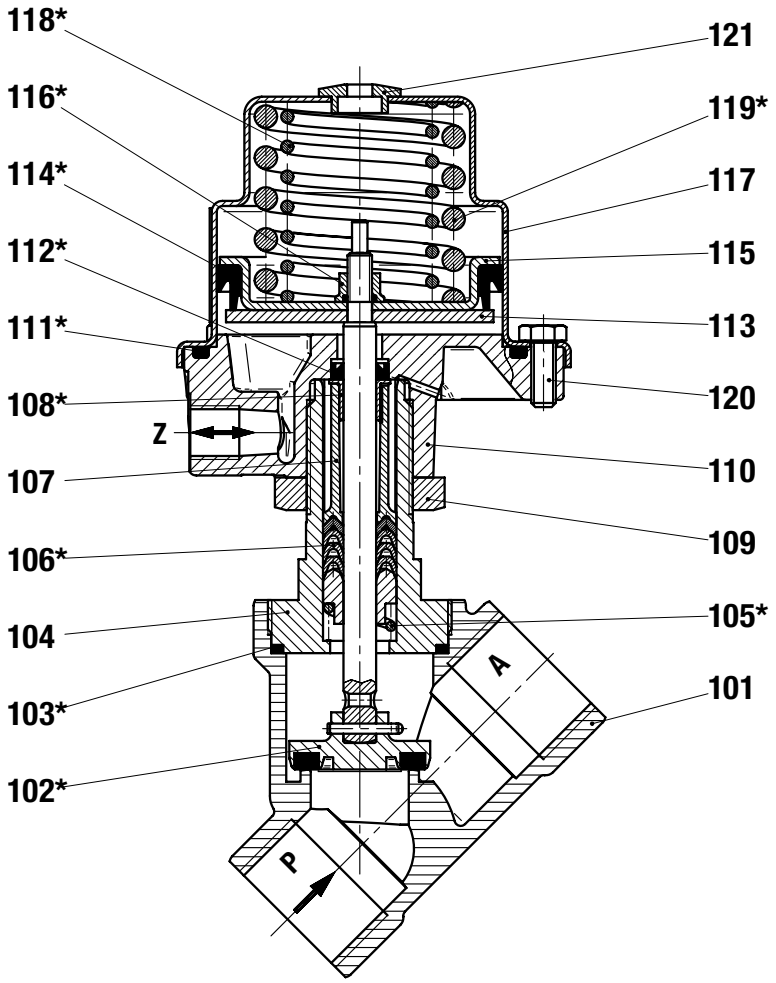
Electrical Data
for 3/2-way pilot valve 84660 / 84680

Technical data see publication D111402
Design acc. to DIN VDE 0580
Voltage range ±10 %
Duty cycle (ED) 100 %
Protection class to EN 60529 IP65
Socket Form A acc. to DIN EN 175301-803 (included)

Further Options (Valves)

XXXXX**01**.XXXX	Normally open, closes with pilot pressur and opens with spring force (pilot pressure 1 – 6 bar)
XXXXX**22**.XXXX	Operating pressure G 1/2 25 bar, G 3/4 16 bar
XXXXX**23**.XXXX	Double electrical position indicator with 2 solenoid switches
XXXXX**52**.XXXX	Optical position indicator
XXXXX**59**.XXXX	Fluid temperature max. 200 °C
On Request	Further versions e.g. for hazardous area

Section view

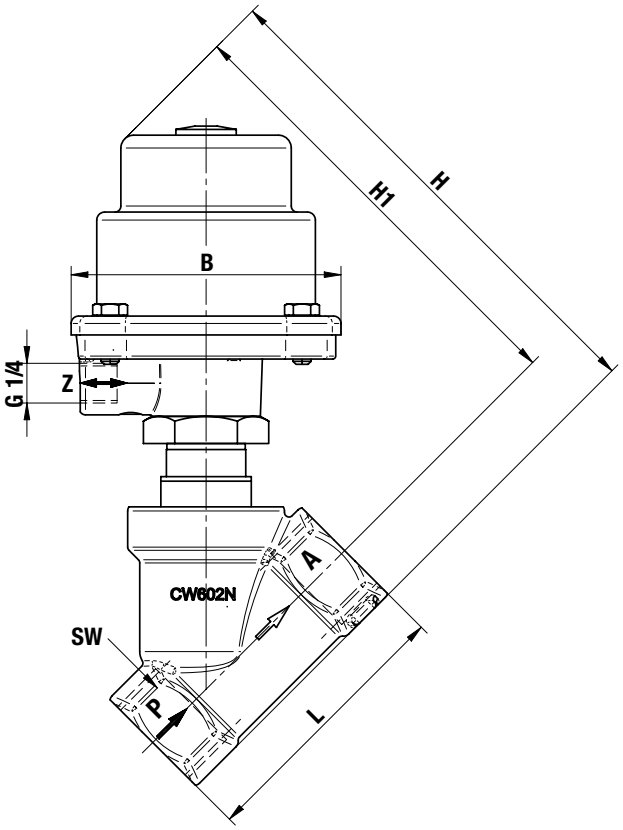


101	Valve body
*102	Valve spindle, complete
*103	Seal ring
104	Screw piece
*105	Pressure spring
*106	Seal packing
107	Spacer bush
*108	Plain beaning
109	Nut
110	Control head housing cover, bottom part
*111	O-ring
*112	Grooved ring
113	Round plate
*114	Grooved ring
115	Round plate
*116	Seal-lock-nut
117	Control head housing
*118	Pressure spring 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	Nominal Diameter (mm)	Connection size	L (mm)	B (mm)	H (mm)	H1 (mm)	SW (mm)
8218200.0000 8219200.0000	15	G 1/2 1/2 NPT	65	89.5	154.0	140.5	27
8218300.0000 8219300.0000	20	G 3/4 3/4 NPT	75	89.5	160.0	144.0	32
8218400.0000 8219400.0000	25	G 1 1 NPT	90	89.5	171.0	150.5	41
8218500.0000 8219500.0000	32	G 1 1/4 1 1/4 NPT	110	89.5	186.0	161.0	50
8218600.0000 8219600.0000	40	G 1 1/2 1 1/2 NPT	120	89.5	190.0	162.5	55
8218700.0000 8219700.0000	50	G 2 2 NPT	150	163.0	206.0	171.0	70
8228500.0000 8229500.0000	32	G 1 1/4 1 1/4 NPT	110	163.0	250.0	225.0	50
8228600.0000 8229600.0000	40	G 1 1/2 1 1/2 NPT	120	163.0	255.0	227.5	55
8228700.0000 8229700.0000	50	G 2 2 NPT	150	163.0	270.0	235.0	70

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) satisfield.