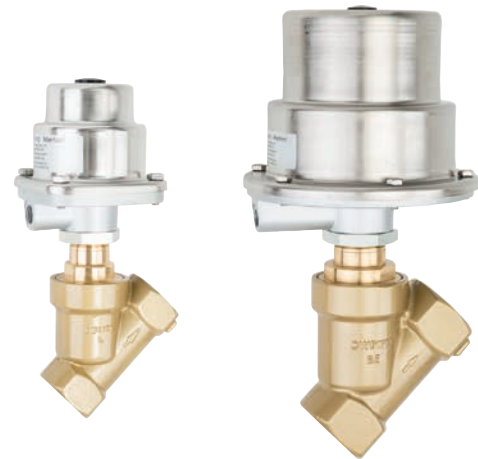


- > Port size: DN 15 ... 50, G1/2 ... 2, (ISO G/NPT)
- > High flow rate
- > Suitable for contaminated process fluid
- > Damped closing (Valves closes against flow direction)
- > For robust industry applications
- > Suitable for vacuum up to max. 90%
- > Option pressure actuated by external liquid fluid



### Technical features

**Medium:**  
Neutral gases and liquids

**Pilot fluid:**  
Neutral gases max. +80°C (+176°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 res. 1/4 NPT

**Operating pressure:**  
See table

**Pilot pressure:**  
3,8 ... 8 bar (55 ... 116 psi)

**Fluid temperature:**  
-10° ... +180°C (+14° ... +356°F)

**Ambient temperature:**  
-10° ... +60°C (+14° ... +140°F)

**Material:**  
Process fluid characteristics:  
Body: Dezincification Brass (CW617N)  
Seat seal: PTFE  
Internal parts: Brass, Stainless steel,  
Spindle sealing: PTFE / FPM, self-adjustable  
Pilot fluid characteristics:  
Body: Stainless steel, Aluminium  
Bottom: WEMA-Kor, coated  
Seals: NBR  
Internal parts: Coated steel

### Technical data - standard models

Symbol	Port size	Orifice (mm)	Actuator ø (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Weight (kg) *3)	Model *3)
	G1/2	15	70	4,8	0 ... 16	1,4	8218200.0000.00000
	1/2 NPT	15	70	4,8	0 ... 16	1,4	8219200.0000.00000
	G3/4	20	70	10	0 ... 10	1,5	8218300.0000.00000
	3/4 NPT	20	70	10	0 ... 10	1,5	8219300.0000.00000
	G1	25	70	14	0 ... 10	1,8	8218400.0000.00000
	1 NPT	25	70	14	0 ... 10	1,8	8219400.0000.00000
	G1 1/4	32	70	23	0 ... 7	2,4	8218500.0000.00000
	1 1/4 NPT	32	70	23	0 ... 7	2,4	8219500.0000.00000
	G1 1/2	40	70	30	0 ... 4,5	2,7	8218600.0000.00000
	1 1/2 NPT	40	70	30	0 ... 4,5	2,7	8219600.0000.00000
	G2	50	70	37	0 ... 3	3,9	8218700.0000.00000
	2 NPT	50	70	37	0 ... 3	3,9	8219700.0000.00000
	G1 1/4	32	125	27	0 ... 16	5,3	8228500.0000.00000
	1 1/4 NPT	32	125	27	0 ... 16	5,3	8229500.0000.00000
	G1 1/2	40	125	37	0 ... 10	5,5	8228600.0000.00000
	1 1/2 NPT	40	125	37	0 ... 10	5,5	8229600.0000.00000
	G2	50	125	53	0 ... 10	7,7	8228700.0000.00000
	2 NPT	50	125	53	0 ... 10	7,7	8229700.0000.00000

\*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

82\*\*\*\*\*.0000.00000

Actuator	Substitute
ø 70	1
ø 125	2
Thread form	Substitute
ISO G	8
NPT	9
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 ... 6 bar)	01
Seals FPM Temperature max. +180°C	03
Operating pressure G1/2 0... 25 bar G3/4 0 ... 16 bar	22
Electrical position indicator with 2 limit switches Sol switch: protection class IP 67, LED, 2 m cable LifYY 2 x 0,25 qmm Type: NAMUR DIN EN 60947-5-6	40
Electrical position indicator with 2 limit switches Sol switch: 10 ... 30 V DC, 3-wire, NOC, PNP, short-circuit proof, protection class IP 67, LED yellow, 2 m cable PVC 3 x 0,25 qmm	41
Optical position indicator	52
Fluid temperature max. 200°C	59

### Notes

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

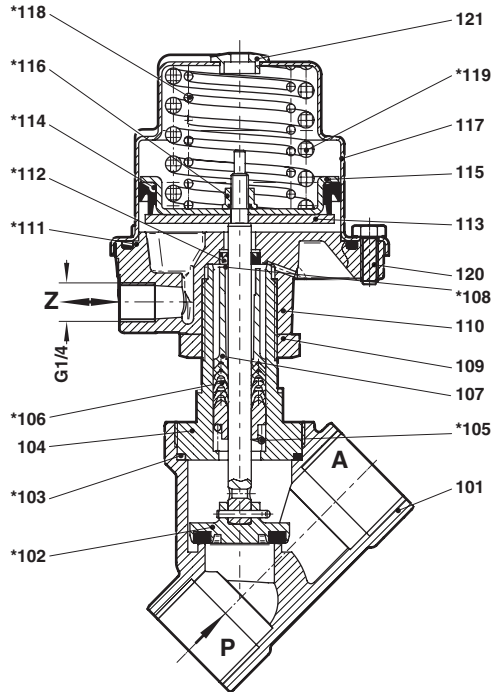
Material	Body Aluminium
Pilot fluid temperature	max. +60°C
Pilot pressure	1 ... 10 bar
Standard voltages	24 V d.c., 24 V a.c., 230 V a.c.

### 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

Further versions on request!

**Section View**
**G1/2 ... 2**  
**1/2 ... 2 NPT**


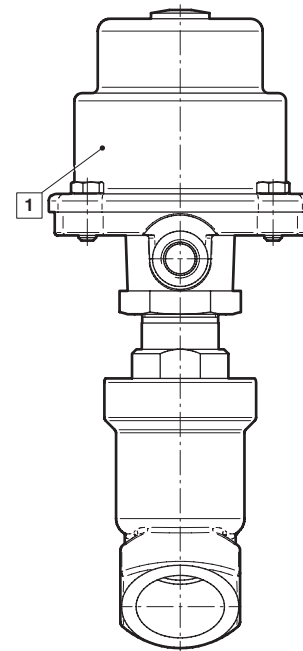
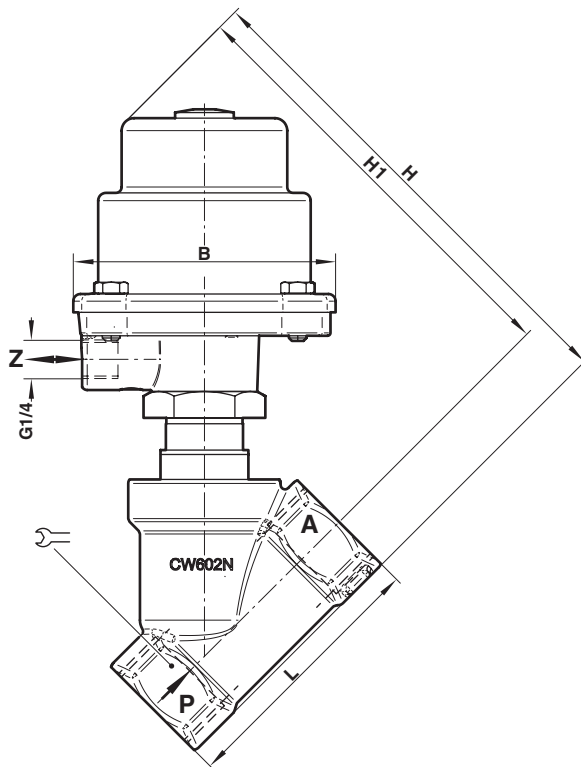
No.	Description
101	Valve body
*102	Valve spindle, complete
*103	Seal ring
104	Screw piece
*105	Pressure spring
*106	Seal packing
107	Spacer bush
*108	Plain bearing
109	Nut
110	Control head housing cover, bottom part
*111	O-ring
*112	FPM-Grooved ring
113	Round plate
*114	Grooved ring
115	Round plate
*116	Seal-lock-nut
117	Control head housing
*118	Pressure spring only with G1 und G2
*119	Pressure spring
120	Hexagon screw
121	Plug


\* 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



 Actuator may be rotated 360°

Port size	Actuator ø	B	H	H1	L		Model
G1/2	70	89,5	154	140,5	65	27	8218200.0000.00000
1/2 NPT	70	89,5	154	140,5	65	27	8219200.0000.00000
G3/4	70	89,5	160	144	75	32	8218300.0000.00000
3/4 NPT	70	89,5	160	144	75	32	8219300.0000.00000
G1	70	89,5	171	150,5	90	41	8218400.0000.00000
1 NPT	70	89,5	171	150,5	90	41	8219400.0000.00000
G1 1/4	70	89,5	186	161	110	50	8218500.0000.00000
1 1/4 NPT	70	89,5	186	161	110	50	8219500.0000.00000
G1 1/2	70	89,5	190	162,5	120	55	8218600.0000.00000
1 1/2 NPT	70	89,5	190	162,5	120	55	8219600.0000.00000
G2	70	89,5	206	171	150	70	8218700.0000.00000
2 NPT	70	89,5	206	171	150	70	8219700.0000.00000
G1 1/4	125	163	250	225	110	50	8228500.0000.00000
1 1/4 NPT	125	163	250	225	110	50	8229500.0000.00000
G1 1/2	125	163	255	227,5	120	55	8228600.0000.00000
1 1/2 NPT	125	163	255	227,5	120	55	8229600.0000.00000
G2	125	163	270	235	150	70	8228700.0000.00000
2 NPT	125	163	270	235	150	70	8229700.0000.00000

**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.