

- > Port size: DN 15 ... 50, G1/2 ... 2 (ISO G/NPT)
- > Suitable for contaminated process fluids
- > High flow rate
- > High media compatibility due to optimal material combinations
- > For robust industry applications
- > Damped closing (valve closes against flow direction)
- > Suitable for vacuum up to max. 90%



### Technical features

**Medium:**  
Aggressive 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 or 1/4 NPT

**Operating pressure:**  
See table

**Pilot pressure:**  
3,5 ... 8 bar (51 ... 116 psi)

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

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

**Material:**  
Process fluid characteristics:  
Body: Stainless steel (1.4408)  
Seat seal: PTFE  
Internal parts: 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	1,3	8238200.0000.00000
	1/2 NPT	15	70	4,8	0 ... 16	1,3	8239200.0000.00000
	G3/4	20	70	10	0 ... 10	1,4	8238300.0000.00000
	3/4 NPT	20	70	10	0 ... 10	1,4	8239300.0000.00000
	G1	25	70	14	0 ... 10	1,7	8238400.0000.00000
	1 NPT	25	70	14	0 ... 10	1,7	8239400.0000.00000
	G1 1/4	32	70	23	0 ... 7	2,4	8238500.0000.00000
	1 1/4 NPT	32	70	23	0 ... 7	2,4	8239500.0000.00000
	G1 1/2	40	70	30	0 ... 4,5	2,6	8238600.0000.00000
	1 1/2 NPT	40	70	30	0 ... 4,5	2,6	8239600.0000.00000
	G2	50	70	37	0 ... 3	3,8	8238700.0000.00000
	2 NPT	50	70	37	0 ... 3	3,8	8239700.0000.00000
	G1/2	15	125	4,8	0 ... 40	4,2	8248200.0000.00000
	1/2 NPT	15	125	4,8	0 ... 40	4,2	8249200.0000.00000
	G3/4	20	125	10	0 ... 40	4,3	8248300.0000.00000
	3/4 NPT	20	125	10	0 ... 40	4,3	8249300.0000.00000
	G1	25	125	14	0 ... 25	4,5	8248400.0000.00000
	1 NPT	25	125	14	0 ... 25	4,5	8249400.0000.00000
	G1 1/4	32	125	27	0 ... 16	5,1	8248500.0000.00000
	1 1/4 NPT	32	125	27	0 ... 16	5,1	8249500.0000.00000
G1 1/2	40	125	37	0 ... 10	5,5	8248600.0000.00000	
1 1/2 NPT	40	125	37	0 ... 10	5,5	8249600.0000.00000	
G2	50	125	53	0 ... 10	7	8248700.0000.00000	
2 NPT	50	125	53	0 ... 10	7	8249700.0000.00000	

\*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	3
ø 125	4
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 2 ... 6 bar)	01
Seat 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 d.c., 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
Stainless steel actuator	60
Spindle seal with stainless steel bellows	80

### Notes

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

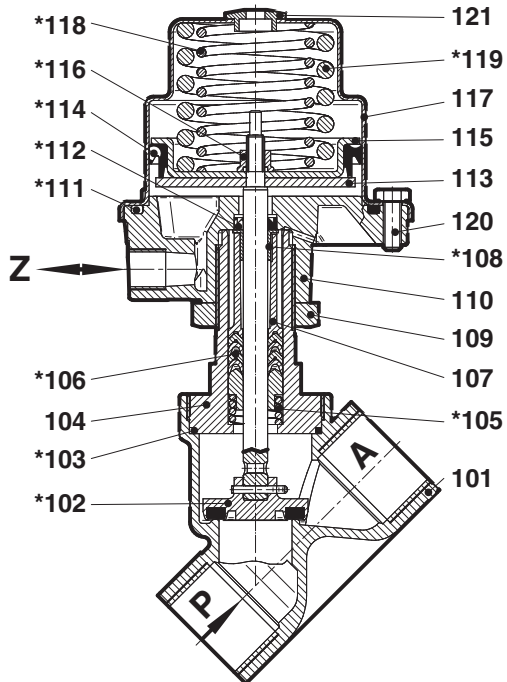
Material	Body Aluminium
Pilot fluid temperature	max. +60°C
Pilot pressure	1 ... 10 bar
Standard voltages	24 V d.c., 24 V a.c., 230 V a.c.

### Electrical Data

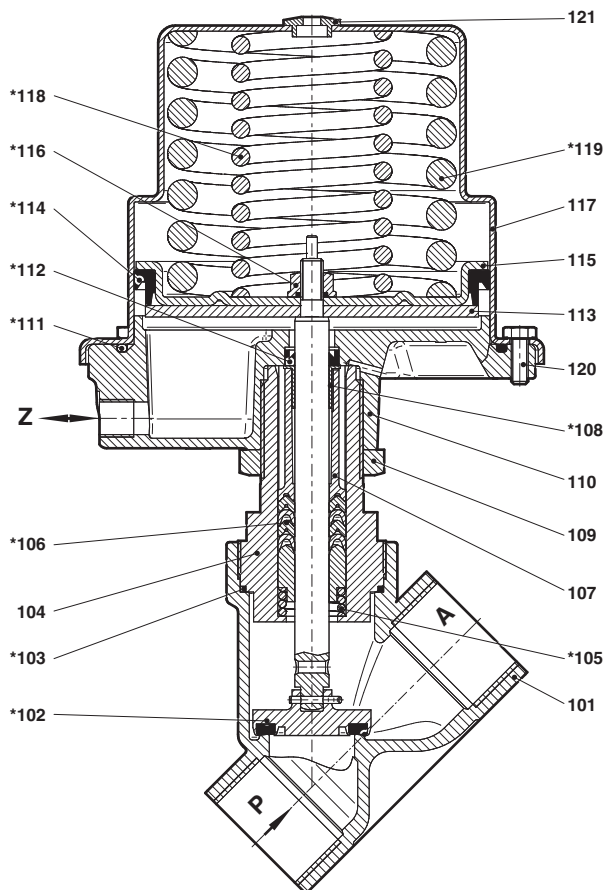
#### for 3/2-way pilot valve 84660 / 84680

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**  
**Actuator ø 70 mm**


No.	Description
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
*111	O-ring
*112	FPM lip seal
113	Round plate
*114	Lip seal
115	Round plate
*116	Tight-Stop-nut
117	Control head housing
*118	Pressure spring for G1 and G2 only
*119	Pressure spring
120	Hexagon screw
121	Plug

**G1 1/4 ... 2**  
**1 1/4 ... 2 NPT**  
**Actuator ø 125 mm**


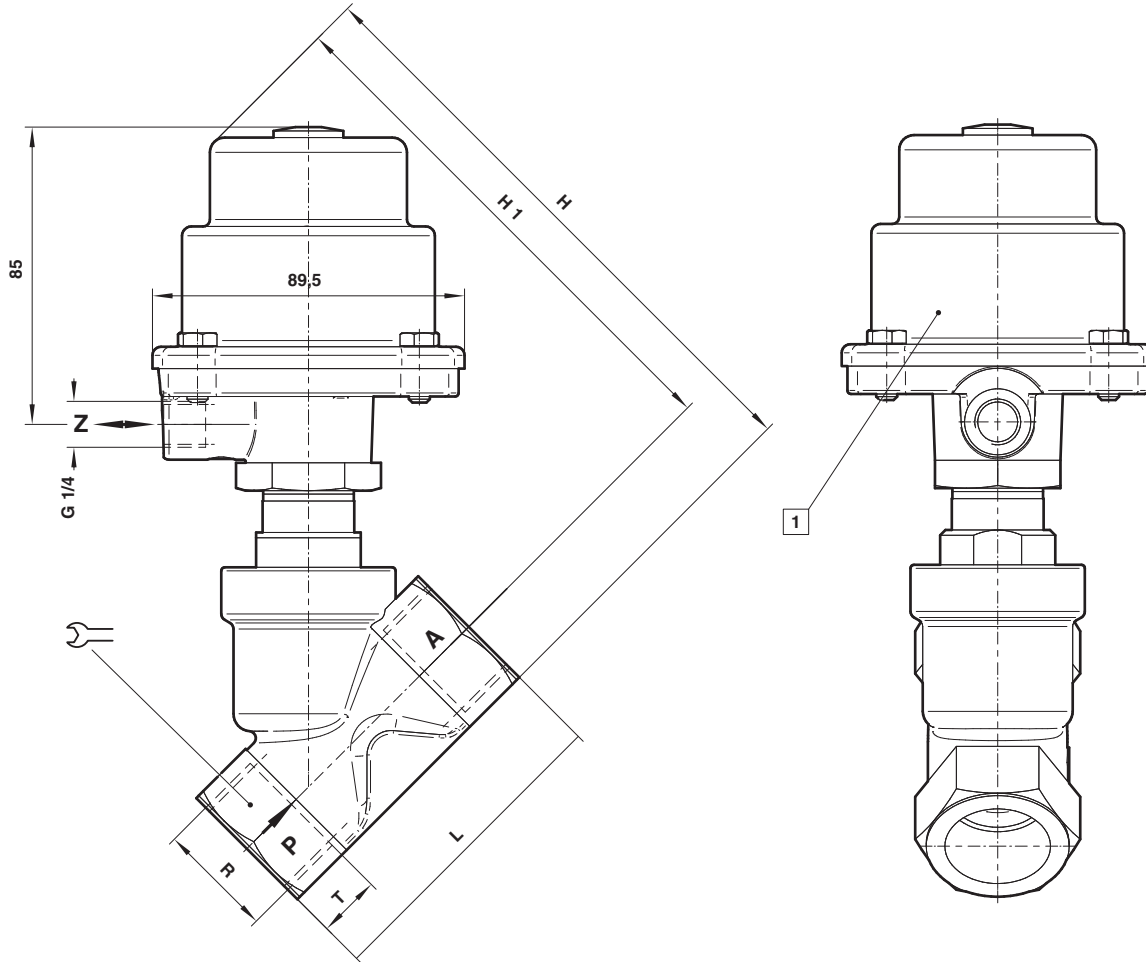
No.	Description
101	Valve body
*102	Valve spindle, assembly
*103	Gasket
104	Screw piece
*105	Pressure spring
*106	Spindle sealing
107	Spacer sleeve
*108	Sleeve bearing
109	Nut
110	Bottom of control head housing
*111	O-ring
*112	FPM lip seal
113	Round plate
*114	Lip seal
115	Round plate
*116	Tight-Stop-nut
117	Control head housing
*118	Pressure spring for G1 and G2 only
*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**  
**Actuator ø 70 mm**

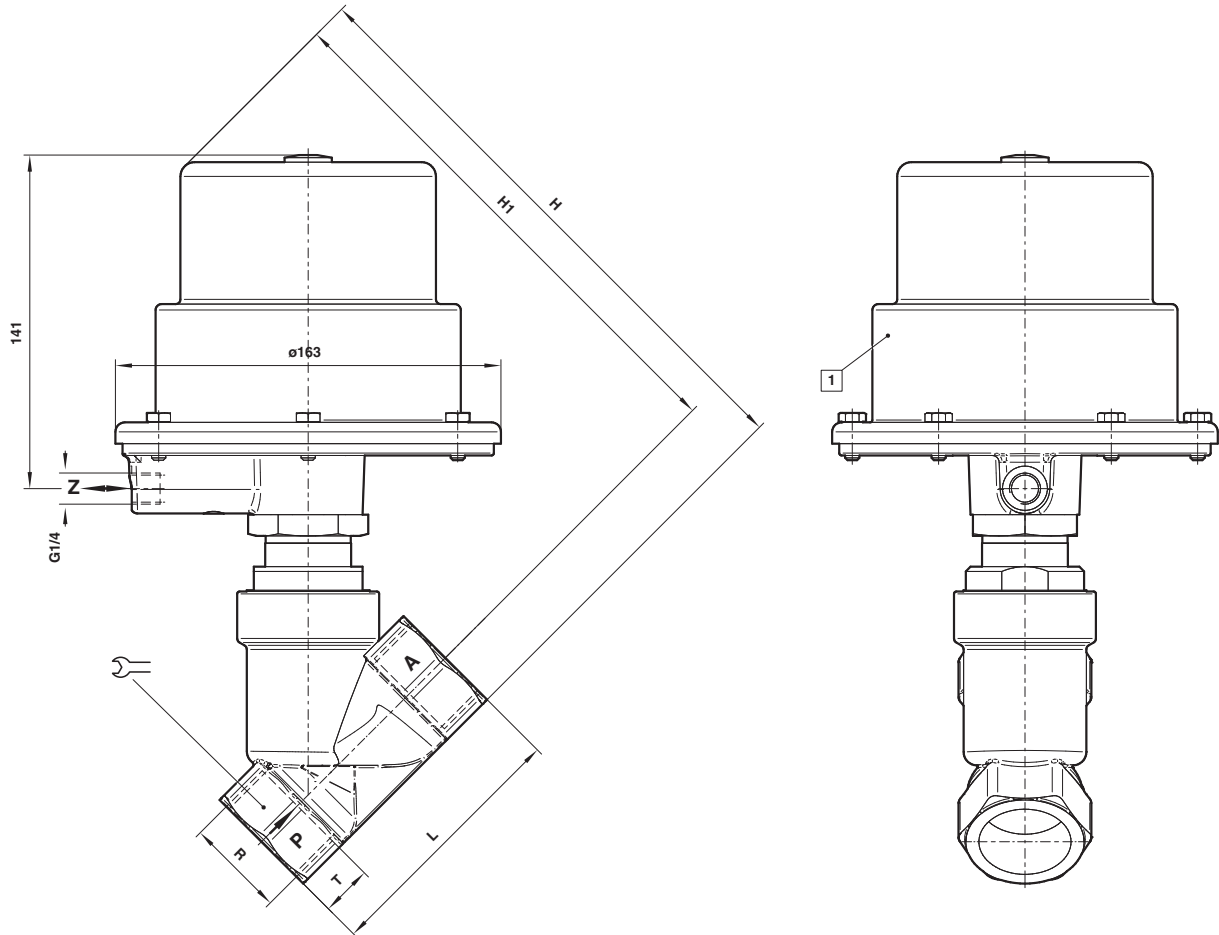
Dimensions in mm  
Projection/First angle




**1** Actuator may be rotated 360°

Port size R	Actuator ø	H	H1	L	T		Model
G1/2	70	154	140	65	15	27	8238200.0000.00000
1/2 NPT	70	154	140	65	13,6	27	8239200.0000.00000
G3/4	70	160	144	75	16,5	32	8238300.0000.00000
3/4 NPT	70	160	144	75	14,1	32	8239300.0000.00000
G1	70	170	150	90	19	41	8238400.0000.00000
1 NPT	70	170	150	90	16,8	41	8239400.0000.00000
G1 1/4	70	186	161	110	21,5	50	8238500.0000.00000
1 1/4 NPT	70	186	161	110	17,3	50	8239500.0000.00000
G1 1/2	70	190	162	120	21,5	55	8238600.0000.00000
1 1/2 NPT	70	190	162	120	17,3	55	8239600.0000.00000
G2	70	206	171	150	26	70	8238700.0000.00000
2 NPT	70	206	171	150	17,8	70	8239700.0000.00000

**Dimensions**
**G1 1/4 ... 2**  
**1 1/4 ... 2 NPT**  
**Actuator ø 125 mm**

 Dimensions in mm  
 Projection/First angle


1 Actuator may be rotated 360°

Port size R	Actuator ø	H	H1	L	T		Model
G1/2	125	232	218	65	15	27	8248200.0000.00000
1/2 NPT	125	232	218	65	13,6	27	8249200.0000.00000
G3/4	125	236	220	75	16,5	32	8248300.0000.00000
3/4 NPT	125	236	220	75	14,1	32	8249300.0000.00000
G1	125	246	226	90	19	41	8248400.0000.00000
1 NPT	125	246	226	90	16,8	41	8249400.0000.00000
G1 1/4	125	250	226	110	21,5	50	8248500.0000.00000
1 1/4 NPT	125	250	226	110	17,3	50	8249500.0000.00000
G1 1/2	125	254	226	120	21,5	55	8248600.0000.00000
1 1/2 NPT	125	254	226	120	17,3	55	8249600.0000.00000
G2	125	270	235	150	26	70	8248700.0000.00000
2 NPT	125	270	235	150	17,8	70	8249700.0000.00000

**Note to Pressure Equipment Directive (PED):**

The valves of this series, including the connection size DN 25 (G 1), are according to Art. 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 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 (2014/30/EU) satisfied.