82180/82190/82280/82290
2/2-way seat valves



- 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
- International approvals

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

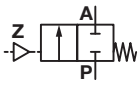
Fluid temperature:
–10° ... +180°C (+14° ... +356°F)

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

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

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Technical data – standard models

Symbol	Port size	Orifice (mm)	Actuator ø (mm)	Flow kv value *1) (m^3/h)	Operating pressure *2) (bar)	Weight *3) (kg)	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
	G1/2	15	125	4,8	0 ... 25	4,3	8228200.0000.00000
	1/2 NPT	15	125	4,8	0 ... 25	4,3	8229200.0000.00000
	G3/4	20	125	10	0 ... 25	4,3	8228300.0000.00000
	3/4 NPT	20	125	10	0 ... 25	4,3	8229300.0000.00000
	G1	25	125	14	0 ... 25	4,6	8228400.0000.00000
	1 NPT	25	125	14	0 ... 25	4,6	8229400.0000.00000
	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 mm^2/s (cSt)
*3) Without pilot valve

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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 pressur and opens with spring force (pilot pressure 2 ... 6 bar (29 ... 87 psi))	01
Seals FPM Temperature max. +180°C	03
Operating pressure G1/2 0 ... 25 bar (0 ... 362 psi) G3/4 0 ... 16 bar (0 ... 232 psi)	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

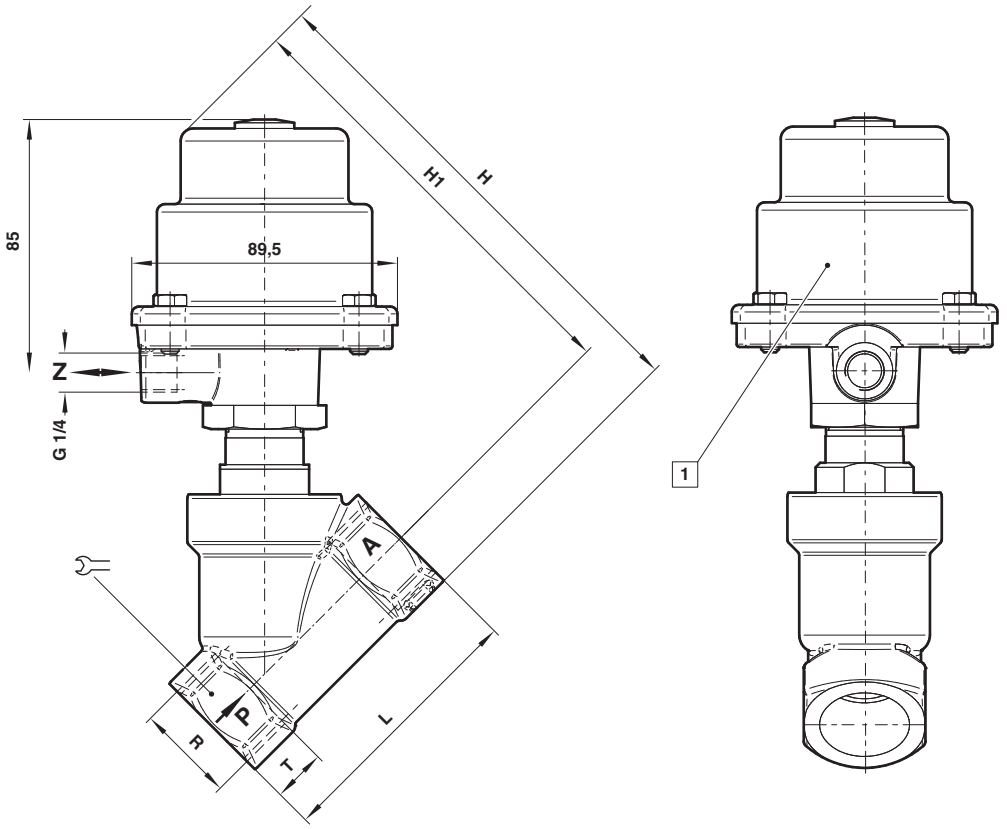
Further versions on request!

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Dimensions

G1/2 ... 2
1/2 ... 2 NPT
Actuator ø 70 mm

Dimensions in mm
Projection/first angle



1 Actuator may be rotated 360°

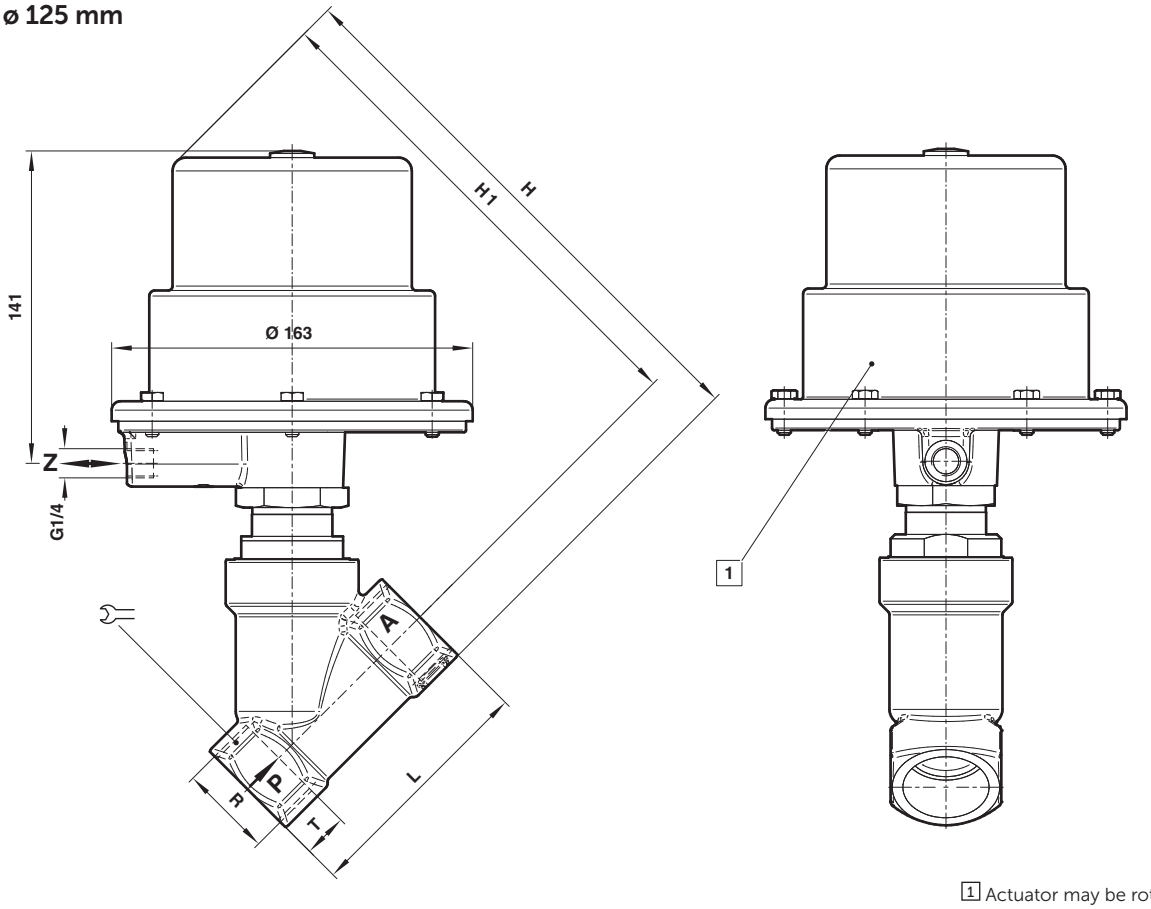
Port size R	Actuator ø	H	H1	L	T	⌯	Model
G1/2	70	152	139	65	14	27	8218200.0000.00000
1/2 NPT	70	152	139	65	13,6	27	8219200.0000.00000
G3/4	70	160	143	75	16	32	8218300.0000.00000
3/4 NPT	70	160	143	75	14,1	32	8219300.0000.00000
G1	70	169	148	90	18	41	8218400.0000.00000
1 NPT	70	169	148	90	16,8	41	8219400.0000.00000
G1 1/4	70	183	159	110	20	50	8218500.0000.00000
1 1/4 NPT	70	183	159	110	17,3	50	8219500.0000.00000
G1 1/2	70	189	160	120	22	55	8218600.0000.00000
1 1/2 NPT	70	189	160	120	17,3	55	8219600.0000.00000
G2	70	201	167	150	24	70	8218700.0000.00000
2 NPT	70	201	167	150	17,8	70	8219700.0000.00000

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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	230	217	65	14	27	8228200.0000.00000
1/2 NPT	125	230	217	65	13,6	27	8229200.0000.00000
G3/4	125	236	220	75	16	32	8228300.0000.00000
3/4 NPT	125	236	220	75	14,1	32	8229300.0000.00000
G1	125	245	224	90	18	41	8228400.0000.00000
1 NPT	125	245	224	90	16,8	41	8229400.0000.00000
G1 1/4	125	247	222	110	20	50	8228500.0000.00000
1 1/4 NPT	125	247	222	110	17,3	50	8229500.0000.00000
G1 1/2	125	252	224	120	22	55	8228600.0000.00000
1 1/2 NPT	125	252	224	120	17,3	55	8229600.0000.00000
G2	125	265	231	150	24	70	8228700.0000.00000
2 NPT	125	265	231	150	17,8	70	8229700.0000.00000

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) satisfield.

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