

83350 2/2-way diaphragm valves

- Port size:
DN 15 ... 50, G1/2 ... 2
- Any flow direction and mounting position
- Special seal materials are required for use with oil and oleiferous media
- International approvals



Technical features

Medium:
Neutral gases and liquid fluids

Pilot fluid:
Air max. +40°C

Switching function:
Normally closed; closed by spring force, opened by pilot pressure

Operation:
Pressure actuated by external fluid

Mounting position:
Optional

Flow direction:
Optional

Port size:
G1/2, G3/4, G1,
G1 1/4, G1 1/2, G2

Pilot connection:
G1/4

Operating pressure:
0 ... 10 bar (0 ... 145 psi)

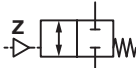
Pilot pressure:
5,5 ... 7 bar (80 ... 98 psi)

Fluid temperature:
–10 ... +80°C (+14 ... +176°F)

Ambient temperature:
–10 ... +55°C (+14 ... +131°F)

Material:
Process fluid characteristics:
Body: Grey cast iron
Seat seal: EPDM
Pilot fluid characteristics:
Body: Polymer material
Seal: NBR
Internal parts: Coated Steel

Technical data – standard models

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar) (psi)		Weight *3) (kg)	Model *3)
	G1/2	15	7	0 ... 10	0 ... 145	1,9	8335200.0000.00000
	G3/4	20	15	0 ... 10	0 ... 145	2	8335300.0000.00000
	G1	25	20	0 ... 10	0 ... 145	2,3	8335400.0000.00000
	G1 1/4	32	37	0 ... 10	0 ... 145	4,5	8335500.0000.00000
	G1 1/2	40	41	0 ... 10	0 ... 145	4,9	8335600.0000.00000
	G2	50	82	0 ... 10	0 ... 145	8,6	8335700.0000.00000

*1) Cv-value (US) ≈ kv value x 1,2

*2) For gases and liquid fluids up to 400 mm²/s (cSt)

*3) Without pilot valve



Option selector

8335***.0000.00000

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), closed by spring force, opened by pilot pressure (Pilot pressure 1 ... 5,5 bar (14 ... 79 psi))	01
Seat seal FPM	03
Seat seal PTFE	06
Body material Stainless steel	50
Electrical position indicator a.c. / d.c.	57
Electrical position indicator only d.c. max. 30 V	58
Electrical position indicator ATEX labelling: Gas: II 2G Ex db eb IIC T6 Gb Dust: II 2D Ex tb IIIC T80°C Db	64

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

Material	Body Aluminium
Pilot fluid temperature	max. +60°C (+140°F)
Pilot pressure	1 ... 10 bar (14 ... 145 psi)
Standard voltages	24 V d.c., 24 V a.c., 230 V a.c.

Further versions on request!

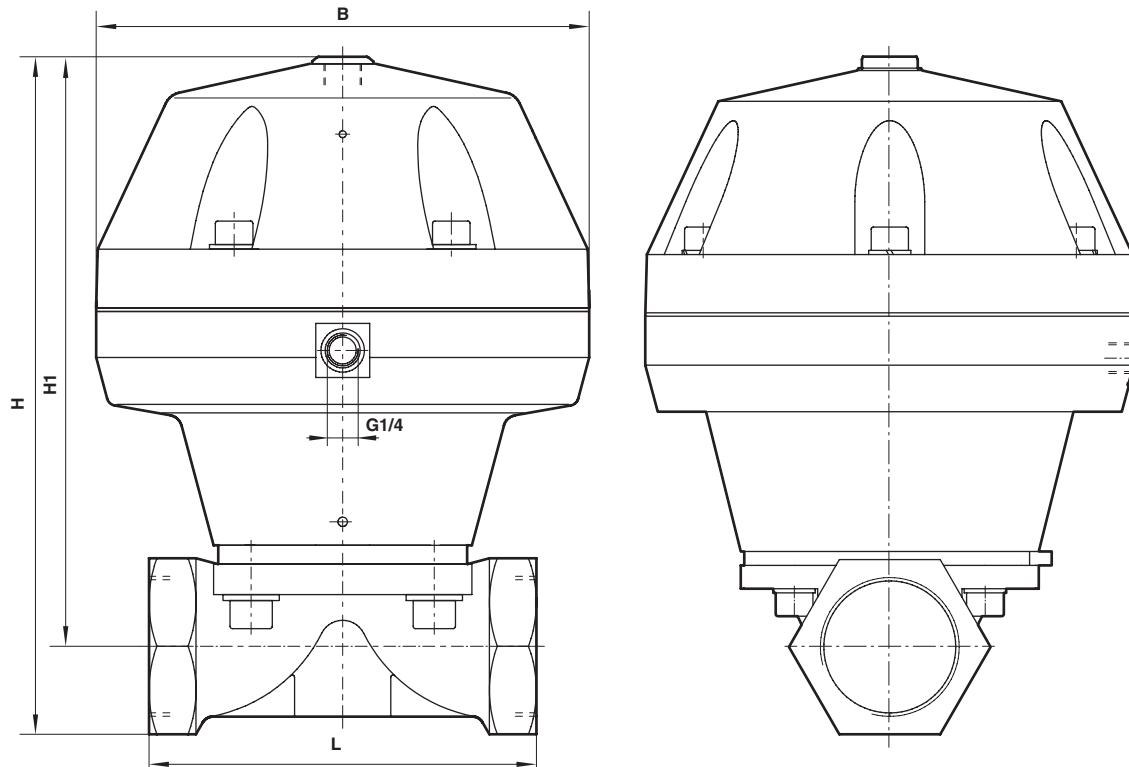
Electrical Data
for 3/2-way pilot valve 84660/84680

Design	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

Dimensions

G1/2 ... 2

Dimensions in mm
Projection/first angle



Port size R	B	H	H1	L	Model
G1/2	125	164	148	5	8335200.0000.00000
G3/4	125	168,5	148	85	8335300.0000.00000
G1	125	171	148	110	8335400.0000.00000
G1 1/4	155	230,5	203	120	8335500.0000.00000
G1 1/2	155	235,5	203	140	8335600.0000.00000
G2	210	285,5	248	165	8335700.0000.00000

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) satisfied.