

2/2-way valves DN 15 to 50

For neutral gases and liquids

Pressure actuated by external fluid

Diaphragm valves

Internal thread G 1/2 to G 2

Operating pressure 0 to 10 bar

83350

Description (standard valve)

Valve for high-viscosity and contaminated media

Switching function:	normally closed closed by spring force, opened by pilot pressure
Flow direction:	as required
Mounting position:	as required

Process fluid characteristics / Valve material

Fluid temperature:	-10 °C up to max. +80 °C
Ambient temperature:	-10 °C up to max. +55 °C
Body:	Grey cast iron
Seat seal:	EPDM

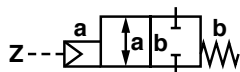
Pilot fluid characteristics / Actuator material

Pilot fluid:	neutral gases
Fluid temperature:	max. +40 °C
Body:	Polymer material
Seal:	NBR
Internal parts:	Coated steel

Features

- Any flow direction and mounting position
- Special seal materials are required for use with oil and oleiferous media

Symbol



Ordering information

To order, quote model number from table overleaf, e. g. 8335400.0000 for a DN 25 valve.



Characteristic Data

Valves

Part Number ◊	Nominal Diameter (mm)	Connection Size	Pilot Pressure		Operating Pressure *		k _v -value ** (Base m ³ /h)	Weight Total (kg)
			min. (bar)	max. (bar)	min. (bar)	max. (bar)		
8335200.0000	15	G 1/2	5.5	7	0	10	7.0	1.9
8335300.0000	20	G 3/4	5.5	7	0	10	15.0	2.0
8335400.0000	25	G 1	5.5	7	0	10	20.0	2.3
8335500.0000	32	G 1 1/4	5.5	7	0	10	37.0	4.5
8335600.0000	40	G 1 1/2	5.5	7	0	10	41.0	4.9
8335700.0000	50	G 2	5.5	7	0	10	82.0	8.6

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

State voltage [V] and frequency [Hz]

** C_v-value (US) ≈ k_v-value x 1.2

◊ Note: **0000** without pilot valve

An electrical solenoid valve can be attach at the pilot connection Z.

Required Parts	Part Number
1 pcs. 3/2 way solenoid valve	8466000.9101 DC / AC

Notes

for 3/2-way pilot valve 84660 / 84680

Material body brass

Pilot fluid temperature max. +60 °C

Pilot pressure: 1 – 10 bar

Standard voltages: 24 V DC, 24 V AC, 230 V AC

Further Options (Valves)

XXXXX01.XXXX Normally open,
pilot pressure 1 up to max. 5.5 bar

XXXXX03.XXXX Seat seal FPM

XXXXX06.XXXX Seat seal PTFE

XXXXX50.XXXX Body material Stainless steel

XXXXX57.XXXX Electrical position indicator AC/DC

XXXXX58.XXXX Electrical position indicator only DC max. 30 V

XXXXX64.XXXX Electrical position indicator EEx de IIC T6

On request Further versions

Electrical Data

for 3/2-way pilot valve 84660 / 84680

Design acc. to DIN VDE 0580

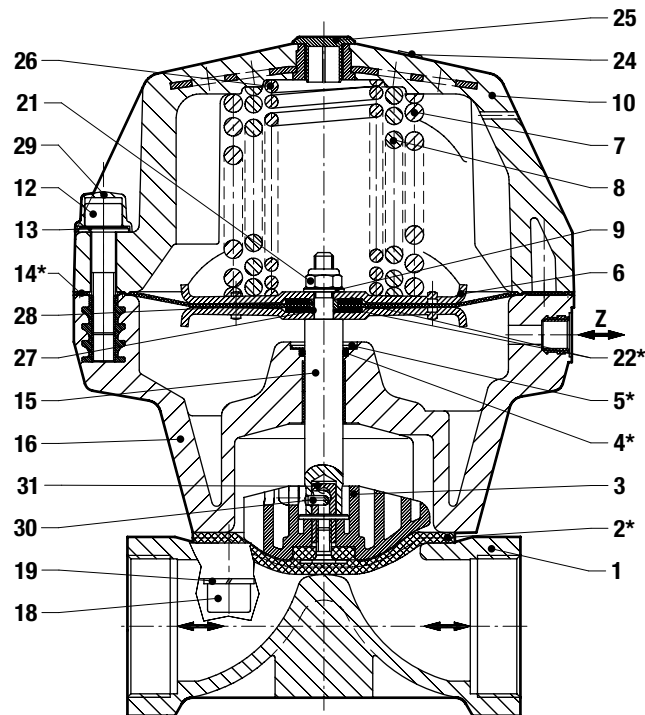
Voltage range ±10 %

Duty cycle (ED) 100 %

Protection class to EN 60529 IP65 with mounted Socket

Socket acc. to DIN EN 175301-803A

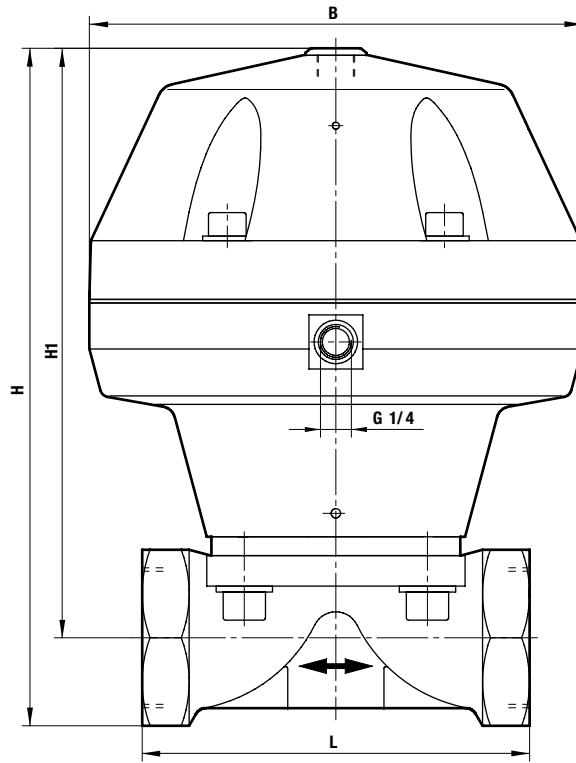
Section View



- | | |
|-------------------|--------------------|
| 1 Valve body | 21 Uni-Stop-nut |
| *2 Shut diaphragm | *22 Gasket |
| 3 Thrust collar | 24 Material plate |
| *4 Quad-seal-ring | 25 Sealing cap |
| *5 Lock washer | 26 Pressure spring |
| 6 Diaphragm disk | 27 O-ring |
| 7 Pressure spring | 28 Distance ring |
| 8 Pressure spring | 29 Cover |
| 9 Washer | 30 Straight pin |
| 10 Upper part | 31 Tappet |
| 12 Screw | |
| 13 Washer | |
| *14 Diaphragm | |
| 15 Spindle | |
| 16 Base complete | |
| 18 Screw | |
| 19 Spring washer | |

* These individual parts form a complete wearing unit.
When ordering spare parts please state Cat. No. and Series No.

General Dimensions



Part Number	Nominal Diameter (mm)	Connection Size	L (mm)	B (mm)	H (mm)	H 1 (mm)
8335200.0000	15	G 1/2	5	125	164.0	148
8335300.0000	20	G 3/4	85	125	168.5	148
8335400.0000	25	G 1	110	125	171.0	148
8335500.0000	32	G 1 1/4	120	155	230.5	203
8335600.0000	40	G 1 1/2	140	155	235.5	203
8335700.0000	50	G 2	165	210	285.5	248

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.