

# 2/2-way-valves DN 8 to DN 50

for neutral gaseous and liquid fluids  
solenoid actuated, with forced lifting

Diaphragm valves

Internal threads G 1/4 to G 2 or 1/4" NPT to 2" NPT

Operating pressure 0 to 16 bar

82340  
82440



## Description (standard valve)

Solenoid valve for e.g. air, water, oil

Switching function:	Normally closed
Flow direction:	determined
Fluid temperature:	-10°C up to max. +90°C
Ambient temperature:	-10°C up to max. +50°C
Mounting position:	optional, preferably solenoid vertical on top



## Material

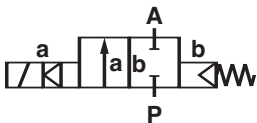
Body:	Brass
Seat seal:	NBR
Internal parts:	Stainless steel, Brass

For contaminated fluids insertion of a strainer is recommended (see accessories).

## Features

- Valve operates without differential pressure ( $\Delta p$ )
- High flow rate
- Easily interchangeable solenoid
- Suitable for vacuum

## Symbol



## Ordering information

To order, quote model number from table overleaf, e.g. 8234000.8301 for a G 1/4 valve with standard solenoid.

## Characteristic data

See page 2 valve and solenoid informations

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D-32502 Bad Oeynhausen

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Characteristic data

Valves

Part Number with DC solenoid	Part Number with AC solenoid	Nominal Diameter (mm)	Port size	Operating Pressure *		kv-value ** (Base m³/h)	Weight (kg)
				min	max (bar)		
8234000.8301 8244000.8301	8234000.8304 8244000.8304	8	G 1/4 1/4" NPT	0	16	2.00	1.3
8234100.8301 8244100.8301	8234100.8304 8244100.8304	10	G 3/8 3/8" NPT	0	16	3.40	1.2
8234200.8301 8244200.8301	8234200.8304 8244200.8304	12	G 1/2 1/2" NPT	0	16	3.60	1.2
8234300.8301 8244300.8301	8234300.8304 8244300.8304	20	G 3/4 3/4" NPT	0	16	10.00	1.9
8234400.8301 8244400.8301	8234400.8304 8244400.8304	25	G 1 1" NPT	0	16	12.50	1.8
8234500.8401 8244500.8401	8234500.8404 8244500.8404	32	G 1 1/4 1 1/4" NPT	0	16	27.00	4.7
8234600.8401 8244600.8401	8234600.8404 8244600.8404	40	G 1 1/2 1 1/2" NPT	0	16	30.00	4.6
8234700.8401 8244700.8401	8234700.8404 8244700.8404	50	G 2 2" NPT	0	10	43.00	5.5

\* with gaseous and liquid fluids up to 25 mm²/s (cSt)  
 \*\* C<sub>v</sub>-value (US) ≈ k<sub>v</sub>-value x 1.2

State voltage [V] and frequency [Hz]

8301/8304 and 8401/8404 Solenoid

Standard voltages

DC	AC 40 Hz to 60 Hz
24 V	24 V
–	110 V
205 V	230 V

Design acc. to DIN VDE 0580  
 Voltage range ±10 %  
 100 % duty cycle  
 Protection class acc. to EN 60529 IP65 with mounted Socket  
 Socket acc. to DIN EN 175301-803A (included)  
 AC solenoids with rectifier

Power Consumption

According to DIN VDE 0580 at coil temperature +20°C. In operating the solenoid coil decrease the power consumption appr. 30%.

Solenoid	DC	AC Inrush	Holding
8301 8304	22 W –	– 25 VA	– 25 VA
8401 8404	40 W –	– 45 VA	– 45 VA

Attention!

Restricted temperature range for explosion proof solenoids.

For technical details see catalog-register „Solenoids“.





Options (Valves)

- XXXXX01.XXXX Normally open
- XXXXX03.XXXX Seat seal FPM, max. fluid temperature +110°C, operating pressure 10 bar max, differential pressure for liquid fluids max 1 bar in energized position
- XXXXX14.XXXX Seat seal EPDM, for hot water, max fluid temperature +110°C, operating pressure 10 bar max, differential pressure for liquid fluids max 1 bar in energized position
- XXXXX17.XXXX Normally open, Seat seal FPM, max fluid temperature +110°C, operating pressure 10 bar max, differential pressure for liquid fluids max 1 bar in energized position

On request

Further versions

Options (Solenoids)

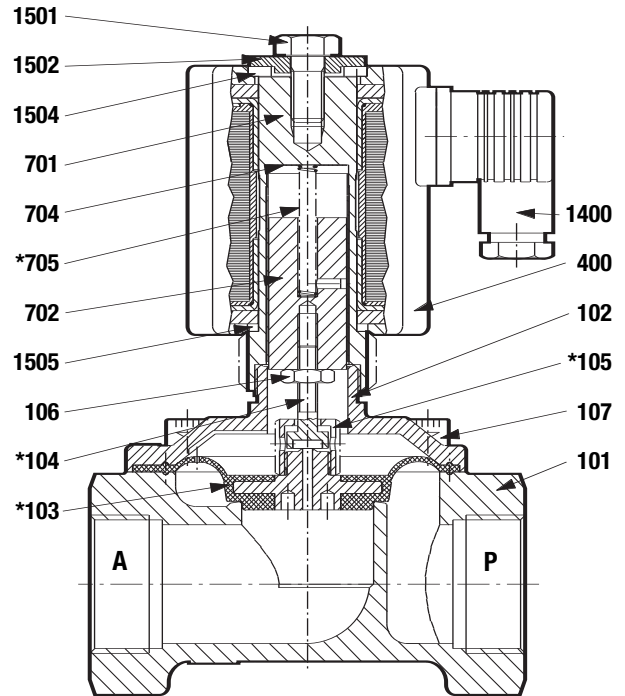
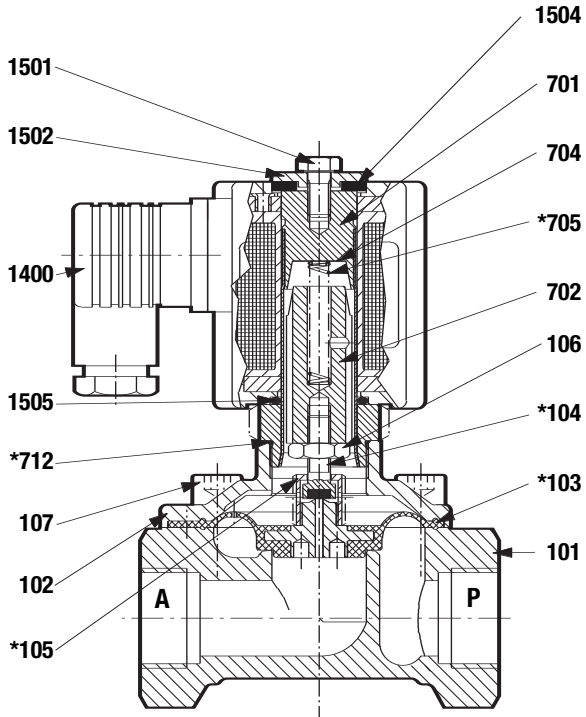
- XXXXXXX.8341 Solenoid in protection class  II 2 GD EEx me II T3 T 140°C
- XXXXXXX.8441 Solenoid in protection class  II 2 GD EEx me II T3 T 140°C
- XXXXXXX.8900 Solenoid in protection class  II 2 GD EEx de IIC T4 und T5 T 140°C
- XXXXXXX.8920 Solenoid in protection class  II 2 GD EEx d IIC T4 und T5 T 140°C

On request

Further versions

Section View

to G 1 bzw. 1" NPT up to G 1 1/4 e.g. 1 1/4" NPT



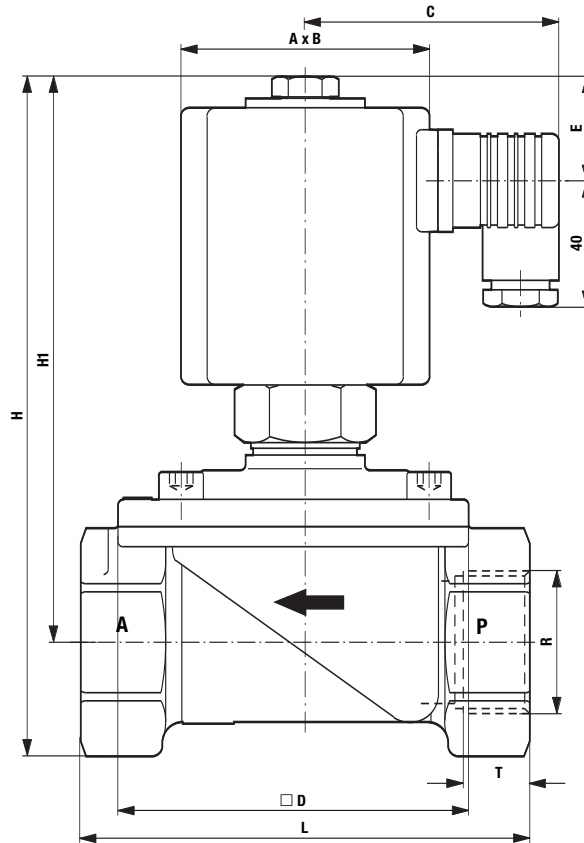
- 101 Valve body
- 102 Body cover
- \*103 Diaphragm
- \*104 Valve spindle
- \*105 Screw piece
- 106 Hexagon nut
- 107 Oval head cap screw up to 1/2 (1/2" NPT)  
Hexagon socket screw for G 3/4 (3/4" NPT)
- 400 Solenoid
- 701 Core tube
- 702 Core

- 704 Anti magnetic spacer
- \*705 Pressure spring
- \*712 O-ring
- 1400 Socket
- 1501 Hexagon screw
- 1502 Round plate
- 1504 Gasket
- 1505 O-ring

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

General Dimensions

Solenoid may be rotated 360°  
Socket turnable 4 x 90°



Part Number	A x B	C	□ D	E	H	H1	L	R	T
8234000.830x 8244000.830x	52 x 65	65	44	26	125	110	67	G 1/4 1/4" NPT	12.0 10.0
8234100.830x 8244100.830x	52 x 65	65	44	26	125	110	67	G 3/8 3/8" NPT	12.0 10.5
8234200.830x 8244200.830x	52 x 65	65	44	26	125	110	67	G 1/2 1/2" NPT	14.0 13.5
8234300.830x 8244300.830x	52 x 65	65	70	26	150	125	95	G 3/4 3/4" NPT	12.5 14.0
8234400.830x 8244400.830x	52 x 65	65	70	26	150	125	95	G 1 1" NPT	14.0 17.0
8234500.840x 8244500.840x	72 x 91	75	96	31	205	170	132	G 1 1/4 1 1/4" NPT	18.0 17.0
8234600.840x 8244600.840x	72 x 91	75	96	31	205	170	132	G 1 1/2 1 1/2" NPT	18.0 17.0
8234700.840x 8244700.840x	72 x 91	75	112	31	220	180	160	G 2 2" NPT	20.0 17.5

**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 50081-1 and EN 50082-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (89/336/EEC) satisfied.