

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 10 bar

Click-on®

82540
82640

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

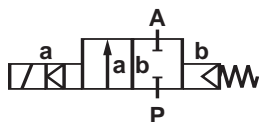
Body:	Brass
Seat seal:	NBR (Perbunan)
Internal parts:	Stainless steel, PVDF, brass

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

Features

- High flow rate
- For robust industry solutions
- Damped operation
- Suitable for vacuum
- For systems with low or discontinuous pressure
- Valve operates without differential pressure (Zero Delta P)
- Solenoid interchangeable without tools (Click-on®)

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 8254000.9151 for a G 1/4 valve with standard solenoid.

Characteristic data

See page 2 valve and solenoid information

Detmolder Strasse 256
D-32545 Bad Oeynhausen
PO Box 10 02 52-53
D-32502 Bad Oeynhausen
Phone ++49 5731 / 791-0
Fax ++49 5731 / 791-179
<http://www.buschjost.com>
mail@buschjost.de

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)		
8254000.9151 8264000.9151	8254000.9154 8264000.9154	8	G 1/4 1/4" NPT	0	10	1.9	0.80
8254100.9151 8264100.9151	8254100.9154 8264100.9154	10	G 3/8 3/8" NPT	0	10	3.0	0.80
8254200.9151 8264200.9151	8254200.9154 8264200.9154	12	G 1/2 1/2" NPT	0	10	3.4	0.80
8254300.9151 8264300.9151	8254300.9154 8264300.9154	20	G 3/4 3/4" NPT	0	10	5.8	1.00
8254400.9151 8264400.9151	8254400.9154 8264400.9154	25	G 1 1" NPT	0	10	8.0	1.30
8254500.9401 8264500.9401	8254500.9404 8264500.9404	32	G 1 1/4 1 1/4" NPT	0	10	23.0	4.00
8254600.9401 8264600.9401	8254600.9404 8264600.9404	40	G 1 1/2 1 1/2" NPT	0	10	25.0	4.30
8254700.9401 8264700.9401	8254700.9404 8264700.9404	50	G 2 2" NPT	0	10	41.0	5.40

* with gaseous and liquid fluids up to 25 mm³/s (cSt)

State voltage [V] and frequency [Hz]

** C_v-value (US) = k_v-value x 1.2

9151/9154 ; 9401/9404 and 8401/8404 solenoid

Standard voltages

DC 1	AC 2 40 Hz to 60 Hz
24 V	24 V
-	42 V
-	110 V
-	230 V

Design to VDE 0580

Voltage range ±10 %

100 % duty cycle

Protection class acc. to EN 60529 IP65

Socket to DIN EN 175301-803A (included)

AC solenoid with rectifier

Options (Valves)

- XXXXX01.XXXX Normally open, from G 1 1/4 (1 1/4" NPT) only with solenoid 8400
- XXXXX02.XXXX Manual override only from G 1 1/4 (1 1/4" NPT)
- XXXXX03.XXXX Seat seal FPM, max. fluid temperature +110 °C
- XXXXX14.XXXX Seat seal EPDM, for hot water, max. fluid temperature +110 °C
- XXXXX17.XXXX Normally open, seat seal FPM, max. fluid temperature +110 °C, from G 1 1/4 (1 1/4" NPT) only with solenoid 8400

On request further versions

Accessories:

- Manual override conversion kit
- Mounting bracket conversion kit

Power Consumption

According to VDE 0580 at coil temperature von +20 °C. In operation the solenoid coil decrease the power consumption approx. 30%.

Solenoid		Power	
DC	AC	DC	AC
9151	9154	18 W	20 VA / 18 W
9401	9404	38 W	42 VA / 38 W
8401	8404	40W	45 VA / 40 W

Options (Solenoid)

- XXXXXX.9191 Protection class x II 2 GD EEx me II T3 T 140°C
- XXXXXX.8441 Protection class x II 2 GD EEx me II T3 T 140°C
- *XXXXXX.9176 Protection class x II 3 GD EEx nA II T4 T 135°C
- *XXXXXX.9426 Protection class x II 3 GD EEx nA II T4 T 135°C
- *XXXXXX.8426 Protection class x II 3 GD EEx nA II T4 T 135°C

On request further versions

Attention!

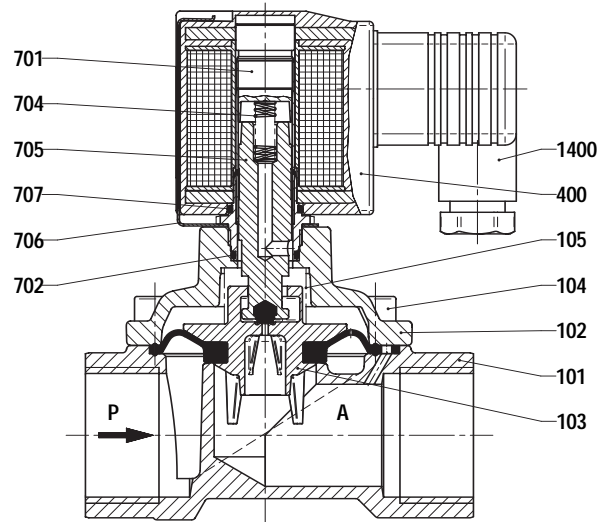
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the case of explosion protected solenoids.

* DC only, for AC solenoids with design inspection certificate acc. to category 2, e.g. XXXXXX.9191 or XXXXXX.8441

Section View 01

up to G 1(1" NPT)

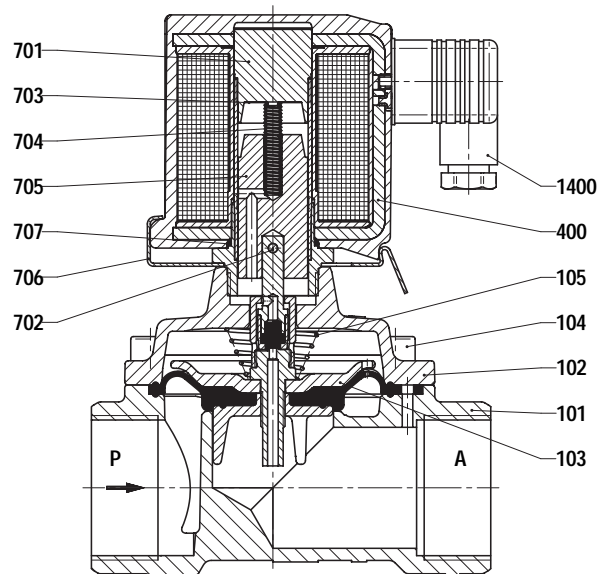
- 101 Valve body
- 102 Body cover
- *103 Diaphragm
- 104 Socket head cap screw
- *105 Pressure spring
- 400 Solenoid
- 701 Core tube
- *702 O-ring
- *704 Pressure spring
- *705 Core
- 706 Spring clip
- *707 O-ring
- 1400 Socket (included)



Section View 02

from G 1 1/4 (1 1/4" NPT)

- 101 Valve body
- 102 Body cover
- *103 Diaphragm
- 104 Socket head cap screw
- *105 Pressure spring
- 400 Solenoid
- 701 Core tube
- *702 Straight pin
- 703 Round plate
- *704 Pressure spring
- *705 Core
- 706 Spring clip
- *707 O-ring
- 1400 Socket (included)



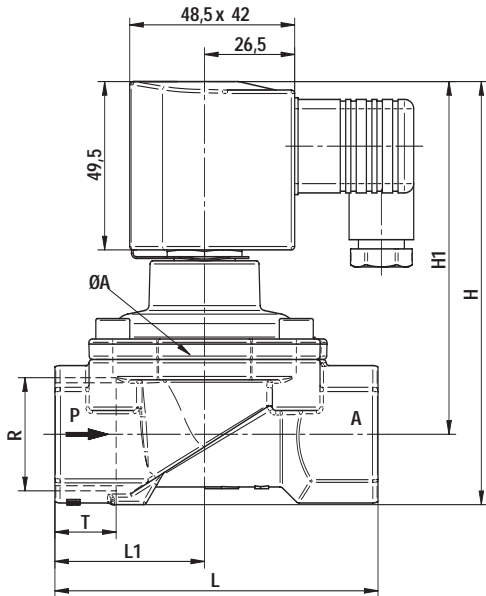
* These individual parts form a complete wearing unit.

When ordering spare parts please state Cat no and series no.

General Dimensions 01 (Standard valve)

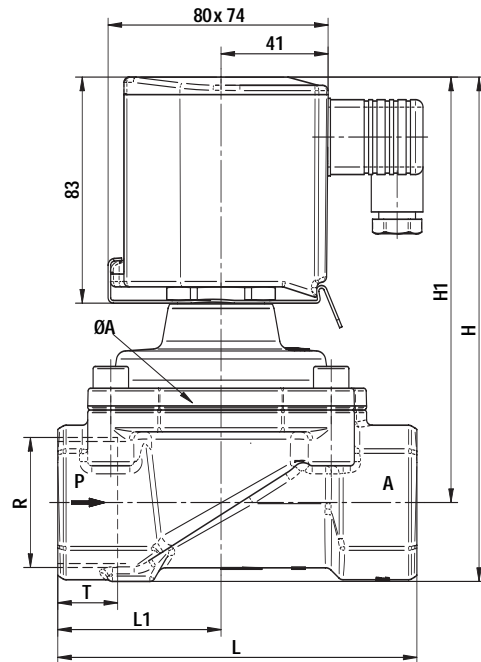
up to G 1 (1" NPT)

Solenoid rotatable 360°
 Socket turnable 4 x 90°
 (Socket included)



General Dimensions 02

from G 1 1/4 (1 1/4" NPT)



Part Number	Ø A	H	H1	L	L1	R	T
8254000.915x 8264000.915x	44	104.0	92.5	60	27.5	G 1/4 1/4" NPT	12.0 10.0
8254100.915x 8264100.915x	44	104.0	92.5	60	27.5	G 3/8 3/8" NPT	12.0 10.5
8254200.915x 8264200.915x	44	108.0	94.5	67	31.0	G 1/2 1/2" NPT	14.0 13.5
8254300.915x 8264300.915x	50	115.0	99.0	80	36.5	G 3/4 3/4" NPT	16.0 14.0
8254400.915x 8264400.915x	62	124.0	103.5	95	44.0	G 1 1" NPT	18.0 17.0
8254500.940x 8264500.940x	92	186.0	157.0	132	60.0	G 1 1/4 1 1/4" NPT	20.0 17.0
8254600.940x 8264600.940x	92	186.0	157.0	132	60.0	G 1 1/2 1 1/2" NPT	22.0 17.0
8254700.940x 8264700.940x	109	201.5	167.0	160	74.0	G 2 2" NPT	24.0 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.