

## 2/2-way valves DN 15 to DN 50

With inspection certificate DIN EN 10204 - 3.1

Requirements AD 2000 A4

For slightly aggressive gases and liquid fluids

Solenoid actuated, with forced lifting

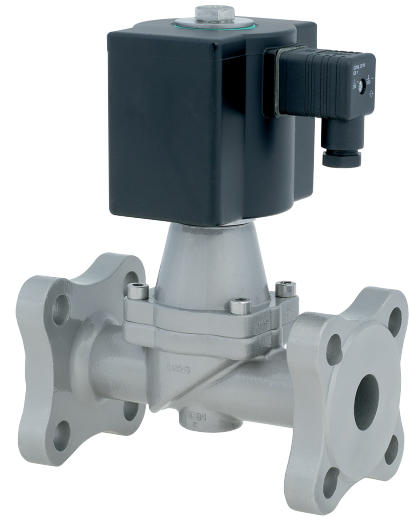
Piston valves

Flange connection, pressure rating PN 40

Operating pressure 0 to 25 (40 bar)

85580

Click-on®



### Description (standard valve)

Solenoid valve for e.g. slightly aggressive fluids

Switching function:	normally closed
Flow direction:	determined
Fluid temperature:	-20 °C up to max. +90 °C
Ambient temperature:	-20 °C up to max. +50 °C
Mounting position:	optional, preferably solenoid vertical on top

### Material

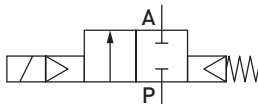
Body:	Stainless steel (1.4408)
Seal seat:	NBR
Internal parts:	Stainless steel

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

### Features

- High flow rate
- For robust industry solutions
- Damped operation
- Valve operates without differential pressure
- Fluids of Group 1 and 2 acc. Pressure Equipment Directive 97/23/EC
- Suitable for supervision Systems

### Symbol



### Ordering information

To order, quote model number from table overleaf, e.g. 8558400.8401 for a DN 25 valve.

D117502.01  
09/09

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### Characteristic data

#### Valves

Part Number Solenoid with ---	Part Number Solenoid with ~	Nominal Diameter (mm)	Operating pressure *		K <sub>v</sub> -value ** (Base m <sup>3</sup> /h)	Weight (kg)
			min. (bar)	max. (bar)		
8558200.8401	8558200.8404	15	0	25	4.4	4.2
8558300.8401	8558300.8404	20	0	25	7.0	4.6
8558400.8401	8558400.8404	25	0	25	10.5	5.1
8558500.8401	8558500.8404	32	0	25	25.0	9.6
8558600.8401	8558600.8404	40	0	25	27.0	10.0
8558700.8401	8558700.8404	50	0	25	43.0	11.5

\* for gases and liquid fluids up to 60 mm<sup>2</sup>/s (cSt)

State voltage [V] and frequency [Hz]

\*\* C<sub>v</sub>-value (US) P K<sub>v</sub>-value x 1.2

### Inspection certificate DIN EN 10204 - 3.1 Requirements AD 2000 A4 (W2 / W5 / W10)

12 57 333.0000 Material quality proof for:

- valve body, -cover, body screws acc. to DIN EN 10204 - 3.1
- material quality proof for fluid contacted parts acc. to DIN EN 10204 - 2.2
- function and leak test acc. to DIN EN 10204 - 3.1, leakage A acc. to DIN EN 12266-1

### Solenoid 8401 / 8404

#### Standard voltages

DC ---	AC ~ 40 Hz - 60 Hz
24 V	24 V
-	110 V
-	120 V
-	230 V

Design acc. to DIN VDE 0580

Voltage range ±10 %

100 % duty cycle

Protection class acc. to EN 60529 IP65

Socket Form A acc. to DIN EN 175301-803 (included)

AC with rectifier plug

### Power Consumption

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

Solenoid	DC ---	AC ~	
		Inrush	Holding
8401	40 W		
8404		45 VA	45 VA




#### Attention!

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

### Further Options (Valves)

- XXXXX01.XXXX Normally open (NO), mounting position solenoid vertical on top
  - XXXXX02.XXXX Manual override
  - XXXXX03.XXXX Seat seal FPM, fluid temperature -10 °C up to +110 °C <sup>1)</sup>
  - XXXXX06.XXXX Seat seal PTFE, fluid temperature -20 °C up to +110 °C <sup>1)</sup>, leakage rate E acc.to DIN EN 12266-1; for fluids of group 1 and 2 of the Pressure Equipment Directive 97/23/EC
  - XXXXX14.XXXX Seat seal EPDM, for hot water, fluid temperature -20 °C up to +110 °C
  - XXXXX17.XXXX Normally open, fluid temperature -10 °C up to +110 °C, Seat seal FPM, mounting position solenoid vertical on top <sup>1)</sup>
  - XXXXX22.XXXX max. operating pressure 40 bar
  - XXXXX23.XXXX Elec. position indicator with two magnetic field sensors
  - XXXXX25.XXXX Seat seal FPM, with larger bleed orifices in the piston, for e.g. fuel and oil, max. viscosity 80 mm<sup>2</sup>/s (cSt), fluid temperature -10 °C up to +110 °C <sup>1)</sup>
  - XXXXX47.XXXX Flanges acc.to ASME B 16.5 150 lb/sq.In.
  - XXXXX48.XXXX Flanges acc.to ASME B 16.5 300 lb/sq.In.
- On request Further versions

### Further Options (Solenoids)

- XXXXXXXX.8441 Protection class  II 2 GD EEx me II T3 T 140 °C
  - XXXXXXXX.8426 \* Protection class  II 3 GD EEx nA II T4 T 135 °C
  - XXXXXXXX.8920 Protection class  II 2 GD EEx d II C T4 and T5 T 130 °C / 95 °C
- On request Further versions

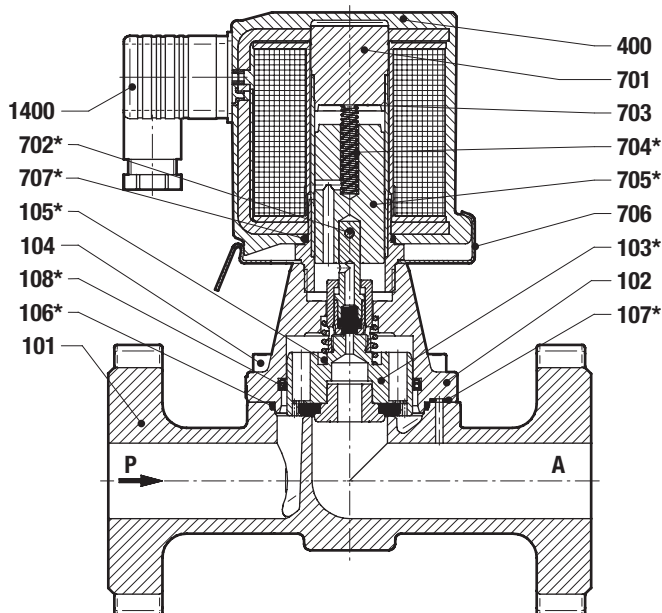
\* DC only, for AC solenoids with design inspection certificate acc.to cat. 2, e.g.XXXXXXXXX.8441

<sup>1)</sup>Up to max.+200 °C fluid temperature with solenoid for higher temperature

## Section view

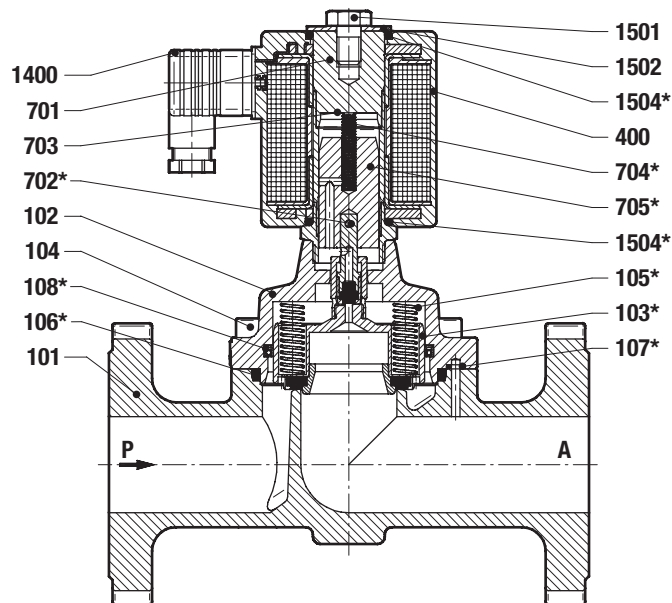
up to DN 25

- 101 Valve body
- 102 Valve cover
- \*103 Valve piston
- 104 Socket head cap screw
- \*105 Pressure spring
- \*106 Seal ring
- \*107 O-ring
- \*108 Grooved ring
- 400 Solenoid
- 701 Core tube
- \*702 Straight pin
- 703 Round plate
- \*704 Pressure spring
- \*705 Core
- 1400 Socket (included)
- 1501 Hexagon screw
- 1502 Round plate
- \*1504 O-Ring (2x)



from DN 32

- 101 Valve body
- 102 Valve cover
- \*103 Valve piston
- 104 Socket head cap screw
- \*105 Pressure spring (2x)
- \*106 Seal ring
- \*107 O-ring
- \*108 Grooved ring
- 400 Solenoid
- 701 Core tube
- \*702 Straight pin
- 703 Round plate
- \*704 Pressure spring
- \*705 Core
- 1400 Socket (included)
- 1501 Hexagon screw
- 1502 Round plate
- \*1504 O-Ring (2x)

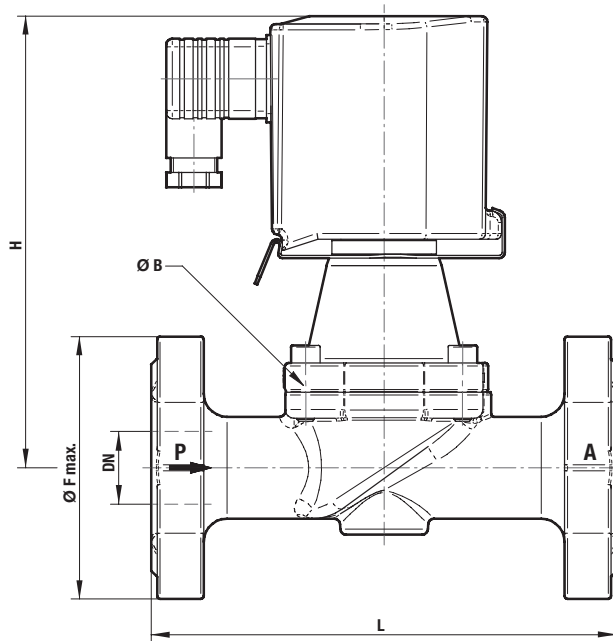


\*These individual parts form a complete wearing unit.  
When ordering spare parts please state Cat no and series no.

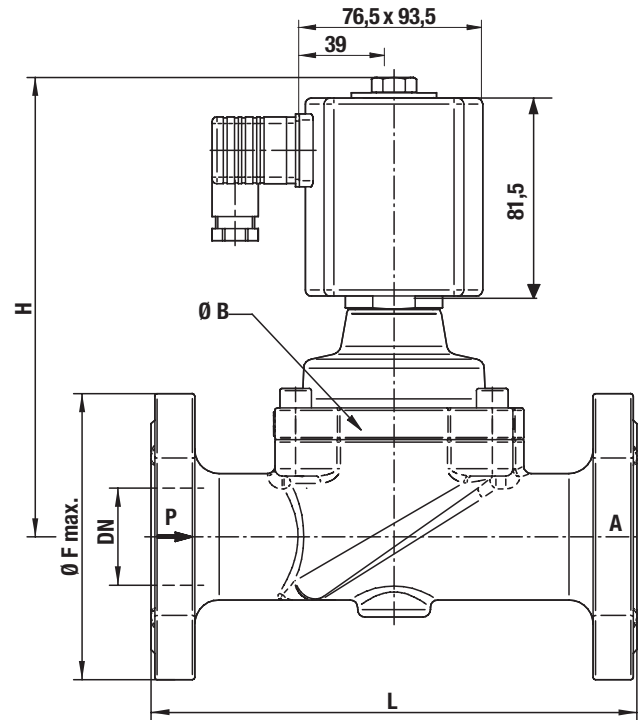
## General Dimensions

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

up to DN 25



up to DN 32



Part Number	Nominal Diameter (mm)	L (mm)	H (mm)	Ø F max. (mm)	Ø B (mm)
8558200.840x	15	130	154	96	44
8558300.840x	20	150	163	110	50
8558400.840x	25	160	168	115	62
8558500.840x	32	180	184	140	92
8558600.840x	40	200	190	150	92
8558700.840x	50	230	197	165	109

Contact face acc. to DIN EN 1092-1/B

### 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.