#### D114402.01 08/10

#### Flange connection, pressure rating PN 40 **Operating pressure 0 to 16 bar**

# **Description (standard valve)**

Solenoid valve for e.g. hot water and steam

For neutral steam and liquid fluids Solenoid actuated, with forced lifting

2/2-way valves DN 15 to DN 50

Switching function: Flow direction: Fluid temperature: Ambient temperature: Mounting position:

**Piston valves** 

normally closed determined 0 °C up to max. +200 °C 0 °C up to max. +60 °C solenoid mounted underneath, fluid temperature up to max. +150 °C Solenoid preferred vertical on top

# Material

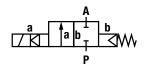
Body: Seal seat: Internal parts: Stainless steel (1.4408), Brass PTFE Stainless steel, PTFE / Carbon / FPM

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

# **Features**

- · High flow rate
- For robust industry solutions
- Damped operation
- Leakage rate E acc. to DIN EN 12266-1
- Solenoid interchangeable without tools (Click-on") up to DN 25 thread
- Valve operates without differential pressure (Zero Delta P)
- Fluids of Group 2 acc. Pressure Equipment Directive 97/23/EC

## **Symbol**



# **Ordering information**

To order, quote model number from table overleaf, e.g. 8552400.9402 for a DN 25 valve.











## **Characteristic data**

Valves

Part Number Solenoid with	Part Number Solenoid with $\sim$	Nominal Diameter (mm)	Operating pressure * min. (bar)	max. (bar)	Kv-value ** (Base m³/h)	Weight (kg)
8552200.9402	8552200.9406	15	0	16	3.8	3.8
8552300.9402	8552300.9406	20	0	16	6.1	4.2
8552400.9402	8552400.9406	25	0	16	9.5	4.8
8552500.8402	8552500.8406	32	0	16	23.0	9.6
8552600.8402	8552600.8406	40	0	16	25.0	10.0
8552700.8402	8552700.8406	50	0	16	41.0	11.5

for gases and liquid fluids up to 80 mm<sup>2</sup>/s (cSt)

\*\* Cy-value (US) P ky-value x 1.2

# Solenoid 9402 / 9406 and 8402 / 8406

Standard voltages

DC	AC $\sim$ 40 Hz to 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 solenoid with rectifier plug

#### **Power Consumption**

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

Solenoid	DC	AC $\sim$	
		Inrush	Holding
9402 *	29 W		
9406 *		33 VA	33 VA
8402	29 W		
8406		33 VA	33 VA

\*  $\bigcirc$  coil only maintaining the ambient temperature of +65 °C (with the expection of solenoid 94XX up to 41 V AC)

#### Attention!

The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids. State voltage [V] and frequency [Hz]

# **Further Options (Valves)**

XXXXX <b>01</b> .XXXX	Normally open (NO), only with solenoid 8407, Mounting position and fluid temperature: max.+150 °C solenoid vertical on top, max.+200 °C solenoid vertical underneath, from DN 32 only vertical on top
XXXXX <b>02</b> .XXXX	Manual override
XXXXX14.XXXX	Seat seal EPDM, fluid temperature 0 °C up to +130 °C
XXXXX <b>22</b> .XXXX	max. operation pressure 25 bar
XXXXX <b>23</b> .XXXX	Electrical position indicator with two magnetic field sensors; only with solenoid 8407
XXXXX <b>47</b> .XXXX	Flanges acc. to ASME B 16.5 150 lb/sq.ln.
XXXXX <b>48</b> .XXXX	Flanges acc. to ASME B 16.5 300 lb/sq.ln.
On request	Further versions
Accessoires:	- Manual override conversion kit

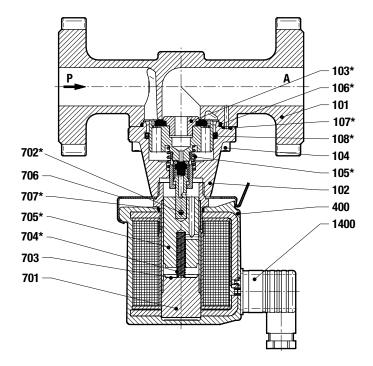




#### Section view

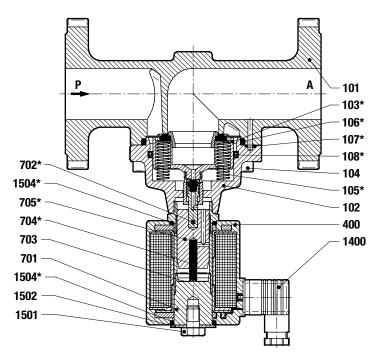
up to DN 25

101	Valve body
102	Valve cover
*103	Valve piston
104	Straight pin
*105	Pressure spring
*106	0-ring
*107	0-ring
*108	Grooved ring
400	Solenoid
701	Core tube
*702	Straight pin
703	Round plate
*704	Pressure spring
*705	Core
706	Spring clip
*707	0-ring
1400	Socket (included)



#### from DN 32

101	Valve body
102	Valve cover
*103	Valve piston
104	Straight pin
*105	Pressure spring (2x)
*106	0-ring
*107	0-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	
*1504	0-Ring (2x)



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

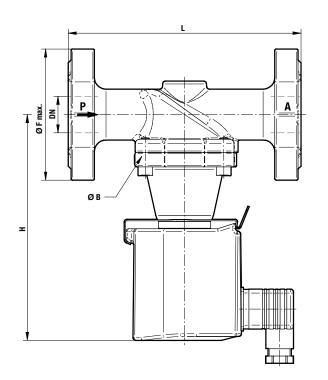


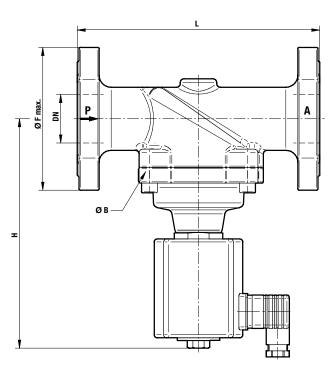


#### **General Dimensions**

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

up to DN 25





Part Number	Nominal Diameter (mm)	L (mm)	H (mm)	Ø F max. (mm)	Ø B (mm)
8552200.940x	15	130	142	96	44
8552300.940x	20	150	150	110	50
8552400.940x	25	160	155	115	62
8552500.840x	32	180	184	140	92
8552600.840x	40	200	190	150	92
8552700.840x	50	230	197	165	109

from DN 32

Suitable for mounting between flanges according to DIN EN 1092-1; 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) satisfield.

