

- > **Port size:**
DN 15 ... 50, Flange connection, Pressure rating PN 40
- > **Suitable for vacuum**
- > **Stainless steel piston**
- > **Valve operates without differential pressure (Zero Delta P)**
- > **Fluids of Group 2 acc. Pressure Equipment Directive 97/23/EC**



Technical features

Medium:
Neutral gases and liquid fluids

Switching function:
Normally closed

Operation:
Solenoid actuated, with forced lifting

Mounting position:
Optional, preferably solenoid vertical on top

Flow direction:
Determined

Port size:
DN 15, DN 20, DN 25, DN 32, DN 40, DN 50

Operating pressure:
0 ... 25 bar (0 ... 362 psi)

Fluid temperature:
-20 ... +90°C (-4° ... +194°F)

Ambient temperature:
-20 ... +50°C (-4° ... +122°F)

Material:
Body: Cast steel, Brass
Seat seal: NBR
Internal parts: Stainless steel, PTFE/Carbon

For contaminated fluids insertion of a strainer is recommended.

Technical data - standard models

Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	15	4,4	0 ... 25	3,8	8550200.9401.xxxxx	8550200.9404.xxxxx
	20	7	0 ... 25	4,2	8550300.9401.xxxxx	8550300.9404.xxxxx
	25	10,5	0 ... 25	4,8	8550400.9401.xxxxx	8550400.9404.xxxxx
	32	25	0 ... 25	9,6	8550500.8401.xxxxx	8550500.8404.xxxxx
	40	27	0 ... 25	10	8550600.8401.xxxxx	8550600.8404.xxxxx
	50	43	0 ... 25	11,5	8550700.8401.xxxxx	8550700.8404.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv-Wert x 1,2

*2) For gases and liquid fluids up to 60 mm²/s (cSt)

Option selector


8550*****

Port size	Substitute
15	2
20	3
25	4
32	5
40	6
50	7
Valve options	Substitute
Normally open (NO), only with solenoid 8400, Mounting position: Solenoid vertical on top	01
Manual override	02
Seat seal FPM, Fluid temperature -10 ... +110°C *2)	03
Seat seal PTFE, Fluid temperature -20 ... +110°C *2) Leakage rate E acc. to DIN EN 12266-1 for fluids of group 1 and 2 of the Pressure Equipment Directive 97/23/EC	06
Seat seal EPDM, Fluid temperature -20 ... +110°C	14
Normally open (NO), Seat seal FPM, Fluid temperature -10 ... +110°C, Mounting position: Solenoid vertical on top *2), only with solenoid 8400	17
Max. operating pressure 40 bar	22
Electrical position indicator with 2 limit switches, only with solenoid 8400	23
Seat seal FPM, with larger bleed orifices for e.g. fuel and oil, max. viscosity 80 mm ² (cSt), Fluid temperature -10 ... +110°C *2)	25
Flanges acc. to ASME B 16.5 150 lb/sq. in.	47
Flanges acc. to ASME B 16.5 300 lb/sq. in.	48

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx
Solenoid options	Substitute
DN 15 ... 25 Solenoid V d.c.	9401
DN 32 ... 50 Solenoid V d.c.	8401
DN 15 ... 25 Solenoid V a.c.	9404
DN 32 ... 50 Solenoid V a.c.	8404

Standard solenoid systems

Voltage and Frequency Solenoid 9401/9404 *1)					
Code	Code	Voltage	Frequency	Power consumption	
Voltage	Frequency			Inrush	Holding
024	00	24 V d.c.	-	38 W	38 W
024	49	24 V a.c.	40 ... 60 Hz	42 VA	42 VA
110	49	110 V a.c.	40 ... 60 Hz	42 VA	42 VA
120	49	120 V a.c.	40 ... 60 Hz	42 VA	42 VA
230	49	230 V a.c.	40 ... 60 Hz	42 VA	42 VA
Voltage and Frequency Solenoid 8401/8404					
024	00	24 V d.c.	-	40 W	40 W
024	49	24 V a.c.	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c.	40 ... 60 Hz	45 VA	45 VA
120	49	120 V a.c.	40 ... 60 Hz	45 VA	45 VA
230	49	230 V a.c.	40 ... 60 Hz	45 VA	45 VA

*1)  US coil only
(With the exception of solenoid 94XX up to 41 V a.c.)

Further versions on request!

Electrical details for all solenoid systems

Design	DIN VDE 0580
Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65
Socket	Form A acc. to DIN EN 175301-803 (included)

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.



Additional solenoid systems

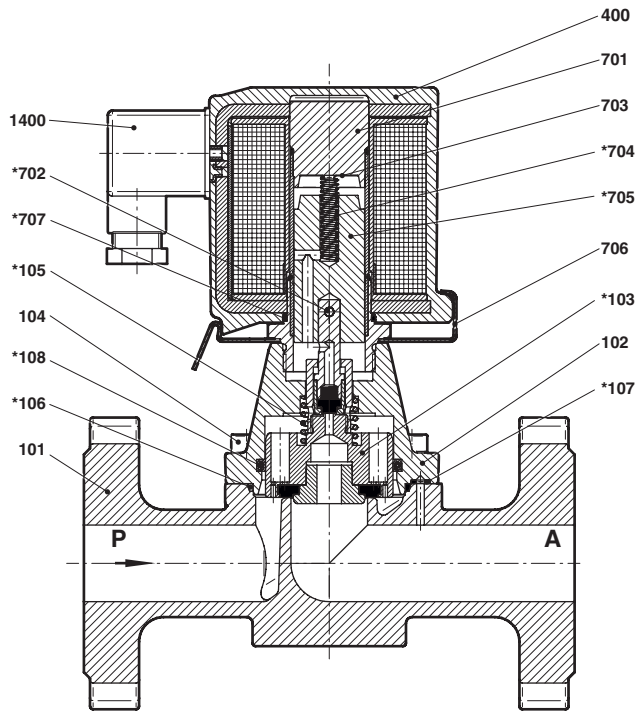
ATEX category	Protection class	Solenoid	Standard voltages
II2GD	EEx me II T3 T 140°C	8441	24 V d.c., 110 V a.c., 230 V a.c.
II3GD	Ex nA II T4 T 135°C *3)	9426	24 V d.c., 110 V a.c., 230 V a.c.
II3GD	Ex nA II T4 T 135°C *3)	8426	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	Ex d II C T4 and T5 T 130°C resp. T 95°C	8920	24 V d.c., 110 V a.c., 230 V a.c.

Attention!

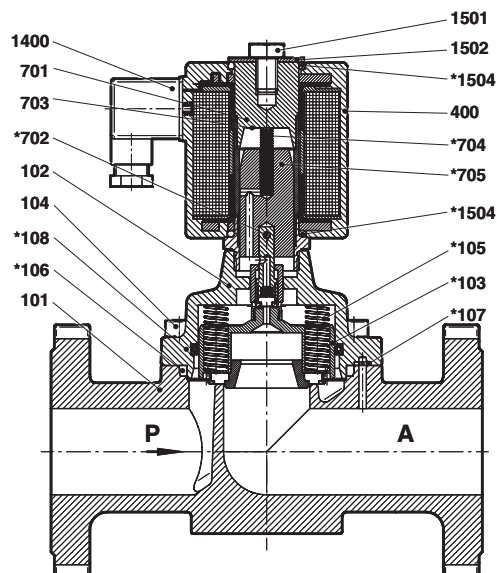
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

*2) Up to max. +200°C fluid temperature with solenoid for higher temperature

*3) Only d.c., for a.c. solenoids with design inspection certificate acc. to category 2, e.g. XXXXXX.8436

Section View
DN 15 ... 25


No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Straight pin
*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
706	Spring-clip
*707	O-ring
1400	Socket (included)

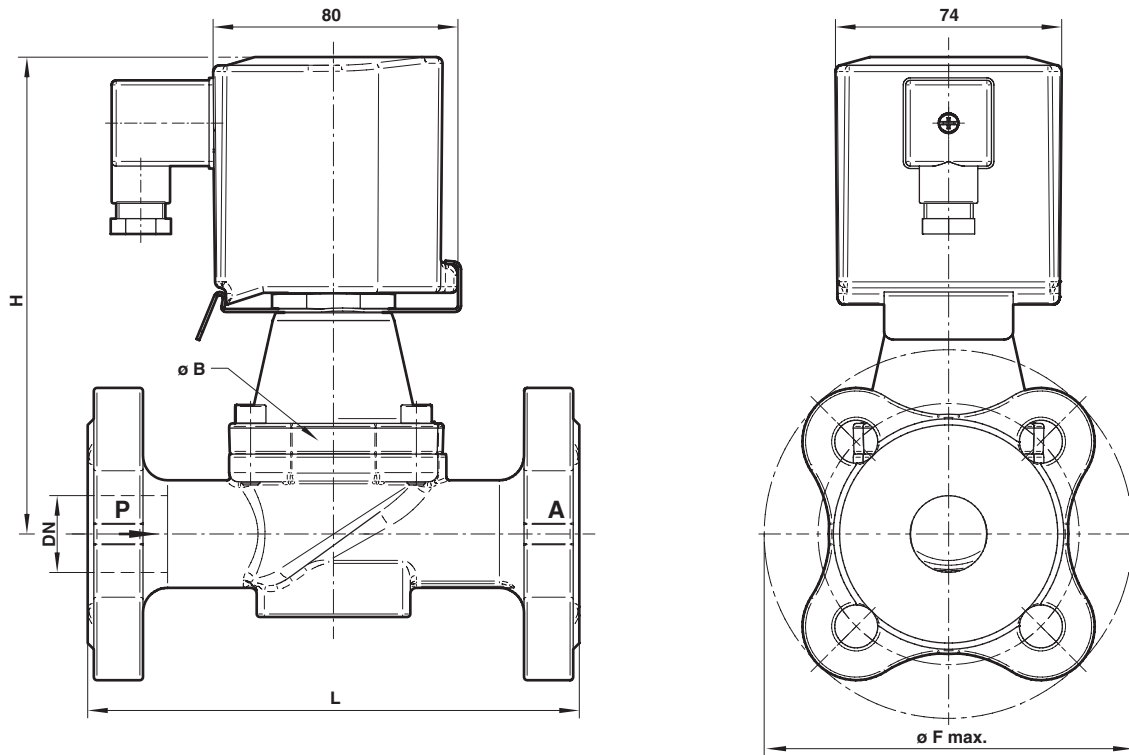
DN 32 ... 50


No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Straight pin
*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 Model No and Series No.

Dimensions
DN 15 ... 25

Dimensions in mm
Projection/First angle

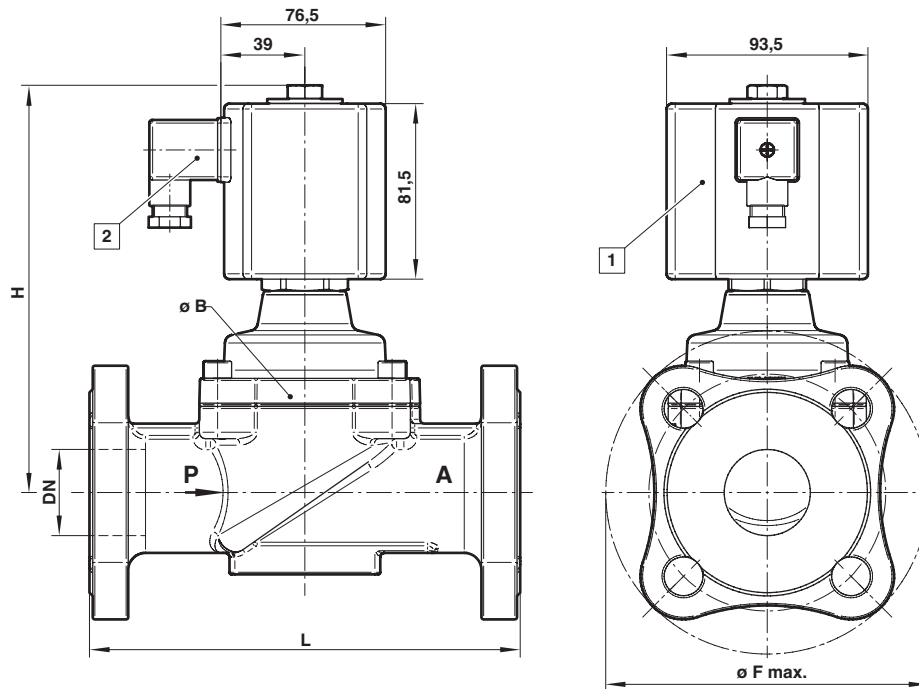


- 1 Socket rotatable 360°
- 2 Socket turnable 4 x 90°
(Socket included)

Orifice (mm)	ø B	ø F max.	H	L	Model
15	44	96	142	130	8550200.940x.xxxx
20	50	110	150	150	8550300.940x.xxxx
25	62	115	155	160	8550400.940x.xxxx

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

Dimensions
DN 32 ... 50

 Dimensions in mm
 Projection/First angle


- 1 Socket rotatable 360°
- 2 Socket turnable 4 x 90°
(Socket included)

Orifice (mm)	ø A	ø F max.	H	L	Model
32	92	140	184	180	8550500.840x.xxxxx
40	92	150	189	200	8550600.840x.xxxxx
50	109	165	197	230	8550700.840x.xxxxx

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 (G1), are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU (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 (G1) 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 (EMC):

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 2014/30/EU (2004/108/EG) satisfied.