

- > **Port size: DN 15 ... 50,**
Flange connection,
Pressure rating PN 40
- > **High flow rate**
- > **For robust industry solutions**
- > **Damped operation**
- > **Suitable for vacuum**
- > **Valve operates without differential pressure (Zero delta P)**
- > **Solenoid interchangeable without tools (Click-on®) up to DN 25**
- > **Fluids of Group 1 and 2 acc. Pressure Equipment Directive 97/23/EC**



Click-on®



Technical features

Medium:

Slightly aggressive 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)

Ambient temperature:

-20 ... +50°C (+4 ... +122°F)

Material:

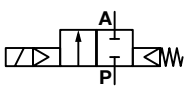
Body: Stainless steel (1.4408)

Seat seal: NBR

Internal parts: Stainless steel

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	8554200.9401.xxxxx	8554200.9404.xxxxx
	20	7	0 ... 25	4,2	8554300.9401.xxxxx	8554300.9404.xxxxx
	25	10,5	0 ... 25	4,8	8554400.9401.xxxxx	8554400.9404.xxxxx
	32	25	0 ... 25	9,6	8554500.8401.xxxxx	8554500.8404.xxxxx
	40	27	0 ... 25	10	8554600.8401.xxxxx	8554600.8404.xxxxx
	50	43	0 ... 25	11,5	8554700.8401.xxxxx	8554700.8404.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 mm³/s (cSt)

Option selector


8554***. *****

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 *1)	03
Seat seal PTFE, Fluid temperature -20 ... +110°C *1) 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, for hot water, Fluid temperature -20 ... +110°C	14
Normally open (NO), Seat seal FPM, Fluid temperature -10 ... +110°C Mounting position: Solenoid vertical on top *1), only with solenoid 8400	17
Max. operating pressure 40 bar	22
Electrical position indicator with 2 limit switches (Reed contact), 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 *1)	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
Version for drinking water on request	

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See 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 *3)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption Holding
024	00	24 V d.c.	-	38 W	38 W
024	49	24 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA
110	49	110 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA
120	49	120 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA
230	49	230 V a.c. *4)	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. *4)	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA
120	49	120 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA
230	49	230 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA

*3)  US coil only (With the exception of solenoid 94XX up to 41 V a.c.)
*4) A.c. only with rectifier plug

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.

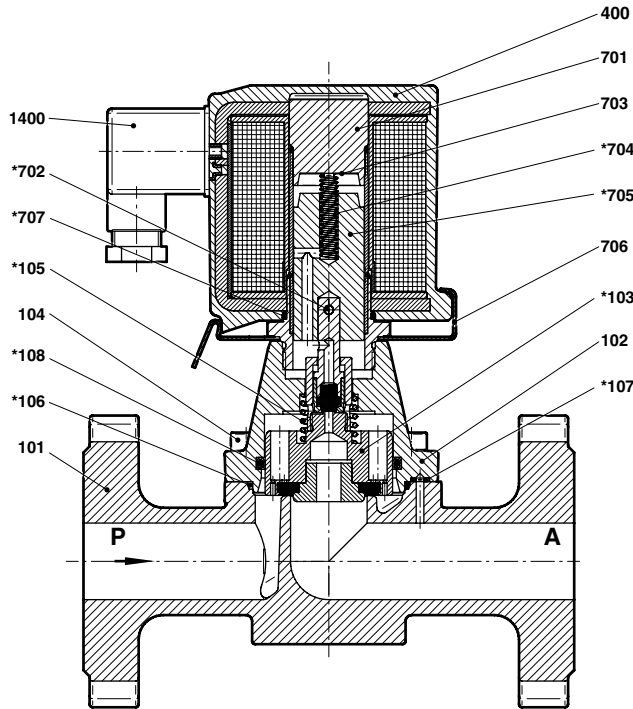


Additional solenoid systems

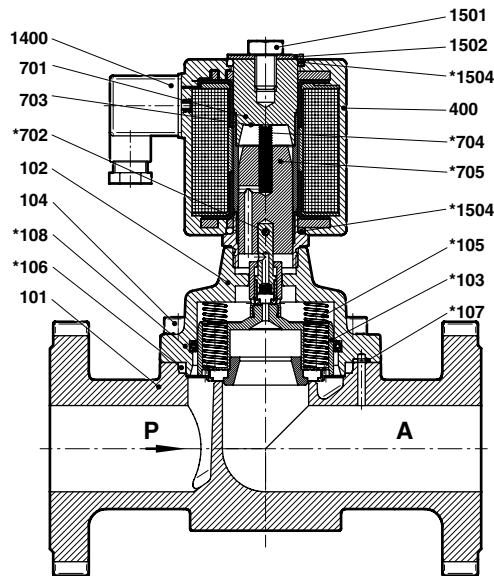
ATEX category	Protection class	Solenoid	Standard voltages
I12G	EEx me II T3 T 140°C	8441	24 V d.c., 110 V a.c., 230 V a.c.
I13G I13D	Ex II 3G Ex nA IIB T4 Gc Ex II 3D Ex tc IIB T130°C Dc IP65	9426 *2)	24 V d.c., 110 V a.c., 230 V a.c.
I13G I13D	Ex II 3G Ex nA IIB T4 Gc Ex II 3D Ex tc IIB T130°C Dc IP65	8426 *2)	24 V d.c., 110 V a.c., 230 V a.c.
I12GD	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.
*1) Up to max. +200°C fluid temperature with solenoid for higher temperature
*2) Only d.c., for a.c. solenoids with design inspection certificate acc. to category 2, e.g. 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


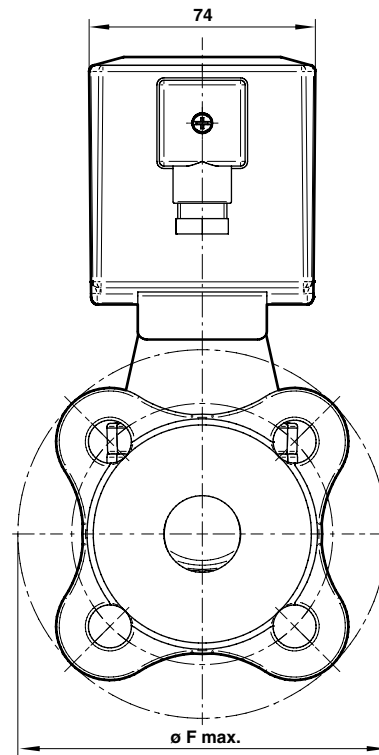
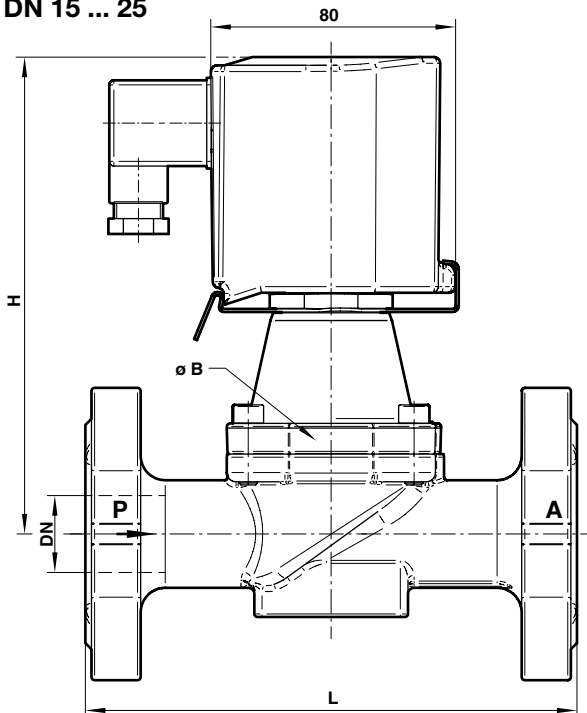
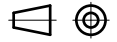
No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Straight pin
*105	Pressure spring (2x)
*106	Seal ring
*107	O-ring
*108	Grooved ring
400	Solenoid
701	Core tube
*702	Straight pin
703	Round plate
*704	Pressure spring
*705	Core
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
*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

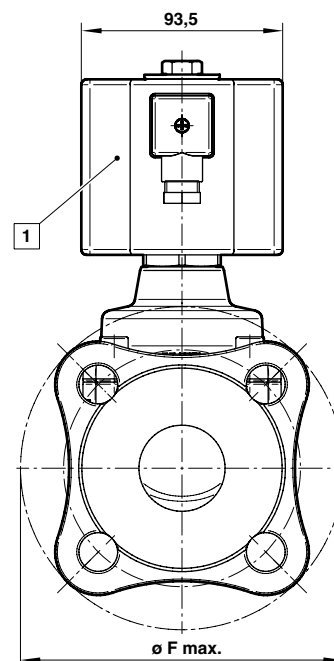
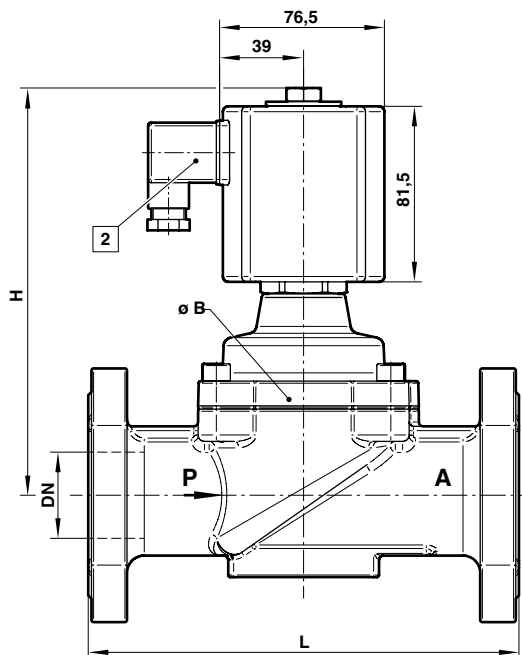


- 1 Socket rotatable 360°
- 2 Socket turnable 4 x 90° (Socket included)

Orifice (mm)	ø B	ø F max.	H	L	Model
15	44	96	142	130	8554200.940x.xxxxx
20	50	110	150	150	8554300.940x.xxxxx
25	62	115	155	160	8554400.940x.xxxxx

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

DN 32 ... 50



- 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	8554500.840x.xxxxx
40	92	150	189	200	8554600.840x.xxxxx
50	109	165	197	230	8554700.840x.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 (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.