

- > Port size: DN 15 ... DN 50
- > High flow rate
- > Damped operation
- > Functional compact design
- > Solenoid interchangeable without tools (*Click-on*)
- > Fluids of Group 2 acc. Pressure Equipment Directive 97/23/EC

Click-on®



Technical features

Medium:

Neutral gases and liquids

Switching function:

Normally closed

Operation:

Indirectly solenoid actuated

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 ... 10/16 bar (0 ... 145/232 psi)

Fluid temperature:

-10 ... +90°C (+14 ... +194°F)

Ambient temperature:

-10 ... +50°C (+14 ... +122°F)

Material:

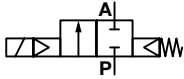
Body: Cast steel, Brass

Seat seal: NBR

Internal parts: Stainless steel, PVDF resp. Brass from DN 32

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
	15	3,8	0,1 ... 16	2,6	8303200.9101.xxxxx
	20	6,1	0,1 ... 16	2,8	8303300.9101.xxxxx
	25	9,5	0,1 ... 16	3,2	8303400.9101.xxxxx
	32	23	0,1 ... 10	5,8	8303500.9101.xxxxx
	32	23	0,1 ... 16	5,9	8303500.9151.xxxxx
	40	25	0,1 ... 10	6,1	8303600.9101.xxxxx
	40	25	0,1 ... 16	6,2	8303600.9151.xxxxx
	50	41	0,1 ... 10	8,4	8303700.9101.xxxxx
	50	41	0,1 ... 16	8,5	8303700.9151.xxxxx

xxxxx Please insert voltage and frequency codes

 *1) Cv-value (US) \approx kv value \times 1,2

*2) For gases and liquid fluids up to 25 mm²/s (cSt)

Option selector

8303★★★★★★.★★★★★★

Port size	Substitute
15	2
20	3
25	4
32	5
40	6
50	7
Valve options	Substitute
Normally open (NO), Operating pressure 0,1 ... 16 bar from DN 32 only with solenoid 9151	01
Manual override	02
Seat seal FPM, Fluid temperature -5 ... +110°C	03
Seat seal EPDM, for hot water, Fluid temperature -20 ... +110°C Operating pressure: up to DN 25: 0,3 ... 16 bar from DN 32: 0,3 ... 10 bar	14
Flanges acc.to ASME B 16.5 150 lb/sq.In.	47

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
up to DN 25 Operating pressure 0,1 ... 16 bar from DN 32 Operating pressure 0,1 ... 10 bar	9101
Operating pressure 0,1 ... 16 bar	9151

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *1)					
Code Voltage	Code Frequency	Voltage	Frequency	Inrush	Holding
024	00	24 V d.c.	-	8 W	8 W
024	50	24 V a.c.	50 Hz	15 VA	12 VA
110	50	110 V a.c.	50 Hz	15 VA	12 VA
120	60	120 V a.c.	60 Hz	15 VA	12 VA
230	50	230 V a.c.	50 Hz	15 VA	12 VA
Voltage and Frequency Solenoid 9151 *1)					
024	00	24 V d.c.	-	18 W	18 W
024	50	24 V a.c.	50 Hz	45 VA	35 VA
110	50	110 V a.c.	50 Hz	45 VA	35 VA
120	60	120 V a.c.	60 Hz	45 VA	35 VA
230	50	230 V a.c.	50 Hz	45 VA	35 VA

*1)  US coil only

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.

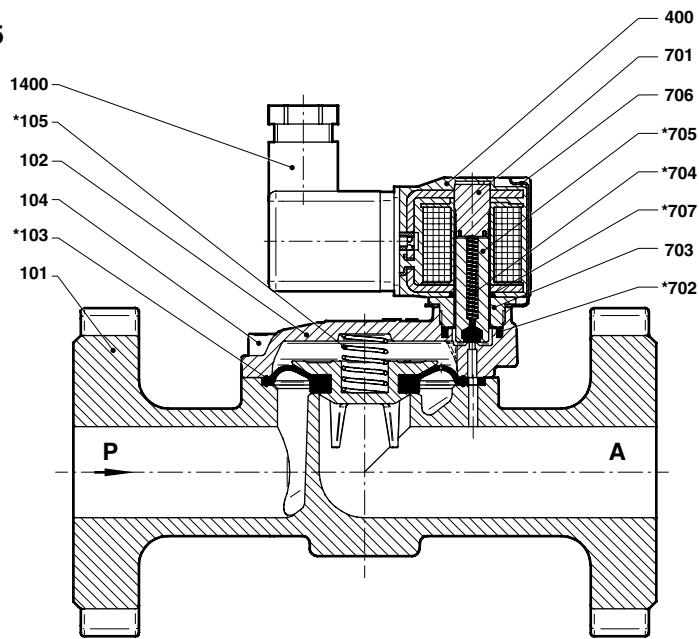


Additional solenoid systems

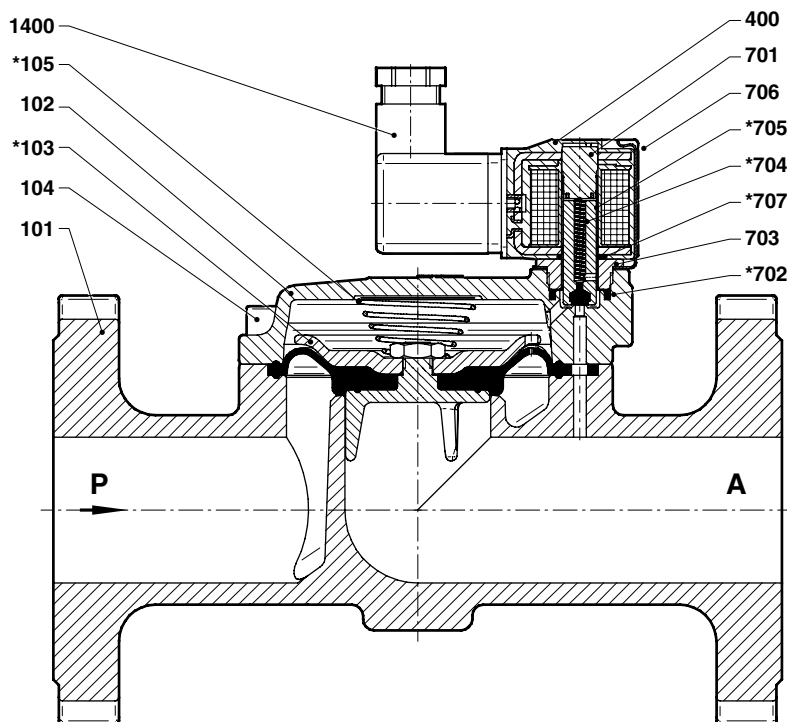
ATEX category	Protection class	Solenoid	Standard Voltages
II2GD	EEx m II T4 T 130°C with 3 m connection cable for d.c./a.c.	9136	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	EEx me II T4 T 140°C	9186	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	EEx md II C T4/T5 130°C with cable gland for d.c.	4682	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	EEx md II C T4/T5 130°C with cable gland for a.c.	4683	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.

**Section View
up to DN 25**


No.	Description
101	Valve body
102	Valve cover
*103	Diaphragm
104	Straight pin
*105	Pressure spring
400	Solenoid
701	Core tube
*702	O-ring
703	Screw piece
*704	Pressure spring
*705	Core
706	Spring clip
*707	O-ring
1400	Socket (included)

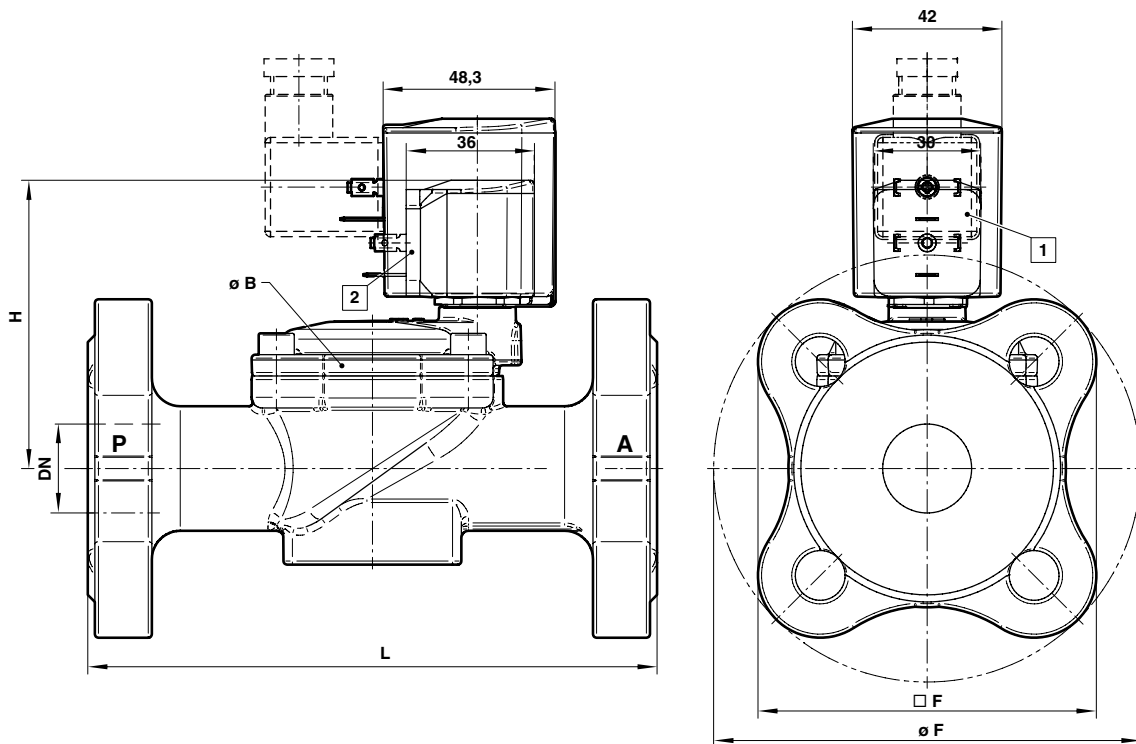
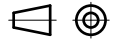
from DN 32


No.	Description
101	Valve body
102	Valve cover
*103	Diaphragm
104	Straight pin
*105	Pressure spring
400	Solenoid
701	Core tube
*702	O-ring
703	Screw piece
*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 Model No. and Series No.

Dimensions
DN 15 ... 50

Dimensions in mm
Projection/First angle



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

Orifice (mm)	ø B	ø F	F	H	L	Model
15	44	96	77	69	130	8303200.9101.xxxxx
20	50	110	86,6	77	150	8303300.9101.xxxxx
25	62	120	95,1	81	160	8303400.9101.xxxxx
32	92	140	110,7	97	180	8303500.9101.xxxxx
32	92	140	110,7	114	180	8303500.9151.xxxxx
40	92	150	117,8	102	200	8303600.9101.xxxxx
40	92	150	117,8	119	200	8303600.9151.xxxxx
50	109	165	128,4	113	230	8303700.9101.xxxxx
50	109	165	128,4	131	230	8303700.9151.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.