

- > Port size: DN 8 ... 50, G1/4 ... 2 (ISO G/NPT)
- > High flow rate
- > Damped operation
- > Functional compact design
- > Solenoid interchangeable without tools (Click-on®)
- > International approvals



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:

 G1/4, G3/8, G1/2, G3/4, G1, G1 1/4, G1 1/2, G2
 1/4 NPT, 3/8 NPT, 1/2 NPT
 3/4 NPT, 1 NPT, 1 1/4 NPT,
 1 1/2 NPT, 2 NPT

Operating pressure:

See table

Differential pressure:

0,1 bar (1,45 psi) required

Fluid temperature:

-10 ... +90°C (+14 ... +194°F)

Ambient temperature:

-10 ... +50°C (+14 ... +122°F)

Material:

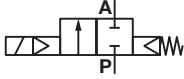
Body: Brass (CW617N)

Seat seal: NBR

Internal parts: Stainless steel, PVDF

For contaminated fluids insertion of a strainer is recommended.

Technical data – standard models

Symbol	Port size	Orifice	Valve length	Flow kv value *1)	Operating pressure *2)		Weight	Model
		(mm)	(mm)		(bar)	(psi)		
	G1/4	8	60	1,9	0,1 ... 16	1,45 ... 232	0,47	8240000.9101.xxxxx
	1/4 NPT	8	60	1,9	0,1 ... 16	1,45 ... 232	0,47	8241000.9101.xxxxx
	G3/8	10	60	3	0,1 ... 16	1,45 ... 232	0,45	8240100.9101.xxxxx
	3/8 NPT	10	60	3	0,1 ... 16	1,45 ... 232	0,45	8241100.9101.xxxxx
	G1/2	12	67	3,8	0,1 ... 16	1,45 ... 232	0,5	8240200.9101.xxxxx
	1/2 NPT	12	67	3,8	0,1 ... 16	1,45 ... 232	0,5	8241200.9101.xxxxx
	G3/4	20	80	6,1	0,1 ... 16	1,45 ... 232	0,65	8240300.9101.xxxxx
	3/4 NPT	20	80	6,1	0,1 ... 16	1,45 ... 232	0,65	8241300.9101.xxxxx
	G1	25	95	9,5	0,1 ... 16	1,45 ... 232	0,95	8240400.9101.xxxxx
	1 NPT	25	95	9,5	0,1 ... 16	1,45 ... 232	0,95	8241400.9101.xxxxx
	G1 1/4	32	132	23	0,1 ... 10 (16) *3)	1,45 ... 145 (232) *3)	2,73	8240500.9101.xxxxx
	1 1/4 NPT	32	132	23	0,1 ... 10 (16) *3)	1,45 ... 145 (232) *3)	2,73	8241500.9101.xxxxx
	G1 1/2	40	132	25	0,1 ... 10 (16) *3)	1,45 ... 145 (232) *3)	2,53	8240600.9101.xxxxx
	1 1/2 NPT	40	132	25	0,1 ... 10 (16) *3)	1,45 ... 145 (232) *3)	2,53	8241600.9101.xxxxx
	G2	50	160	41	0,1 ... 10 (16) *3)	1,45 ... 145 (232) *3)	3,85	8240700.9101.xxxxx
	2 NPT	50	160	41	0,1 ... 10 (16) *3)	1,45 ... 145 (232) *3)	3,85	8241700.9101.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2

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

*3) With Solenoid 9151

Option selector

824*****.*****

Thread form	Substitute
ISO G	0
NPT	1
Port size	Substitute
1/4	0
3/8	1
1/2	2
3/4	3
1	4
1 1/4	5
1 1/2	6
2	7
Valve options	Substitute
Normally open (NO), from G1 1/4 with solenoid 9151 0,1 ... 16 bar (1,45 ... 232 psi)	01
Manual override	02
Seat seal FPM, Fluid temperature -5 ... +110°C (+23 ... +230°F)	03
Seat seal EPDM, for hot water, max. fluid temperature +110°C (+230°F) 0,3 ... 16 bar (4,35 ... 232 psi) (up to G1)	14
0,3 ... 10 bar (4,35 ... 145 psi) (from G1 1/4)	
Latching system impuls time min. 30 ms only for d.c. 6 V, 12 V and 24 V	50
Version for drinking water with test according to KTW up to max. G1	88
Version for drinking water with test according to KTW/ NSF-approval Normally open (NO), up to G1 0,3 ... 16 bar (4,35 ... 232 psi)	89

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx
Solenoid options	Substitute
G1/4 ... 1 Operating pressure 0,1 ... 16 bar (1,45 ... 232 psi)	9101
G1 1/4 ... 2 Operating pressure 0,1 ... 10 bar (1,45 ... 145 psi)	9101
G1 1/4 ... 2 Operating pressure 0,1 ... 16 bar (1,45 ... 232 psi)	9151

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *4)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption 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 *4)					
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

*4)  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)

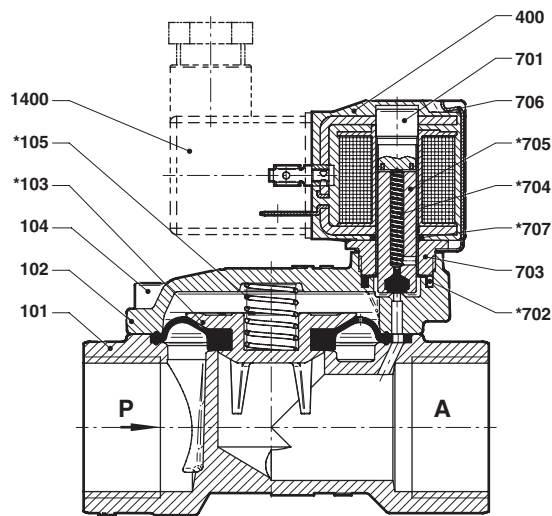
According to DIN VDE 0580 at a solenoid temperature of +20°C. At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Additional solenoid systems for hazardous areas

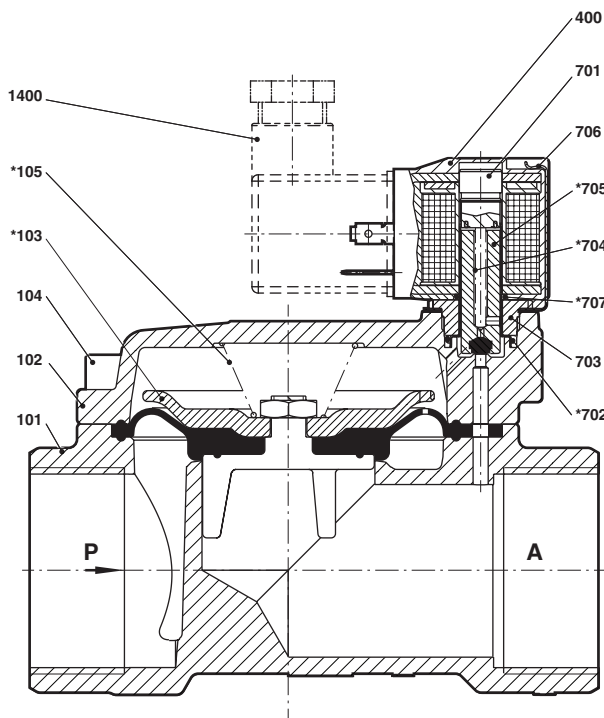
ATEX category	ATEX protection class	IP protection class	So-lenoid	Standard voltages
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6106	24 V DC, 110 V AC, 230 V AC
II 2G II 2D	Ex ec mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126 *5)	24 V DC, 110 V AC, 230 V AC
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc	IP65	9116	24 V DC, 110 V AC, 230 V AC
I 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc	IP65	9176	24 V DC, 110 V AC, 230 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. *5) from G1 1/4 / 1 1/4 NPT (16 bar)

Section View
G1/4 ... 1
1/4 ... 1 NPT


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

G1 1/4 ... 2
1 1/4 ... 2 NPT


No.	Description
101	Valve body
102	Valve cover
*103	Diaphragm
104	Allen head screw
*105	Pressure spring
400	Solenoid
701	Core tube
*702	O-ring
703	Screw piece
*704	Pressure spring
*705	Plunger
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.

