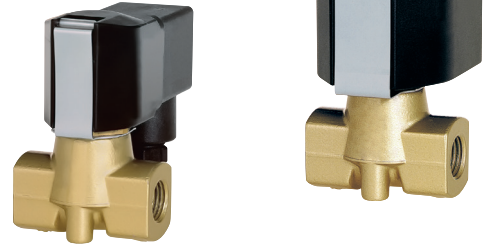


- > Port size: 1/8" ... 3/8" (ISO G/NPT)
- > Suitable for vacuum
- > High flow rate
- > Functional compact design
- > Body with M5 fastening thread as standard
- > Solenoid interchangeable without tools (*Click-on*)
- > Valve operates without pressure differential
- > International approvals

*Click-on*



### Technical features

**Medium:**  
Neutral gases and liquids

**Switching function:**  
Normally closed

**Operation:**  
Directly solenoid actuated

**Mounting position:**  
Optional, preferably solenoid vertical on top

**Flow direction:**  
Determined

**Port size:**  
G1/8, G1/4, G3/8  
1/8 NPT, 1/4 NPT, 3/8 NPT

**Operating pressure:**  
See table

**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, Brass

For contaminated fluids insertion of a strainer is recommended.

### Technical data - Standard models - Valves normally closed

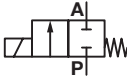
Symbol	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2)		Weight (kg)	Model Solenoid in V d.c. / a.c.
				(bar)	(psi)		
	G1/8	1,5	0,07	0 ... 25	0 ... 362	0,33	8251800.9101.xxxxx
	1/8 NPT	1,5	0,07	0 ... 25	0 ... 362	0,33	8252800.9101.xxxxx
	G1/4	1,5	0,07	0 ... 25	0 ... 362	0,33	8251000.9101.xxxxx
	1/4 NPT	1,5	0,07	0 ... 25	0 ... 362	0,33	8252000.9101.xxxxx
	G3/8	1,5	0,07	0 ... 25	0 ... 362	0,33	8251100.9101.xxxxx
	3/8 NPT	1,5	0,07	0 ... 25	0 ... 362	0,33	8252100.9101.xxxxx
	G1/8	1,5	0,07	0 ... 70	0 ... 1015	0,57	8251807.9151.xxxxx
	1/8 NPT	1,5	0,07	0 ... 70	0 ... 1015	0,57	8252807.9151.xxxxx
	G1/4	1,5	0,07	0 ... 70	0 ... 1015	0,57	8251007.9151.xxxxx
	1/4 NPT	1,5	0,07	0 ... 70	0 ... 1015	0,57	8252007.9151.xxxxx
	G3/8	1,5	0,07	0 ... 70	0 ... 1015	0,57	8251107.9151.xxxxx
	3/8 NPT	1,5	0,07	0 ... 70	0 ... 1015	0,57	8252107.9151.xxxxx
	G1/8	2,5	0,15	0 ... 10	0 ... 1015	0,33	8251820.9101.xxxxx
	1/8 NPT	2,5	0,15	0 ... 10	0 ... 1015	0,33	8252820.9101.xxxxx
	G1/4	2,5	0,15	0 ... 10	0 ... 1015	0,33	8251020.9101.xxxxx
	1/4 NPT	2,5	0,15	0 ... 10	0 ... 1015	0,33	8252020.9101.xxxxx
	G3/8	2,5	0,15	0 ... 10	0 ... 1015	0,33	8251120.9101.xxxxx
	3/8 NPT	2,5	0,15	0 ... 10	0 ... 1015	0,33	8252120.9101.xxxxx
	G1/8	2,5	0,15	0 ... 40	0 ... 580	0,57	8251820.9151.xxxxx
	1/8 NPT	2,5	0,15	0 ... 40	0 ... 580	0,57	8252820.9151.xxxxx
	G1/4	2,5	0,15	0 ... 40	0 ... 580	0,57	8251020.9151.xxxxx
	1/4 NPT	2,5	0,15	0 ... 40	0 ... 580	0,57	8252020.9151.xxxxx
	G3/8	2,5	0,15	0 ... 40	0 ... 580	0,57	8251120.9151.xxxxx
	3/8 NPT	2,5	0,15	0 ... 40	0 ... 580	0,57	8252120.9151.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)

**Technical data - Standard models - Valves normally closed**

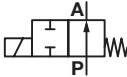
Symbol	Port size	Orifice (mm)	Flow kv value *3) (m³/h)	Operating pressure *4) (bar) (psi)		Weight (kg)	Typ Solenoid in V d.c. /a.c.
	G1/8	3	0,21	0 ... 4	0 ... 58	0,33	8251840.9101.xxxxx
	1/8 NPT	3	0,21	0 ... 4	0 ... 58	0,33	8252840.9101.xxxxx
	G1/4	3	0,21	0 ... 4	0 ... 58	0,33	8251040.9101.xxxxx
	1/4 NPT	3	0,21	0 ... 4	0 ... 58	0,33	8252040.9101.xxxxx
	G3/8	3	0,21	0 ... 4	0 ... 58	0,33	8251140.9101.xxxxx
	3/8 NPT	3	0,21	0 ... 4	0 ... 58	0,33	8252140.9101.xxxxx
	G1/8	3	0,21	0 ... 20	0 ... 290	0,57	8251840.9151.xxxxx
	1/8 NPT	3	0,21	0 ... 20	0 ... 290	0,57	8252840.9151.xxxxx
	G1/4	3	0,21	0 ... 20	0 ... 290	0,57	8251040.9151.xxxxx
	1/4 NPT	3	0,21	0 ... 20	0 ... 290	0,57	8252040.9151.xxxxx
	G3/8	3	0,21	0 ... 20	0 ... 290	0,57	8251140.9151.xxxxx
	3/8 NPT	3	0,21	0 ... 20	0 ... 290	0,57	8252140.9151.xxxxx
	G1/8	4	0,35	0 ... 12	0 ... 174	0,57	8251860.9151.xxxxx
	1/8 NPT	4	0,35	0 ... 12	0 ... 174	0,57	8252860.9151.xxxxx
	G1/4	4	0,35	0 ... 12	0 ... 174	0,57	8251060.9151.xxxxx
	1/4 NPT	4	0,35	0 ... 12	0 ... 174	0,57	8252060.9151.xxxxx
	G3/8	4	0,35	0 ... 12	0 ... 174	0,57	8251160.9151.xxxxx
	3/8 NPT	4	0,35	0 ... 12	0 ... 174	0,57	8252160.9151.xxxxx
	G1/8	5	0,5	0 ... 6	0 ... 87	0,57	8251880.9151.xxxxx
	1/8 NPT	5	0,5	0 ... 6	0 ... 87	0,57	8252880.9151.xxxxx
G1/4	5	0,5	0 ... 6	0 ... 87	0,57	8251080.9151.xxxxx	
1/4 NPT	5	0,5	0 ... 6	0 ... 87	0,57	8252080.9151.xxxxx	
G3/8	5	0,5	0 ... 6	0 ... 87	0,57	8251180.9151.xxxxx	
3/8 NPT	5	0,5	0 ... 6	0 ... 87	0,57	8252180.9151.xxxxx	

xxxxx Please insert voltage and frequency codes

\*3) Cv-value (US) ≈ kv value x 1,2

\*4) For gases and liquid fluids up to 25 mm²/s (cSt)

**Technical data - Standard models - Valves normally open**

Symbol	Port size	Orifice (mm)	Flow kv value *5) (m³/h)	Operating pressure *6) (bar)		Weight (kg)	Model Solenoid in V d.c. / a.c.
	G1/4	1,5	0,07	0 ... 16	0 ... 232	0,33	8251001.9101.xxxxx
	1/4 NPT	1,5	0,07	0 ... 16	0 ... 232	0,33	8252001.9101.xxxxx
	G1/4	2,5	0,15	0 ... 6	0 ... 87	0,33	8251021.9101.xxxxx
	1/4 NPT	2,5	0,15	0 ... 6	0 ... 87	0,33	8252021.9101.xxxxx
	G1/4	2,5	0,15	0 ... 25	0 ... 362	0,57	8251021.9151.xxxxx
	1/4 NPT	2,5	0,15	0 ... 25	0 ... 362	0,57	8252021.9151.xxxxx
	G1/4	3	0,21	0 ... 3	0 ... 43	0,33	8251041.9101.xxxxx
	1/4 NPT	3	0,21	0 ... 3	0 ... 43	0,33	8252041.9101.xxxxx
	G1/4	3	0,21	0 ... 16	0 ... 232	0,57	8251041.9151.xxxxx
	1/4 NPT	3	0,21	0 ... 16	0 ... 232	0,57	8252041.9151.xxxxx
	G1/4	4	0,35	0 ... 8	0 ... 116	0,57	8251061.9151.xxxxx
	1/4 NPT	4	0,35	0 ... 8	0 ... 116	0,57	8252061.9151.xxxxx

xxxxx Please insert voltage and frequency codes

\*5) Cv-value (US) ≈ kv value x 1,2

\*6) For gases and liquid fluids up to 25 mm²/s (cSt)

**Option selector**
**825\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\***

Thread form	Substitute
ISO G	1
NPT	2
Port size	Substitute
1/8"	8
1/4"	0
3/8"	1
Valve options	Substitute
Normally closed (NC), DN 1,5 Operating pressure 0 ... 25 bar (with solenoid 9101)	00
Normally open (NO), DN 1,5 Operating pressure 0 ... 16 bar (with solenoid 9101)	01
Normally closed (NC), DN 1,5 Operating pressure 0 ... 70 bar (with solenoid 9151)	07
Normally closed (NC), DN 2,5 Operating pressure 0 ... 10 bar (with solenoid 9101)	20
Normally closed (NC), DN 2,5 Operating pressure 0 ... 40 bar (with solenoid 9151)	20
Normally open (NO), DN 2,5 Operating pressure 0 ... 6 bar (with solenoid 9101)	21
Normally open (NO), DN 2,5 Operating pressure 0 ... 25 bar (with solenoid 9151)	21
Normally closed (NC), DN 3 Operating pressure 0 ... 4 bar (with solenoid 9101)	40
Normally closed (NC), DN 3 Operating pressure 0 ... 20 bar (with solenoid 9151)	40
Normally open (NO), DN 3 Operating pressure 0 ... 3 bar (with solenoid 9101)	41
Normally open (NO), DN 3 Operating pressure 0 ... 16 bar (with solenoid 9151)	41
Normally closed (NC), DN 4 Operating pressure 0 ... 12 bar (with solenoid 9151)	60
Normally open (NO), DN 4 Operating pressure 0 ... 8 bar (with solenoid 9151)	61
Normally closed (NC), DN 5 Operating pressure 0 ... 6 bar (with solenoid 9151)	80

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
Solenoid 9101	9101
Solenoid 9151	9151

**Standard solenoid systems**

Voltage and Frequency Solenoid 9101 *7)					
Code	Code	Voltage	Frequency	Power consumption	
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 *7)					
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

**Electrical details for all solenoid systems**

<b>Design</b>	DIN VDE 0580
<b>Voltage range</b>	±10%
<b>Duty cycle</b>	100% ED
<b>Protection class</b>	EN 60529 IP65
<b>Socket</b>	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.

**Further versions on request!**

\*7)  US coil only

### Standard solenoid systems

Voltage and Frequency Solenoid 9101 *7)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				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 *7)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
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

\*7)  US coil only

### 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.

Further versions on request!

### Additional solenoid systems for hazardous areas

ATEX category	ATEX protection class	IP protection class	Solenoid	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 eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126 *8)	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!

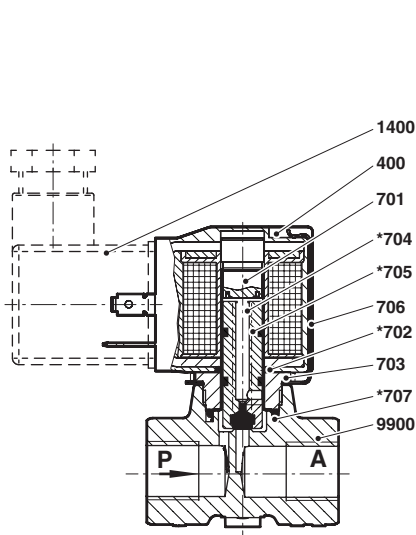
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

\*8) from G1 1/4 / 1 1/4 NPT (16 bar)

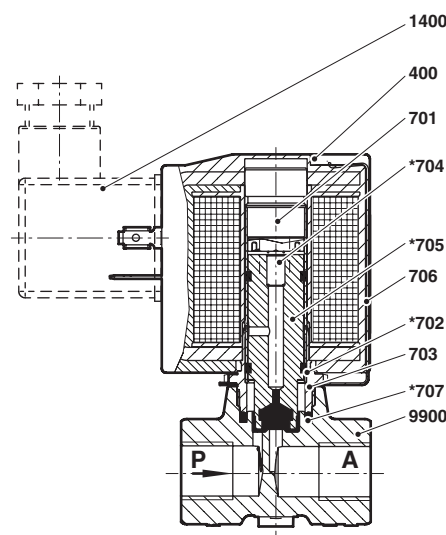
### Section view

G1/8 ... 3/8

Solenoid 9101



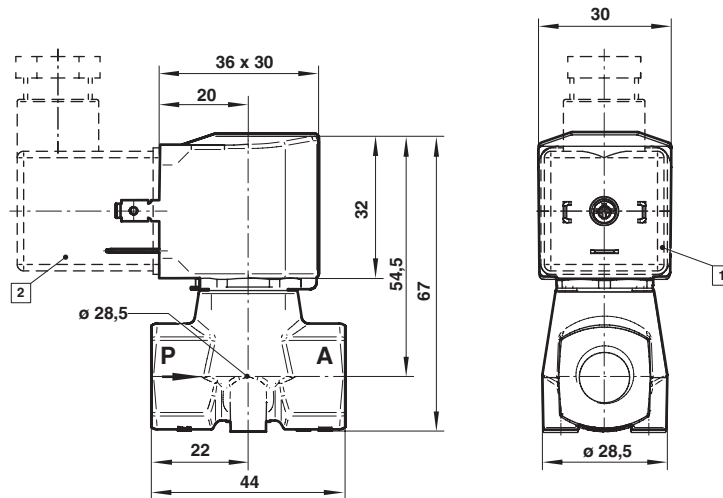
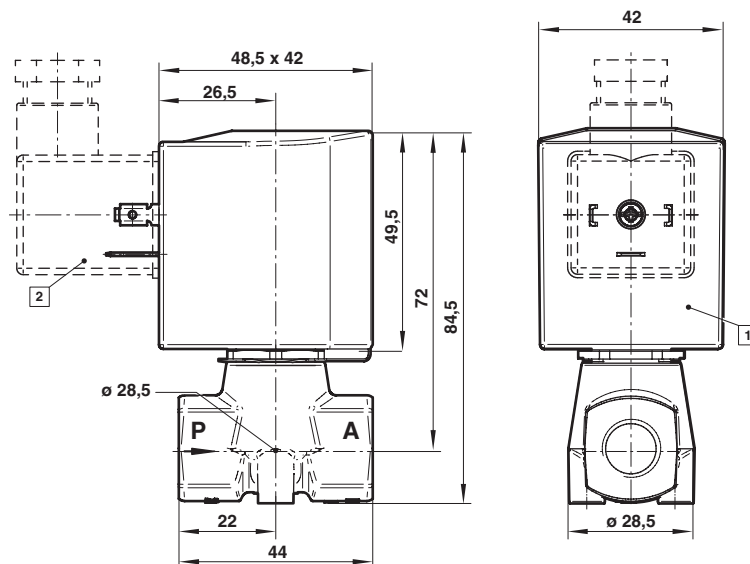
Solenoid 9151



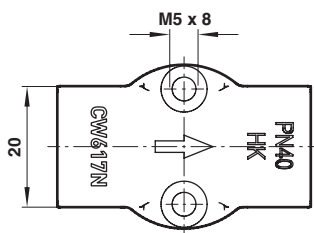
No.	Description
400	Solenoid
701	Core tube
702	O-ring
703	Screw piece
*704	Pressure spring
*705	Plunger
706	Spring clip
*707	O-ring
1400	Socket (included)
9900	Valve body

\* These individual parts form a complete wearing unit.  
When ordering spare parts please state Model No. and Series No.

**Dimensions**
**Solenoid 9101**

 Dimensions in mm  
 Projection/First angle

**Solenoid 9151**


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


**Note to Pressure Equipment Directive (PED):**

The valves of this series up to and including DN 25 (G1) are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice wellknown in the member countries. The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

**For valves > DN 25 (G1) Art. 4 § (1) Letter d) 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 (2014/30/EU) satisfied.

**Note to EAC marking:**

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.