- **Port size: DN 8 ... 25, G1/4 ... 1 (DIN ISO 228/1)**
- **Qualification approval EN 161:2011 and EN ISP 23553-1**
- **Short response time < 1 s**
- **Valve operates without differential pressure**

Technical features

Medium:
Neutral gases and liquid fuels
Switching function:
Normally closed
Operation:
Solenoid actuated,
with forced lifting
Mounting position:
Optional, preferably solenoid vertical on top

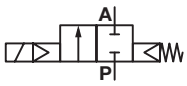
Flow direction:
Determined
Port size:
G1/4, G3/8, G1/2, G3/4, G1
Operating pressure:
0 … 8 bar (0 ... 116 psi)

Fluid temperature:
0° ... +60°C (+32° ... +140°F)
Ambient temperature:
0° ... +60°C (+32° ... +140°F)
EC-Type Examination:
Certificate product ID-No.:
CE-0085CN0205
valve class A: G1/4 ... 3/4;
B: G1; valve group 2

Material:
Body: Brass (CW617N)
Seat seal: NBR-G
Internal parts: Stainless steel, Brass

Strainer (with maximum mesh size of 0.25 mm) is necessary upstream of the valve.

Technical data - standard models

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m^3/h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	G1/4	8	1,1	0 ... 8	0,8	8209000.9178.xxxxx	8209000.9179.xxxxx
	G3/8	10	2,3	0 ... 8	0,8	8209100.9178.xxxxx	8209100.9179.xxxxx
	G1/2	12	2,6	0 ... 8	0,9	8209200.9178.xxxxx	8209200.9179.xxxxx
	G3/4	20	5,4	0 ... 8	1	8209300.9178.xxxxx	8209300.9179.xxxxx
	G1	25	5,8	0 ... 8	1,3	8209400.9178.xxxxx	8209400.9179.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 mm^2/s (cSt)

Option selector

8209★00.★★★★.★★★★★

Thread form	Substitute
1/4"	0
3/8"	1
1/2"	2
3/4"	3
1"	4

Frequency	Substitute
See table frequency codes	xx
Voltage	**Substitute**
See Voltage codes	xxx
Solenoid options	**Substitute**
24 ... 120 V	9178
121 ... 250 V	9179

Solenoid 917x

Frequency

Solenoid 9178: 24 ... 120 V

Solenoid 9179: 121 ... 250 V

Standard solenoid sytems

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption Holding
Voltage and Frequency Solenoid 9178 *1)					
024	00	24 V d.c.	-	18 W	18 W
024	49	24 V a.c. *2)	40 ... 60 Hz	20 VA	20 VA
110	49	110 V a.c. *2)	40 ... 60 Hz	20 VA	20 VA
Voltage and Frequency Solenoid 9179 *1)					
230	49	230 V a.c. *2)	40 ... 60 Hz	20 VA	20 VA

*1) c SP us coil only
*2) 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.

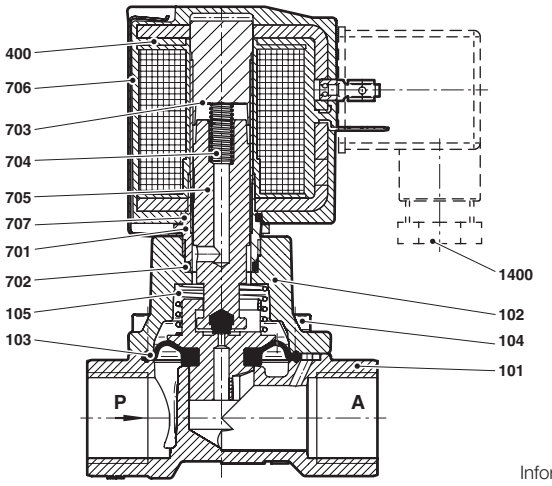
Additional solenoid systems

ATEX category	Protection class	Solenoid	Standard voltages
II2GD	EEx me II T3 T 140°C	9191	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

G1/4 ... 1



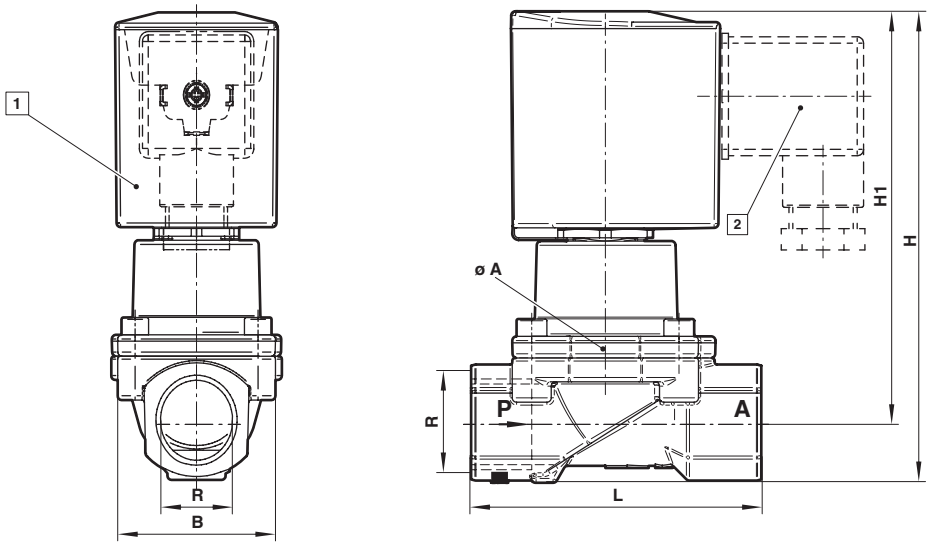
Nr.	Description
101	Valve body
102	Valve cover
103	Diaphragm
104	Allen head screw
105	Pressure spring
400	Solenoid
701	Core tube
702	O-ring
703	Round plate
704	Pressure spring
705	Plunger
706	Spring clip
707	O-ring
1400	Socket (included)

Information concerning expendable parts:
The valves have been prototype tested.
Expendable parts can only be replaced by the manufacturer.

Dimensions

G1/4 ... 1

Dimensions in mm
Projection/First angle



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

Port size R	A	H	H1	L	Model
G1/4	44	104	92,5	60	8209000.917x.xxxxx
G3/8	44	104	92,5	60	8209100.917x.xxxxx
G1/2	44	108	94,5	67	8209200.917x.xxxxx
G3/4	50	115	99	80	8209300.917x.xxxxx
G1	62	124	103,5	95	8209400.917x.xxxxx

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) satisfield.