

- Compact build piston valve**
- Functional design**
- High flow rate**
- Damped operation via cone**
- Piston guided in PTFE rings**
- Long lifetime**
- Solenoid interchangeable without tools (*Click-on*<sup>®</sup>)**



### Technical features

**Medium:**

Neutral gases and liquids

**Switching function:**

Normally closed

**Operation:**

Indirectly solenoid actuated

**Mounting:**

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:**

0,5 ... 40 bar

**Fluid temperature:**

-20 ... +90°C

**Ambient temperature:**

-20 ... +50°C

**Materials:**

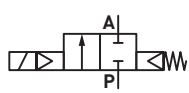
Body: Brass (CW617N)

Seat seal: NBR

Internal parts: Stainless steel,  
Brass, PTFE/Carbon

For contaminated fluids insertion  
of a strainer is recommended.

### Technical data - standard models

Symbol	Port size	Orifice (mm)	Flow kv value *1 (m³/h)	Operating pressure *2 (bar)	Weight (kg)	Model Solenoid in d.c./a.c.
	G1/4	8	2,2	0,5 ... 40	0,83	8536000.9151.xxxxx
	1/4 NPT	8	2,2	0,5 ... 40	0,83	8537000.9151.xxxxx
	G3/8	10	3,4	0,5 ... 40	0,82	8536100.9151.xxxxx
	3/8 NPT	10	3,4	0,5 ... 40	0,82	8537100.9151.xxxxx
	G1/2	12	4,4	0,5 ... 40	0,85	8536200.9151.xxxxx
	1/2 NPT	12	4,4	0,5 ... 40	0,85	8537200.9151.xxxxx
	G3/4	20	7	0,5 ... 40	1,25	8536300.9151.xxxxx
	3/4 NPT	20	7	0,5 ... 40	1,25	8537300.9151.xxxxx
	G1	25	10,5	0,5 ... 40	1,7	8536400.9151.xxxxx
	1 NPT	25	10,5	0,5 ... 40	1,7	8537400.9151.xxxxx
	G1 1/4	32	25	0,5 ... 40	4,1	8536500.9151.xxxxx
	1 1/4 NPT	32	25	0,5 ... 40	4,1	8537500.9151.xxxxx
	G1 1/2	40	27	0,5 ... 40	3,85	8536600.9151.xxxxx
	1 1/2 NPT	40	27	0,5 ... 40	3,85	8537600.9151.xxxxx
	G2	50	43	0,5 ... 40	5,6	8536700.9151.xxxxx
	2 NPT	50	43	0,5 ... 40	5,6	8537700.9151.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)

Option selector

853★ ★ ★ ★ .9151. ★ ★ ★ ★

Thread form	Substitute
ISO G	6
NPT	7
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), up to DN 25: Operating pressure 0,5 ... 35 bar from DN 32: Operating pressure 0,5 ... 25 bar	01
Manual override	02
Seat seal FPM, Fluid temperature -10 ... +110°C	03
Seat seal PTFE, Fluid temperature -10 ... +110°C, Operating pressure 1 ... 25 bar	06
Seat seal EPDM, for hot water, Fluid temperature -20 ... +110°C	14

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx

Standard solenoid systems

Voltage and Frequency Solenoid 9151 *1)					
Code	Code	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

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

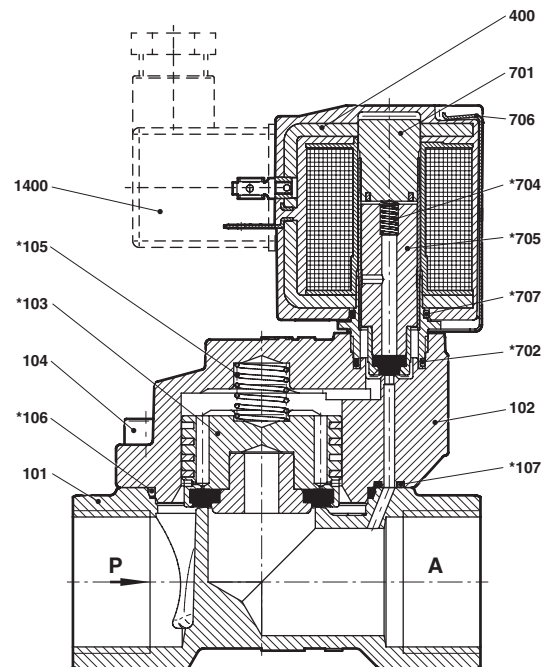
ATEX category	Protection class	Solenoid	Standard voltages
II3GD	Ex nA II T4 Ex tD A22 IP65 T 135°C	9176	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	Ex me II T4 T 110°C	9186	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	Ex dmb IIC T4/T5 Ex tD A21 IP66 T 130°C up to DN 25: Operating pressure 0,5 ... 16 bar from DN 32: Operating pressure 0,5 ... 10 bar	468x	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) US coil only

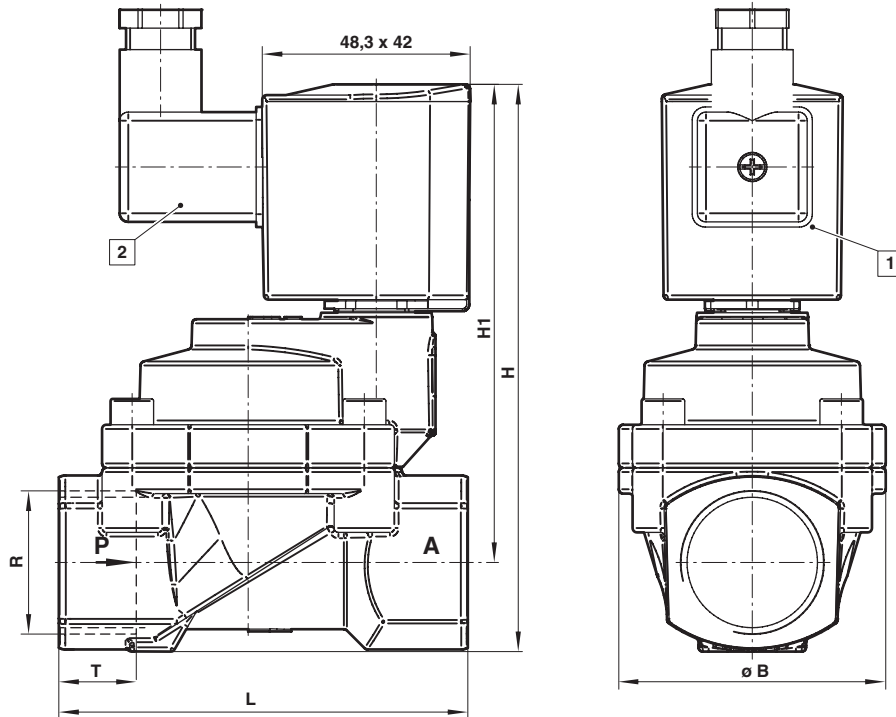
Further versions on request!

**Section View**
**G1/4 ... 2**
**1/4 ... 2 NPT**


No.	Description
101	Valve body
102	Valve cover
*103	Valve plate
104	Allen head screw
*105	Pressure spring
*106	Gasket
*107	O-ring / gasket
400	Solenoid
701	Core tube
*702	O-ring
*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.

**Dimensions**
**G1/4 ... 2**
**1/4 ... 2 NPT**


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

Port size R	ø B	H	H1	L	T	Model
G1/4	44	105	93,5	60	12	8536000.9151.xxxxx
1/4 NPT	44	105	93,5	60	12	8537000.9151.xxxxx
G3/8	44	105	93,5	60	12	8536100.9151.xxxxx
3/8 NPT	44	105	93,5	60	12	8537100.9151.xxxxx
G1/2	44	107,5	102,5	67	14	8536200.9151.xxxxx
1/2 NPT	44	107,5	102,5	67	14	8537200.9151.xxxxx
G3/4	50	119	102,5	80	16	8536300.9151.xxxxx
3/4 NPT	50	119	102,5	80	16	8537300.9151.xxxxx
G1	62	131,5	110,5	95	18	8536400.9151.xxxxx
1 NPT	62	131,5	110,5	95	18	8537400.9151.xxxxx
G 1 1/4	92	166	137	132	20	8536500.9151.xxxxx
1 1/4 NPT	92	166	137	132	20	8537500.9151.xxxxx
G1 1/2	92	166	137	132	22	8536600.9151.xxxxx
1 1/2 NPT	92	166	137	132	22	8537600.9151.xxxxx
G2	109	186	151,5	160	24	8536700.9151.xxxxx
2 NPT	109	186	151,5	160	24	8537700.9151.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) satisfied.