

- > Port size: DN 8 ... 50, 1/4 ... 2 (ISO G/NPT)
- > High flow rate
- > For robust industry solutions
- > Damped operation
- > Suitable for vacuum
- > For systems with low or fluctuating pressure
- > Valve operates without differential pressure
- > Solenoid interchangeable without tools (*Click-on*)
- > International approvals



### Technical features

**Medium:**  
Slightly aggressive gases and liquids

**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, 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

**Fluid temperature:**  
-10 ... +90°C (+14° ... +194°F)

**Ambient temperature:**  
-10 ... +50°C (+14° ... +122°F)

**Material:**  
Body: Stainless steel (1.4408)  
Seat seal: NBR-K  
Internal parts: Stainless steel, PVDF

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) (psi)		Weight (kg)	Model Solenoid V d.c.	Model Solenoid V a.c.
	G1/4	8	1,9	0 ... 10	0 ... 145	0,7	8259000.9151.xxxxx	8259000.9154.xxxxx
	1/4 NPT	8	1,9	0 ... 10	0 ... 145	0,7	8449000.9151.xxxxx	8449000.9154.xxxxx
	G3/8	10	3	0 ... 10	0 ... 145	0,7	8259100.9151.xxxxx	8259100.9154.xxxxx
	3/8 NPT	10	3	0 ... 10	0 ... 145	0,7	8449100.9151.xxxxx	8449100.9154.xxxxx
	G1/2	12	3,4	0 ... 10	0 ... 145	0,8	8259200.9151.xxxxx	8259200.9154.xxxxx
	1/2 NPT	12	3,4	0 ... 10	0 ... 145	0,8	8449200.9151.xxxxx	8449200.9154.xxxxx
	G3/4	20	5,8	0 ... 10	0 ... 145	0,9	8259300.9151.xxxxx	8259300.9154.xxxxx
	3/4 NPT	20	5,8	0 ... 10	0 ... 145	0,9	8449300.9151.xxxxx	8449300.9154.xxxxx
	G1	25	8	0 ... 10	0 ... 145	1,3	8259400.9151.xxxxx	8259400.9154.xxxxx
	1 NPT	25	8	0 ... 10	0 ... 145	1,3	8449400.9151.xxxxx	8449400.9154.xxxxx
	G1 1/4	32	23	0 ... 16	0 ... 232	4,3	8259500.9401.xxxxx	8259500.9404.xxxxx
	1 1/4 NPT	32	23	0 ... 16	0 ... 232	4,3	8449500.9401.xxxxx	8449500.9404.xxxxx
	G1 1/2	40	25	0 ... 16	0 ... 232	4,1	8259600.9401.xxxxx	8259600.9404.xxxxx
	1 1/2 NPT	40	25	0 ... 16	0 ... 232	4,1	8449600.9401.xxxxx	8449600.9404.xxxxx
	G2	50	41	0 ... 16	0 ... 232	5,1	8259700.9401.xxxxx	8259700.9404.xxxxx
	2 NPT	50	41	0 ... 16	0 ... 232	5,1	8449700.9401.xxxxx	8449700.9404.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)

G1/4 ... G1 resp. 1/4 NPT ... 1 NPT max. 16 bar on request



### Standard solenoid systems

#### Voltage and Frequency Solenoid 9151/9154 \*3)

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	18 W	18 W
024	49	24 V a.c. *4)	40 ... 60 Hz	20 VA	20 VA
110	49	110 V a.c. *4)	40 ... 60 Hz	20 VA	20 VA
120	49	120 V a.c. *4)	40 ... 60 Hz	20 VA	20 VA
230	49	230 V a.c. *4)	40 ... 60 Hz	20 VA	20 VA

#### Voltage and Frequency Solenoid 9301/9304 \*3)

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	18 W	18 W
024	49	24 V a.c. *4)	50 Hz	20 VA	20 Hz
110	49	110 V a.c. *4)	50 Hz	20 VA	20 Hz
120	49	120 V a.c. *4)	60 Hz	20 VA	20 Hz
230	49	230 V a.c. *4)	50 Hz	20 VA	20 Hz

#### Voltage and Frequency Solenoid 9401/9404 \*3)

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	38 W	38 W
024	49	24 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA
110	49	110 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA
120	49	120 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA
230	49	230 V a.c. *4)	40 ... 60 Hz	42 VA	42 VA

#### Voltage and Frequency Solenoid 8401/8404

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	40 W	40 W
024	49	24 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA
120	49	120 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA
230	49	230 V a.c. *4)	40 ... 60 Hz	45 VA	45 VA



\*3) c<sub>US</sub> only (with the exception of solenoid 94xx up to 41 V a.c.)

\*4) A.c. only with rectifier plug

\*5) d.c. only, for a.c. solenoids with design inspection certificate acc. to category 2, e. g. 6120 or 6240

Further versions on request!

### 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.

### Additional solenoid systems for hazardous areas

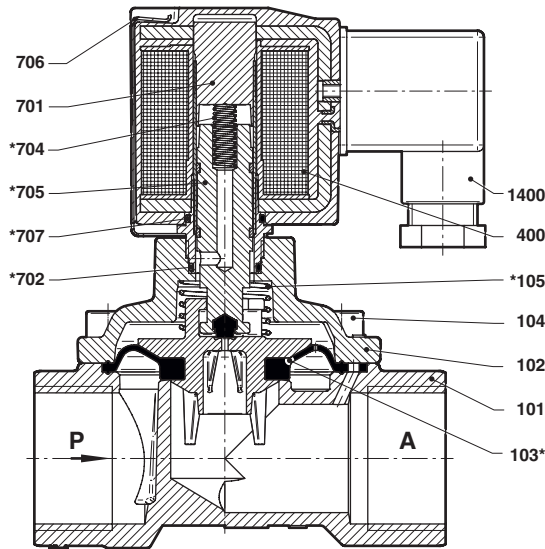
ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	8426 *5)	24 V d.c.
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	9176 *5)	24 V d.c.
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	9426 *5)	24 V d.c.
II 2G II 2D	Ex eb mb IIC T3 Gb Ex mb tb IIIB T140°C Db	IP66	6120	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T3 Gb Ex mb tb IIIB T140°C Db	IP66	6240	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.

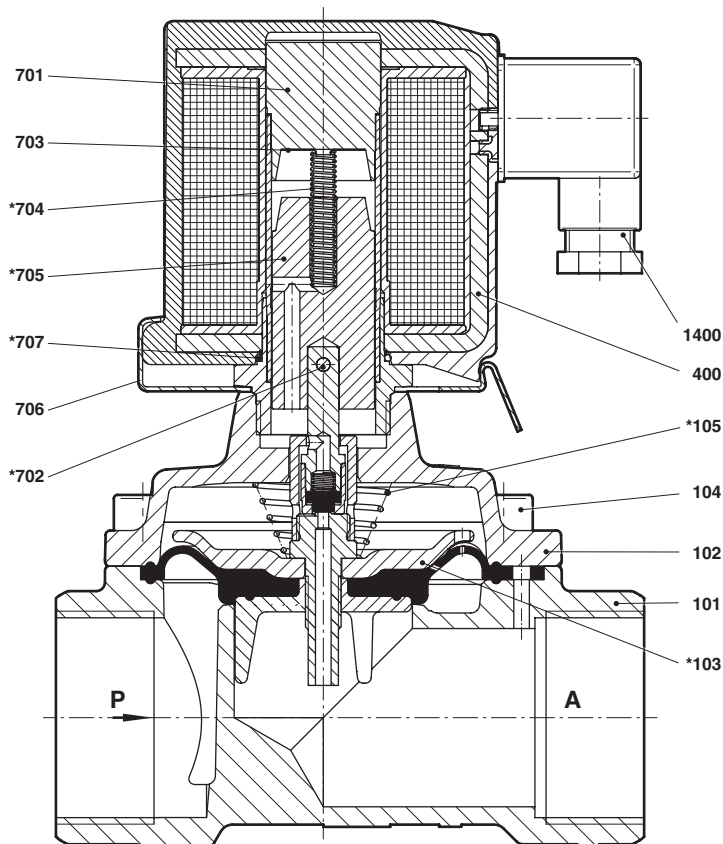
**Section View**

**G1/4 ... 1**  
**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
*704	Pressure spring
*705	Core
706	Spring clip
*707	O-ring
1400	Socket (included)

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



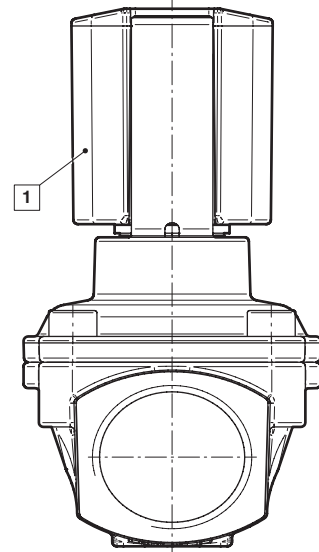
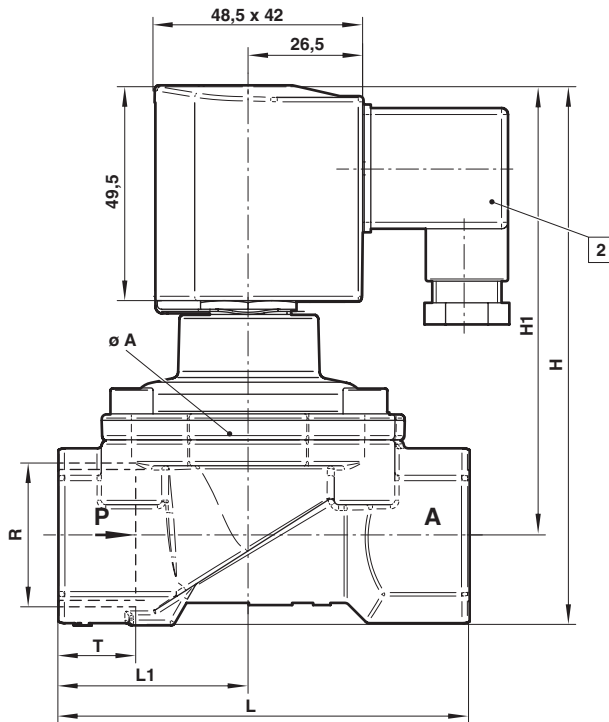
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101	Valve body
102	Valve cover
*103	Diaphragm
104	Allen head screw
*105	Pressure spring
400	Solenoid
701	Core tube
*702	O-ring
*704	Pressure spring
*705	Core
706	Spring clip
*707	O-ring
1400	Socket (included)

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

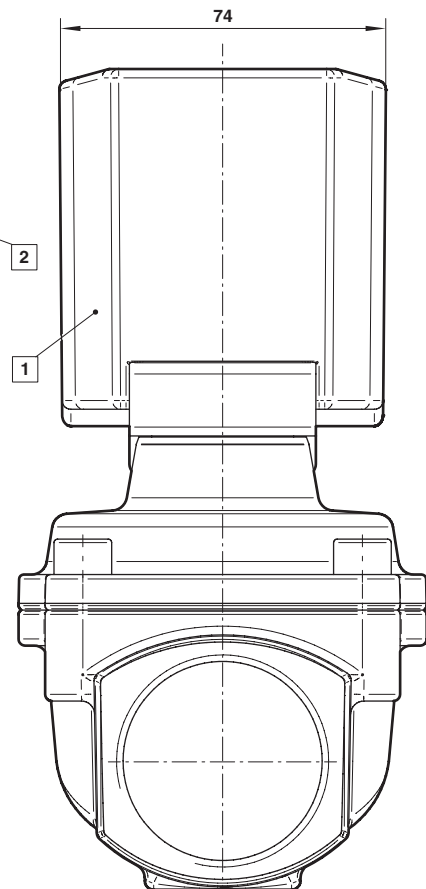
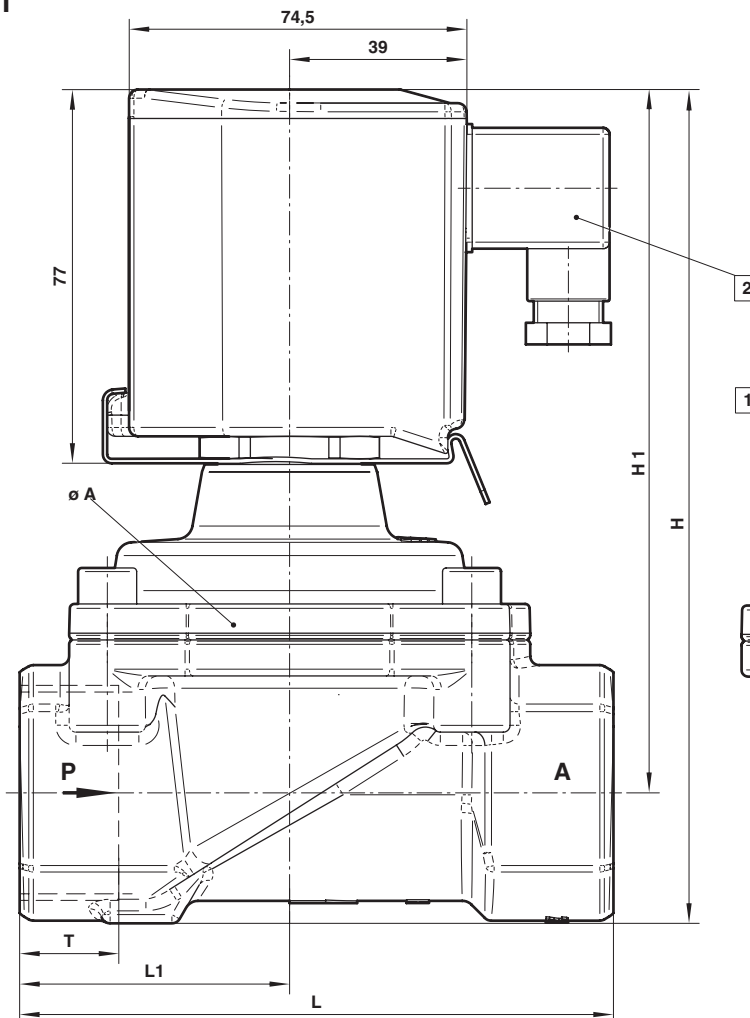
**Dimensions**

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

Dimensions in mm  
Projection/First angle



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



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

## Dimensions

### G1/4 ... 2

### 1/4 ... 2 NPT

Port size R	ø A	H	H1	L	L1	T	Model
G1/4	44	104	92,5	60	27,5	12	8259000.915x.xxxxx
1/4 NPT	44	104	92,5	60	27,5	10	8449000.915x.xxxxx
G3/8	44	104	92,5	60	27,5	12	8259100.915x.xxxxx
3/8 NPT	44	104	92,5	60	27,5	10,5	8449100.915x.xxxxx
G1/2	44	108	94,5	67	31	14	8259200.915x.xxxxx
1/2 NPT	44	108	94,5	67	31	13,5	8449200.915x.xxxxx
G3/4	50	115	99	80	36,5	16	8259300.915x.xxxxx
3/4 NPT	50	115	99	80	36,5	14	8449300.915x.xxxxx
G1	62	124	103,5	95	44	18	8259400.915x.xxxxx
1 NPT	62	124	103,5	95	44	17	8449400.915x.xxxxx
G1 1/4	92	186	157	132	60	20	8259500.940x.xxxxx
1 1/4 NPT	92	186	157	132	60	17	8449500.940x.xxxxx
G1 1/2	92	186	157	132	60	22	8259600.940x.xxxxx
1 1/2 NPT	92	186	157	132	60	17	8449600.940x.xxxxx
G2	109	201,5	167	160	74	24	8259700.940x.xxxxx
2 NPT	109	201,5	167	160	74	17,5	8449700.940x.xxxxx

#### 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.