

- > **Port size: DN 12 ... 50, G1/2 ... 2**
- > **Valve works without minimum pressure differential**
- > **Up to 16 bar backpressure tight with leak rate E according to DIN EN 12266-1**
- > **International approvals**



### Technical features

**Medium:**

Air, water and oil

**Switching function:**

Normally closed; no switching function at back pressure

**Operation:**

Solenoid actuated, with forced lifting

**Mounting:**

Solenoid vertical on top

**Flow direction:**

Determined

**Port size:**

G1/2, G3/4, G1, G1 1/4, G1 1/2, G2

**Operating pressure:**

P > A: 0 ... 25 bar (0 ... 362 psi)  
 A > P: 0 ... 16 bar (0 ... 232 psi), backpressure tight

**Fluid temperature:**

0° ... +90°C (+32° ... +194°F)

**Ambient temperature:**

0° ... +50°C (+32° ... +122°F)

**Materials:**

Body: Brass (CW617N)

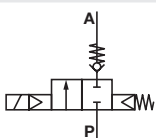
Seat seal: NBR

Internal parts:

Stainless steel, PTFE/Carbon

For contaminated fluids the use of a strainer upstream of the valve is recommended.

### Technical data - standard models

Symbol	Port size	Orifice (mm)	Flow kv-value *1) (m <sup>3</sup> /h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in DC	Model Solenoid in AC
	G1/2	12	4,4	0 ... 25	2,5	8560200.8401.xxxxx	8560200.8404.xxxxx
	G3/4	20	7,0	0 ... 25	2,7	8560300.8401.xxxxx	8560300.8404.xxxxx
	G1	25	10,5	0 ... 25	3,1	8560400.8401.xxxxx	8560400.8404.xxxxx
	G1 1/4	32	25,0	0 ... 25	5,6	8560500.9501.xxxxx	8560500.9504.xxxxx
	G1 1/2	40	27,0	0 ... 25	5,4	8560600.9501.xxxxx	8560600.9504.xxxxx
	G2	50	43,0	0 ... 25	6,8	8560700.9501.xxxxx	8560700.9504.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<sup>2</sup>/s (cSt)  
 up to 80 mm<sup>2</sup>/s (cSt) on request

### Option selector

8560★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Port size	Substitute
1/2"	2
3/4"	3
1"	4
1 1/4"	5
1 1/2"	6
2"	7
Valve options	Substitute
Manual override, only with solenoid 8400	02
Seat seal FPM, Fluid temperature 0 ... +110°C	03
Seat seal EPDM, Fluid temperature 0 ... +110°C	14
Position indicator with two solenoid sensors	23

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
G1/2 ... 1 Solenoid in V d.c.	8401
G1 1/4 ... 2 Solenoid in V d.c.	9501
G1/2 ... 1 Solenoid in V a.c.	8404
G1 1/4 ... 2 Solenoid in V a.c.	9504

### Standard solenoid systems

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.	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c.	40 ... 60 Hz	45 VA	45 VA
120	49	120 V a.c.	40 ... 60 Hz	45 VA	45 VA
220	49	220 V a.c.	40 ... 60 Hz	45 VA	45 VA
230	49	230 V a.c.	40 ... 60 Hz	45 VA	45 VA
Voltage and Frequency Solenoid 9501/9504					
024	00	24 V d.c.	-	80 W	80 W
024	49	24 V a.c.	40 ... 60 Hz	89 VA	89 VA
110	49	110 V a.c.	40 ... 60 Hz	89 VA	89 VA
120	49	120 V a.c.	40 ... 60 Hz	89 VA	89 VA
220	49	220 V a.c.	40 ... 60 Hz	89 VA	89 VA
230	49	230 V a.c.	40 ... 60 Hz	89 VA	89 VA

Further options 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

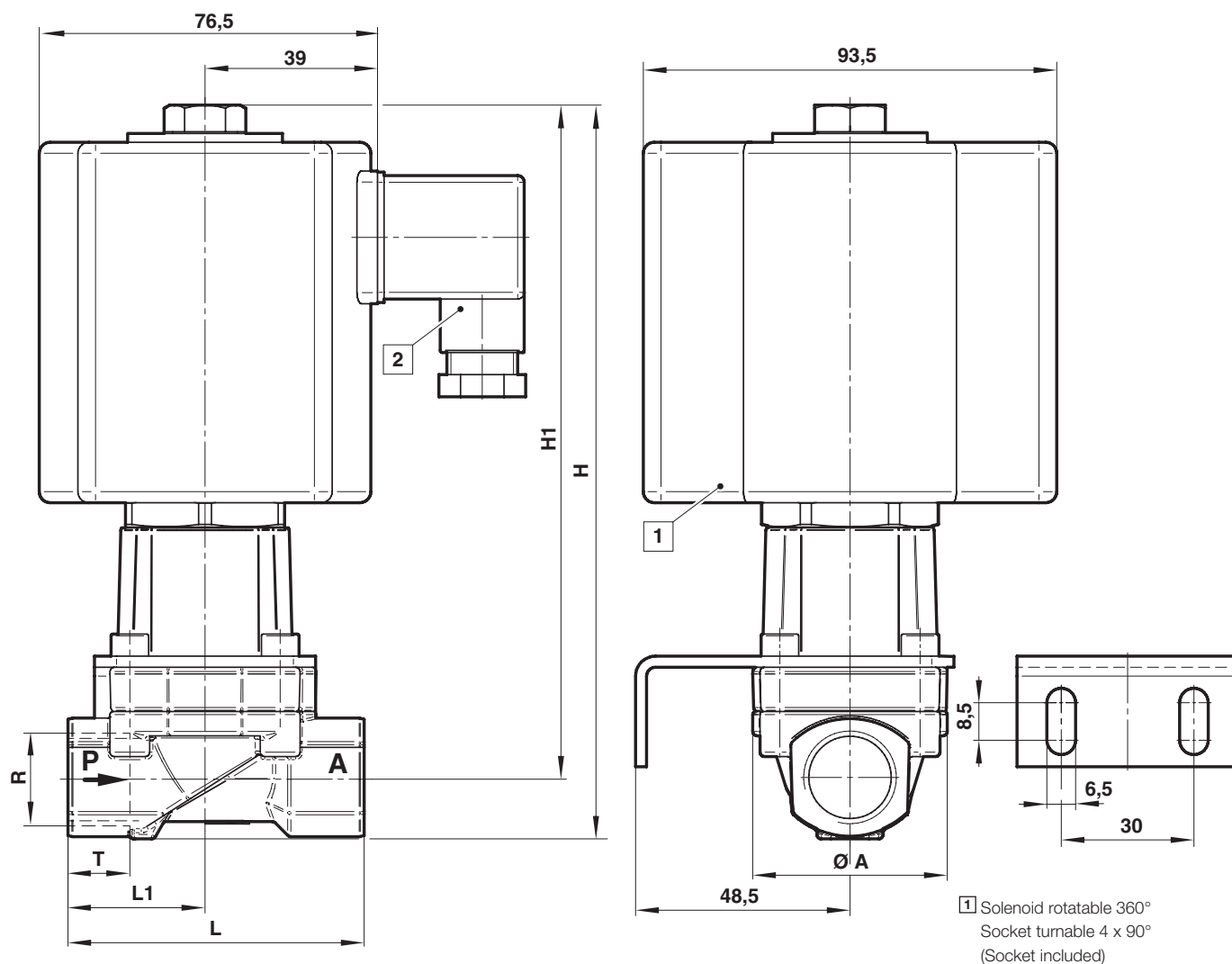
ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc *3)	IP65	8426	24 V d.c., 110 V a.c., 230 V a.c.
II 2G	Ex d IIC T4/T5 Ex tD A21 IP65 T130°C or T95°C	IP65	8920	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex e mb II T3/T4 Ex tD A21 IP65 T140°C	IP65	9540	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 up to G1	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.  
\*3) Only DC, for AC solenoids with design inspection certificate acc. to category 2, e.g. XXXXXX. 6240

**Dimensions**  
up to G1

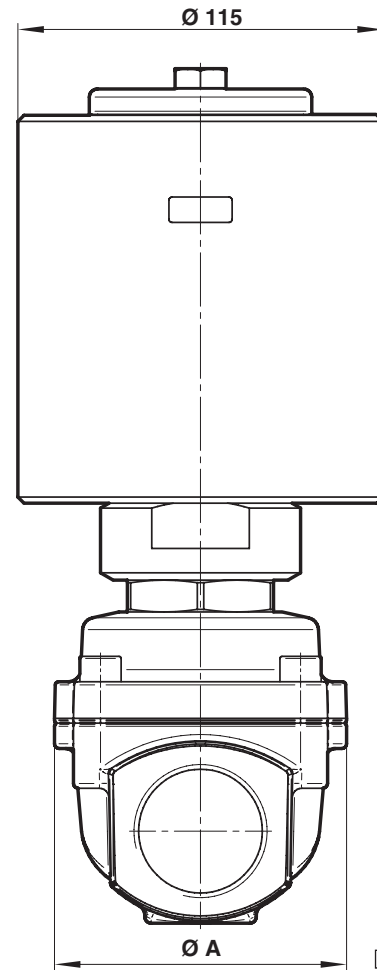
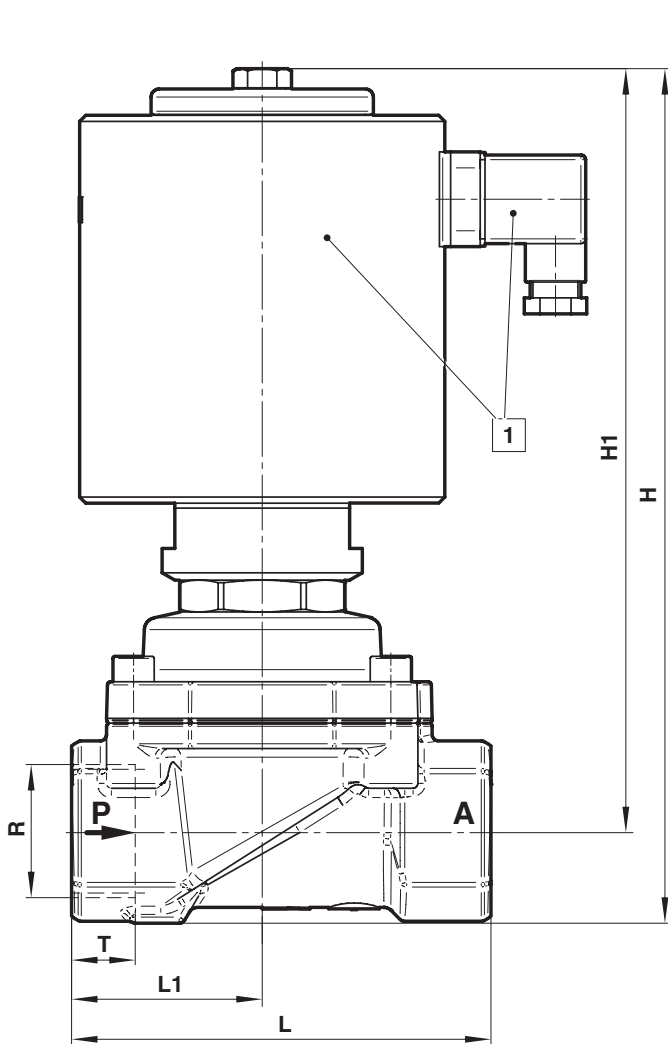
Dimensions in mm  
Projection/First angle



Connection R	ø A	H	H1	L	L1	T	Type
G1/2	44	166,5	150	80	36,5	14	8560200.840x.xxxxx
G3/4	50	166,5	150	80	36,4	16	8560300.840x.xxxxx
G1	62	184,0	164	95	44,0	18	8560400.840x.xxxxx

**Dimensions**  
from G1 1/4

Dimensions in mm  
Projection/First angle



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

Connection R	ø A	H	H1	L	L1	T	Type
G1 1/4	92	283,0	283	132	60	20	8560500.950x.xxxxx
G1 1/2	92	283,0	283	132	60	22	8560600.950x.xxxxx
G2	109	N.D.	N.D.	160	74	24	8560700.950x.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.