

- > 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®*) up to G 1 thread

OBSOLETE DOCUMENT
 Technical Reference Only

Click-on®



Technical features

Medium:

Slightly aggressive gases and liquids

Switching function:

Normally closed

Operation:

Solenoid actuated, with forced lifting

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 ... 25 bar (0 ... 362 psi)

Fluid temperature:

–20° ... +90°C (–4° ... +194°F)

Ambient temperature:

–20° ... +50°C (–4° ... +122°F)

Material:

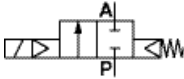
Body: Stainless steel (1.4408)

Seat seal: NBR

Internal parts: Stainless steel, 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 V d.c.	Model Solenoid in V a.c.
	G1/4	8	2,2	0 ... 25	2,4	8574000.9401.xxxxx	8574000.9404.xxxxx
	1/4 NPT	8	2,2	0 ... 25	2,4	8575000.9401.xxxxx	8575000.9404.xxxxx
	G3/8	10	3,4	0 ... 25	2,4	8574100.9401.xxxxx	8574100.9404.xxxxx
	3/8 NPT	10	3,4	0 ... 25	2,4	8575100.9401.xxxxx	8575100.9404.xxxxx
	G1/2	12	4,4	0 ... 25	2,5	8574200.9401.xxxxx	8574200.9404.xxxxx
	1/2 NPT	12	4,4	0 ... 25	2,5	8575200.9401.xxxxx	8575200.9404.xxxxx
	G3/4	20	7	0 ... 25	2,7	8574300.9401.xxxxx	8574300.9404.xxxxx
	3/4 NPT	20	7	0 ... 25	2,7	8575300.9401.xxxxx	8575300.9404.xxxxx
	G1	25	10,5	0 ... 25	3,1	8574400.9401.xxxxx	8574400.9404.xxxxx
	1 NPT	25	10,5	0 ... 25	3,1	8575400.9401.xxxxx	8575400.9404.xxxxx
	G1 1/4	32	25	0 ... 25	5,6	8574500.8401.xxxxx	8574500.8404.xxxxx
	1 1/4 NPT	32	25	0 ... 25	5,6	8575500.8401.xxxxx	8575500.8404.xxxxx
	G1 1/2	40	27	0 ... 25	5,4	8574600.8401.xxxxx	8574600.8404.xxxxx
	1 1/2 NPT	40	27	0 ... 25	5,4	8575600.8401.xxxxx	8575600.8404.xxxxx
	G2	50	43	0 ... 25	6,8	8574700.8401.xxxxx	8574700.8404.xxxxx
	2 NPT	50	43	0 ... 25	6,8	8575700.8401.xxxxx	8575700.8404.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

857*****.*****

Thread form	Substitute
ISO G	4
NPT	5
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), Mounting position: solenoid vertical on top, only with solenoid 8400	01
Manual override	02
Seat seal FPM, Fluid temperature -10 ... +110°C *3)	03
Seat seal PTFE, max. fluid temperature +110°C *3)	06
Seat seal EPDM, for hot water, max. fluid temperature +110°C	14
Normally open (NO), Seat seal FPM, Fluid temperature -10 ... +110°C *3), Mounting position: solenoid vertical on top, only with solenoid 8400	17
Max. operating pressure 40 bar	22
Electrical position indicator with 2 limit switches (Reed contact) only with solenoid 8400	23
Seat seal FPM, with larger bleed orifices in the piston, for fluids such as fuel and oil , viscosity max. 80 mm²/s (cSt), Fluid temperature -10 ... +110°C *3)	25
Designed for ammonia, Seat seal CR	75
Version for drinking water on request	

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
G1/4 ... 1 Solenoid in V d.c.	9401
G1 1/4 ... 2 Solenoid in V d.c.	8401
G1/4 ... 1 Solenoid in V a.c.	9404
G1 1/4 ... 2 Solenoid in V a.c.	8404

Standard solenoid systems

Voltage and Frequency Solenoid 9401/9404 *1)					
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.	40 ... 60 Hz	42 VA	42 VA
110	49	110 V a.c.	40 ... 60 Hz	42 VA	42 VA
120	49	120 V a.c.	40 ... 60 Hz	42 VA	42 VA
230	49	230 V a.c.	40 ... 60 Hz	42 VA	42 VA
Voltage and Frequency Solenoid 8401/8404					
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
230	49	230 V a.c.	40 ... 60 Hz	45 VA	45 VA

*1) r coil only (with the exception of solenoid 94xx up to 41 V a.c.)

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
II2G	Ex me II T3 T 140°C	8441	24 V d.c., 110 V a.c., 230 V a.c.
II3G II3D	Ex II 3G Ex nA IIB T4 Gc Ex II 3D Ex tc IIB T130 °C Dc IP65	9426 *2)	24 V d.c., 110 V a.c., 230 V a.c.
II3G II3D	Ex II 3G Ex nA IIB T4 Gc Ex II 3D Ex tc IIB T130 °C Dc IP65	8426 *2)	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.

*2) d.c. only, for a.c. solenoids with design inspection certificate acc. to category 2, e. g. xxxxxx.8441

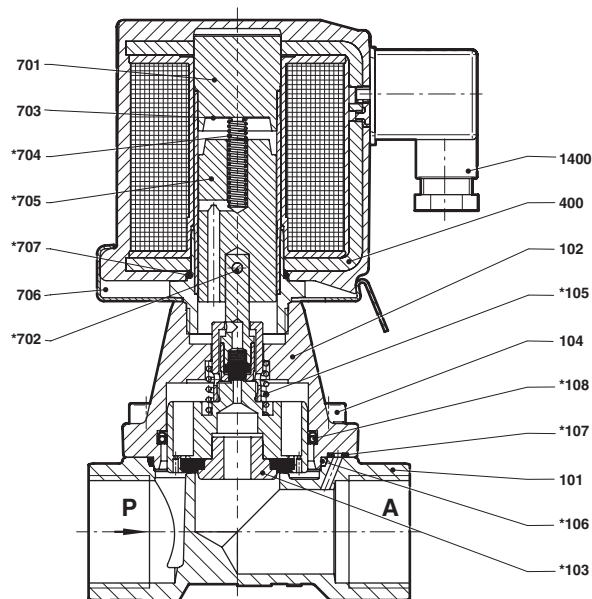
*3) Up to max. 200°C fluid temperature with solenoid for higher temperature



Section View

G1/4 ... 1

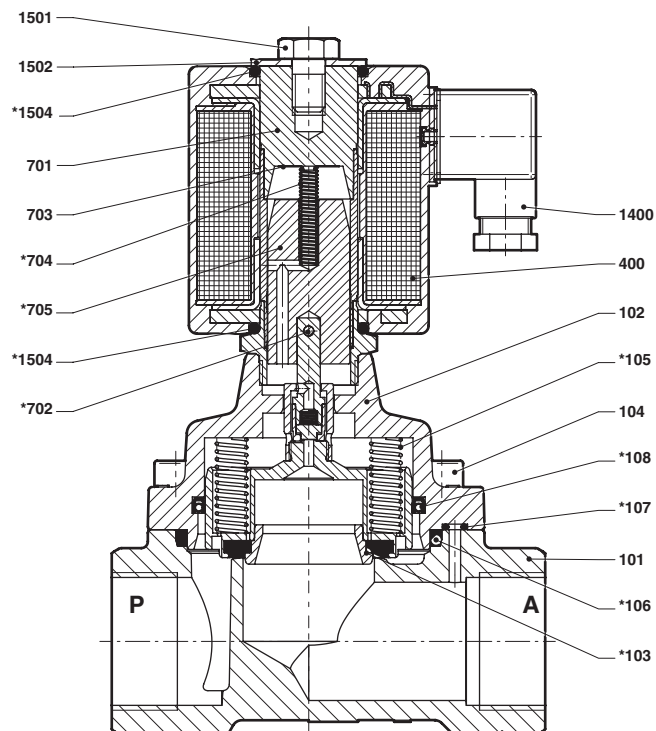
1/4 ... 1 NPT



No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Socket head cap screw
*105	Pressure spring
*106	O-ring
*107	O-ring
*108	Grooved ring
400	Solenoid
701	Core tube
*702	Straight pin
703	Round plate
*704	Pressure spring
*705	Core
706	Spring clip
*707	O-ring
1400	Socket (included)

G1 1/4 ... 2

1 1/4 ... 2 NPT



No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Socket head cap screw
*105	Pressure spring (2x)
*106	O-ring
*107	O-ring
*108	Grooved ring
400	Solenoid
701	Core tube
*702	Straight pin
703	Round plate
*704	Pressure spring
*705	Core
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
*1504	O-ring(2x)

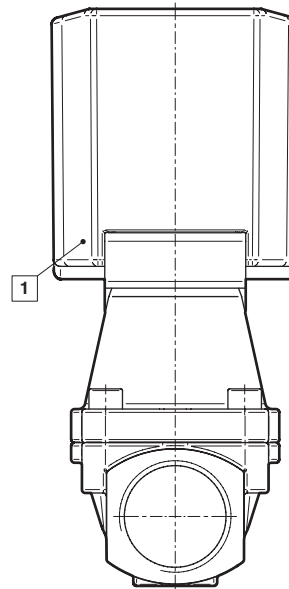
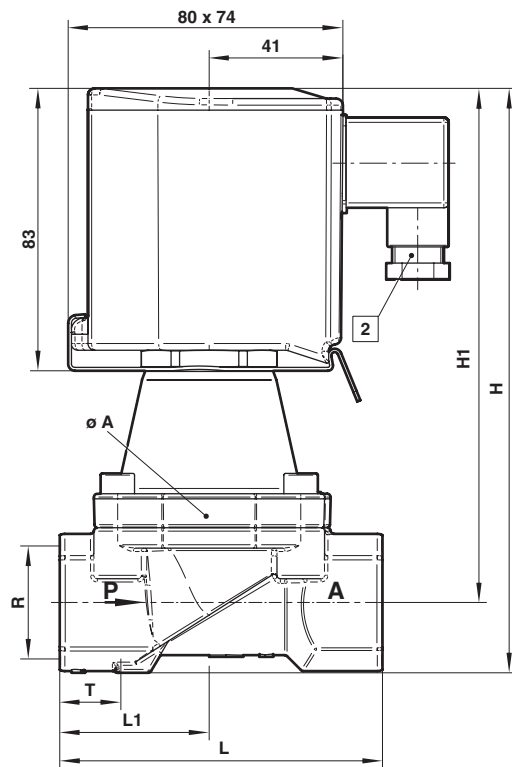
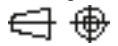
* These individual parts form a complete wearing unit.

When ordering spare parts please state Model No. and Series No.

Dimensions

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

Abmessungen in mm
Projection/First angle



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

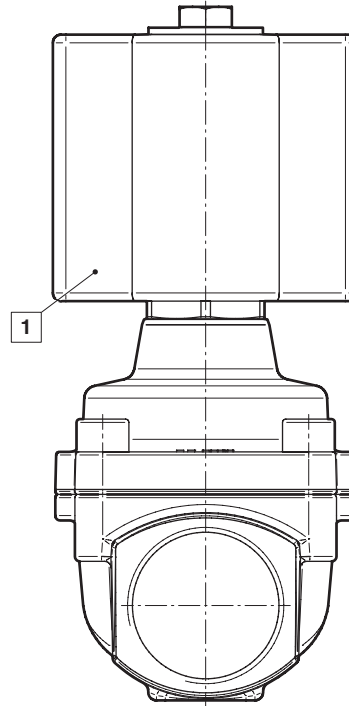
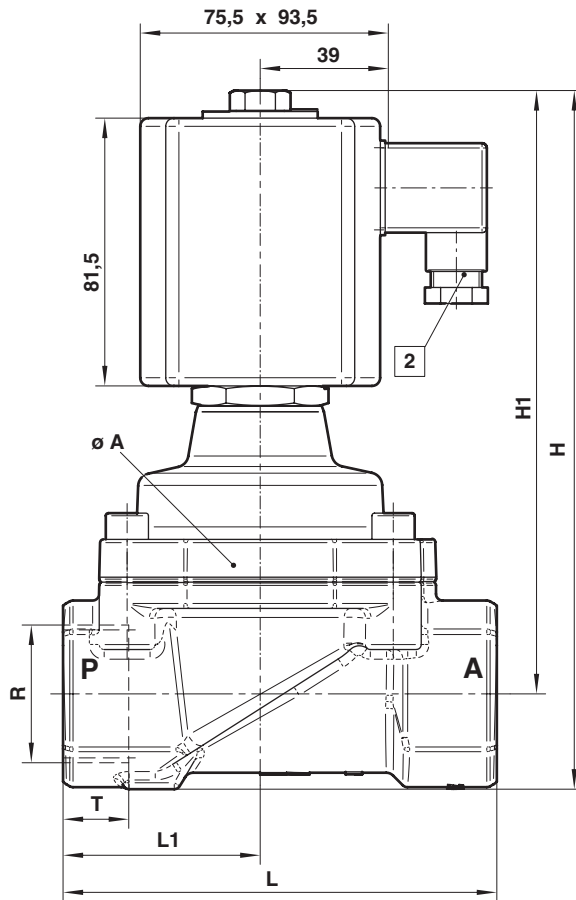
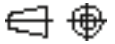
Port size R	ø A	H	H1	L	L1	T	Model
G1/4	44	152	140,5	60	60	12	8574000.940x.xxxxx
1/4 NPT	44	152	140,5	60	60	10	8575000.940x.xxxxx
G3/8	44	152	140,5	60	60	12	8574100.940x.xxxxx
3/8 NPT	44	152	140,5	60	60	10,5	8575100.940x.xxxxx
G1/2	44	154,5	140,5	67	67	14	8574200.940x.xxxxx
1/2 NPT	44	154,5	140,5	67	67	13,5	8575200.940x.xxxxx
G3/4	50	162	146,5	80	80	16	8574300.940x.xxxxx
3/4 NPT	50	162	146,5	80	80	14	8575300.940x.xxxxx
G1	62	183	162	95	95	18	8574400.940x.xxxxx
1 NPT	62	183	162	95	95	17	8575400.940x.xxxxx



Dimensions

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

Abmessungen in mm
Projection/First angle



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

Port size R	ø A	H	H1	L	L1	T	Model
G1 1/4	92	212,5	183,5	132	132	20	8574500.840x.xxxxx
1 1/4 NPT	92	212,5	183,5	132	132	17	8575500.840x.xxxxx
G1 1/2	92	212,5	183,5	132	132	22	8574600.840x.xxxxx
1 1/2 NPT	92	212,5	183,5	132	132	17	8575600.840x.xxxxx
G2	109	226,5	192	160	160	24	8574700.840x.xxxxx
2 NPT	109	226,5	192	160	160	17,5	8575700.840x.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 well-known 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 § (7) 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

device will be available on request.

Note to Electromagnetic Compatibility Directive (EMC)

The valves shall be provided with an electrical circuit which ensures the limits of the harmonized standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Directive (2004/108/EG) satisfied.