2/2-way valves DN 8 to DN 50

For slightly aggressive gases and liquids
Solenoid actuated, with forced lifting
Piston valves
Internal threads G 1/4 to G 2 or 1/4 NPT to 2 NPT
Operating pressure 0 to 25 bar (40 bar)

85740
85750

Description (standard valve)

Solenoid valve for slightly aggressive gases and liquids

Switching function:	normally closed
Flow direction:	determined
Fluid temperature:	–20 °C up to max. +90 °C
Ambient temperature:	–20 °C up to max. +50 °C
Mounting position:	optional, preferably solenoid vertical on top

Click-on®

Stainless Steel

Material

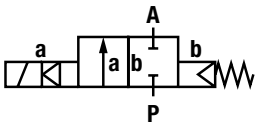
Body:	Stainless steel (1.4408)
Seat seal:	NBR-K
Internal parts:	Stainless steel, PTFE/Carbon

For contaminated fluids insertion of a strainer is recommended.

Features

- 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

Symbol



Ordering information

To order, quote model number from table overleaf, e. g. 8574400.9401 for a DN 25 valve.

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Valve Technology and Systems

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Characteristic Data

Valves

Part Number Solenoid with ⎓	Part Number Solenoid with ~	Nominal Diameter (mm)	Connection Size	Operating Pressure * min.	max. (bar)	k_V-value ** (Base m^3/h)	Weight Total (kg)
8574000.9401 8575000.9401	8574000.9404 8575000.9404	8	G 1/4 1/4 NPT	0	25	2.2	2.4
8574100.9401 8575100.9401	8574100.9404 8575100.9404	10	G 3/8 3/8 NPT	0	25	3.4	2.4
8574200.9401 8575200.9401	8574200.9404 8575200.9404	12	G 1/2 1/2 NPT	0	25	4.4	2.5
8574300.9401 8575300.9401	8574300.9404 8575300.9404	20	G 3/4 3/4 NPT	0	25	7.0	2.7
8574400.9401 8575400.9401	8574400.9404 8575400.9404	25	G 1 1 NPT	0	25	10.5	3.1
8574500.8401 8575500.8401	8574500.8404 8575500.8404	32	G 1 1/4 1 1/4 NPT	0	25	25.0	5.6
8574600.8401 8575600.8401	8574600.8404 8575600.8404	40	G 1 1/2 1 1/2 NPT	0	25	27.0	5.4
8574700.8401 8575700.8401	8574700.8404 8575700.8404	50	G 2 2 NPT	0	25	43.0	6.8

* for gases and liquid fluids up to 40 mm^2/s (cSt)
** C_V-value (US) ≈ k_V-value x 1.2

State voltage [V] and frequency [Hz]

Solenoid 9401 / 9404 and 8401 / 8404

Standard voltage

DC ⎓	AC ~ 40 Hz – 60 Hz	
24 V	24 V	–
–	110 V	120 V
–	230 V	220 V

Design acc. to DIN VDE 0580
Voltage range ±10 %
100 % duty cycle
Protection class acc. to EN 60529 IP65
Socket Form A acc. to DIN EN 175301-803 (included)
AC with rectifier plug

Power Consumption

According to DIN VDE 0580 at coil temperature of +20 °C. In operation the power consumption of the solenoid decreases by approx. 30 %.

Solenoid	DC ⎓	AC ~ Inrush	Holding
9401 *	38 W	–	–
9404 *	–	42 VA	42 VA
8401	40 W	–	–
8404	–	45 VA	45 VA

* c SP us coil only
(with the exeption of solenoid 94xx up to 41 V AC)

Attention!
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Further Options (Valves)

XXXXX**01**.XXXX Normally open, vertical on top, only with solenoid 8400

XXXXX**02**.XXXX Manual override

XXXXX**03**.XXXX Seat seal FPM, Fluid temperature –10 °C up to max. +110 °C [1)]

XXXXX**06**.XXXX Seat seal PTFE, Fluid temperature max. + 110 °C [1)],

XXXXX**14**.XXXX Seat seal EPDM, max. Fluid temperature +110 °C

XXXXX**17**.XXXX Normally open, Seat seal FPM, Fluid temperature –10 °C up to max. +110 °C [1)], Mounting position: vertical on top, only with solenoid 8400

XXXXX**22**.XXXX max. operating pressure 40 bar

XXXXX**23**.XXXX Position indicator with two solenoid sensors, only with solenoid 8400

XXXXX**25**.XXXX Seat seal FPM, with larger bleed orifices in the piston, for fluids such as fuel and oil , viscosity max. 80 mm^2/s (cSt), Fluid temperature –10 °C up to max. +110 °C [1)]

On request Further versions

Further Options (Solenoids)

XXXXXXX.**8441** Protection class ⟨Ex⟩ II 2 GD EEx me II T3 T 140 °C

XXXXXXX.**9426*** Protection class ⟨Ex⟩ II 3 GD EEx nA II T4 T 135 °C

XXXXXXX.**8426*** Protection class ⟨Ex⟩ II 3 GD EEx nA II T4 T 135 °C

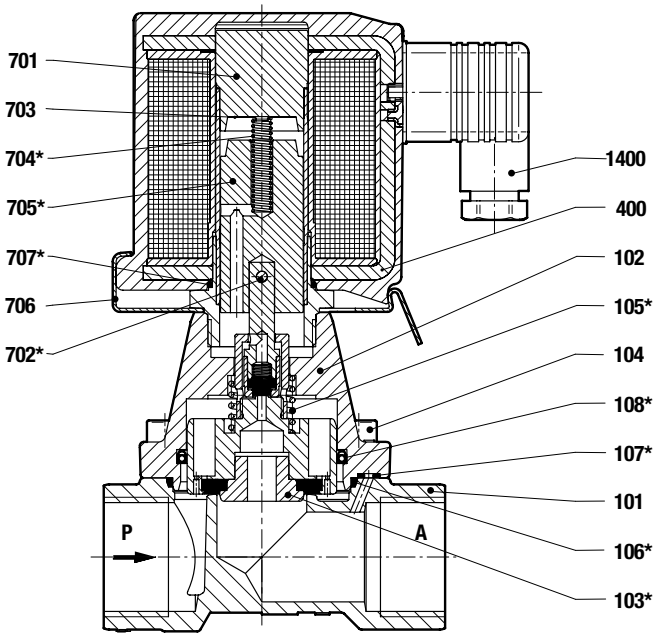
On request Further versions

* DC only, for AC solenoids with design inspection certificate acc. to category 2, e. g. xxxxxxx.8441 [1)] Up to max. 200 °C fluid temperature with solenoid for higher temperature

Section View

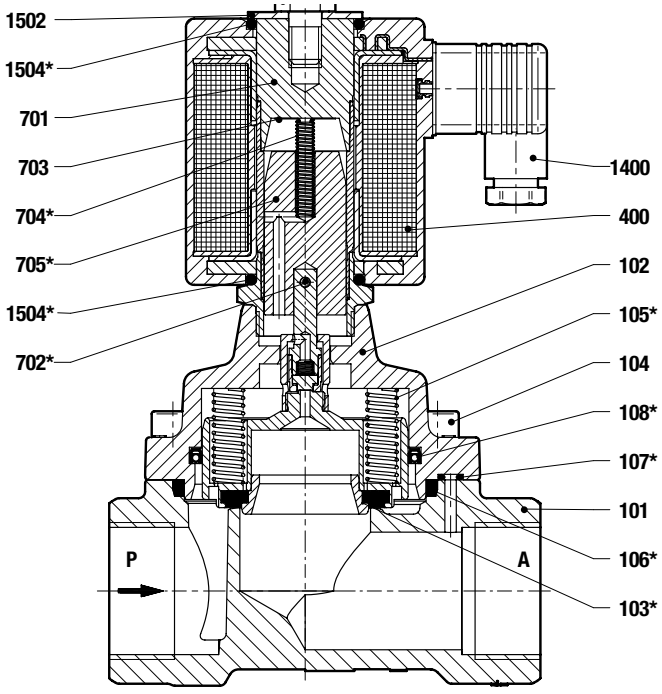
up to G 1 resp. 1 NPT

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)



from G 1 1/4 resp. 1 1/4 NPT

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)

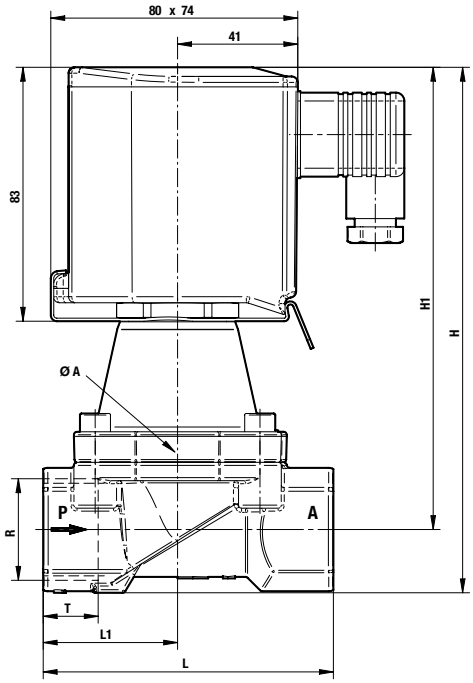


* These individual parts form a complete wearing unit.
When ordering spare parts please state Cat. No. and Series No.

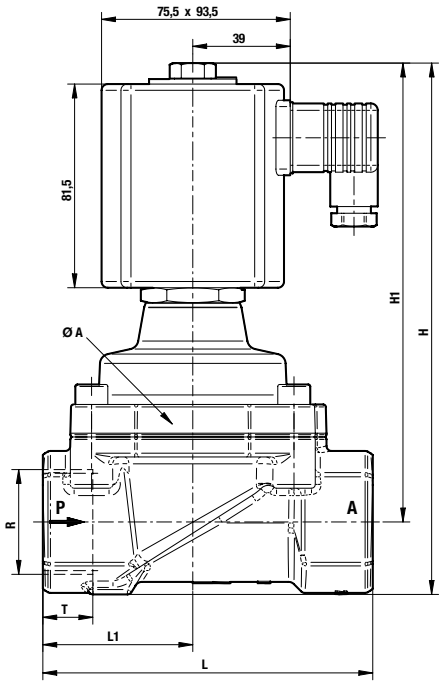
General Dimensions

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

up to G 1 resp. 1 NPT



from G 1 1/4 rep. 1 1/4 NPT



Part Number	Nominal Diameter (mm)	Connection Size	A (mm)	H (mm)	H 1 (mm)	L (mm)	L 1 (mm)	T (mm)
8574000.940x 8575000.940x	8	G 1/4 1/4 NPT	44	152.0	140.5	60	27.5	12.0 10.0
8574100.940x 8575100.940x	10	G 3/8 3/8 NPT	44	152.0	140.5	60	27.5	12.0 10.5
8574200.940x 8575200.940x	12	G 1/2 1/2 NPT	44	154.5	140.5	67	31.0	14.0 13.5
8574300.940x 8575300.940x	20	G 3/4 3/4 NPT	50	162.0	146.5	80	35.5	16.0 14.0
8574400.940x 8575400.940x	25	G 1 1 NPT	62	183.0	162.0	95	44.0	18.0 17.0
8574500.840x 8575500.840x	32	G 1 1/4 1 1/4 NPT	92	212.5	183.5	132	60.0	20.0 17.0
8574600.840x 8575600.840x	40	G 1 1/2 1 1/2 NPT	92	212.5	183.5	132	60.0	22.0 17.0
8574700.840x 8575700.840x	50	G 2 2 NPT	109	226.5	192.0	160	74.0	24.0 17.5

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.