

2/2-way valves ND 8 to 50

For neutral gaseous and liquid fluids
Indirectly solenoid actuated
Diaphragm valves
Internal threads G ¼ to G 2
Operating pressure 0.5 to 10/16 bar

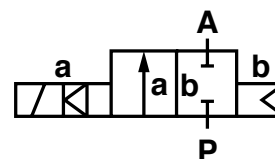


Publication 7501540.06.04.98
Catalogue index
A 6
82 120, 82 130 series

Description (standard valve)

Solenoid valve for air, water and oil

Flow direction: determined
Fluid temperature: max. +90 °C
Ambient temperature: max. +50 °C
Sum of fluid and ambient temperature: max. +130 °C
Mounting position: optional, preferably solenoid vertical on top
Material Body: Brass
Seat seal: NBR
Internal parts: 1.4104, 1.4301
For contaminated fluids insertion of a strainer is recommended (see accessories).



Switching function:
Normally closed

Features

- High flow rate
- Clear design
- Single part diaphragm
- Compact solenoid with integrated core tube

Characteristic data

ND	Connection (Thread acc. to DIN 228/1)	Dimension [mm]	Operating pressure with gaseous and liquid fluids up to 25 mm ² /s (cSt) [bar]		k _V -value ²⁾ (Base m ³ /h)	Weight [kg]	Dimension table No.	Cat no	
			min. ¹⁾	max.				Valve	Solenoid DC or AC
8	G ¼	67	0.5	16	1.75	0.650	01	82 120 00.8001	
8	G ¼	55	0.5	16	1.75	0.655	02	82 130 00.8001	
10	G ⅜	67	0.5	16	3.40	0.625	03	82 121 00.8001	
10	G ⅜	55	0.5	16	2.50	0.650	04	82 131 00.8001	
12	G ½	67	0.5	16	4.00	0.600	05	82 122 00.8001	
12	G ½	55	0.5	16	3.10	0.620	06	82 132 00.8001	
20	G ¾	95	0.5	10	11.00	1.350	07	82 123 00.8001	
25	G 1	95	0.5	10	13.80	1.200	08	82 124 00.8001	
32	G 1¼	132	0.5	10	30.00	2.550	09	82 125 00.8001	
40	G 1½	132	0.5	10	31.60	2.250	10	82 126 00.8001	
50	G 2	160	0.5	10	47.50	3.500	11	82 127 00.8001	

State voltage [V] and frequency [Hz]

¹⁾ Minimum pressure differential P_A 0.5 bar

²⁾ C_V-value (US) ≈ k_V-value x 1.2

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Solenoids

Standard voltages	DC	AC	
		50 Hz	60 Hz
	24 V	24 V	–
	–	110 V	120 V
	205 V	230 V	220 V

Design acc. to VDE 0580

Voltage range $\pm 10\%$

100 % duty cycle

Protection class acc. to EN 60529 IP 65

(previous DIN 40050)

Socket acc. to DIN 43 650

Attention: Restricted temperature range for explosion proof solenoids.

For technical details see catalog-register "Solenoids"

Power consumption ¹⁾

Solenoid	DC	AC	
		Inrush	Holding
8001	12 W	20 VA	16 VA

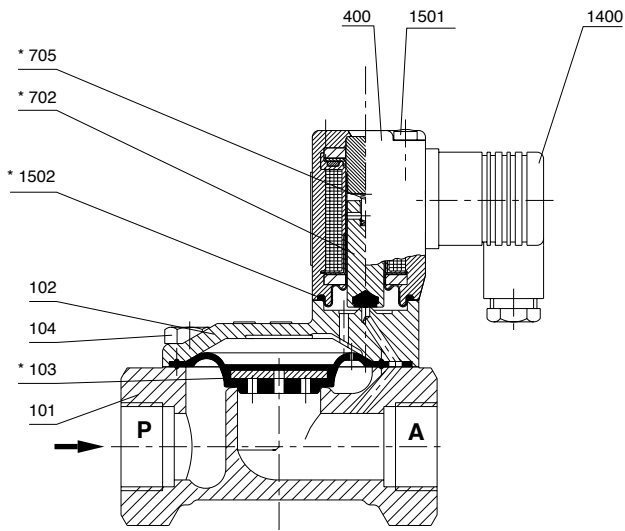
¹⁾ **According to VDE 0580 at coil temperature +20 °C. In operating the solenoid coil decrease the power consumption appr. 30 %.**

Further models

available at extra cost

- XX XXX **02.XXXX** Manual override
- XX XXX **03.XXXX** Seat seal FPM, max. temperature +110 °C
- XX XXX **04.XXXX** Damped operation, kv-value reduced appr. –40%,
 $p_{\max} = 10$ bar
- XX XXX **07.XXXX** Fabric diaphragm, for air only
- XX XXX **14.XXXX** Seat seal EPDM, for hot water, max. temperature +110 °C,
 $p_{\max} = 10$ bar
- XX XXX **69.974X** Nickel-plated
- XX XXX **83.XXXX** Sealed core tube, for liquid fluids only
- XX XXX **84.XXXX** Sealed core tube, seat seal EPDM, for hot water, max. fluid temperature +110 °C, for liquid fluids only
- **On request** UL/CSA
Further versions
- XX XXX XX.**8004** DC Solenoid with rectifier, for AC only
- XX XXX XX.**8036** Solenoid in protection class EEx me II T4
- XX XXX XX.**8080** Solenoid with low power consumption 5 W, for DC only
- XX XXX XX.**8095** Solenoid with low power consumption 6/4.5 VA, for AC only
- XX XXX XX.**9748** Solenoid for DC only, for XX XXX **69**
- XX XXX XX.**9749** Solenoid for AC only, for XX XXX **69**

Section



- 101 Valve body
- 102 Body cover
- *103 Diaphragm
- 104 Oval head cap screw up to G 1/2
Hexagon screw G 3/4 – G 2
- 400 Solenoid
- *702 Core
- *705 Pressure spring
- 1400 Socket
- 1501 Cheese head cap screw
- *1502 O-ring

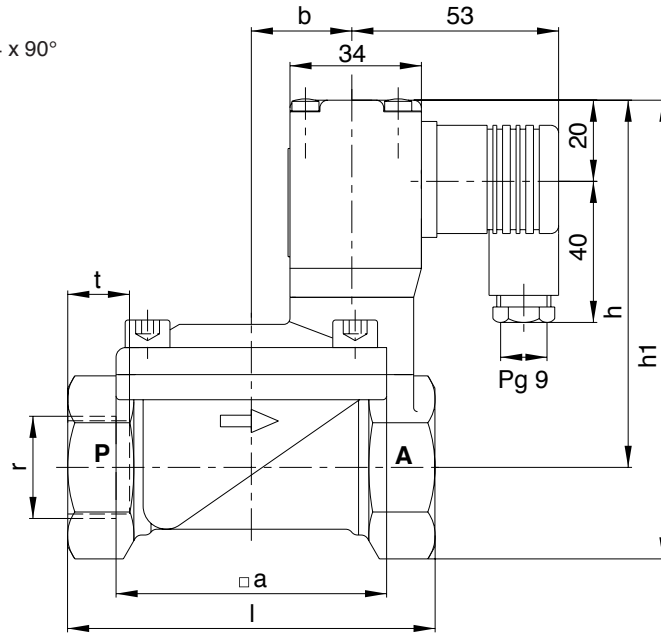
* These individual parts form a complete wearing unit.

When ordering spare parts please state Cat no and series no.

Dimensions

Solenoid* and socket turnable 4 x 90°

* Look for right position of core, spring and O-ring.



Dimension table no	□ a	b	h	h ₁	l	r	t
01	44	12.5	85	100	67	G 1/4	12.0
02	44	12.5	87	102	55	G 1/4	10.0
03	44	12.5	85	100	67	G 3/8	12.0
04	44	12.5	87	102	55	G 3/8	10.0
05	44	12.5	85	100	67	G 1/2	14.0
06	44	12.5	87	102	55	G 1/2	10.0
07	70	26.0	95	120	95	G 3/4	12.5
08	70	26.0	95	120	95	G1	14.0
09	96	39.0	110	145	132	G1 1/4	18.0
10	96	39.0	110	145	132	G1 1/2	18.0
11	112	47.0	120	160	160	G2	20.0

