2/2-way valves DN 10

for neutral gaseous and liquid fluids Solenoid actuated, with forced lifting Diaphragm valves Internal threads G 1/4 to G 1/2 or 1/4" NPT to 1/2" NPT Operating pressure 0 to 10 bar

Description (standard valve)

Solenoid valve for e.g. air, water, oil

Switching function: Flow direction: Fluid temperature: Ambient temperature: Mounting position:

Normally closed determined -10 °C up to max. +90 °C -10 °C up to max. +50 °C optional, preferably solenoid vertical on top



Material

Body: Seat seal: Internal parts: Brass, PA 66 NBR (Perbunan) 1.4104, 1.4303, PVDF

For contaminated fluids insertion of a strainer is recommended (see accessories).

Features

- Suitable for vacuum
- Clear design
- Compact solenoid with integrated core tube
- Valve operates without pressure differential ($\Delta p)$
- Operating pressure 0 20 bar with AC and NBR sealing

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 82 532 00.8001 for a G 1/2 valve with standard solenoid.

Characteristic data

See page 2 valve and solenoid informations



Characteristic data

Valves

Part Number with DC or AC solenoid	Nominal Diameter (mm)	Port size	Valve length (mm)	Operating F min	Pressure * max (bar)	kv-value [†] (Base m ³ /h)	Weight (kg)
82 530 00.8001	10	G 1/4	44	0	10	1,50	0,50
82 630 00.8001		1/4" NPT					
82 531 00.8001	10	G 3/8	44	0	10	1,70	0,50
82 631 00.8001		3/8" NPT					
82 532 00.8001	10	G 1/2	60	0	10	1,70	0,60
82 632 00.8001		1/2" NPT					

* with gaseous and liquid fluids up to 25 mm²/s (cSt) † C_V-value (US) \approx k_V-value x 1,2

State voltage [V] and frequency [Hz]

8001 Solenoid

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 ±10 % 100 % duty cycle

Protection class acc. to EN 60529 IP 65 (previous DIN 40050) Socket acc. to DIN 43 650-A Pg9 (included)

Power Consumption

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

DC	AC	
	Inrush	Holding
12 W	20 VA	16 VA

For technical details see catalog-register "Solenoids"

Options

available at extra	a cost		
valves			
XX XXX U3.XXXX	Seat seal FKM, max. fluid temperature +110 °C		
XX XXX 14.XXXX	Seat seal EPDM, for hot water, max. fluid temperature +110 °C		
XX XXX 18.XXXX	Degreased version, seat seal FKM		
XX XXX 22.XXXX	Operating pressure 0 up to 20 bar, only for NBR and AC solenoid		
XX XXX 51.XXXX	Seat seal HNBR, for hot water and steam, fluid temperature 0 °C up to max. +150 °C, operating pressure 0 – 6 bar		
On request	Further versions body with fastening thread 2x M5		
Options			
available at extra cost			
Solenoids			
XX XXX XX.8004 XX XXX XX 8041	DC solenoid with rectifier for AC only Solenoid in protection class FEx me II T3		
	available at extr Valves XX XXX 03.XXXX XX XXX 14.XXXX XX XXX 14.XXXX XX XXX 18.XXXX XX XXX 22.XXXX XX XXX 51.XXXX On request Options available at extr Solenoids XX XXX XX.8004 XX XXX XX.8041		

Solenoid in protection class EEx me II T3

Further versions

On request



Section View

Solenoid rotated by 90° in drawing



- 101 Valve body
- *102 Diaphragm
- 103 Spacer
- 400 Solenoid
- *702 Core
- *704 Guide pin
- *705 Pressure spring
- 1400 Socket
- 1501 Oval 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.

General Dimensions

Socket turnable 4 x 90°





Part Number	L	Н	H1	В	SW	R	Т
82 530 00.8001	44	85,5	73	12,5	21	G 1/4	12,0
82 630 00.8001						1/4" NPT	10,0
82 531 00.8001	44	85,5	73	12,5	21	G 3/8	12,0
82 631 00.8001						3/8" NPT	10,0
82 532 00.8001	60	79,5	75,5	12,5	27	G 1/2	15,0
82 632 00.8001						1/2" NPT	13,0

EU Manufacturer's Declaration

as defined in EU Machinery Guideline 89/392/EEC, Appendix II B We hereby declare that the diaphragm valves were developed and designed using the following harmonised standards:

EN 292	Machine Safety
EN 983	Pneumatic Systems
EN 60204-1	Electrical Equipment for Machinery

<u>Note</u>

These diaphragm valves are intended for fitting in a machine. They must not be commissioned until it has been established that the machine as a whole conforms to the EU guideline.

Note on EU guideline

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 50081-1 and EN 50082-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (89/336/EEC) satisfied.