

## **Industrial Automation**

**IMI** Buschjost

# 82530/82630 2/2-way diaphragm valves

- Port size: DN 10, G1/4 ... 1/2 (ISO G/NPT)
- Functional design
- Compact solenoid with integrated core tube
- Valve operates without differential pressure
- Operating pressure 0 ... 20 bar with alternating current and NBR sealing
- International approvals











#### **Technical features**

Medium:

Neutral gases and liquids

Switching function: Normally closed

Operation:

Solenoid actuated, with forced lifting

Mounting position: Optional, preferably solenoid vertical on top Flow direction: Determined

Port size: G1/4, G3/8, G1/2, 1/4 NPT, 3/8 NPT, 1/2 NPT

Operating pressure: 0 ... 10 bar (0 ... 145 psi) Fluid temperature:

-10 ... +90°C (+14 ... +194°F)

Ambient temperature:

-10 ... +50°C (+14 ... +122°F)

Material:

Body: Brass (CW617N), PA66 Seat seal: NBR

Internal parts: Stainless steel,

For contaminated fluids insertion of a strainer is recommended.

#### Technical data - standard models

Symbol	Port size	Orifice	Valve length	Flow kv value *1)	Operating pressure *2)		Weight	Model
		(mm)	(mm)	(m³/h)	(bar)	(psi)	(kg)	Solenoid in V d.c./a.c.
	G1/4	10	44	1,5	0 10	0 145	0,5	8253000.8001.xxxxx
	1/4 NPT	10	44	1,5	0 10	0 145	0,5	8263000.8001.xxxxx
A A	G3/8	10	44	1,7	0 10	0 145	0,5	8253100.8001.xxxxx
	3/8 NPT	10	44	1,7	0 10	0 145	0,5	8263100.8001.xxxxx
PI	G1/2	10	60	1,7	0 10	0 145	0,6	8253200.8001.xxxxx
	1/2 NPT	10	60	1,7	0 10	0 145	0,6	8263200.8001.xxxxx

xxxxx Please insert voltage and frequency codes

<sup>\*1)</sup> Cv-value (US)  $\approx$  kv value x 1,2

<sup>\*2)</sup> For gases and liquid fluids up to 25 mm<sup>2</sup>/s (cSt)



#### Option selector 82\*3\*\*\*.\*\*\*.\*\* Thread form Frequency Substitute ISO G 5 See table frequency codes NPT 6 Voltage Port size Substitute See table voltage codes 1/4 0 Solenoid options G1/4 ... 1/2 3/8 1 Operating pressure 0 ... 10 1/2 2 bar (0 .. 145 psi) Solenoid in V a.c./d.c. Valve options Substitute Normally open (NO) 01 Solenoid in V a.c. only with solenoid Solenoid in V d.c. 8027 (a.c.) or 8029 (d.c.) Seat seal FPM, 03 for fuel and oil, Fluid temperature −5 ... +110°C (+23 ... +230°F) Seat seal EPDM, 14 for hot water, max. fluid temperature +110°C (+230°F) Degreased version, 18 Seat seal FPM, Fluid temperature -5 +110°C (+23 ... +230°F), with solenoid 8041: Fluid temperature -5 +80°C (+23 ... +176°F) Operating pressure 22 0 ... 20 bar (0 ... 290 psi), only for NBR and a.c. solenoid, only ATEX category 3 possible Seat seal HNBR, for hot 51 water and steam. Operating pressure 0 ... 6 bar (0 ... 87 psi), Fluid temperature 0 ... +150°C (+32 +302°F), Solenoid vertical underneath: up to max. +60 °C ambient tempera-

#### Standard solenoid systems

ture permitted

Voltage and Frequency Solenoid 8001						
Code	Code	Voltage	Frequency	Power con	Power consumption	
Voltage	Frequency			Inrush	Holding	
024	00	24 V d.c.	_	12 W	12 W	
024	50	24 V a.c.	50 Hz	20 VA	16 VA	
110	50	110 V a.c.	50 Hz	20 VA	16 VA	
120	60	120 V a.c.	60 Hz	20 VA	16 VA	
230	50	230 V a.c.	50 Hz	20 VA	16 VA	

Further versions on request!

#### Electrical details for all solenoid systems

Design	DIN VDE 0580
Voltage range	<u>+</u> 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  $+20^{\circ}$ 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 2G II 2D	Ex eb mb IIC T3 Gb Ex mb tb IIIB T150°C Db	IP66	6200	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.

### Additional solenoid systems

Option	Solenoid	Standard voltages	
Solenoid with rectifier	8004	110 V a.c., 230 V a.c.	

Substitute

Substitute

Substitute

XX

XXX

8001

8027

8029



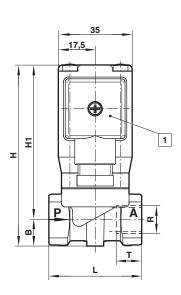
**Dimensions** 

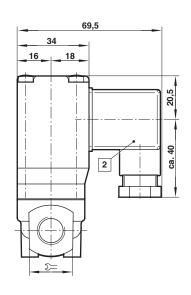
G1/4 ... 1/2 1/4 ... 1/2 NPT

Dimensions in mm Projection/first angle









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

Port size R	В	Н	H1	L	\$ <del>=</del>	Т	Тур
G1/4	14	87	73	44	21	12	8253000.8001.xxxxx
1/4 NPT	14	87	73	44	21	10	8263000.8001.xxxxx
G3/8	14	87	73	44	21	12	8253100.8001.xxxxx
3/8 NPT	14	87	73	44	21	10	8263100.8001.xxxxx
G1/2	14	90	74,5	60	27	15	8253200.8001.xxxxx
1/2 NPT	14	90	74,5	60	27	13	8263200.8001.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) satisfield.