

83320 2/2-way diaphragm valves

- Port size: DN 20 ... 40, G3/4 ... 1 1/2 (ISO G/NPT)
- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm
- International approvals



Technical features

Medium: Air	Port size: G3/4, G1, G1 1/2	Ambient temperature: -20° ... +85°C (-4° ... +185°F)	Material: Body: Stainless steel 1.4408 Seat seal: TPE Internal parts: TPU
Switching function: Normally closed	Operating pressure: 0,4 ... 8 bar (5,8 ... 116 psi)	Cleaning gas temperature: -40° ... +85°C (-40° ... +185°F)	
Operation: Solenoid pilot operated	Dusty gas temperature: -40° ... +85°C (-40° ... +185°F)		
Mounting position: Optional, preferably solenoid vertical on top			
Flow direction: Determined			

Technical data – standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure (bar) (psi)		Weight (kg)	Typ
	G3/4	20	95	18	0,4 ... 8	5,8 ... 116	0,92	8332300.8171.xxxxx
	G1	25	95	22	0,4 ... 8	5,8 ... 116	1,01	8332400.8171.xxxxx
	G1 1/2	40	135	59	0,4 ... 8	5,8 ... 116	3,11	8332600.8171.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2

Option selector

8332★ ★ ★ ★ 8171. ★ ★ ★ ★ ★ ★

Port size	Substitute
3/4	3
1	4
1 1/2	6
Valve options	Substitute
Flange version without valve body	54
Dusty gas temperature version -40 ... +100°C (-40 ... +212°F), Seat seal TPE, Ambient temperature -20 ... +85°C (-4 ... +185°F), Cleaning gas temperature -40 ... +85°C (-40 ... +185°F)	62
Dusty gas temperature version -40 ... +140°C (-40 ... +284°F), Seat seal TPE, Ambient temperature -20 ... +85°C (-4 ... +185°F), Cleaning gas temperature -40 ... +85°C (-40 ... +185°F)	63
Low temperature version Dusty gas temperature version -40 ... +85°C (-40 ... +185°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-4 ... +185°F), Cleaning gas temperature -40 ... +85°C (-40 ... +185°F) Not in combination with with solenoid system 817x	71

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx

Standard solenoid systems

Voltage and Frequency Solenoid 8171 *2)					
Code	Code	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2) us only

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 for hazardous areas

ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/ T95°C Db	IP66	468x	24 V d.c., 110 V a.c., 230 V a.c.
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	8176	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T135°C Db	IP66	6176	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

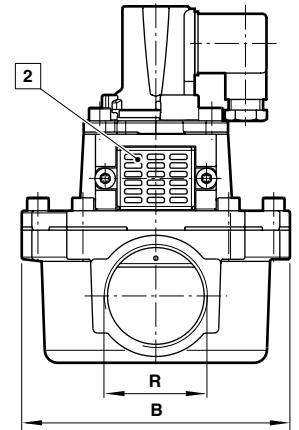
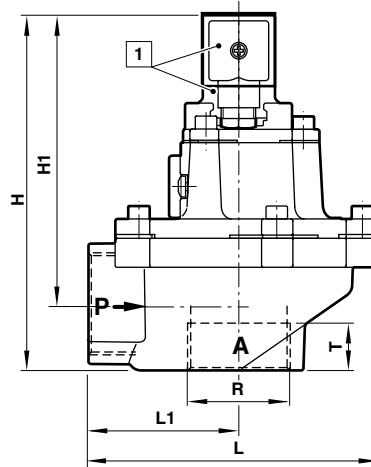
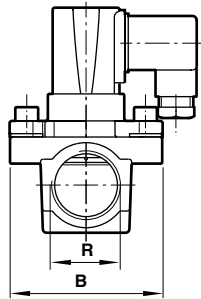
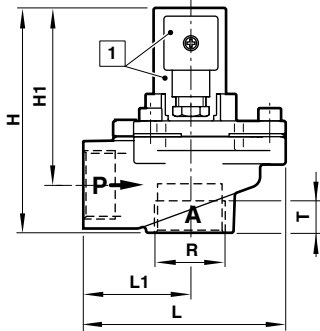
Option	Solenoid	Standard voltages
Solenoid version for low temperature -40°C	9151	24 V d.c., 110 V a.c., 230 V a.c.

Dimensions

G3/4 ... 1

G1 1/2

Dimensions in mm
Projection/first angle



- 1 Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)
- 2 Silencer

Port size R	B	H	H1	L	L1	T	Model
G3/4	80	105,5	83	95	50	18	8332300.8171.xxxxx
G1	80	105,5	83	95	50	18	8332400.8171.xxxxx
G1 1/2	124,5	166	136	135	70	22	8332600.8171.xxxxx

Note to Pressure Equipment Directive (PED):

The valves of this series 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.

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) satisfied.

Note to EAC marking:

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.