

Industrial Automation

IMI Buschjost

82960 Lf. 54 2/2-way diaphragm valves

- Port size: DN 20 ... 65,
 Tank Valve execution
- 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

Switching function: Normally closed

Operation:

Solenoid pilot operated

Flow direction: Determined Mounting position:

Optional, preferably solenoid vertical on top

Port size:

DN 20, DN 25, DN 40, DN 50, DN 65

Operating pressure: 0,4 ... 8 bar (5,8 ... 116 psi) Dusty gas temperature:

-40 ... +85°C (-40 ... +185°F)

Ambient temperature: -20 ... +85°C (-4 ... +185°F)

Cleaning gas temperature: -40 ... +85°C (-40 ... +185°F) Material:

Body: Aluminium Seat seal: TPE Internal parts: TPU

Technical data - standard models

Symbol	Orifice	Valve length	Flow kv value *1)	Operating pressure		Weight	Model
	(mm)	(mm)	(m³/h)	(bar)	(psi)	(kg)	Solenoid in V d.c./a.c.
a lab b	20/25	95	22	0,4 8	5,8 116	0,32	8296454.8171.xxxxx
	40	135	59	0,4 8	5,8 116	0,73	8296654.8171.xxxxx
	50/65	169	80	0,4 8	5,8 116	1,15	8296754.8171.xxxxx
Y P							

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2



Option selector 8296 * * *.8171. * * * * * Orifice (mm) Substitute Frequency Substitute 20/25 4 See table frequency codes XX 40 6 Voltage Substitute 50/65 7 See table voltage codes XXX Substitute Valve options Further versions on request! Tank valve execution with-54 out valve housing Dusty gas temperature 60 -10 ... +140°C (+14 ... +284°F) (DN 20 ... DN 40) Ambient temperature -10 ... +85°C (+14 ... +185°F) Cleaning gas temperature −10 ... +85°C (+14 ... +185°F) Seat seal ECO/FPM One level, to 4,5 bar (65 psi) 90 (only DN 40)

Standard solenoid systems

Voltage and Frequency Solenoid 8171 *2)						
Code	Code	Voltage	Frequency	Power consumption		
Voltage	Frequency			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	



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 T6/T5/ T4 Gb Ex tb IIIC T130°C Db	IP66	42xx	24 V d.c., 110 V a.c., 230 V a.c.
2G 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.



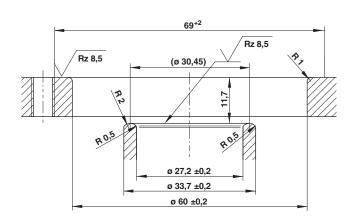
Dimensions

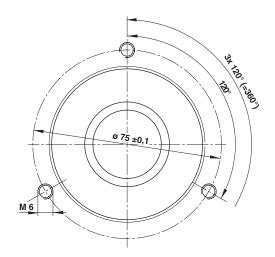
Valve Seat 8296454

Dimensions in mm Projection/first angle



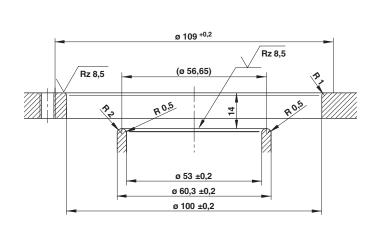


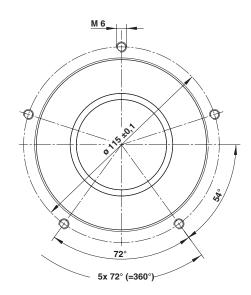




Valve Seat 8296654

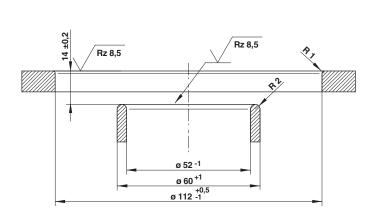
Hole Pattern 8296654

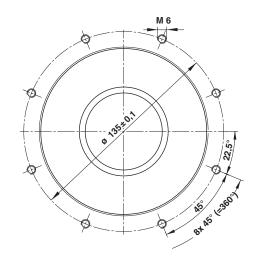




Valve Seat 8296754

Hole Pattern 8296754







Note to Pressure Equipment Directive (PED):

The valves of this series are according to Art. 4 \S 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) satisfield.