

Life Science

IMI FAS

15 mm MICROSOL Interface High flow solenoid valve

- 3/2 NC, 3/2 NO Manifold mounting
- Compact design
- High flow
- Pilot operated, servo assisted
- Long life in excess of 100 millions cycle rate
- Low power consumption



Technical features

Medium:

Air, oxygen and neutral gases

Operation:

Pilot operated, servo assisted 3-way valves, normally closed or normally open with manual override

Operating pressure: 3/2 NC: 1,5 ... 10 bar (22 ... 145 psi) 3/2 NO: 1,5 ... 8 bar (22 ... 116 psi)

Flow:

200 l/min at inlet pressure 6 bar (87 psi), $\Delta p = 1$ bar (14,5 psi) and +20°C (+68°F) Air.

kv factor: 3 (Cv: 0,21)

Mounting: Manifold

Orifice: 3 mm

Response time: 10 ... 15 ms

Response time measured according to ISO 12238

Life expectancy: 100 million cycles (except Hit & Hold valves)

Weight: 55 g (0,12 lbs)

Ambient/media temperature: Ambient:

−10 ... +50°C (+14 ... +122°F) Media:

Media.

-10 ... +30°C (+14 ... +86°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F). Materials:

Body: PPS, POM, PA Seat seals: NBR, PUR Internal parts: Stainless steel, PA. PAA

Electrical details

Voltage	12 or 24 V d.c.
Voltage range	−10% +15%
Power consumption	1 W
Electrical connection	AMP 2P
Electrical insulation	1500 V a.c.
Insulation class	F (155°C)
Protection class according to EN 60529	IP65

Following options on request

Pneumatic configuration
Operating pressure
Materials
Coil orientation
Electrical connections
Lower power consumption for portable devices

Embedded electronics options

Led signalization

File code: LS_DS_MICROSOL-INT_en/05/24



Technical data – standard models

Symbol	Operating pressure)	kv*1)	Voltage	Power consumption	Manual override	Seal material	Coil orientation *2)	Drawing	Model
	(bar)	(psi)		(V d.c.)	(W)			(mm)	No.	
	1,5 10	22 145	3	12	1	Push only	NBR	B05	-	01-312E-06-HP A1151 AWP
	1,5 10	22 145	3	12	1	Push only	NBR	B06	1	01-312E-06-HP A1161 AWP
12 2 10	1,5 10	22 145	3	12	1	Push only	NBR	B07	_	01-312E-06-HP A1171 AWP
	1,5 10	22 145	3	24	1	Push only	NBR	B05	-	01-312E-06-HP A1151 AYV
1 3	1,5 10	22 145	3	24	1	Push only	NBR	B06	1	01-312E-06-HP A1161 AYV
	1,5 10	22 145	3	24	1	Push only	NBR	B07	-	01-312E-06-HP A1171 AYV
	1,5 8	22 116	3	12	1	Push only	NBR	B05	_	01-322E-06-HP A1151 AWP
	1,5 8	22 116	3	12	1	Push only	NBR	B06	1	01-322E-06-HP A1161 AWP
12 2 10	1,5 8	22 116	3	12	1	Push only	NBR	B07	-	01-322E-06-HP A1171 AWP
□ □ · · · · · · · · · · · · · · · · · · ·	1,5 8	22 116	3	24	1	Push only	NBR	B05	-	01-322E-06-HP A1151 AYV
1 3	1,5 8	22 116	3	24	1	Push only	NBR	B06	1	01-322E-06-HP A1161 AYV
	1,5 8	22 116	3	24	1	Push only	NBR	B07	-	01-322E-06-HP A1171 AYV

^{*1)} Cv = 0.07 kv

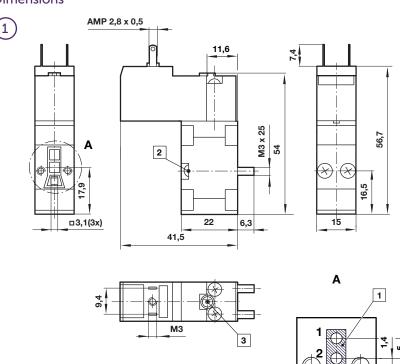
Accessories



Electrical connection



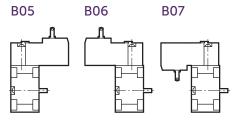
Dimensions



Dimensions in mm Projection/first angle







- 1 Sealing area
- The recommended mounting screw tightening torque is 0,6 Nm.
- 3 Manual override

All solenoids are supplied with mounting screws and gasket.

9,7

3,1

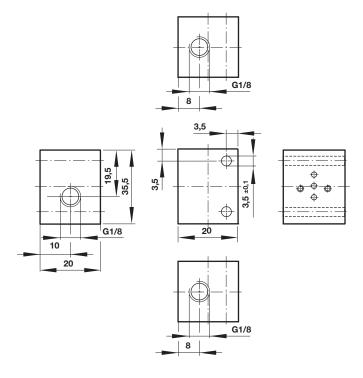
^{*2)} See page 2



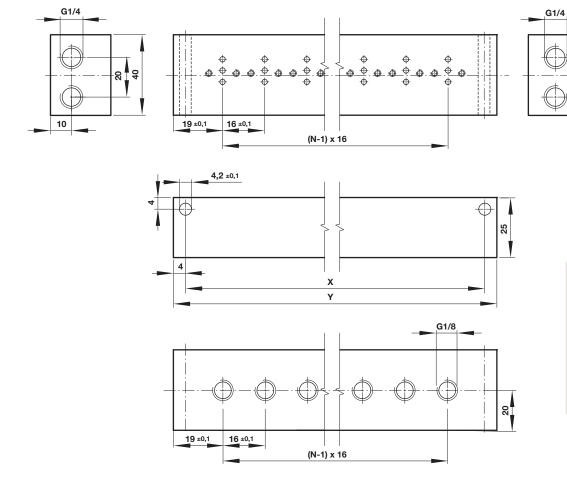
Test manifold Model: S010.5036 Dimensions in mm Projection/first angle







Test manifold $2\dots 10$ positions; Common inlet: G1/4; Individual outlets: G1/8 Available on request



Valve station	Χ	Υ
2	46	54
3	62	70
4	78	86
5	94	102
6	110	118
7	126	134
8	142	150
9	158	166
10	174	182

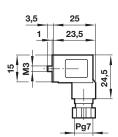


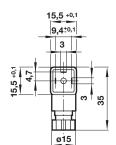
Electrical connector Model: N050.1456

Dimensions in mm Projection/first angle









Warning

These products are intended for use in air, oxygen and neutral gas systems only. Do not use these products where pressures and temperatures can exceed those listed under »Technical features«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult IMI Plc., FAS MEDIC SA.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.