

15 mm MICROSOL Interface IS

High flow intrinsically safe solenoid valve

- 3/2 NC
Manifold mounting
- Compact design
- High flow
- Pilot operated, servo assisted
- Long life - in excess of 100 millions cycle rate
- Low power consumption
- Certification: ATEX, IECEx



Technical features

Medium:

Air, oxygen and neutral gases (10% to 95 % humidity, non condensing), 40 µm filtered

Operation:

Direct acting 3-way valves, normally closed

Operating pressure:

see table below page 2

Flow:

160 l/min at 7 bar (101 psi) at +20°C (+68°F)

220 l/min at 8 bar (116 psi) at +20°C (+68°F)

kv factor:

2,3 ... 3 (Cv: 0,15 ... 0,20)

Mounting:

Manifold

Orifice:

3 mm

Response time:

25 ms
Response time measured according to ISO 12238

Life expectancy:

50 ... 100 million cycles (except Hit & Hold valves)

Weight:

55 g

Ambient/media temperature:

–10 ... +40 °C (+14 ... +122°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2 °C (+35°F)

Materials:

Body: PPS
Seat seals: NBR, FPM
Internal parts: Stainless steel, PA 6/6

Electrical details

Voltage	12 or 24 V d.c.
Voltage range	–10% ... +25%
Electrical insulation	500 V a.c.
Insulation class	F (155°C)
Protection class according to EN 60529	IP65

MICROSOL valves Ex-Protection class

II 1 GD (Industrial, Zone 0, Gaz & Dust)
Ex ia IIC T4, T5 ou T6 Ga
Ex ia IIIC T85°C, T100°C ou T135°C Da
INERIS 02ATEX0007X
INERIS 02ATEX0009X
INERIS 02ATEX0031X, IECEx 14.0002X

PICOSOL valves Ex-Protection class

II 1 GD (Industrial, Zone 0, Gaz & Dust)
Ex ia IIC T4, T5 ou T6
Ex iaD 20 T85°C, T100°C ou T135°C
INERIS 04ATEX0101X
INERIS 04ATEX0101X/01

Ex-Approvals

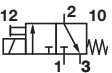
2011/65/CE
2004/108/CE
94/9/CE

Following options on request

Pneumatic configuration
Operating pressure (also vacuum)
Materials
Voltage
Pneumatic port allocation
Power consumption
Electrical connections (flying leads on request)
Coil orientation
Deaerated
Manual override

File code: LS_DS_MICROSOL-INT-IS_en/05/24

Technical data – standard models

Symbol	Operating pressure		kv*1)	Voltage	Power consumption	Manual override	Seal material	Lead	Drawing	Model
	(bar)	(psi)	(l/min)	(V d.c.)	(W)			(mm)	No.	
	4 ... 8	58 ... 116	3	12	0,5	Push only	NBR	300	1	11-312E-06-HP+H110002+AWF *2)
	4 ... 8	58 ... 116	3	24	0,5	Push only	NBR	300	1	11-312E-06-HP+H110003+AYJ *2)
	1,5 ... 7	22 ... 101	3	12	0,55	Push only	NBR	–	2	01-312E-06-HP+H012003+BCC *3)
	1,5 ... 7	22 ... 101	3	24	0,55	Push only	NBR	–	2	01-312E-06-HP+H012004+BDH *3)

*1) $C_v = 0,07 \text{ kv}$

*2) PICOSOL pilot valve

*3) MICROSOL pilot valve

Electrical connection

Electrical connector MPM 9,4 mm industry standard (C192) to mate AMP spade 2,8 x 0,5 mm



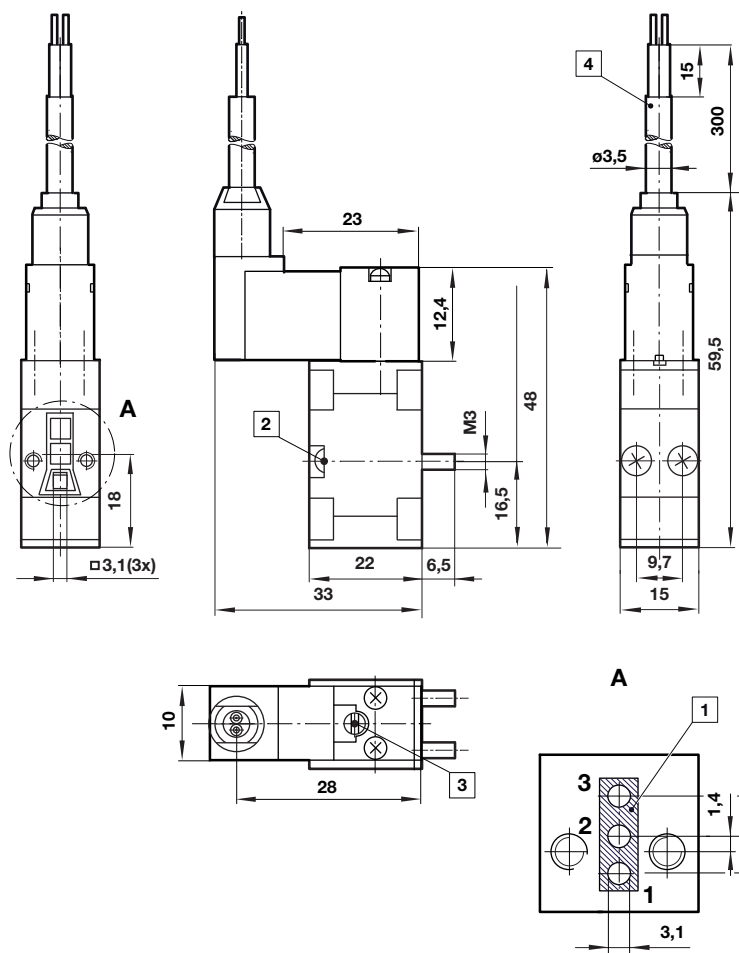
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N050.1456

Dimensions

①

Dimensions in mm
Projection/first angle



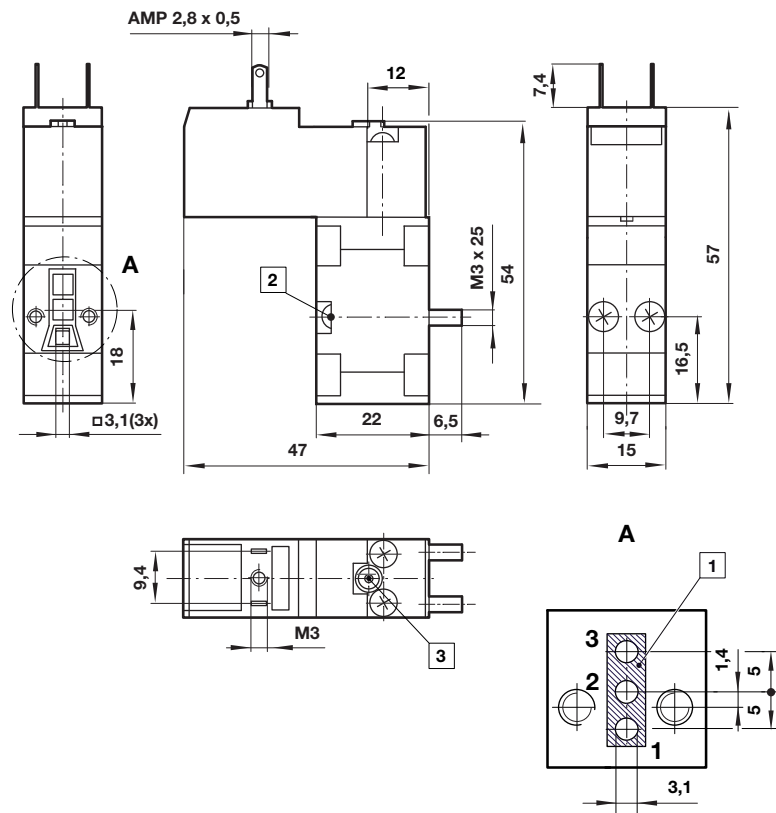
- ① Sealing area
- ② The recommended mounting screw tightening torque is 0,15 Nm.
- ③ Manual override
- ④ Connection cable

All valves are supplied with mounting screws and gasket.

Dimensions

②

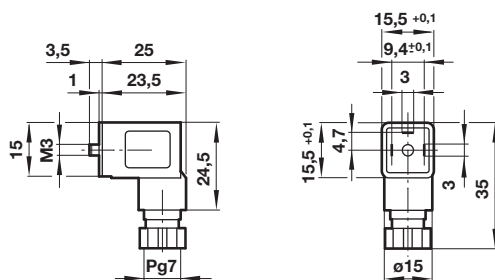
Dimensions in mm
Projection/first angle



- 1 Sealing area
- 2 The recommended mounting screw tightening torque is 0,15 Nm.
- 3 Manual override

All valves are supplied with mounting screws and gasket.

Electrical connector Model: N050.1456



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.