

15 mm MICROSOL IS

Direct acting intrinsically safe solenoid valve

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



Technical features

Medium:

Air, oxygen, 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:

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

kv factor:

0,12 (Cv: 0,008)

Mounting:

Manifold

Orifice:

0,5 mm

Response time:

25 ms
Response time measured according to ISO 12238

Life expectancy:

20 ... 100 million cycles (except Hit & Hold valves)

Weight:

30 g (0,07 lbs)

Ambient/media temperature:

–10 ... +50°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	–5% ... +15% @ 100% duty cycle
Electrical insulation	500 V a.c.
Insulation class	F (155°C)
Protection class according to EN 60529	IP51 with connector

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
Deagreed
Manual override

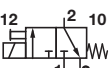
Ex-Protection class

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

Ex-Approvals

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

Technical data – standard models

Symbol	Operating pressure		kv*1)	Power consumption	Voltage	Manual override	Seal material	Drawing	Model
	(bar)	(psi)	(l/min)	(W)	(V d.c.)			No.	
	0 ... 7	0 ... 101	0,12	0,55	12	Push only	NBR	1	01-311P-00-H0+H012003+BCC
	0 ... 7	0 ... 101	0,12	0,70	24	Push only	NBR	1	01-311P-00-H0+H012004+BDH
	4 ... 7	58 ... 101	0,07	0,10	12	Push only	NBR	2	01-311P-00-H0+H010014+AWD
	4 ... 7	58 ... 101	0,07	0,10	24	Push only	NBR	2	01-311P-00-H0+H010016+AYG

*1) Cv = 0,07 kv

Accessories

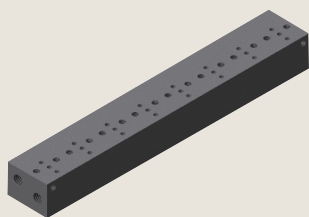
Mounting plate with M5 thread —
1 position for 2 ways valve up to
2 mm orifice and 3 ways valve



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S050.1010

M5 ported mounting plate —
2 ... 8 positions



Available on request

Electrical connection

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



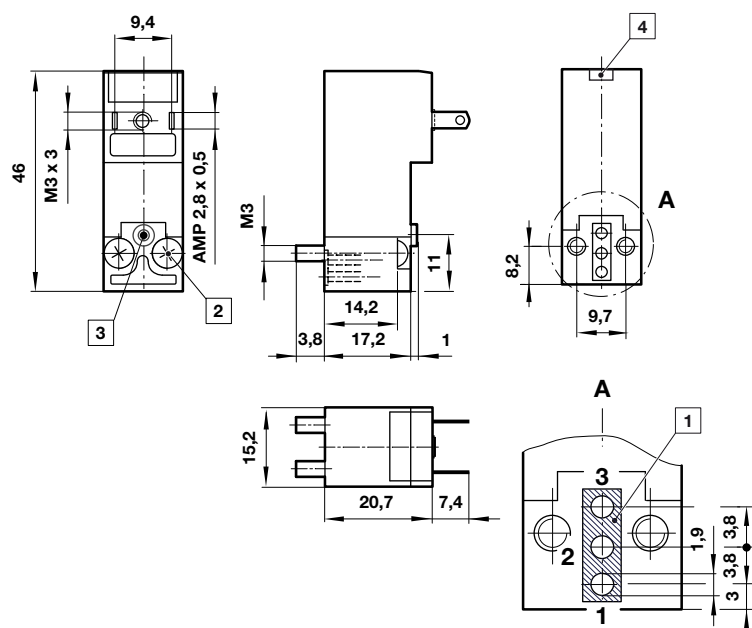
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N050.1456

Dimensions

① MICROSOL IS, kv 0,12 led signalization

Dimensions in mm
Projection/first angle



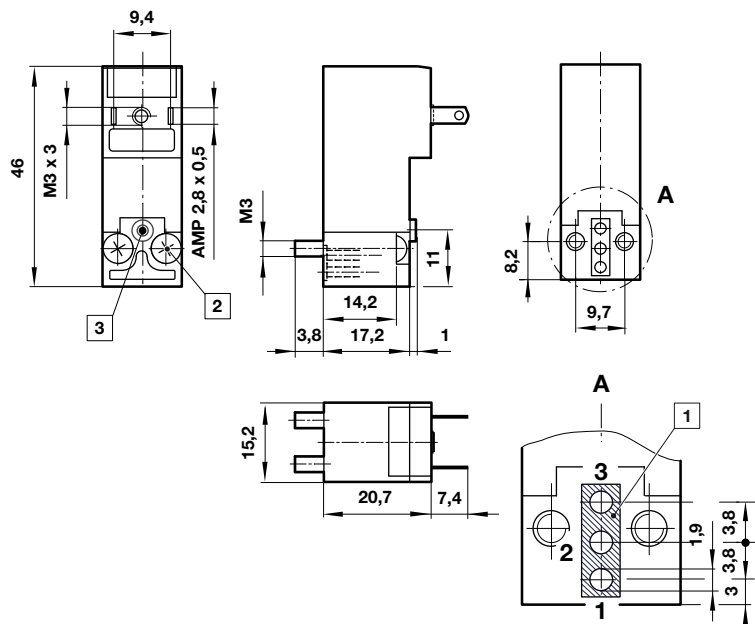
- ① Sealing area
- ② The recommended mounting screw tightening torque is 0,15 Nm.
- ③ Manual override, push only
- ④ Solenoid with integrated LED

All solenoid are supplied with mounting screws and gasket.

Dimensions

② MICROSOL IS, kv 0,07 without led signalization

Dimensions in mm
Projection/first angle

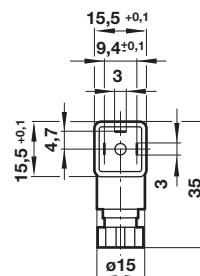
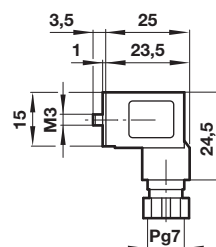
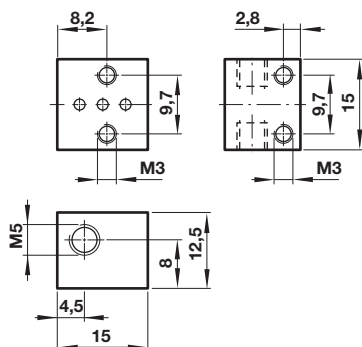


- ① Sealing area
- ② The recommended mounting screw tightening torque is 0,15 Nm.
- ③ Manual override, push only

All solenoid are supplied with mounting screws and gasket.

Mounting plate Model: S050.1010 (Aluminium)

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.