

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

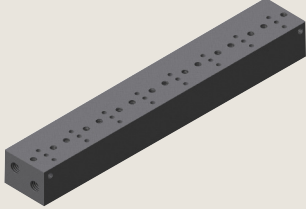
Accessories

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



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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

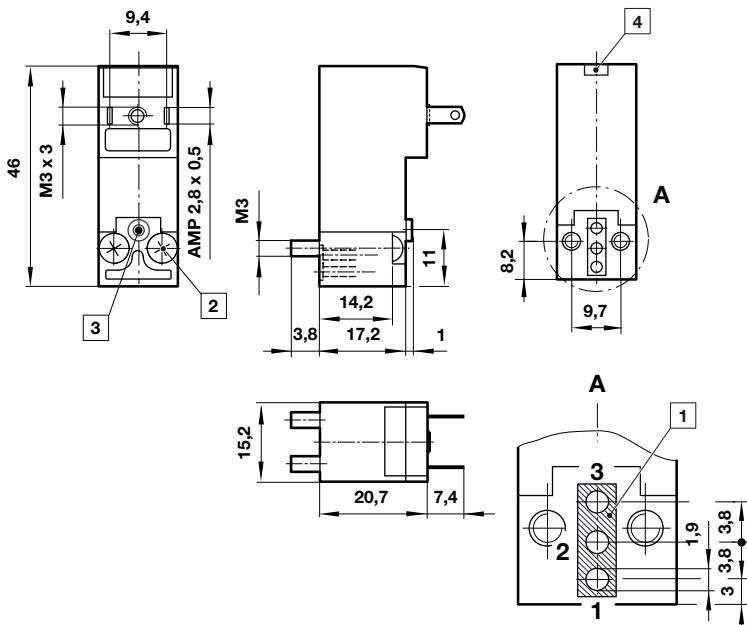


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Dimensions

① MICROSOL IS, kv 0,12 led signalization

Dimensions in mm
Projection/first angle



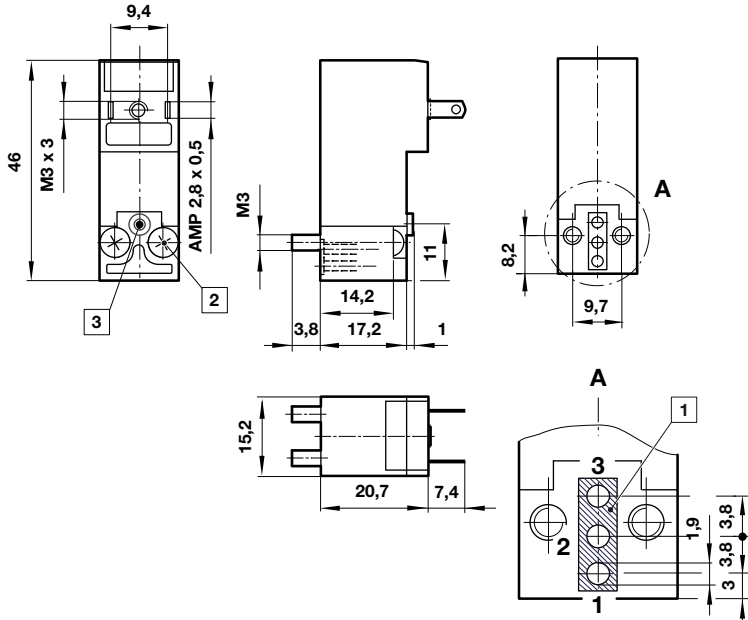
- ① Sealing area
- ② The recommended mounting screw tightening torque is 0,15 Nm.
- ③ Manual override, push only
- ④ Solenoid with integrated LED

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

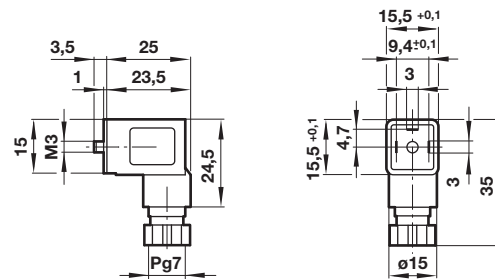
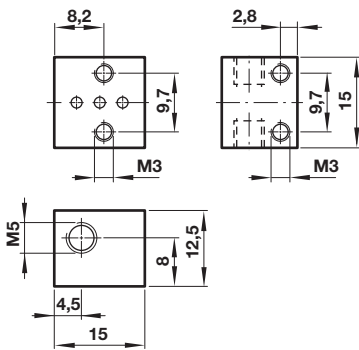


- ① Sealing area
- ② The recommended mounting screw tightening torque is 0,15 Nm.
- ③ Manual override, push only

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.