15 mm MICROSOL 3/2 MS
Media separated solenoid valve

- 3/2 UNI Media separated, Manifold mounting
- Low internal volume, virtually no unswept volume
- Large pressure rang
- Long life – in excess of 10 Mio. cycles
- Very compact design
- Low power consumption 4/0,4 W

Technical features

Medium:
Neutral or aggressive gases and liquids

Operation:
Direct acting 3-way media separated valves

Operating pressure:
Orifice 1,2 mm: –0,95 ... 4,5 bar (–13,8 ... 65,2 psi)
Orifice 1,6 mm: –0,95 ... 2,2 bar (–13,8 ... 31,9 psi)

Flow:
kv: 0,6 l/min; flow: 24 l/min (orifice 1,2 mm, at Δp = 2 bar, 20°C (+68°F))
kv: 0,8 l/min; flow: 33 l/min (orifice 1,6 mm, at Δp = 2 bar, 20°C (+68°F))

Mounting:
Manifold

Orifice:
1,2 and 1,6 mm

Life expectancy:
≥10 Mio. cycles

Weight:
30 g (1,06 lbs)
Ambient/media temperature:
+5 ... +50°C (+41 ... +122°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:
Body in contact with media: PEEK
Seal and diaphragm material in contact with media:
FPM, FFPM, EPDM

Electrical details

Voltage tolerance	±5%
Voltage	12 and 24 V.d.c (>60ms)
Power consumption	4/0,4 W
Electrical connection	AMP 2P
Electrical insulation	1500 V.a.c.
Insulation class	F (155°C)
Protection class	IP51
Cycle rate	< 4Hz

Integrated pulse width modulation (PWM)
Revert polarity detection

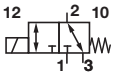
Following options on request

Operating pressure
Materials
Manual override
Coil orientation
Voltage
Electrical connection (leads)

Embedded electronics options

Without integrated pulse width modulation

Technical data – standard models

Symbol	Orifice	Operating pressure		Back pressure max. *1)		kv *2)	Voltage	Power consumption *3)	Seal / Diaphragm Material	Model
	(mm)	(bar)	(psi)	(bar)	(psi)	(l/min)	(V d.c.)	(W)		
	1,6	–0,95 ... 2,2	–13,8 ... 31,9	1,10	15,95	0,8	12	4/0,4	FPM	01-333EF03-B1+23112+AXA
	1,6	–0,95 ... 2,2	–13,8 ... 31,9	1,10	15,95	0,8	12	4/0,4	EPDM	01-333EF03-B5+23112+AXA
	1,6	–0,95 ... 2,2	–13,8 ... 31,9	1,10	15,95	0,8	12	4/0,4	FFPM	01-333EF03-B6+23112+AXA
	1,6	–0,95 ... 2,2	–13,8 ... 31,9	1,10	15,95	0,8	24	4/0,4	FPM	01-333EF03-B1+23112+AZU
	1,6	–0,95 ... 2,2	–13,8 ... 31,9	1,10	15,95	0,8	24	4/0,4	EPDM	01-333EF03-B5+23112+AZU
	1,6	–0,95 ... 2,2	–13,8 ... 31,9	1,10	15,95	0,8	24	4/0,4	FFPM	01-333EF03-B6+23112+AZU

*1) Maximum back pressure during commutation: 50% of operating pressure
*2) Cv = 0,07 kv
*3) Power consumption: "boosting power during approx 50 ms" / "holding power"

Accessories

Mounting manifold with M5 threads — 1 position, PEEK

S010.2259

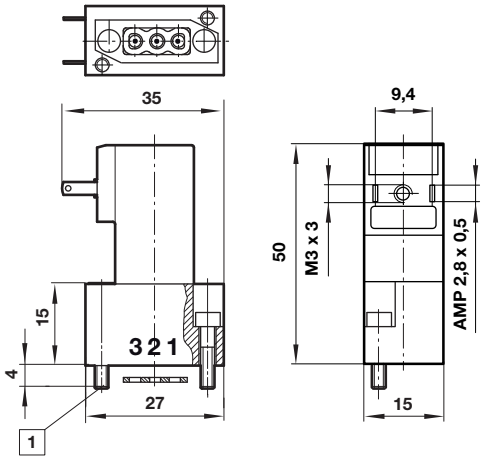
Electrical connection

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

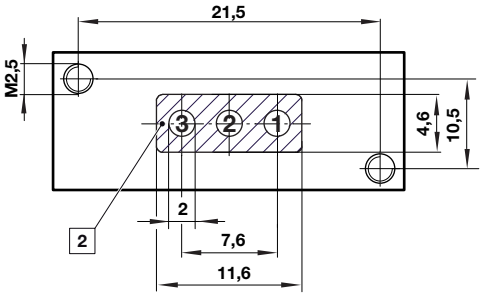
N050.1456

Dimensions

Dimensions in mm
Projection/first angle



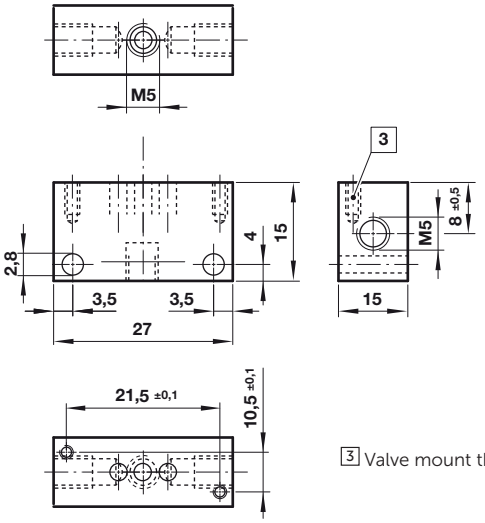
Connecting area



1 Mounting screw
2 Sealing area

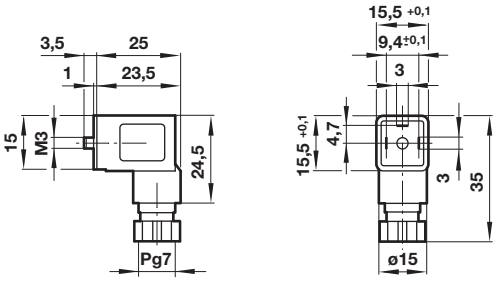
All solenoids are supplied with mounting screws and gasket.

Mounting M5 manifold
Model: S010.2259



3 Valve mount threads

Electrical connector
Model: N050.1456



Warning

These products are intended for use in neutral or aggressive gases and liquids 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 FAS.

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.