- **2/2, 3/2; Manifold mounting**
- **Compact design**
- **High flow rate**
- **In excess of 100 – Mio. cycle rate**
- **Up to 3,6 mm orifice**

Technical features

Medium:
Air, oxygen, neutral gases (10 % to 95 % humidity, non condensing), 40 µm filtered
Operation:
Direct acting 2-way and 3-way valves, normally closed and normally opened
Operating pressure:
see table below page 2
Flow:
6 … 120 l/min at 2 bar (29 psi) at +20 °C (+68°F)

kv factor:
0,15 ... 3 (Cv: 0.01 ... 0.2)
Mounting:
Manifold
Orifice:
2/2 way valves
0,5 .... 3,6 mm (0.02 ... 0.14")
3/2 way valves
0,5 .... 1,5 mm (0.02 ... 0.06")
Response time:
10 ... 15 ms
Response time measured according to ISO 12238

Life expectancy:
≥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:	24 V d.c.
Voltage range:	-10 % ... +15 % @ 100 % duty cycle
Electrical insulation:	1500 V a.c.
Insulation class:	F (155 °C)
Protection class according to EN 60529:	IP 51 with connector

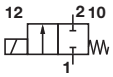
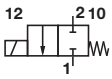
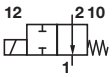
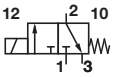
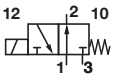
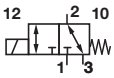
Following options on request

- Pneumatic configuration (latching)
- Operating pressure (also vacuum)
- Materials
- Voltage
- Pneumatic port allocation
- Power consumption
- Electrical connections (300 mm flying leads, connector types)
- Coil orientation
- Protection class

Embedded electronics options

- Integrated pulse width modulation (PWM)
- Reverse polarity protection
- Led signalization

Technical data - standard models

Symbol	Operation	Orifice	Operating pressure (bar)	Operating pressure (psi)	kv *1) (l/min)	Voltage *3) (V d.c.)	Power consumption (W) *2)	Seal Material	Drawing No.	Model
	2/2 NC (Flow direction from 1 » 2)	0,5	0 ... 15	0 ... 218	0,15	24	1	NBR	1	01-211P200-H0+13111+AYV
		0,8	0 ... 10	0 ... 145	0,4	24	1	NBR	1	01-211P201-H0+13111+AYV
		1,2	0 ... 10	0 ... 145	0,75	24	2	NBR	1	01-211P202-H0+63111+AYZ
		1,6	0 ... 6	0 ... 87	1,15	24	2	NBR	1	01-211P203-H0+63111+AYZ
		2	0 ... 4	0 ... 58	1,3	24	2	NBR	1	01-211P204-H0+63111+AYZ
	2/2 NC (Flow direction from 2 » 1)	3,6	0 ... 6	0 ... 87	3	24	12/0,5	NBR	2	01-211P-036H0+63111+AZN
	2/2 NO ECI *4)	0,5	0 ... 16	0 ... 232	0,15	24	2	NBR	1	01-221P200-H0+631A1+AYZ
		1,2	0 ... 10	0 ... 145	0,75	24	2	NBR	1	01-221P202-H0+631A1+AYZ
		2	0 ... 6	0 ... 145	1,4	24	2	NBR	1	01-221P204-H0+631A1+AYZ
	3/2 NC	0,8	0 ... 8	0 ... 116	0,28	24	1	NBR	3	01-311P101-H0+13111+AYV
		1,1	0 ... 10	0 ... 145	0,42	24	2	NBR	3	01-311P1011H0+63111+AYZ
		1,5	0 ... 6	0 ... 87	0,55	24	2	NBR	3	01-311P1015H0+63111+AYZ
	3/2 NO ECI *4)	0,8	0 ... 10	0 ... 145	0,28	24	2	NBR	3	01-321P101-H0+631A1+AYZ
		1,1	0 ... 6	0 ... 87	0,42	24	2	NBR	3	01-321P1011H0+631A1+AYZ
		1,5	0 ... 3	0 ... 102	0,55	24	2	NBR	3	01-321P1015H0+631A1+AYZ
	3/2 UNI	0,7	0 ... 6	0 ... 87	0,24	24	2	NBR	3	01-331P1070H0+63111+AYZ
		1	0 ... 3,5	0 ... 50	0,36	24	2	NBR	3	01-331P1010H0+63111+AYZ
		1,5	0 ... 2	0 ... 29	0,55	24	2	NBR	3	01-331P1015H0+63111+AYZ

*1) Cv - Value in [gal/min] = kv x 0.07; kv for 3/2 way valves represents flow value between ports 2 and 3
*2) Valve models with 2 power consumption values are equipped with ‚Hit & Hold' power saving electronic
*3) Valve models available with different nominal voltages
*4) ECI - Push type version

Accessories

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

Page 4

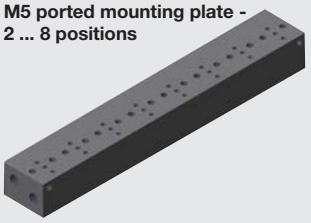
S050.1010

Mounting plate with G1/8 thread — 1 position for 2 ways 3,6 mm orifice

Page 4

S010.2248

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

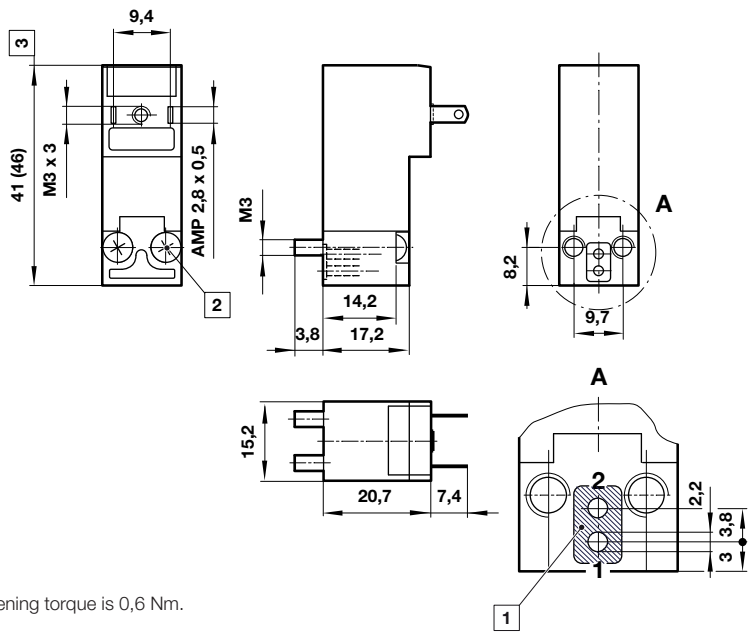
Page 4

N050.1456

Dimensions

Dimensions shown in mm
Projection/First angle

1 2 ways standard



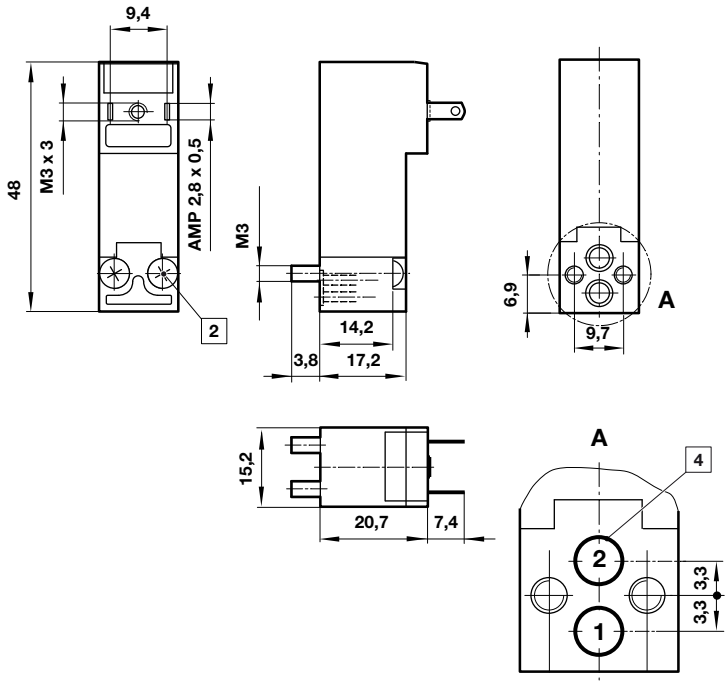
1 Sealing area
2 The recommended mounting screw tightening torque is 0,6 Nm.
3 Value in ( ) for ECI version

All solenoids are supplied with mounting screws and gasket.

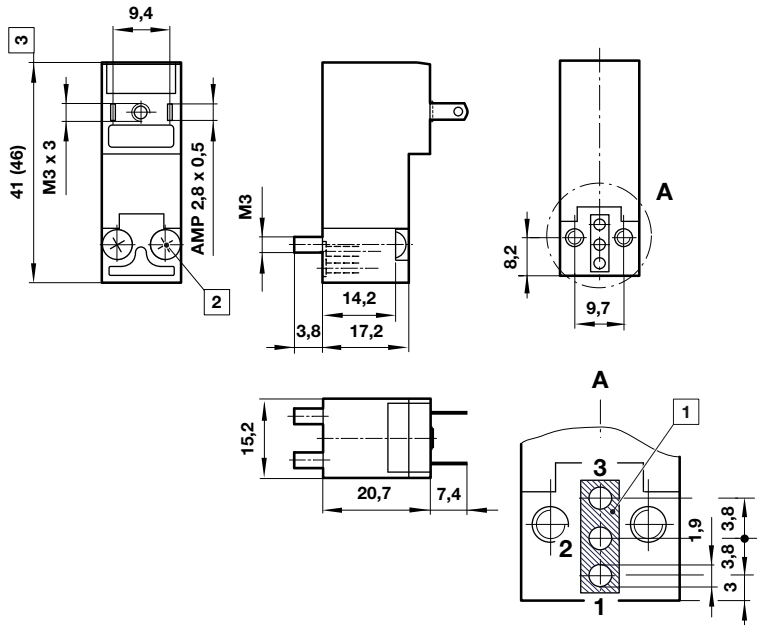
Dimensions

Dimensions shown in mm
Projection/First angle

2 2 ways 3,6 mm orifice



3 3 ways standard



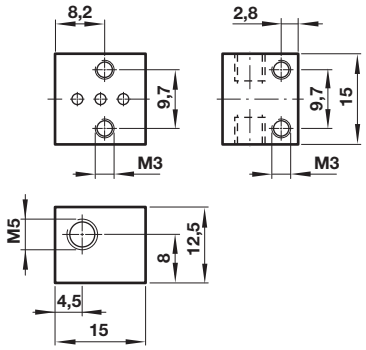
1 Sealing area
2 The recommended mounting screw tightening torque is 0,6 Nm.
3 Value in ( ) for ECI version
4 'O' Rings Ø 4 x 1

All solenoids are supplied with mounting screws and gasket or 'O' Rings.

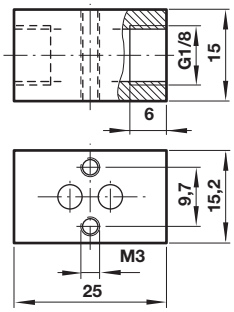
Dimensions

Dimensions shown in mm
Projection/First angle

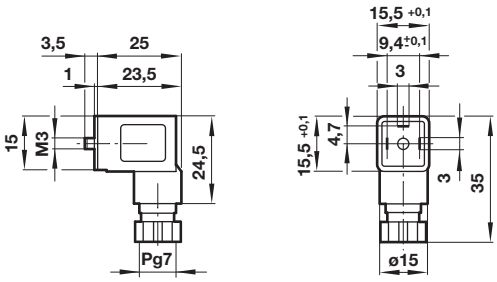
Mounting plate
Model: S050.1010
(Aluminium)



Mounting plate
Model: S010.2248
(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 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.