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 psig)
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).

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

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

> 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 data - standard models

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Operation</th>
<th>Orifice</th>
<th>Operating pressure</th>
<th>kv *1)</th>
<th>Voltage *3)</th>
<th>Power consumption *2)</th>
<th>Seal Material</th>
<th>Drawing No.</th>
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**Accessories**

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

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

MS ported mounting plate - 2 ... 8 positions

**Electrical connection**

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

**Dimensions**

2 ways standard

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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

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Sealing area

The recommended mounting screw tightening torque is 0,6 Nm.

Value in () for ECI version

All solenoids are supplied with mounting screws and gasket.
Dimensions

2 2 ways 3.6 mm orifice

Dimensions shown in mm
Projection/First angle

3 3 ways standard

Sealing area
The recommended mounting screw tightening torque is 0.6 Nm.
Value in ( ) for ECI version
'O' Rings Ø 4 x 1

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