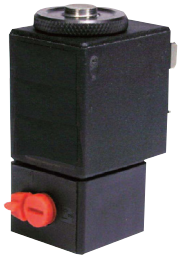
22 mm INTERSOL
Direct acting solenoid valve



- 2/2, 3/2; Manifold mounting
- Compact design
- Easy integration
- Long life – in excess of 25 Mio. cycles
- Up to 2000 cycles per minute
- Up to 1,8 mm orifice

Technical features

Medium:
Air, neutral gases and liquids

Operation:
Direct acting 2-way and 3-way valves, normally closed and normally opened, universal, with manual override

Operating pressure:
0 ... 15 bar

Flow (kv factor):
0,6 ... 1,0 (Cv: 0,04 ... 0,06)

Mounting:
Flange mount

Orifice:
1,2 ... 1,8 mm (0,05 ... 0,07")

Response time:
8 ... 15 ms
Response time measured according to ISO 12238

Life time:
25 million cycles

Ambient/media temperature:
–15 ... +50°C (+5 ... +122°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:
Body: Brass, PA
Seal: NBR, FPM, EDPM

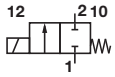
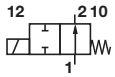
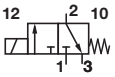
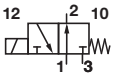
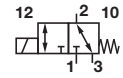
Electrical details

Voltage tolerances	–10% ... +15%
Duty cycle	100% ED
Insulation class	F (155°C)
Protection class according to EN 60529	IP65 with connector
Electrical connection	Interface according to DIN EN 175301-803, Form B
Coil orientation	Rotable 360°
Coil mounting	M8 x 0,75 mm nut

Following options on request

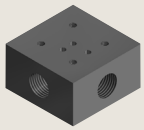
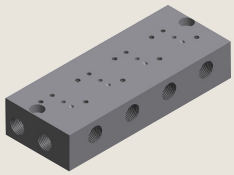
Pneumatic configuration
Voltage
Operating pressure (also vacuum)
Materials
Power consumption
Electrical connections (type of connector & coil orientation)

Technical data – standard models

Symbol	Port size	Function	Orifice	Operating pressure		kv *1)	Voltage	Power consumption	Material		Model
			(mm)	(bar)	(psi)	(l/min)	(V d.c.)	(W)	Body	Seal	
	Manifold	2/2 NC	1,2	0 ... 15	0 ... 217	0,60	24	3,8	PA	NBR	09-211I-02-30+AQF
	Manifold	2/2 NC	1,6	0 ... 10	0 ... 145	0,80	24	3,8	PA	NBR	09-211I-03-30+AQF
	Manifold	2/2 NC	1,8	0 ... 8	0 ... 116	1,00	24	3,8	PA	NBR	09-211I-01830+AQF
	Manifold	2/2 NO	1,8	0 ... 12	0 ... 174	0,75	24	3,8	PA	NBR	09-221I-01830+AQF
	Manifold	3/2 NC	1,2	0 ... 15	0 ... 217	0,60	24	3,8	PA	NBR	09-311I-02-30+AQF
	Manifold	3/2 NC	1,4	0 ... 12	0 ... 174	0,70	24	3,8	PA	NBR	09-311I-01430+AQF
	Manifold	3/2 NC	1,6	0 ... 10	0 ... 145	0,80	24	3,8	PA	NBR	09-311I-03-30+AQF
	Manifold	3/2 NC	1,8	0 ... 8	0 ... 116	1,00	24	3,8	PA	NBR	09-311I-01830+AQF
	Manifold	3/2 NO	1,2	0 ... 10	0 ... 145	0,60	24	3,8	PA	NBR	09-321I-02-30+AQF
	Manifold	3/2 NO	1,4	0 ... 7	0 ... 101	0,75	24	3,8	PA	NBR	09-321I-01430+AQF
	Manifold	3/2 NO	1,8	0 ... 6	0 ... 87	0,85	24	3,8	PA	NBR	09-321I-01830+AQF
	Manifold	3/2 NC	1,2	0 ... 8	0 ... 116	0,60	24	3,8	PA	NBR	09-331I-02-30+AQF
	Manifold	3/2 NC	1,8	0 ... 4	0 ... 58	0,85	24	3,8	PA	NBR	09-331I-01830+AQF

*1) Cv – Value in [gal/min] = kv x 0,07

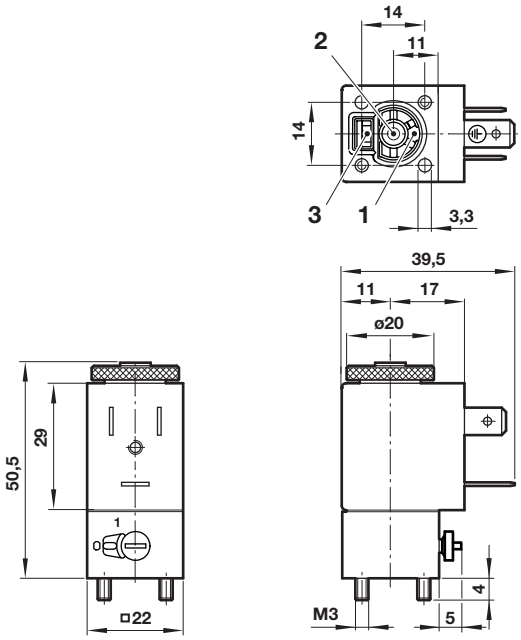
Accessories

G1/8 ported mounting plate — 1 position for 3/2 ways valve	G1/8 ported mounting plate — 2 ... 8 positions	22 mm Industrial standard 2-pole + PE
		
S090.3146	Available on request	N060.1075

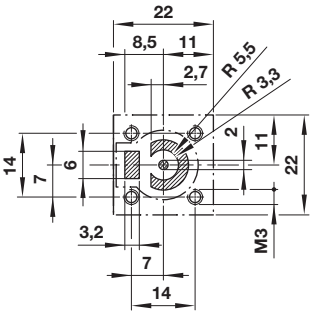
Dimensions

Dimensions in mm
Projection/first angle

Valve



Manifold fitting



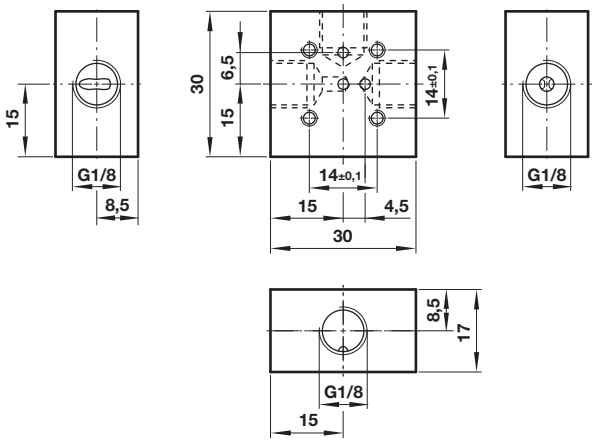
Port identification

	Ports 1	2	3
2/2 NC	A	P	–
2/2 NO	P	–	A
3/2 NC	A	P	R
3/2 NO	A	R	P
3/2 UNI (SEL)	P	A_1	A_2
3/2 UNI (MIX)	A	P_1	P_2

P, P_1, P_2 = Inlet; A, A_1, A_2 = Outlet; R = Exhaust
Please refer to marking on the valve body for flow direction or port identification.

All solenoids are supplied with mounting screws and gasket.

Mounting plate



Warning

These products are intended for use in air, neutral gas and liquid 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 Precision Engineering, Fluid Automation Systems s.a.

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.