

31/32/33 Series 3/2 Closed/Open/Universal



Features & Benefits

- For Mixing, Diverting & Venting Applications
- Compact Valve Design
- Wide Range of Available Orifices
- Zero Pressure Rated
- Choice of Valve Body Material and Seals
- Exd and Exm options
- Direct acting
- Response time 5-25ms



Features

Pipe Size	Qn	OPD (Bar)		P.Max	Orifice	Cat No.
		AC Voltages	DC Voltages	Bar	mm	
1/8"	34	0 - 10.6	0 - 10.6	60	1.60	31112115
1/8"	108	0 - 7.0	0 - 7.0	60	2.40	31122115
1/8"	141	0 - 5.8	0 - 5.8	60	3.00	31132115
1/4"	34	0 - 10.6	0 - 10.6	60	1.60	31212115
1/4"	108	0 - 7.0	0 - 7.0	60	2.40	31222115
1/4"	141	0 - 5.8	0 - 5.8	60	3.00	31232115
1/8"	34	0 - 10.0	0 - 10.0	60	1.60	32112115
1/8"	108	0 - 5.4	0 - 5.4	60	2.40	32122115
1/8"	141	0 - 2.4	0 - 2.4	60	3.00	32132115
1/4"	34	0 - 10.0	0 - 10.0	60	1.60	32212115
1/4"	108	0 - 5.4	0 - 5.4	60	2.40	32222115
1/4"	141	0 - 2.4	0 - 2.4	60	3.00	32232115
1/8"	34	0 - 7.5	0 - 7.5	60	1.60	33112115
1/8"	108	0 - 3.5	0 - 3.5	60	2.40	33122115
1/8"	141	0 - 2.0	0 - 2.0	60	3.00	33132115
1/4"	34	0 - 7.5	0 - 7.5	60	1.60	33212115
1/4"	108	0 - 3.5	0 - 3.5	60	2.40	33222115
1/4"	141	0 - 2.0	0 - 2.0	60	3.00	33232115

Electrical Characteristics

Coil Voltage DC (=):	12v, 24v, 110v
Coil Voltage AC 50Hz (~):	24v, 110v, 120v, 230v
Coil Voltage AC 60Hz (~):	24v, 110v, 120v, 220v
Voltage tolerance:	+10% or -10%
Duty Cycle:	100% ED
Protection Class (Std):	IP65 (BS EN 60529) (plug supplied as standard)
Electrical Connection (Std):	PG9 Din Connector DIN 43650/ISO 4400 (EN 175301-803) Form 'A'
Coil Insulation:	Class H (BS EN 60085) 180°C (E5 Type)
Power:	14.5 Watts, 19 VA

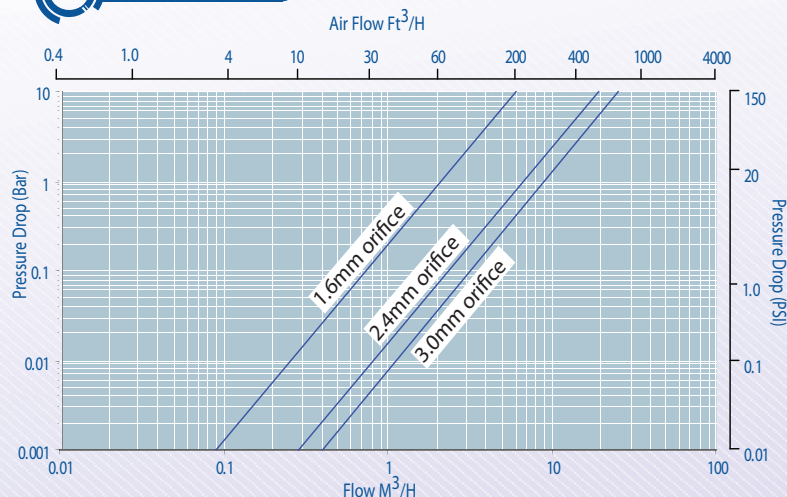
Specifications

Function:	31 Series 3 way Normally Closed, Energise to open 32 Series 3 way Normally Open, Energise to close 33 Series 3 way Universal
Ambient Temperature:	-10°C to +50°C
Maximum Viscosity:	115 SSU
Body Material (Std):	Brass CZ122
Flange Tube:	Stainless Steel 303
Plunger and Top Stop:	Stainless Steel 430FR
Springs:	Stainless Steel 302
Seal Material (Std):	Nitrile (BunaN)
Connection type (Std):	BS21
Shading Coil:	Copper

Qn = Flow of air in litres/min @ 20°C. Input 6 bar Δp of 1 bar



Flow Data



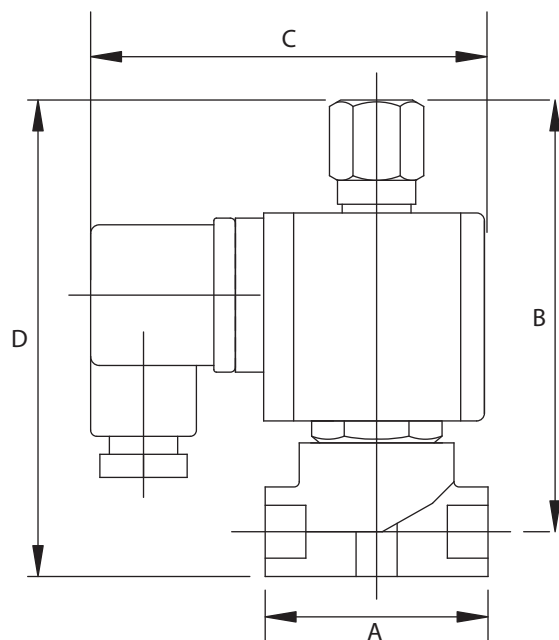
How to use the Flow Chart

1. Select the required flow.
2. Note the corresponding orifices/model and pressure drop.
3. Using orifices/model, (refer to the Features panel) for technical information

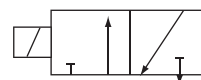
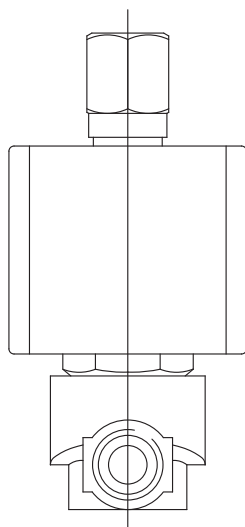


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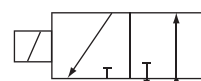
31 Series
3/2 Closed/Open/Universal



Solenoid Coil may be rotated to any angle.



3/2 Normally Closed



3/2 Normally Open



3/2 Universal

Dimensions

Size	A	B	C	D	Weight (Kg)
1/8"	44	81	75	90	0.35
1/4"	44	81	75	90	0.35

Dimensions given in mm

Options

Solenoid Enclosure		
Protection Class	Electrical Entry	Ambient
EExd T6 (IP67)	M20 X 1.5 Female	-50°C to +40°C
EExd T4 (IP67)	M20 X 1.5 Female	-50°C to +70°C
Exm T5 (IP65)	M16 X 1.5 Male FLYING LEAD	-20°C to +40°C

Body Material
Stainless Steel 316

Seal Material	Media Temperature Range
EPDM	-50°C to +120°C
Viton	-20°C to +150°C
PTFE	-200°C to +180°C

See solenoid enclosures for specific details

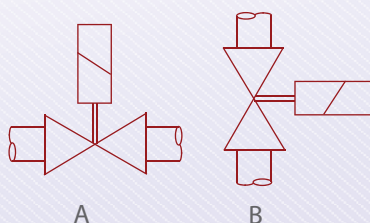
LED power indicator option

Mounting bracket option

Mounting tapping option

See corrosion reference guide and
sealing solutions for material compatibility

Mounting



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