

# ASCO™ Miniature Solenoid Valves

General Service Valves, Miniature Solenoid

**Series  
188**

- The 188 Series solenoid valves are designed for use with air and inert gases, and can also be used to pilot other valves or cylinders
- Compact architecture and low power consumption make them ideal for portable medical devices
- LED visual indicator and electrical protection circuitry are standard features
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
  - Respiratory Therapy
  - Dental
  - Anesthesia Delivery
  - Industrial Gas Analyzers



Fluids	Temperature Range	Seal Materials
Air or Inert Gas, non-lubricated <sup>1</sup>	5 °C to 50 °C (41 °F to 122 °F)	NBR (Nitrile)
		FKM

<sup>1</sup> filtered at 25 µm

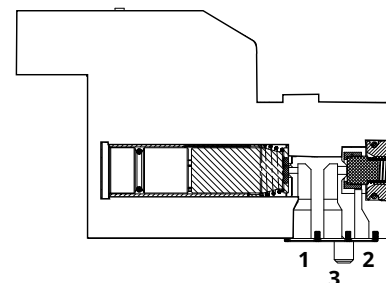
NOTE: Additional constructions and options are available including alternate elastomers and orifice sizes. Minimum quantities apply.

General Valve Information	
Body	PA (polyamide) MXD6
Others	Stainless steel, nickel-plated steel, synthetic material, aluminum
Response Time	< 10ms
Options	Oxygen clean available

Electrical Characteristics	
Standard Voltages*	5 VDC, 12 VDC, 24 VDC (-5%/+10%)
Power Consumption	1 - 1.3 W

\* Other voltages on request

NOTE: The solenoid valves are designed for continuous operation within the maximum ambient temperature limits.



3/2 NC or 3/2 NO Function  
Pad Mount Body

Insulation Class	Coil Insulation	Protection	Ambient Temperature Range	Electrical Connection
	°C (°F)	VA	°C (°F)	
F	155 (311)	IP40	5 to 50 (41 to 122)	Connector with two 0.25mm <sup>2</sup> lead wires + built-in LED and electrical protection or lead wires, 0.5m (19.7in) long

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Specifications								
Orifice Size		Flow Coefficient		Operating Pressure bar (psi)		Power Rating	Type of Electrical Connection*	Catalog Number
mm (inches)				min.	max.			
1 ➡ 2	2 ➡ 3	Kv (m³/h)	Cv			gases, liquids	W	
3/2 NC - Normally Closed								
0.5 (0.020)	0.7 (0.028)	0.006	0.007	0	8 (116)	1.3	01	18801003
							02	18801076
							03	18801074
							04	18801078
						1	05	18801072
0.8 (0.031)	0.8 (0.031)	0.007	0.008	0	4 (58)	1.3	01	18801081
							02	18801082
							03	18801083
							04	18801084
						1	05	18801085
1.0 (0.040)	1.0 (0.040)	0.011	0.013	0	2.5 (36)	1.3	01	18801086
							02	18801087
							03	18801088
							04	18801089
						1	05	18801090
3/2 NO - Normally Open								
0.5 (0.020)	0.5 (0.020)	0.006	0.007	0	6 (87)	1.3	01	18801063
							02	18801077
							03	18801075
							04	18801079
						1	05	18801073
0.8 (0.031)	0.8 (0.031)	0.007	0.008	0	3 (43.5)	1.3	01	18801091
							02	18801092
							03	18801093
							04	18801094
						1	05	18801095
1.0 (0.040)	1.0 (0.040)	0.011	0.013	0	1.5 (21.8)	1.3	01	18801096
							02	18801097
							03	18801098
							04	18801099
						1	05	18801100

\* Type 01, 02, 03, 04 with LED and electrical protection

01 = horizontal, width 5.08mm (0.2in)

02 = vertical, width 5.08mm (0.2in)

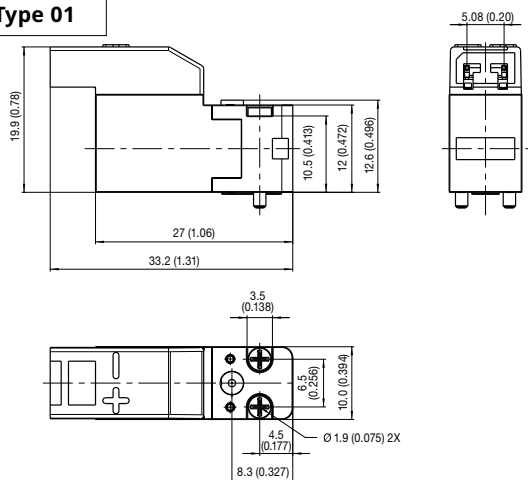
03 = horizontal, width 2.54mm (0.1in)

04 = vertical, width 2.54mm (0.1in)

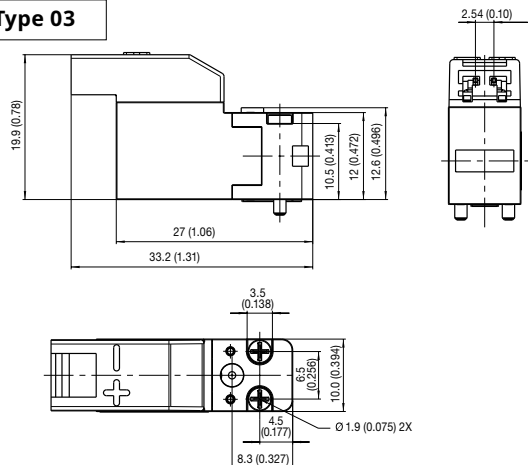
05 = cable ends 0.5m long (19.7in), 0.25mm²

### Dimensions: mm (inches)

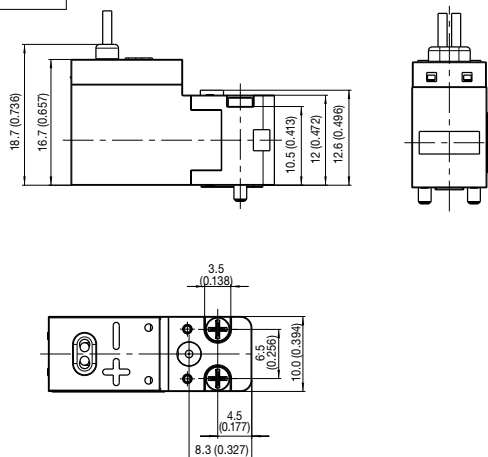
Type 01



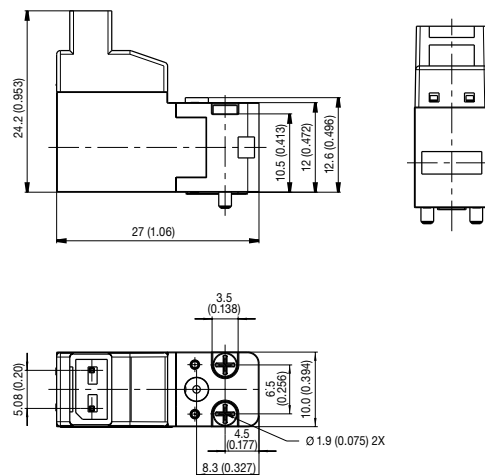
Type 03



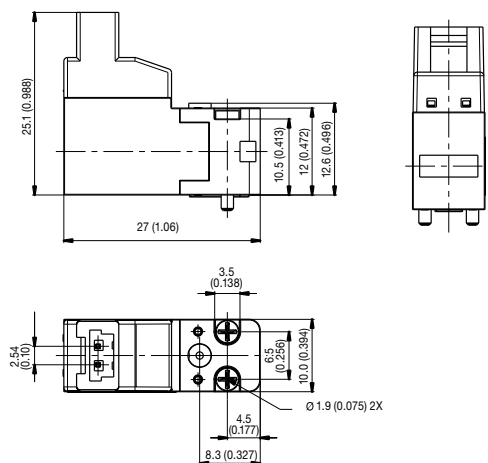
Type 05



Type 02



Type 04



### Flange Facing

Use in vacuum (NO)

3 = Vacuum pump
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2 = Outlet

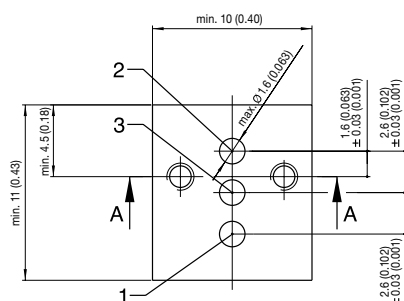
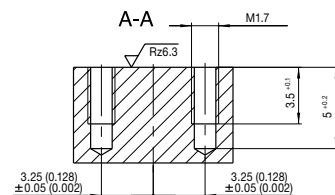
1 = Atmosphere

Use in vacuum (NC)

1 = Vacuum pump
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2 = Outlet

3 = Atmosphere



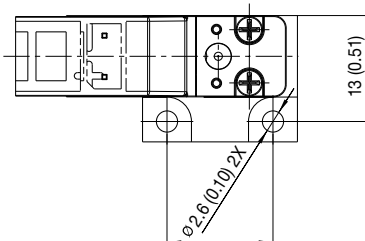
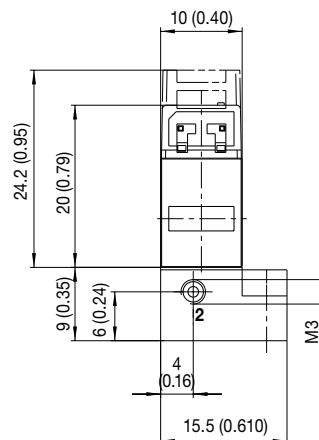
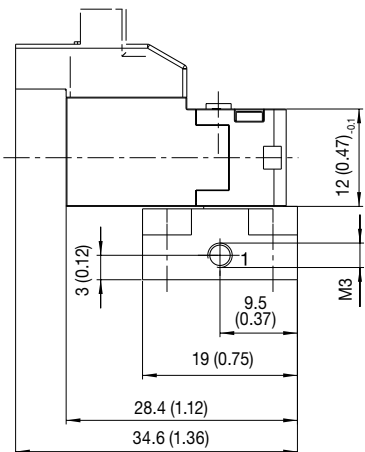
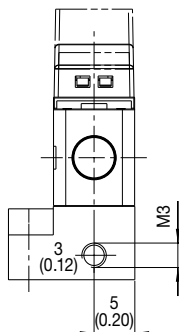
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## Dimensions: mm (inches)

### Valve Mounted on Single Subbase



Number of Valves	Subbase Catalog Number	Weight kg
1	35300101	0.015

Number of Valves	Subbase Catalog Number*	Length	
		L1	L2
2	35300102	33.5 (1.32)	27.5 (1.08)
3	35300103	44 (1.73)	38 (1.50)
4	35300104	54.5 (2.15)	48.5 (1.91)
5	35300105	65 (2.56)	59 (2.32)
6	35300106	75.5 (2.97)	69.5 (2.74)
7	35300107	86 (3.39)	80 (3.15)
8	35300108	96.5 (3.80)	90.5 (3.56)
9	35300109	107 (4.21)	101 (3.98)
10	35300110	117.5 (4.63)	111.5 (4.39)

A : Blanking plate, cat. number 88135305

**NOTE:**  
The connectors must be ordered separately, please indicate the quantity and one of the following codes:  
Connector, 2 wires:  
Distance between contacts 5.08mm (0.2in)  
- Length 0.5m (19.7in) - cat. no.: **88118801**  
- Length 1.5m (59.1in) - cat. no.: **88118802**  
- Length 3m (118in) - cat. no.: **88118803**  
Distance between contacts 2.54mm (0.1in)  
- Length 0.5m (19.7in) - cat. no.: **88118806**  
- Length 1.5m (59.1in) - cat. no.: **88118807**  
- Length 3m (118in) - cat. no.: **88118808**



Availability, design and specifications are subject to change without notice.  
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