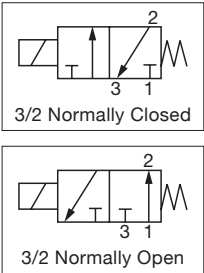


ASCO™ MINIATURE SOLENOID VALVES

GENERAL SERVICE VALVES, MINIATURE SOLENOID

SERIES
188

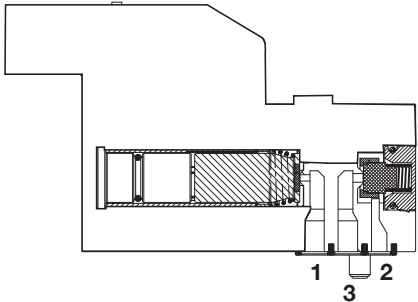
- The 188 Series solenoid valves are designed for use with air and inert gases, and can also be used to pilot other valves or cylinders
- Compact architecture and low power consumption of only 1.3 W make them ideal for portable medical devices
- Also available in a 1 W version for increased versatility
- 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 ¹	5 °C to 50 °C (41 °F to 122 °F)	NBR (Nitrile)
		FKM

¹ 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 300 Series Stainless Steel Body



Electrical Characteristics	
Standard Voltages*	5 VDC, 12 VDC, 24 VDC (-15%/+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.

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 0.5mm ² lead wires + built-in LED and electrical protection or lead wires, 0.5m (19.7in) long

00217GB-2019-R01

ASCO™ MINIATURE SOLENOID VALVES

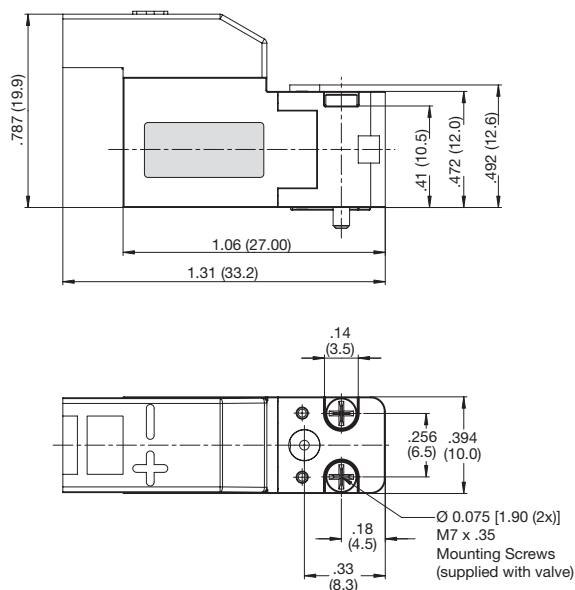
GENERAL SERVICE VALVES, MINIATURE SOLENOID

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)



NOTE: The connectors to be ordered separately.
 Includes one connector with two wires.



Length	Catalog Number
20" (0.5m)	88118801
59" (1.5m)	88118802
118" (3m)	88118803

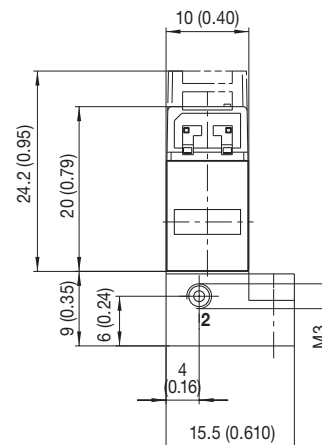
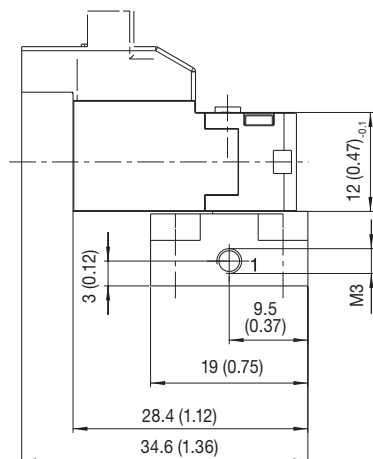
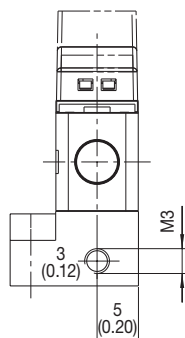
ASCO™ MINIATURE SOLENOID VALVES

GENERAL SERVICE VALVES, MINIATURE SOLENOID

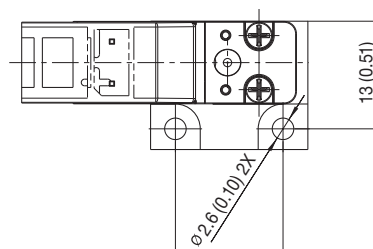
SERIES
188

Dimensions: mm (inches)

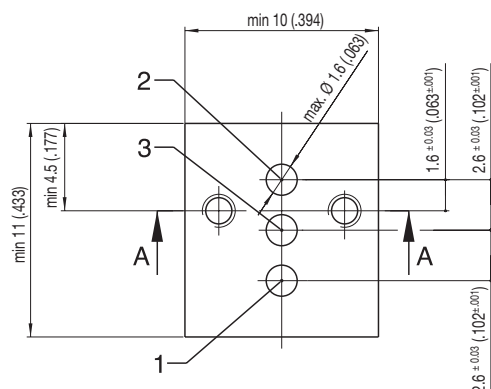
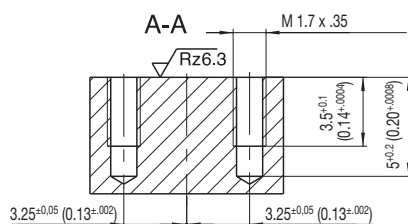
Valve Mounted on Single Subbase



Number of Valves	Subbase Catalog Number	Weight kg
1	35300101	2.53



Manifold Interface



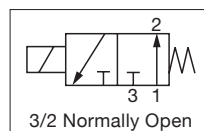
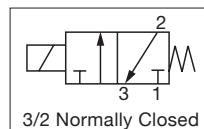
00217GB-2019-R02

ASCO™ MINIATURE SOLENOID VALVES

GENERAL SERVICE VALVES, MINIATURE SOLENOID WITH LATCHING COIL

SERIES
188

- The 188 Series latching coil solenoid valves are designed for use with air and inert gases, and can also be used to pilot other valves or cylinders
- The benefit of the latching coil is that no power consumption is needed to hold the valve in the open position
- Compact architecture and low power consumption of only 1.3 W make them ideal for portable medical devices
- Also available in a 1 W version for increased versatility
- 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 ¹	5 °C to 50 °C (41 °F to 122 °F)	NBR (Nitrile)
		FKM

¹ filtered at 25µm

General Valve Information*	
Body	PA (polyamide) MXD6
Others	Stainless steel, nickel-plated steel, synthetic material, aluminum
Response Time	< 10ms
Options	Oxygen clean available 300 Series Stainless Steel Body

* Other materials on request

Electrical Characteristics	
Standard Voltages*	5 VDC, 12 VDC, 24 VDC (-15%/+10%)
Power Consumption	1 - 1.3 W

* Other voltages on request

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 0.5mm ² lead wires + built-in LED and electrical protection or lead wires, 0.5m (19.7in) long

00217GB-2019-R01

00217GB-2019-R01

ASCO™ MINIATURE SOLENOID VALVES

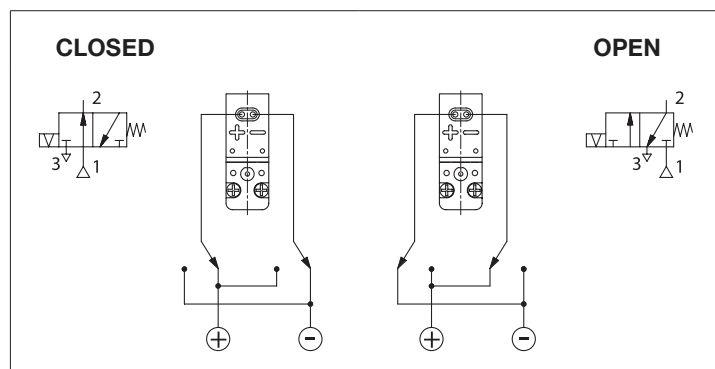
GENERAL SERVICE VALVES, MINIATURE SOLENOID WITH LATCHING COIL

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/NO								
0.5 (0.020)	0.7 (0.028)	0.007	0.008	0	7 (101)	1.3	01	18801101
							02	18801102
							03	18801103
							04	18801104
						1	05	18801105
0.8 (0.031)	0.8 (0.031)	0.009	0.010	0	3 (43.5)	1.3	01	18801106
							02	18801107
							03	18801108
							04	18801109
						1	05	18801110
1.0 (0.040)	1.0 (0.040)	0.011	0.013	0	1 (14.5)	1.3	01	18801111
							02	18801112
							03	18801113
							04	18801114
						1	05	18801115

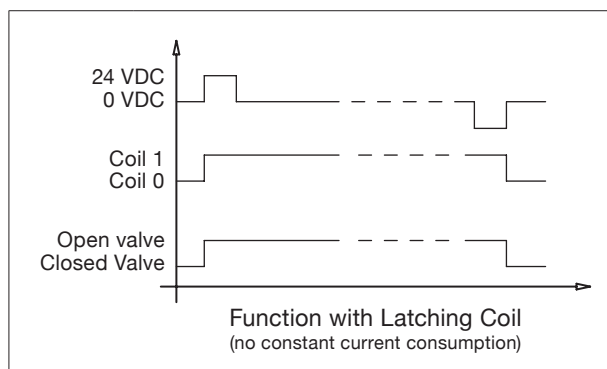
* Type 01, 02, 03, 04 with LED and electrical protection
01 = horizontal, width 5.08mm (0.2in)
02 = vertical, width 5.08mm (0.2in)

03 = horizontal, width 2.54mm (0.1in)
04 = vertical, width 2.54mm (0.1in)
05 = cable ends 0.5m long (19.7in), 0.25mm²

Wiring Diagram



Functional Diagram



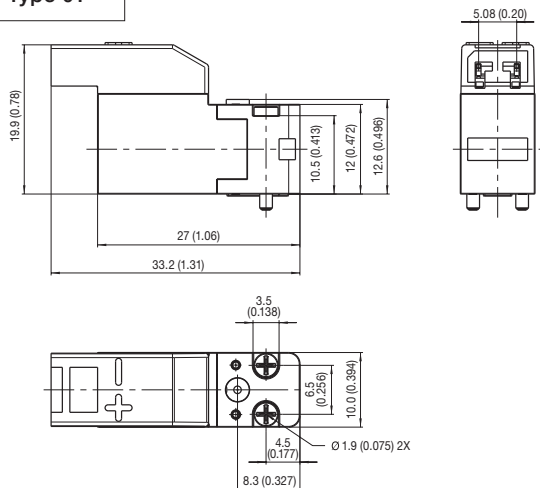
ASCO™ MINIATURE SOLENOID VALVES

GENERAL SERVICE VALVES, MINIATURE SOLENOID WITH LATCHING COIL

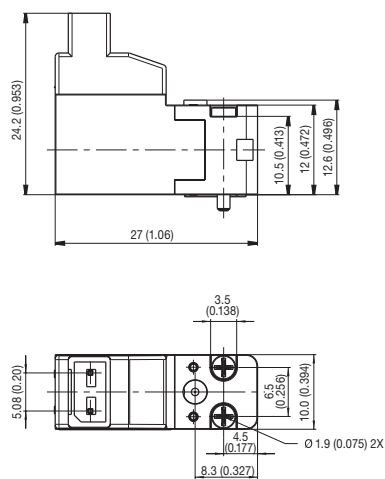
SERIES
188

Dimensions: mm (inches)

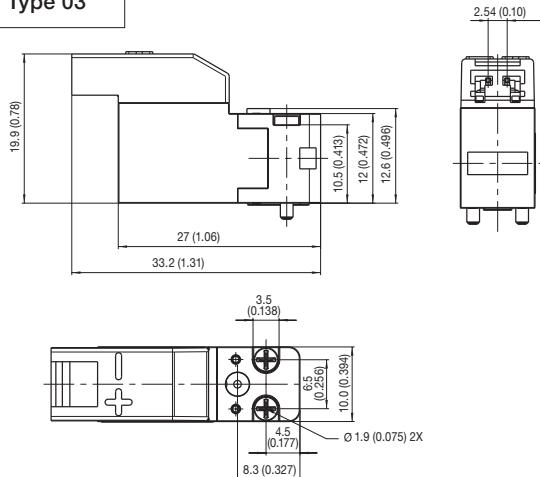
Type 01



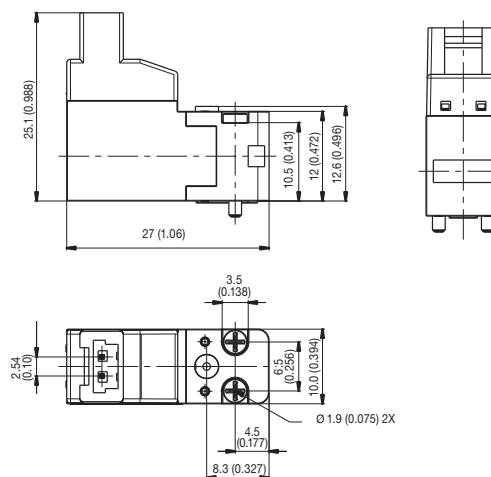
Type 02



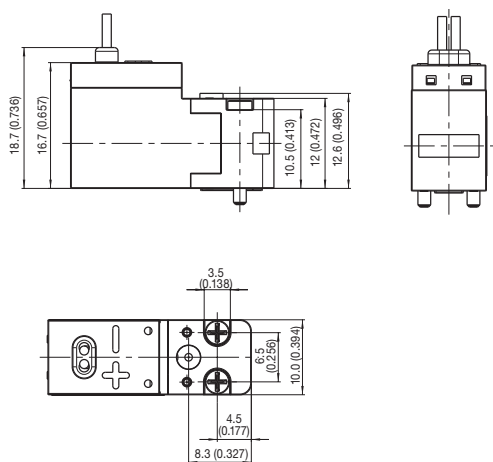
Type 03



Type 04



Type 05



Flange Facing

NO

3 = Pressure
2 = Outlet
1 = Exhaust

NC

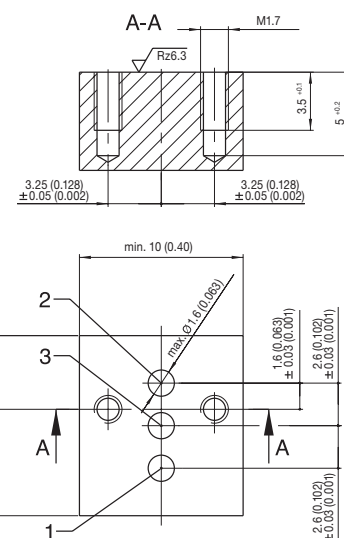
1 = Pressure
2 = Outlet
3 = Exhaust

Use in vacuum (NO)

3 = Vacuum pump
2 = Outlet
1 = Atmosphere

Use in vacuum (NC)

1 = Vacuum pump
2 = Outlet
3 = Atmosphere

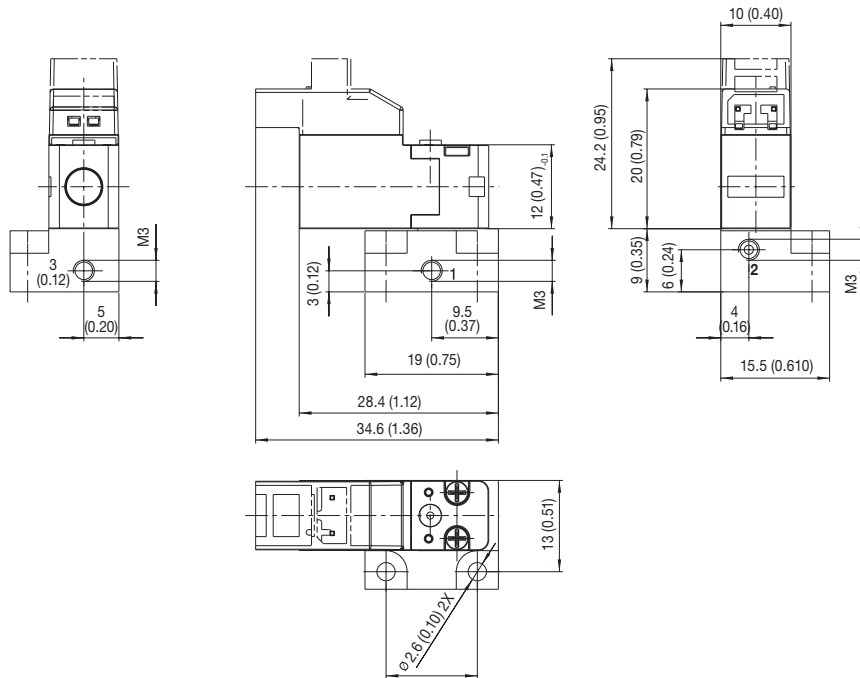


00217GB-2019-R01

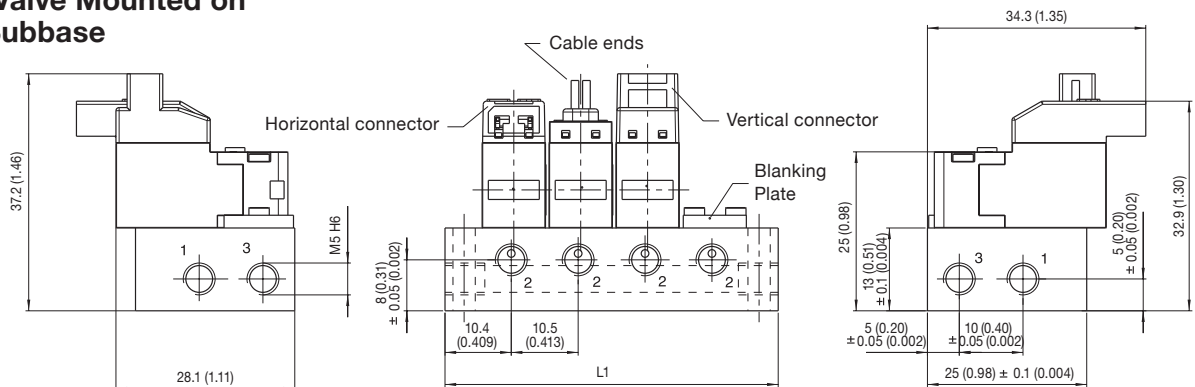
Dimensions: mm (inches)

Solenoid Valve Mounted on Single Subbase

Number of Valves	Subbase Catalog Number	Weight
		kg
1	35300101	0.015

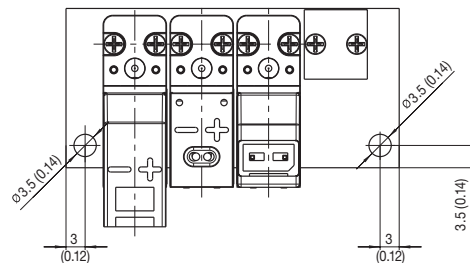


Solenoid Valve Mounted on Multiple Subbase



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**

