

## Model P001 Piston Flow Meter (Analog) 0.005 to 200 cc/min

### SPECIFICATIONS

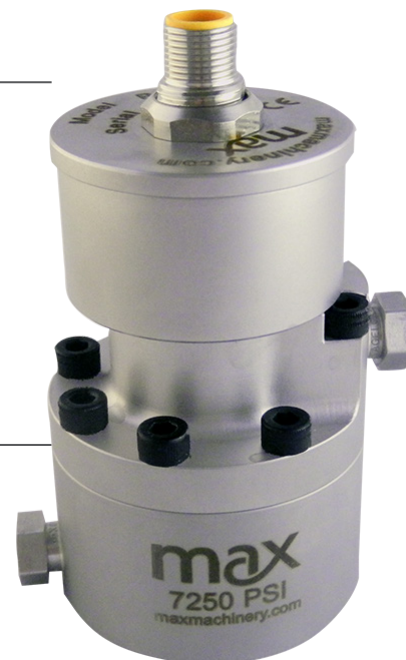
Flow Range	0.005 to 200 cc/min
Accuracy (3 cP)	± 0.2% of reading over a 200:1 range, or ± 2mV (or 4µA), whichever is greater
Maximum Operating Pressure	7250 psi (500 bar)
Weight	1.1 kg
Recommended Filtration	5 micron
Port Size(s)	1/4" or 6mm tube fitting
Fluids	Most non aqueous, hydrocarbon based fluids

### MATERIALS OF CONSTRUCTION

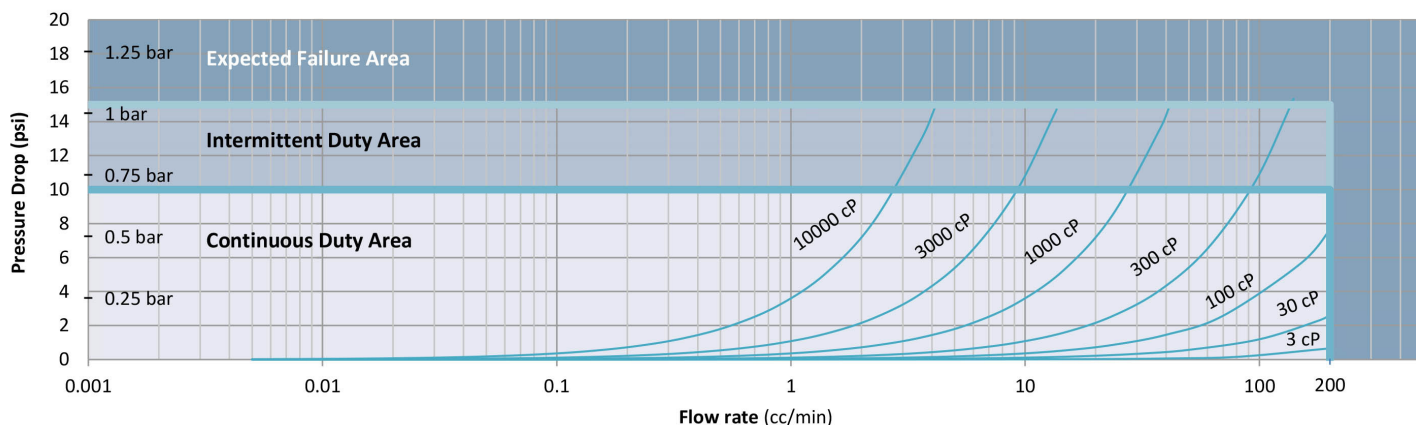
External	Stainless steel, type 316
Wetted	Stainless steel, type 316, 440C; Silicon Nitride; Nickel based carbide
O-Rings	Standard: Viton® Optional: Perfluoroelastomer

### ANALOG TRANSMITTER

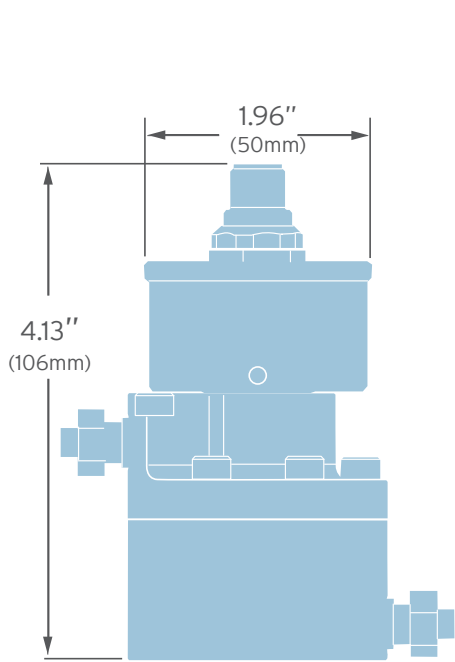
Output Signal	Any range of ± 10V or ± 20mA Linearized and damped with anti-dither protection
Power Supply Requirements	12Vdc @ 90 mA, 24Vdc @ 45 mA
Ambient Operational Range	-40°C to 80°C, Single piece – Two piece to 110°C
Metered Liquid Temp Range (based on 20° ambient)	-40°C to 90°C, Industrial model -40°C to 155°C, Two piece high temperature model -40°C to 225°C, Two piece, ultra high temperature model
Compliance	CE Certified, Ex-proof version available with ATEX/IECEX II 2 G Ex db IIB Tx Gb as well as UL, cUL certification for Class 1, Division 1, Groups C and D, Tx



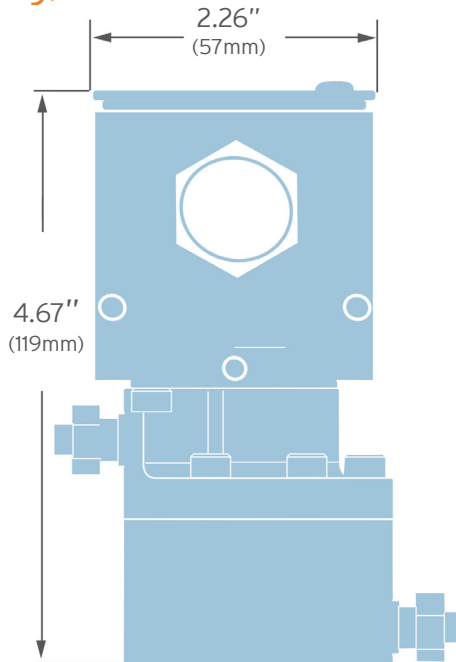
Typical Pressure Drop (Delta P versus flow rate for various viscosities)



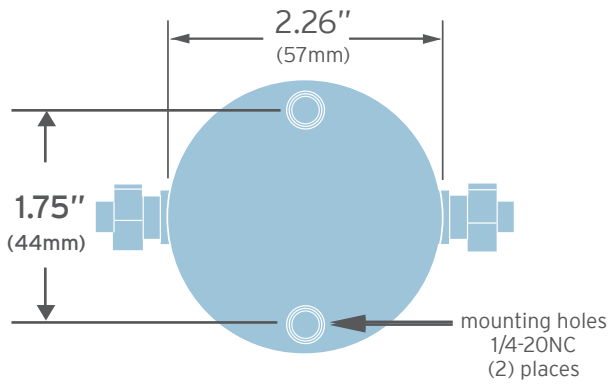
# Model P001 Piston Flow Meter (Analog)



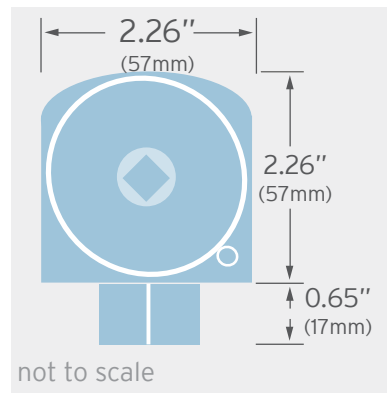
Model P001 meter with industrial transmitter



Model P001 meter with Explosion Proof transmitter



Bottom View

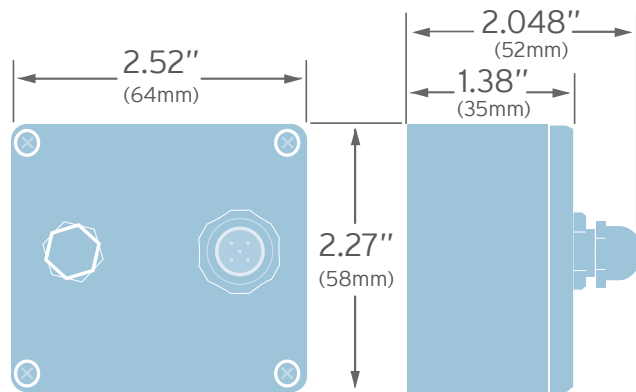


Top View of Explosion Proof Enclosure

## ELECTRICAL CONNECTION – ANALOG TRANSMITTERS

	Turck® Connector		
	PCA Label	Pin #	Mating Cable Wire Color
Power *	V+	1	Brown
Common	Com	4	Black
Signal Output (+)	Sig	5	Grey
Signal Output (-)	Ret	2	White
Case Ground	Case	3	Blue

\* Please specify 12Vdc or 24Vdc operation



REMOTE PCA ENCLOSURE FOR HIGH TEMPERATURE TRANSMITTERS  
(2 meter interconnect cable, not shown)



Max Machinery, Inc.  
an ISO 9001:2015 certified company

# Positive Displacement Flow Meters

## Piston Type, P-Series 7250 psi (500 bar) rated

Flow Meter Selections      Transmitter Selections

Model #   HS    /     /  1 -  Non-Standard Options  
Bi-Directional Cal: BID

### Max Flow Range

0.2 Liters/Min	P001	3
2 Liters/Min	P002	2

### Pressure

7250 psi (500 bar)	HS
--------------------	----

### Fluid Connection

SAE	2
1/4" and 6mm Tube	3

### Seal Selection

Viton® - FKM	1
Perfluoroelastomer - FFKM	5

### Options

None	NA
------	----

1 Transmitter Type

### Output Type

A	A	4-20mA Output - Powered by 24 Vdc
A	B	4-20mA Output - Powered by 12 Vdc
A	C	0-10 Volt Output - Powered by 24 Vdc
A	D	0-10 Volt Output - Powered by 12 Vdc
P	N	5V Pulse/Freq. - Powered by 5-26 Vdc
Q	N	5V Quadrature - Powered by 5-26 Vdc
P	S	Current Sinking, Single Phase

### Temperature Rating

1	90°C Industrial, 75°C Haz-Loc
2	155°C Ind./ 130°C Haz-Loc, 2 Part**
3	225°C -Industrial, 2 Part †

### Electrical Connection

1	Industrial, Turck® Connector
2	Hazardous Location, 1/2 Inch Conduit*

### Signal Type

P	Pulse
A	Analog
Q	Quadrature



\* See temp chart in product manual.  
 \*\* Receiver portion of 2 part transmitters are not rated Ex-Proof, consult factory.  
 \*\*\* Teflon not used above 90°C for this high pressure rated product.  
 † Not available for hazardous location use. (Exceeds 130°C temp. Limit.)  
 Product includes single directional calibration, bi-directional calibrations for Analog and Quadrature devices are optional.