



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

Model CGM1 Gear Flow Meter (Frequency)

1.0 cc/min to 2 liters/min

SPECIFICATIONS

Flow Range	1 cc/min to 2 liters/min
Accuracy (at 30 cP)	± 1.0% of reading over a 100:1 range
Accuracy (at 3 cP)	± 1.0% of reading over a 100:1 range (≤100 psi*)
Maximum Operating Pressure	250 psi (17 bar)
Weight	0.4 kg
Recommended Filtration	10 micron
Port Size(s)	1/8" NPT or 1/8" BSPP
Fluids	Most aqueous and hydrocarbon-based fluids
Typical Fluid pH Range	2 to 13



MATERIALS OF CONSTRUCTION

External	Unfilled PEEK: Stainless Steel, type 303, 316, 17-7; FKM
Wetted	Unfilled PEEK: Zirconia (ZrO ₂)
O-Rings	Standard: FEPM (Fluoroelastomer) Optional: FFKM (Perfluoroelastomer)

FREQUENCY TRANSMITTER

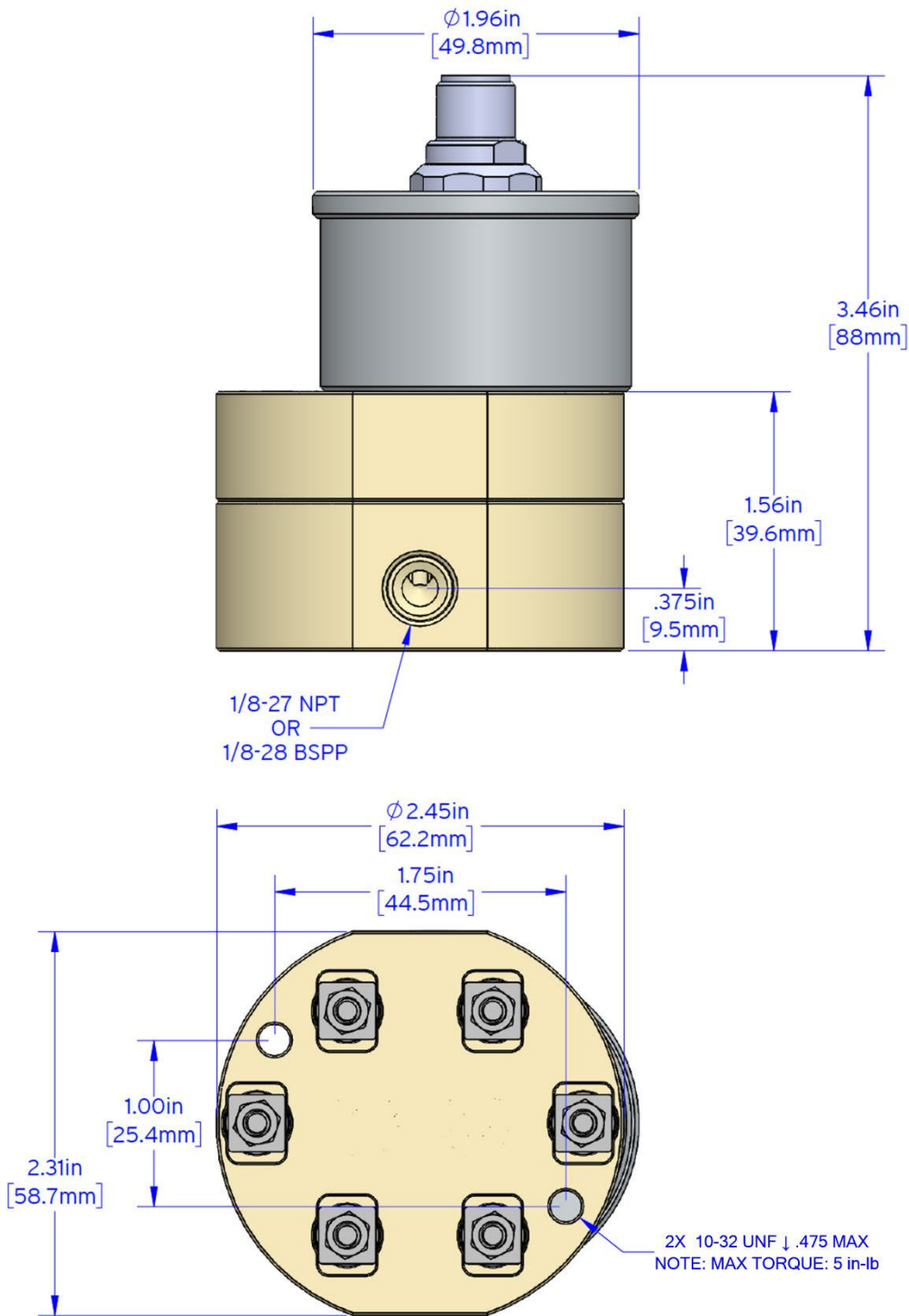
Output Signal	Standard: 5 Vdc, single phase Optional: Quadrature 5 Vdc, two phase Current sinking, 20 mA max., single phase
K-Factor	Single Phase: 500 pulses/cc Two Phase: 1,000 pulses/cc, 4x decoded (250 pulses/cc/phase, 1x decoded)
Power Supply Requirements	5 - 26 Vdc, at 30 mA
Ambient Operational Range	-15°C to 70°C
Metered Liquid Temp Range	-15°C to 70°C

Compliance	CE Certified - IP65 Rated
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*When operating above 100 psi, accuracy over the 100:1 range may increase to +/- 3% of reading

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DIMENSIONS (Not to scale)



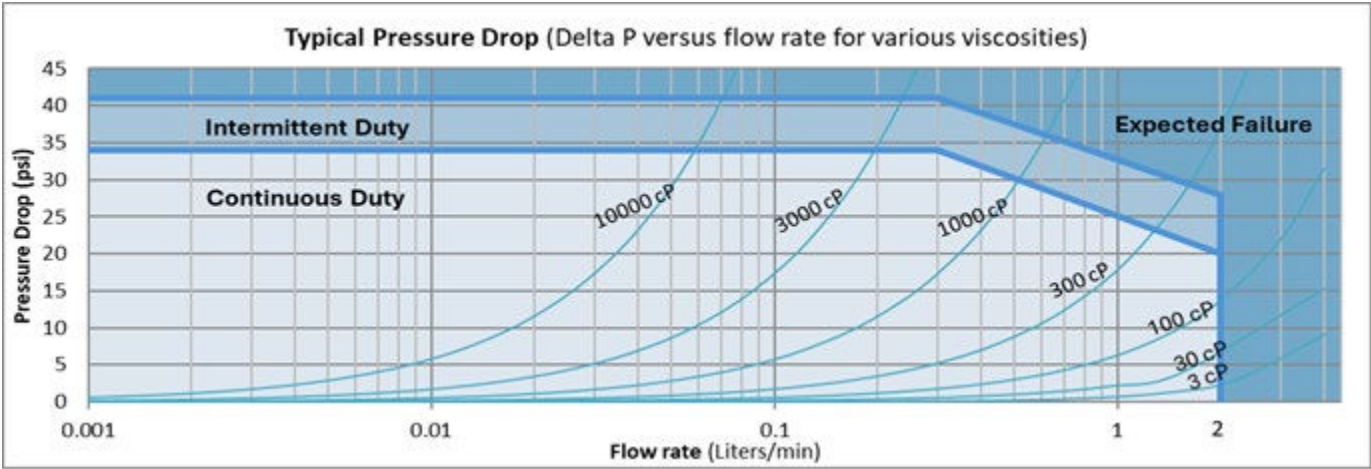
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CONNECTIVITY

Electrical connection - Frequency Output Transmitters

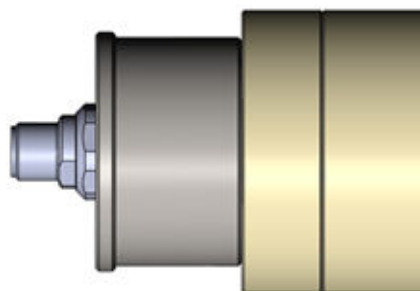
	Turck® Connector		
	PCA Label	Pin #	Mating Cable Wire Color
Power (+5 to 26 Vdc)	V+	1	Brown
Common	Com	4	Black
Pulse Output	Ph A	2	White
Output Phase B (Quad only)	Ph B	5	Grey
Case Ground	Case	3	Blue

PRESSURE DROP GRAPH



CGM1 Flow Meter

Flow Meter Selections				Transmitter Selections			
Model #		LP		/			/ 1 -
				Non-Standard Options			
				Bi-Directional Cal: BID			
				1 Transmitter Type			
Max Flow Range 2.0 Liters/Min CGM1				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	
Pressure 250 psi (17 bar) LP				Temperature Rating			
				1 70°C Industrial			
Fluid Connection				Electrical Connection			
NPT 1				1 Industrial, Turck® Connector			
BSPP 6							
Seal Selection				Signal Type			
AFLAS® - FEPM 9				P Pulse			
Perfluoroelastomer - FFKM 5				A Analog			
				Q Quadrature			
Options							
Calibration Viscosity 30 cP C1							
Calibration Viscosity 3 cP C2							
(Consult Factory) Calibration Viscosity 1 cP C3							
CGM Viscosity Calibration Guide							
Application Use Viscosity (cP)				Factory Calibration Viscosity (cP)			
≥ 10				30			
2 ≤ Use ≤ 10				3			
2 or less				1			



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