

Model G045 Gear Flow Meter (Frequency) 25 cc/min to 45 liters/min

SPECIFICATIONS

Flow Range	25 cc/min to 45 liters/min
Accuracy (at 30 cP)	± 0.3% of reading over a 100:1 range
Maximum Operating Pressure	6000 psi (414 bar)
Weight	3.7 kg
Recommended Filtration	30 micron
Port Size(s)	1/2" NPT or #8 SAE or Manifold Mount
Fluids	Most non-aqueous, hydrocarbon based fluids



MATERIALS OF CONSTRUCTION

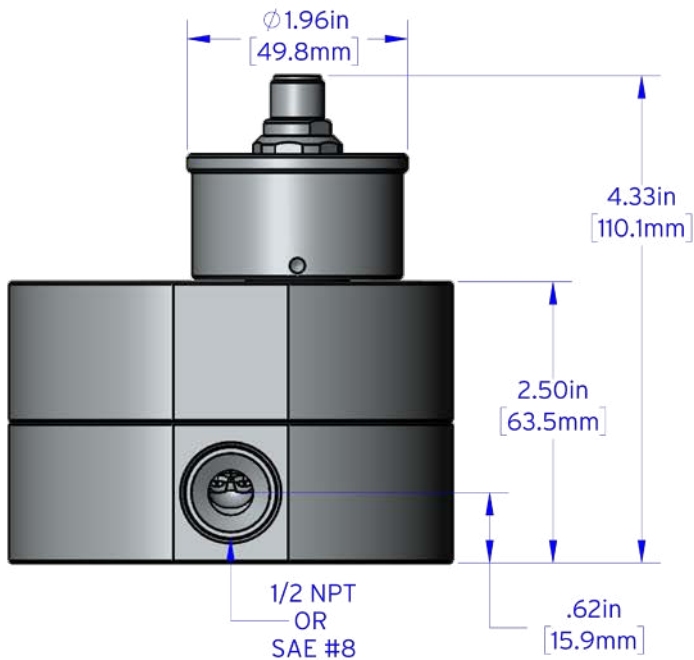
External	Stainless steel, type 303; Fluoropolymer coated bolts; MoS2 lubricant
Wetted	Stainless steel, type 303, 440C, 17-4; Nickel plated SmCo magnet
O-Rings	Standard: Viton® Optional: Teflon®, Perfluoroelastomer

FREQUENCY TRANSMITTER

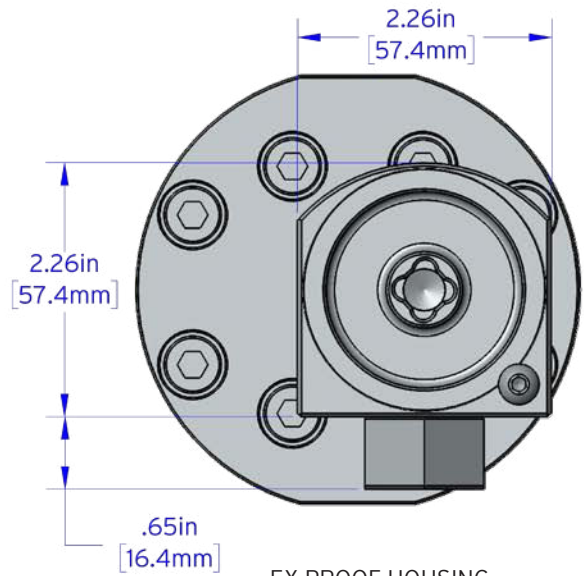
Output Signal	Standard: 5 Vdc, single phase Optional: Quadrature 5 Vdc, two phase Current sinking, 20 mA max., single phase
K-Factor	Single Phase: 70 pulses/cc Two Phase: 140 pulses/cc, 4x decoded (35 pulses/cc/phase, 1x decoded)
Power Supply Requirements	5 - 26 Vdc, @ 30 mA
Ambient Operational Range	-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, Standard 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

Model G045 Flow Meter (Frequency)

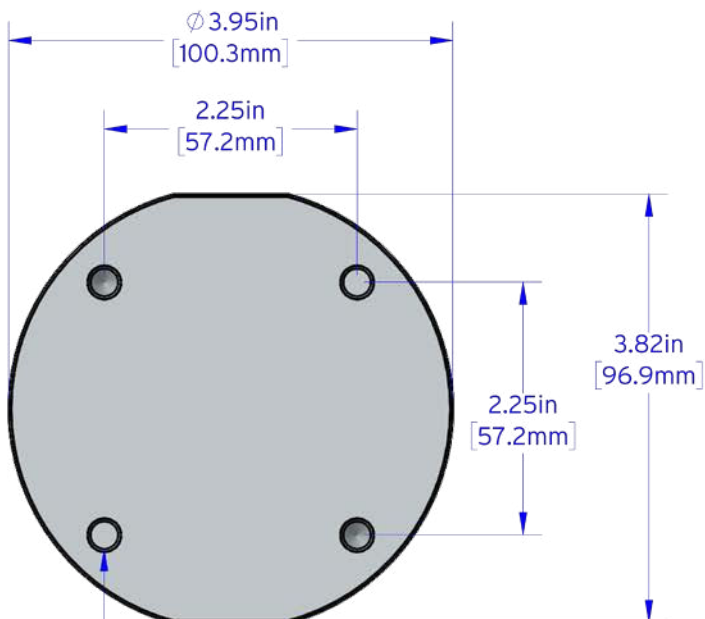
DIMENSIONS (Not to scale)



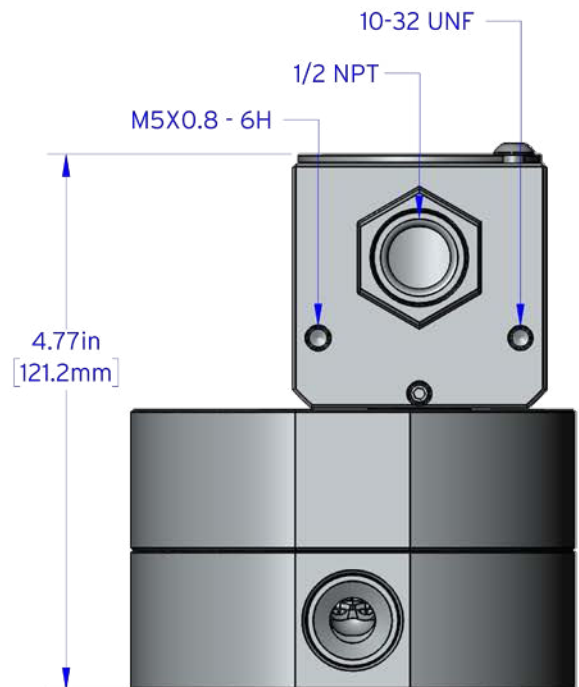
MODEL G045 WITH INDUSTRIAL HOUSING



EX-PROOF HOUSING TOP VIEW



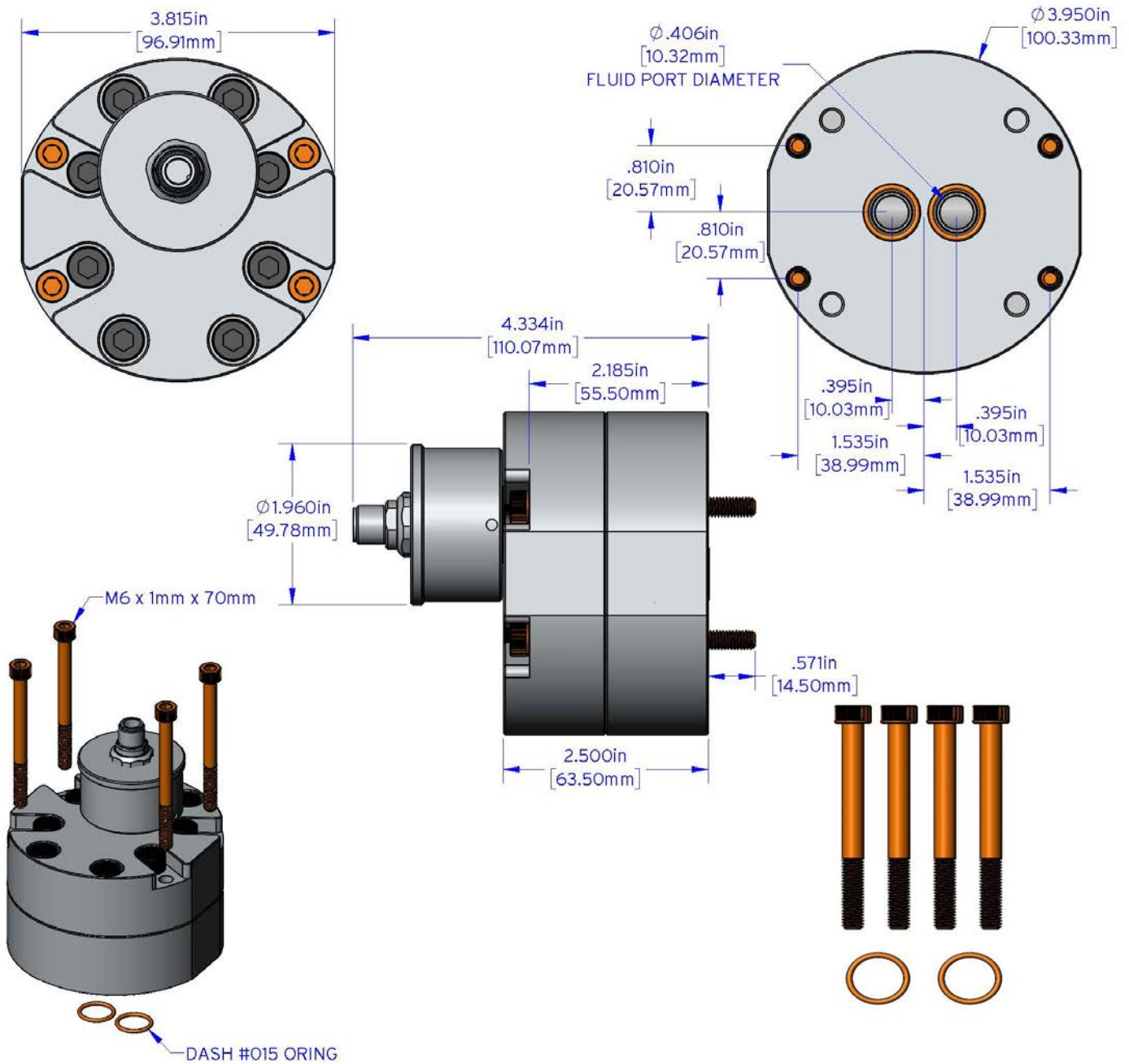
4X 1/4-20 UNC
BOTTOM VIEW



MODEL G045 WITH EX-PROOF HOUSING

Model G045 Flow Meter (Frequency)

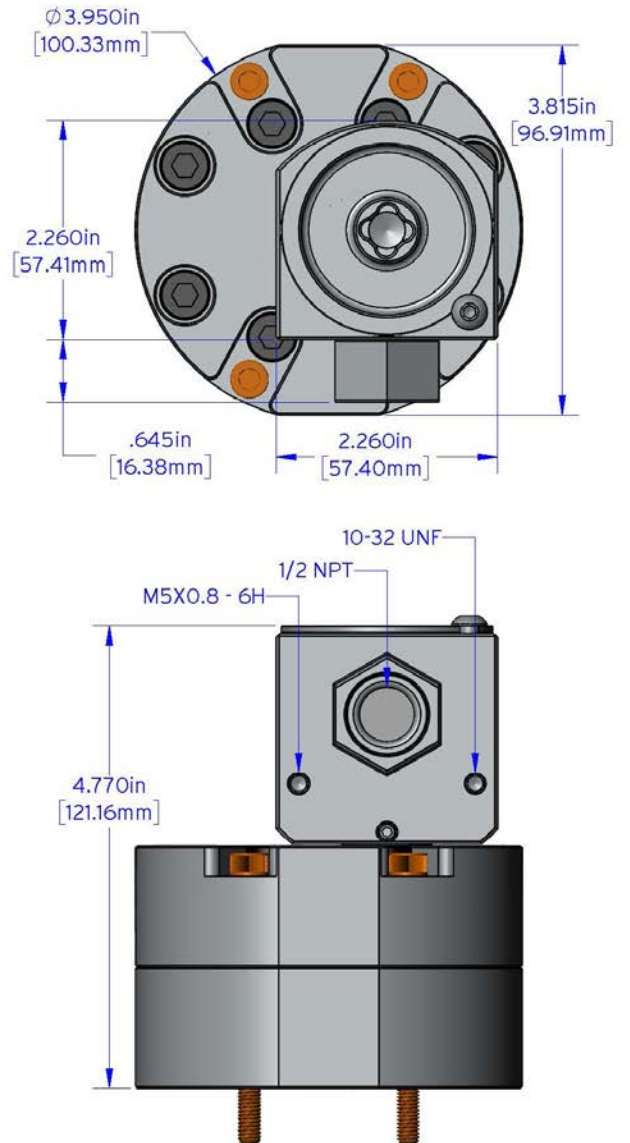
DIMENSIONS (Not to scale) - Manifold Specifications



INSTALLATION KIT			
Description	G045-MM-KIT-VIT/QTY.	G045-MM-KIT-TEF/QTY.	G045-MM-KIT-PER/QTY.
SHCS M6x1x70 COATED	4	4	4
O-RING 90 FKM 9/16X11/16X1/16	2	-	-
O-RING PTFE 9/16X11/16X1/16	-	2	-
O-RING 90 FFKM 9/16X11/16X1/16	-	-	2

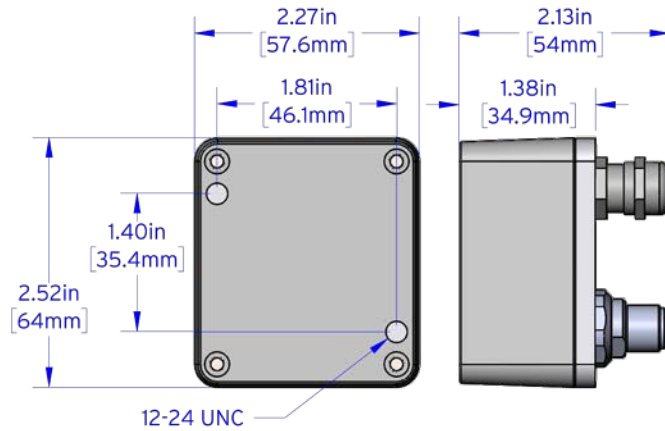
Model G045 Flow Meter (Frequency)

DIMENSIONS (Not to scale) - Manifold Specifications



Model G045 Flow Meter (Frequency)

DIMENSIONS (Not to scale)



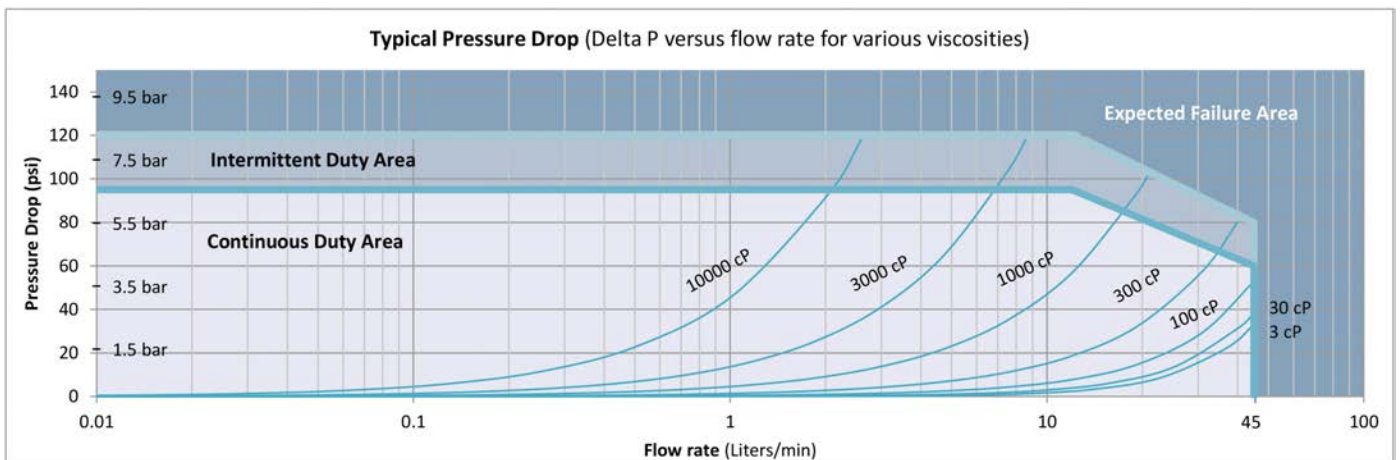
REMOTE PCA ENCLOSURE FOR HIGH TEMPERATURE TRANSMITTERS
 (Not Shown: Industrial 2 meter interconnect cable included, Ex-Proof user supplied interconnect cable required)

CONNECTIVITY

ELECTRICAL CONNECTION – FREQUENCY TRANSMITTERS

PCA Label	Turck® Connector	
	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



Positive Displacement Flow Meters Gear Type, G-Series

Flow Meter Selections Transmitter Selections

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

Max Flow Range

4 Liters/Min	G004
15 Liters/Min	G015
45 Liters/Min	G045
105 Liters/Min	G105
240 Liters/Min	G240

Note: G105 & G240 not available in Manifold Mount version

Pressure

6000 psi (414 bar) HS

Note: G240 limited to 4000 psi (275 bar) if specified with NPT connections

Fluid Connection

NPT	1
SAE	2
Manifold Mount	4

Seal Selection

Viton® - FKM	1
Teflon® - PTFE***	3
Perfluoroelastomer - FFKM	5

Options

None NA

(Note: Not available in Manifold Mount) Heat Trace Option HT

* 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.

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



Model G015