Model P214 Piston Flow Meter (Frequency) 5 cc/min to 10,000 cc/min

SPECIFICATIONS

Flow Range 5 cc/min to 10,000 cc/min

Accuracy (at 3 cP) \pm 0.2% of reading over a 200:1 range

Maximum Operating Pressure 3000 psi (210 bar)

Weight 3.8 kg
Recommended Filtration 10 micron

Port Sizes 3/8" NPT, #6 SAE or manifold mount

Fluids Most non-aqueous, hydrocarbon based fluids



MATERIALS OF CONSTRUCTION

External Stainless steel, type 303; Xylan coated bolts

Wetted Stainless steel, type 303, Nitrided type 303, 440C;

Alnico magnet

O-Rings Standard: Viton®

Optional: Teflon®, Perfluoroelastomer, Neoprene

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: 90 pulses/cc

Two Phase: 180 pulses/cc, 4x decoded

(45 pulses/cc/phase, 1x decoded)

Power Supply Requirements 5-26 Vdc @ 30ma

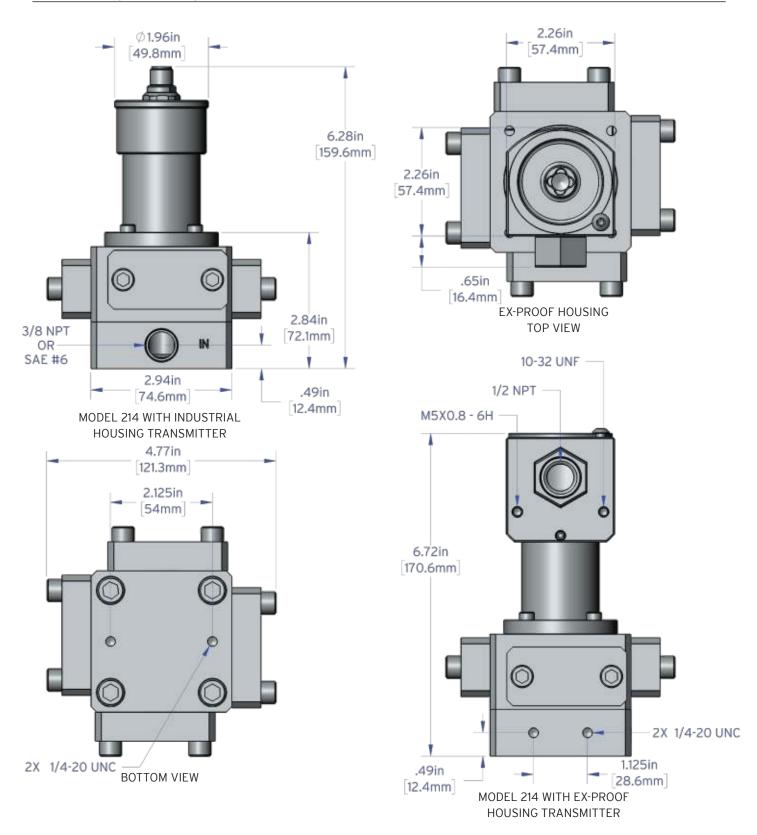
Ambient Operational Range -40°C to 80°C, Single piece – Two piece to 110°C

Metered Liquid Temp Range -40°C to 90°C, Standard model

(based on 20° ambient) -40°C to 225°C, Two piece high temperature model

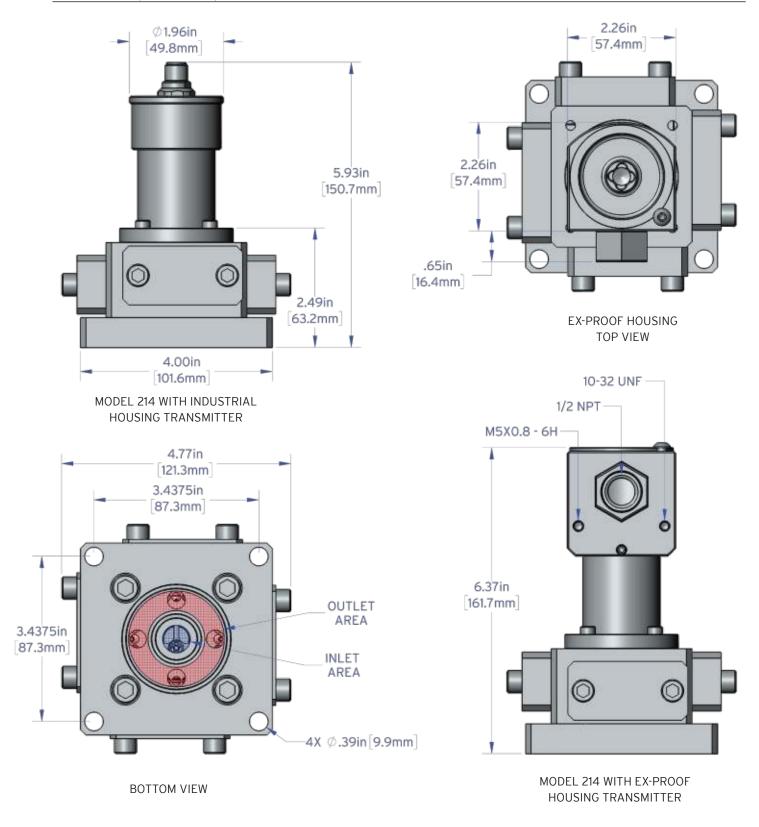
Compliance CE Certified, Ex-proof version available with ATEX/IECEx II 2 G Ex db IIB Tx Gb as well

as UL, cUL certification for Class 1, Division 1, Groups C and D, Tx



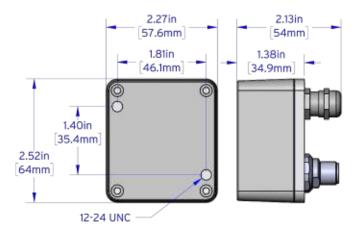
Model P214 Piston Flow Meter (Analog)

DIMENSIONS (Not to scale)



Model P214 Flow Meter (Frequency)

DIMENSIONS (Not to scale)



REMOTE PCA ENCLOSURE FOR HIGH TEMPERATURE TRANSMITTERS

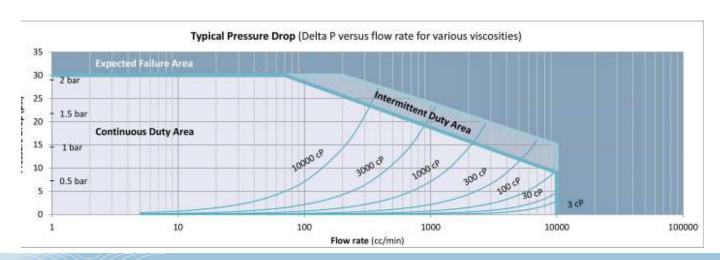
(Not Shown: Industrial 2 meter interconnect cable included, Ex-Proof user supplied interconnect cable required)

CONNECTIVITY

ELECTRICAL CONNECTION - FREQUENCY TRANSMITTERS

| 4 3 | | Turck® Connector | | | |
|----------------------------|--------------|---------------------|----------------------------|--|--|
| 1 2 | 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



Positive Displacement Flow Meters Distantive Displacement Flow Meters

| Piston Type, P-Series 3000 psi (210 par) rated | | | | | | | | | | |
|--|-------------------|------|--|---|---|--------------------------------|-------------------------------------|--------------------------------------|--------------------------------|--|
| Flow Meter Selections Transmitter Selections | | | | | | | | | | |
| Model # | MS | | | / | | | / | / o | - Non-Standard Options | |
| | | | | | | | | | Bi-Directional Cal: BID | |
| | | | | | | | | | | |
| | | | | | | | | 0 | Transmitter Type | |
| Max Flow Range | | | | | | Output Type | | | ut Type | |
| 1.8 Liters/Min P213 | | | | Α | | | A 4-20mA Output - Powered by 24 Vdc | | | |
| 10 Liters/Min P214 | | | | Α | | | В | 4-20mA Output - Powered by 12 Vdc | | |
| 35 Liters/Min P215 | | | | Α | | | С | 0-10 Volt Output - Powered by 24 Vdc | | |
| | | | | Α | | | D | 0-10 V | olt Output - Powered by 12 Vdc | |
| | | | | Р | | | Ν | 5V Pu | lse/Freq Powered by 5-26 Vdc | |
| | | | | Q | | | Ν | 5V Qu | adrature - Powered by 5-26 Vdc | |
| | | | | Р | | | S | Currer | nt Sinking, Single Phase | |
| Pressure | | | | | Temperature Rating | | | | | |
| 3000 psi (210 bar) | MS | | | | 1 90°C Industrial / 75°C Haz-Loc | | | | | |
| | | | | | 2 130°C Haz-Loc, 2 Part ** | | | | | |
| Fluid Connection | | | | | | 3 | 225° | C Indus | trial, 2 Part † | |
| | NPT 1 | | | | | Electrical Connection | | | nnection | |
| | SAE 2 | | | | 1 | 1 Industrial, Turck® Connector | | | | |
| Mar (Not available on model | nifold 4 P215) | | | | 2 Hazardous Location, 1/2 Inch Conduit* | | | | | |
| Seal Se | election | ì | | | | | | | | |
| Vito | n® - FKM | 1 1 | | | Sig | gna | І Турє | 9 | | |
| Teflon | ® - PTFE | 3 | | Р | P Pulse | | | | | |
| Perfluoroelastome | er - FFKM | 1 5 | | А | Analog | | | | | |
| 1 | Neoprene | e 7 | | Q | Qu | adra | ature | | | |
| | Opti | ions | | | | | | | _ | |

- See temp chart in product manual. Receiver portion of 2 part transmitters are not rated Ex-Proof, consult factory.

Heat Trace Option HT

None NA

† 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.

