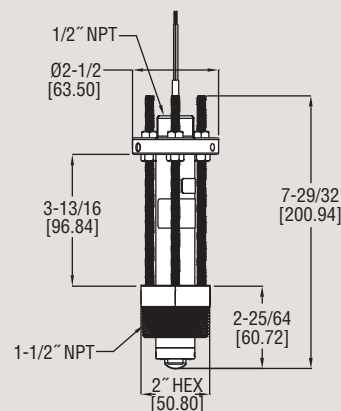




Series
PFT

Paddlewheel Flow Sensor

Non-Magnetic Sensing, Insertion Style for 1-1/2 to 40" Pipe, Pulse or 4 to 20 mA



The Series PFT is a paddlewheel flow sensor used to monitor liquid flow rates in pipes from 1-1/2 to 40" with just one size adjustable sensor. Multiple wetted material choices offer application versatility. The PFT is ideal for monitoring water flow rates in irrigation systems and building automation cooling systems.

The PFT uses inductive sensing to sense the blades of the impeller as they rotate. Sensor technology does not use magnets allowing low flow rate monitoring and no concerns with magnetic material in the flow. Two output choices are available in the PFT, pulse or 4 to 20 mA. The pulse models are a square wave output signal with frequency proportional to the flow velocity. The 4 to 20 mA models have a linear output of the velocity with 4 mA equal to 1.2 ft/s and 20 mA equal to 25 ft/s. There are no external components needed to have the 4 to 20 mA output unlike other competitor products. Paddlewheel, shaft and bearings are easily field replaceable.

FEATURES

- Bearings and shaft offer excellent wear protection even in applications with particulate for long life
- Weatherproof and submersible rated for irrigation applications

APPLICATIONS

- Irrigation, ground water remediation, cooling systems, pump protection, leak detection, filtration systems

SPECIFICATIONS

Service: Water-based fluids.

Range: 1.2 to 25 ft/s (0.37 to 7.62 m/s).

Wetted Materials: Body and fitting: Brass or 316 SS; fitting o-ring: FKM standard, silicone or Buna-N optional; impeller: 316 SS; shaft: Tungsten carbide standard or 316 SS optional; bearing: PTFE standard, carbon graphite optional.

Linearity: $\pm 1.0\%$ of full range.

Repeatability: $\pm 0.5\%$ of full range.

Temperature Limits: -40 to 212°F (-40 to 100°C).

Pressure Limits: 400 psig (27.6 bar) @ 100°F (37.8°C), 325 psig (22.4 bar) @ 212°F (100°C).

Process Connection: 1-1/2" NPT male standard, 2" NPT male optional.

Output:

Pulse: NPN open collector with square wave output, rated 60 V @ 50 mA maximum. Frequency: 3.2 to 200 Hz. Pulse Width: 2.5 msec $\pm 25\%$.

4 to 20 mA: 4 mA is 0 ft/s, 20 mA is 25 ft/s.

Power Requirement: 10 to 35 VDC.

Power Consumption: 40 mA (max).

Electrical Connection: 22 AWG shielded UL type PTLC rated 105°C, 20' (6.1 m) long with cable gland. Can be extended up to 2000' (609 m) with similar cable. Optional UL listed burial rated cable.

Enclosure Rating: NEMA 6P (IP67).

Housing Materials: Brass or 316 SS.

Weight: 3 lb.

Agency Approval: CE.

Model	Body Material	Output	Description
PFT-IAN-B111-S	Brass	4 to 20 mA	1-1/2" NPT connection, FKM seals, tungsten-carbide shaft, PTFE bearing, 20' of cable
PFT-IAN-S111-S	316 SS	4 to 20 mA	1-1/2" NPT connection, FKM seals, tungsten-carbide shaft, PTFE bearing, 20' of cable
PFT-IDN-B111-S	Brass	Pulse	1-1/2" NPT connection, FKM seals, tungsten-carbide shaft, PTFE bearing, 20' of cable
PFT-IDN-S111-S	316 SS	Pulse	1-1/2" NPT connection, FKM seals, tungsten-carbide shaft, PTFE bearing, 20' of cable

Consult factory for longer cable lengths, burial rated cable, 2" NPT connection, or other wetted materials.