

# **SERIES PFT | PADDLEWHEEL FLOW SENSOR**







PFT-HDN-S611-S shown with A-PFT-HKIT-SS



PFT-HDN-B611-S shown with A-PFT-HKIT

#### **FEATURES/BENEFITS**

- · Bearings and shaft offer excellent wear protection even in applications with particulate for long life
- · Weatherproof and submersible rated for irrigation applications
- One unit adjustable over a large pipe size range
- Multiple wetted material choices offer application versatility
- Integral 4-20 mA output with no need for additional external components
- Sensor technology uses inductive sensing to sense the blades of the impeller therefore does not use magnets allowing low flow rate monitoring with no concerns regarding magnetic material in the flow

## **APPLICATIONS**

- Irrigation
- · Ground water remediation
- Cooling systems
- Pump protection
- Leak detection
- · Filtration systems

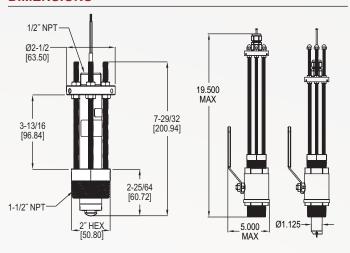
#### DESCRIPTION

The Series PFT Paddlewheel Flow Sensor is used to monitor liquid flow rates in pipes from 1-1/2 to 40" (40-1016 mm). The unit has one size-adjustable sensor and is available in brass or 316 SS body. The unit outputs a frequency proportional pulsed or 4-20 mA output. The pulse models are a square wave output signal with frequency proportional to the flow velocity and the 4-20 mA models have a linear output of the velocity with 4 mA equal to 0 ft/s and 20 mA equal to 25 ft/s.

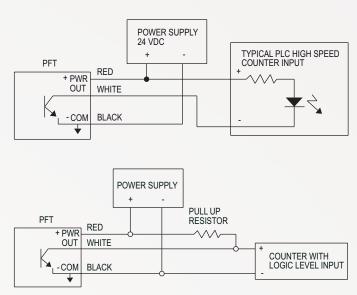
## **SPECIFICATIONS**

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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.
Linearity	±1.0% of FS.
Repeatability	±0.5% of FS.
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 or 1-1/2" BSPT male standard, 2" NPT male or 2" BSPT male optional.
Output	Pulse: NPN open collector with square wave output, rated 60 V @ 50 mA max; Frequency: 3.2 to 200 Hz. Pulse Width: 2.5 msec ±25%; 4-20 mA: 4 mA is 0 ft/s, 20 mA is 25 ft/s.
Power Requirement	10-35 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 (1.36 kg).
Agency Approvals	CE.
*Brass units IP67 only.	

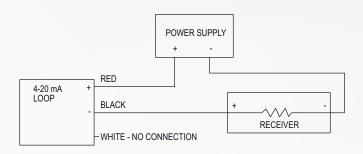
## **DIMENSIONS**



## **WIRING DIAGRAM**



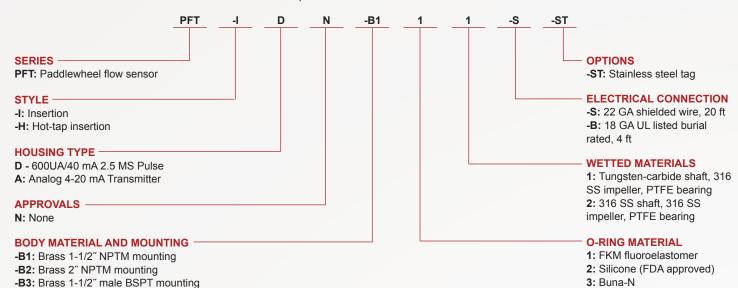
Pulse output wiring



4-20 mA output wiring

#### **HOW TO ORDER**

Use the **bold** characters from the chart below to construct a product code.



# ACCESSORIES

-B4: Brass 2" male BSPT mounting
-B5: Brass 1-1/2" NPTM hot tap with valve
-B6: Brass 1-1/2" NPTM hot tap without valve
-B7: Brass 1-1/2" male BSPT hot tap with valve
-B8: Brass 1-1/2" male BSPT hot tap without valve

-\$1: 316 SST 1-1/2" NPTM mounting
-\$2: 316 SST 2" NPTM mounting
-\$3: 316 SST 1-1/2" male BSPT mounting
-\$4: 316 SST 2" male BSPT mounting
-\$5: 316 SST 1-1/2" NPTM hot tap with valve
-\$6: 316 SST 1-1/2" NPTM hot tap without valve
-\$7: 316 SST 1-1/2" male BSPT hot tap with valve
-\$8: 316 SST 1-1/2" male BSPT hot tap without valve

Model	Description
A-PFT-HKIT	1-1/2" brass valve NPT with nipple
A-PFT-HKIT-SS	1-1/2" SS valve NPT with nipple
A-PFT-HKIT-BSPT	1-1/2" brass valve BSPT with nipple
A-PFT-HKIT-SS-BSPT	1-1/2" SS valve BSPT with nipple

# ORDER ONLINE TODAY!

dwyer-inst.com/Product/SeriesPFT



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