Dwyer

SERIES PDWS & PWF

PADDLEWHEEL FLOW SENSOR
Low Friction Bearings, Long Life, 1/2 to 8″ Pipe (12.7 to 203 mm)
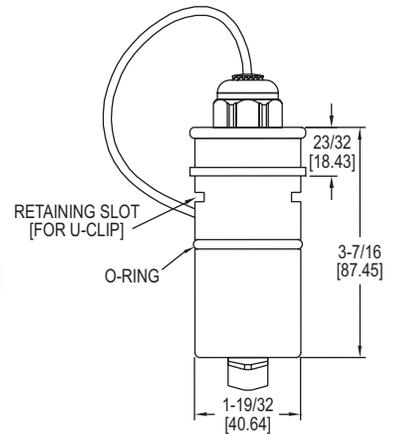

PWF-B-PXX **PWF-S-BXX** **PWF-S-DXX** **PWF-T-SFT-SS**

RETAINING SLOT
[FOR U-CLIP]

O-RING

23/32
[18.43]

3-7/16
[87.45]

1-19/32
[40.64]

The **SERIES PDWS** Insertion Paddlewheel Flowmeters are designed for pipe size ranges from 1/2 to 8″ with available materials of brass, stainless steel, PVC, and polypropylene. The Series PDWS is intended to be used with the Series PWF, a wide variety of custom tee, saddle, or welded fittings that come in bronze, PVC, and stainless steel.

FEATURES/BENEFITS
• The bearings are made from ruby jewel to reduce the coefficient of friction and maintain high accuracy
• PVC and polypropylene body material offers resistance against corrosive media

APPLICATIONS
• Industrial water & wastewater treatment
• Cooling water monitoring
• Industrial fluid control
• Chemical proportioning
• Fluctuating fluid conductivity applications

SPECIFICATIONS
Service: Compatible clean liquids.
Range: 0.3 to 30 ft/s (0.09 to 9.14 m/s).
Wetted Materials: Sensor: Brass, 316 SS, PVC, or polypropylene; Rotor: PVDF; Shaft: Nickel-bonded tungsten carbide (ceramic optional); Bearings: Ruby jewel; O-ring: EPDM (fluoroelastomer optional).
Accuracy: ±1.5% FS.
Temperature Limits: Brass, 316 SS: 200°F (93°C); PVC, Polypropylene: 130°F (55°C).
Pressure Limits: Brass: 200 psi (14 bar); 316 SS: 250 psi (17 bar); PVC, polypropylene: 175 psi (12 bar) @ 75°F (24°C); High pressure option: 400 psi (28 bar) (SS only).
Process Connection: See below.
Output: Current sinking, square wave pulse, opto-isolated.
Power Requirements: 6 to 24 VDC, 2 mA (max. 20 mA).
Electrical Connection: #22 AWG, 3 conductor, 18′ (5.5 m) cable (max. 2000′ run).
Enclosure Rating: NEMA 4X (IP66).
Weight: 2 lb (907 g).

MODEL CHART

Example	PDWS	-1B	-CRS	PDWS-1B-CRS
Series	PDWS			Insertion paddlewheel flow sensor
Size/ Material		1B 1S 1P 1Y 2B 2S 2P 2Y		1/2 to 3″, brass 1/2 to 3″, 316 SS 1/2 to 3″, PVC 1/2 to 3″, polypropylene 4 to 8″, brass 4 to 8″, 316 SS 4 to 8″, PVC 4 to 8″, polypropylene
Options			CRS IMM FOR HPO	Ceramic shaft Immersible (urethane potted electrical connection) Fluoroelastomer O-ring High pressure options (Use with SS only)
Note: Need to purchase with Series PWF fitting for proper installation.				

ACCESSORIES

Series	Description
BAT	Blind analog transmitter; converts pulse output to 4 to 20 mA analog output; unit is loop powered, fits on the enclosure of the meter, and is field spannable.
RTI2	Rate total indicator; converts pulse output to 4 to 20 mA analog output with local flow rate and totalization display; unit is loop powered, can fit on the enclosure of the meter, and provides a high/low flow alarm.
PWD	Pulse divider, for use with pacing electronic metering pumps; unit divides the input frequency to any number from 1 to 9999 with the use of rotary switches to suit a number of metering pump inputs. (See website)

MODEL CHART - TEE FITTING

Model	Description	PDWS-1XX						
		1/2″	3/4″	1″	1-1/2″	2″	3″	4″
		-0050	-0075	-0100	-0150	-0200	-0300	-0400
PWF-T-BFS	Bronze/female sweat (for copper tubing)	X	X	X	X	X	X	X
PWF-T-BFT	Bronze/female thread	X	X	X	X	X	X	X
PWF-T-PME	PVC/male stub end	X	X	X	X	X		
PWF-T-CFT	Carbon steel/female thread	X	X	X	X	X		
PWF-T-SFT	304 SS/female thread	X	X	X	X	X		
-SS	All 316 SS option	X	X	X	X	X		
-HP	High pressure option (SS or CS only)	X	X	X	X	X		

MODEL CHART - SADDLE FITTING

Model	Description	PDWS-1XX	PDWS-2XX		
		3″	4″	6″	8″
		-0300	-0400	-0600	-0800
PWF-S-DXX	Ductile iron	X	X	X	X
PWF-S-PXX	PVC	X	X	X	X
PWF-S-BXX	Bronze	X	X		
-LPS	Installed on 16″ long pipe stub option (PVC only)	X	X	X	X

MODEL CHART - WELD/BRAZE FITTING

Model	Description	PDWS-1XX	PDWS-2XX		
		3″	4″	6″	8″
		-0300	-0400	-0600	-0800
PWF-W-BXX	Bronze	X	X	X	X
PWF-W-CXX	Carbon steel	X	X	X	X
PWF-W-SXX	316 stainless steel	X	X	X	X
-HP	High pressure option (SS or CS only)	X	X	X	X

Example: PWF-T-CFT-0050-SS
To order an all 316 SS female thread 1/2″ tee for Series PDWS-1XX Paddlewheel Flow Meter.

USA: California Proposition 65
⚠WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov