

# PW Saddle Mounted Flow Meters

## HALL EFFECT

The PW series meters have a paddle wheel with a magnet mounted in the wheel. Every time the paddle wheel rotates, a pulse of electrical current is generated. This is called the Hall Effect. Flow is registered on an external device by counting the pulses.

## PW SADDLE MOUNTED METERS

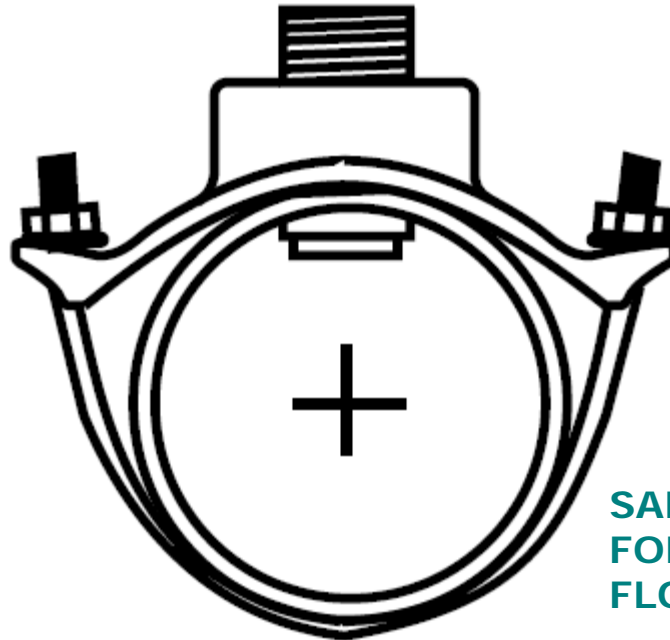
Simple to install with time-honored reliable performance, the PW Saddle Mounted Flow Meters are highly repeatable, rugged sensors that offer exceptional value with little or no maintenance. The insertion paddle wheel is a process-ready open collector signal and has a wide dynamic flow range. The sensor measures liquid flow rates in full pipes and can be used in low pressure systems.



## INSTALLATION – SADDLE MOUNT

The PWS Series Meters are mounted directly to a saddle. A hole is drilled in the pipe, the saddle is mounted on the pipe and the sensor is inserted into the pipe and sealed with the screw cap. The rugged cast iron saddle and reliable insertion paddle wheel make a reliable and easily serviced installation.

SPECIFICATIONS	PW300S	PW400S	PW600S
Part No.	500867	500868	500869
Nominal Pipe Diameter	3"	4"	6"
Min Flow (gpm)	7	12	26
Max Flow (gpm)	441	783	1762
Velocity Range (fps)	0.3 to 20		
Housing	Glass Filled Polypropylene		
Paddle (Rotor)	Black PVDF		
Shaft	Titanium		
Accuracy	± 1% of reading		
Maximum Temperature	150°F		
Maximum Water Pressure	180 psi		
Manufacturer	Signet		



## SADDLE MOUNTING FOR PW –S SERIES FLOW METERS

### Specifications

- The flow sensor shall use a four-blade, open-cell rotor design using insertion paddlewheel technology.
- Linearity of the output signal with respect to flow rate shall be  $\pm 1$  % of full range.
- Measurement repeatability of the output signal with respect to flow rate shall be  $\pm 0.5$  % of full range.
- The sensor body shall be made of injection-molded polypropylene (PP) that shall accommodate up to 12.5 bar @ 20°C (180 psi @ 68°F) and 1.7 bar @ 90°C (25 psi @ 194°F). As an alternative, the sensor shall be made of injection-molded polyvinylidene fluoride (PVDF) that shall accommodate up to 14 bar @ 20°C (200 psi @ 68°F) and 1.7 bar @ 100°C (25 psi @ 212°F).
- The sensor shall attach to a pipe via a variety of insertion-style installation fittings supplied by the flow sensor manufacturer. Attachment shall use a 1-1/4 X 11-1/2 NPSM threaded cap. Sealing shall be accomplished with a double O-ring seal. O-rings shall be made of FPM-Viton®, FPM-Kalrez® or EPDM.
- The sensor shall be equipped with 0.5 in. female conduit connection.
- The sensor shall operate with a power input of 3.3 to 6VDC @ <1.5 mA or from 6 to 24 VDC @ <20 mA.
- The sensor output shall provide an open-collector pulse at a frequency of 49.2 Hz per m/s nominal (15 Hz per ft/s).
- Output shall be via a twisted pair, foil-shielded cable with drain wire. Supplied cable shall be at least 7.6 m (25 ft) long, with a maximum allowable length of 305 m (1000 ft).
- The operating range of the sensor shall accommodate nominal flow rates from 0.1 to 6 m/s (0.3 to 20 ft/s).
- The sensor shall meet appropriate CE standards.
- The sensor shall be GF Signet Model 2536-PO.