

## WS131 Flow Meter

### PRODUCT DESCRIPTION

The Eno Scientific flow meter is designed to measure water flow for monitoring well drawdown and usage. It uses a modular design consisting of a PVC housing and an electronic sensor module that easily attaches to the housing using a hand tightened ring nut. With the sensor in place, electrical pulses are generated as water moves past the paddle wheel which can be interpreted as water volume by an Eno Scientific Well Sounder or other device. When the test is complete, the sensor can be removed and replaced with an inexpensive plug using the same kind of hand tightened ring nut. This leaves the sensor port available for future testing.

The housings currently come in three sizes, 1", 1.5", and 2". The housings are made of Type 1 PVC with sockets for schedule 40 PVC pipe, compatible with common PVC piping and adhesives.

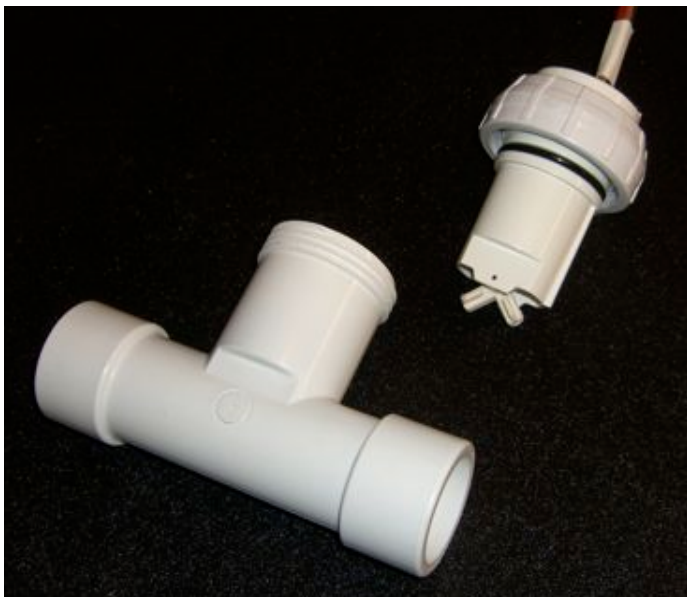
The electronic sensor operates off a 5-24VDC power supply and provides an output voltage on the signal line which switches between Vin and ground as the paddle wheel turns. The sensor is available in two configurations, with a plugged cable ready to plug into the Well Sounder, or with three wire leads for connection to other devices such as a logger. Note that external power is required in the 3 wire configuration.



The flow meter shown in use with the Well Sounder 2010 PRO.

The paddle wheel is made of a very tough polyethylene material and is the only moving part subject to wear. In water flows high in abrasives, it may experience wear with time but is easily replaced without tools.

The flow meter components and assemblies are available individually or in kits with the Well Sounder 2010 PRO. Additional housings, plugs, nuts, and paddle wheel repair kits are all readily available from your local distributor or online at [www.enoscientific.com](http://www.enoscientific.com).



### Key Features:

- Modular design
- Removeable sensor
- Standard PVC mounting
- Direct interface to Well Sounder
- Standard pulse output
- Wide input voltage range

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## SPECIFICATIONS

**Materials:**

Housings – Type 1 PVC  
 Paddle Wheel – HDPE  
 O-ring – Buna N  
 Axle – Tungsten Carbide

**Plumbing:**

Pipe size – Schedule 40 PVC  
 Pressure - 240PSI

**Physical:**

Pipe size – Schedule 40 PVC  
 Test Pressure – 240 PSI  
 Temperature: 32 – 140 F (0 – 60 C)  
 Dimensions:

1”	5.75 x 4.5 x 2.4”
1.5”	6.25 x 5.25 x 2.4”
2”	7.11 x 5.75 x 3”

Clearance for sensor removal: 3.5”

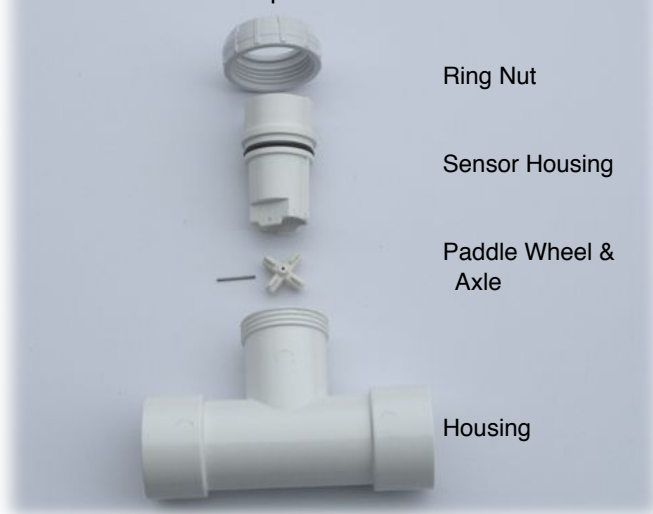
**Electrical:**

Power: 5 – 24V @ 500 uA max  
 Output signal: Pull-to-ground (+V – 0V)  
 Pulse width: ~5mS  
 Frequency: .3 – 200 Hz

**Characteristics:**

Pipe Size	1"	1.5"	2"
Min Flow (gal/min)	.86	1.8	2.8
Max Flow (gal/min)	52	108	170
Press Drop (PSI) @Max Flow	.25	.18	.15
Scale Factor (gal/pulse)	.0057	.0121	.0209

Exploded view.



Eno Scientific flow meters are available individually or in kits with the Well Sounder 2010 PRO with everything needed to begin drawdown testing.



For more information, contact your local distributor: