

FPW300 – Low-Flow PaddleWheel Flow Meter

- ▶ For very low flow measuring
- ▶ Compact design for limited mounting space
- ▶ One moving part only
- ▶ Stainless steel construction
- ▶ High turndown ratio
- ▶ High pressure resistance



FPW300 is designed specially for measuring very low liquid flow which is not measurable with a regular flow meter. Flow rate could be as low as 10mLPM. High repeatability and quick response time. Pressure resistance is up to 400 BAR (5,800 psi) for regular model while higher operating pressure could be achieved by using an adaptor.

Specifications

Nominal Diameter	≤DN15
Applicable Medium	Liquid
Accuracy	≤±0.5% of reading
Linearity	±0.1%
Repeatability	≤±0.1% of reading
Pressure Rating	100bar, 200bar, MAX.400bar
Pressure Drop	≤700mbar (at max. flow rate)
Power Supply	10...25Vdc
Current Consumption	≤20mA
Output	PNP / NPN pulse, 3-wire 4...20mA
Wiring Protection	Reverse polarity, short-circuit
Ambient Temperature	-40...85°C
Medium Temperature	-50°C ... 177°C
Protection Class	IP65
Materials	
Sensor Housing/Body	304/316 stainless steel
Rotor	CD4MCu stainless steel
Shaft/Bearings	Tungsten steel
Electrical Connection	M12x1 plug / solenoid plug
End Connection	Threads
Measuring Range	See technical data for details

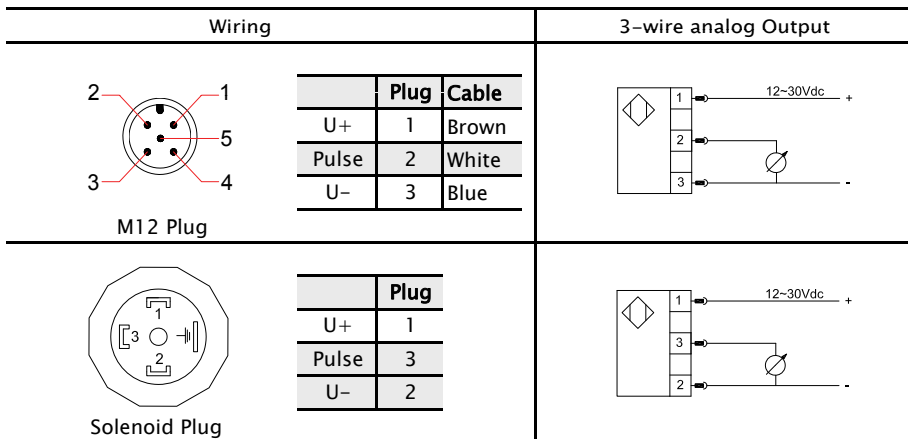
Applications

- ▶ Hydraulic/lubrication oil monitoring
- ▶ Energy industry
- ▶ Machinery manufacture
- ▶ Food and pharmaceutical industry
- ▶ Leak monitoring

Wiring 1 – Pulse Output

Wiring	PNP output	NPN output												
<p>M12 Plug</p> <table border="1"> <thead> <tr> <th></th> <th>Plug</th> <th>Cable</th> </tr> </thead> <tbody> <tr> <td>U+</td> <td>1</td> <td>Brown</td> </tr> <tr> <td>Pulse</td> <td>4</td> <td>Black</td> </tr> <tr> <td>U-</td> <td>3</td> <td>Blue</td> </tr> </tbody> </table>		Plug	Cable	U+	1	Brown	Pulse	4	Black	U-	3	Blue		
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<p>Solenoid Plug</p> <table border="1"> <thead> <tr> <th></th> <th>Plug</th> </tr> </thead> <tbody> <tr> <td>U+</td> <td>1</td> </tr> <tr> <td>Pulse</td> <td>3</td> </tr> <tr> <td>U-</td> <td>2</td> </tr> </tbody> </table>		Plug	U+	1	Pulse	3	U-	2						
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Wiring 2 - Analog Output

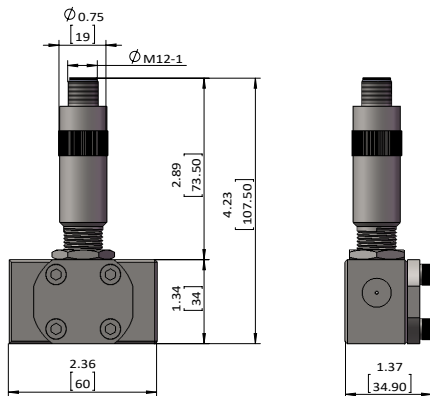


Standard Flow Range (10:1)

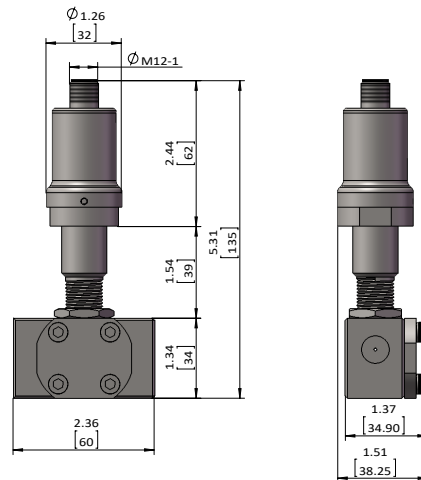
Serial No.	FTB100-1	FTB100-2	FTB100-3	FTB100-4	FTB100-5
Min. Flow Rate (LPM)	0.01	0.03	0.1	0.3	0.55
Max. Flow Rate (LPM)	0.1	0.3	1	3	5.5

Dimensions in Inches (mm)

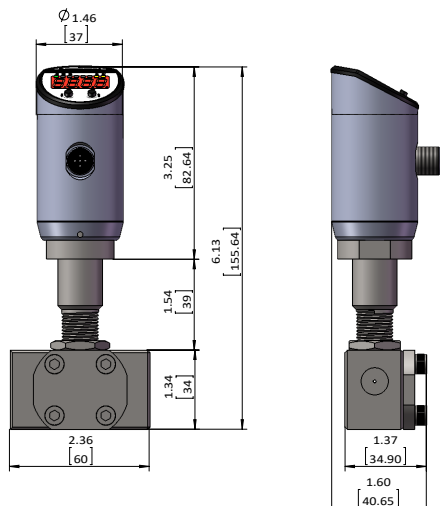
M12X1 plug for pulse output



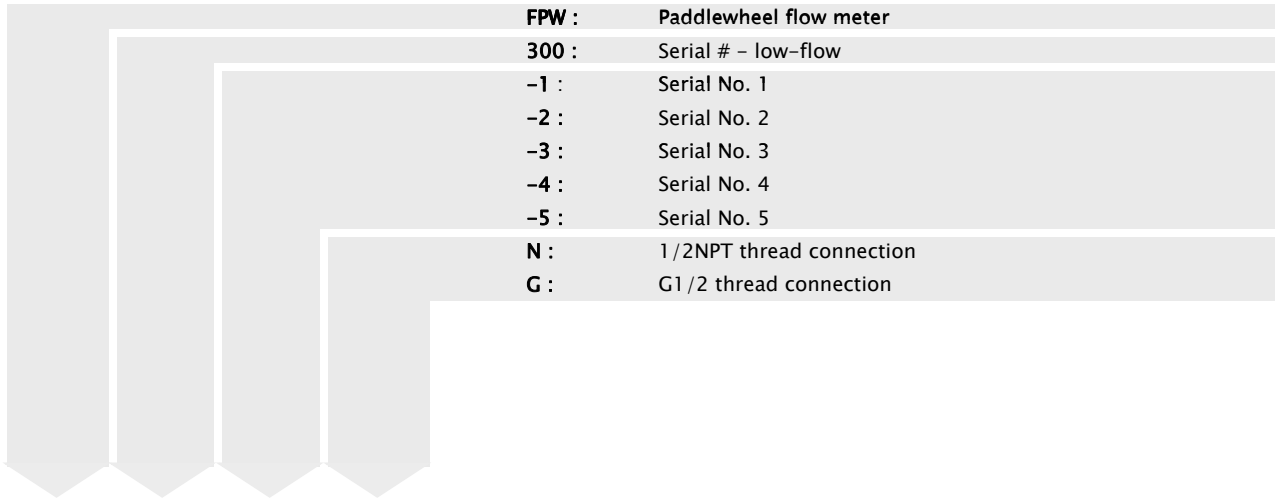
M12X1 plug for analog output



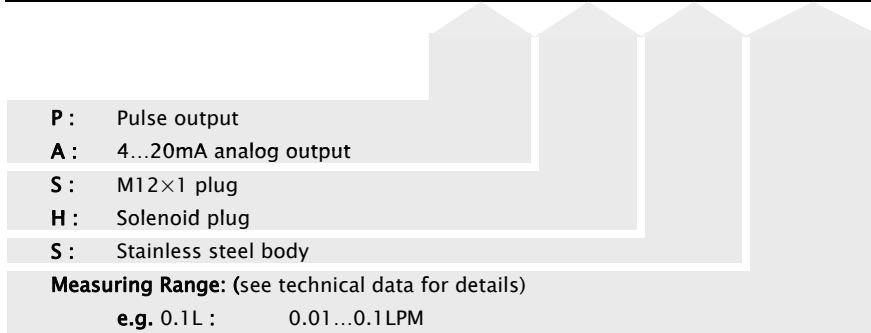
Smart control unit



Order Code



FPW	300	-1	G	P	H	S	0.1L
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Special Order upon Request