FPW200 – Compact PaddleWheel Flow Meter

- **Low cost**
- **One moving part only**
- **Choices of wetted part material (stainless steel / PVC)**
- **Wide turndown ratio**

Fluid flowing through FPW200 causes the paddle wheel to spin. As magnets embedded in the paddle spin past the sensor, electrical pulses are produced in which frequency is proportional to the flow rate. The revolutions per minute and the K-factor (number of pulses/Gallon) are used to obtain the flow passing through the unit.

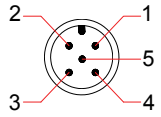
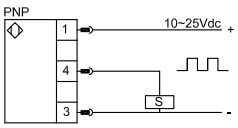
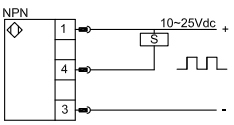
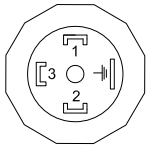
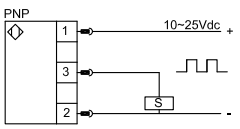
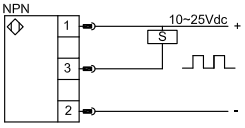
Specifications

Nominal Diameter	1/2" (DN15), 3/4" (DN20), 1"(DN25)
Applicable Medium	Water or any liquid with viscosity<10mm2/s
Accuracy	≤±1% of F.S.
Repeatability	≤0.2% of F.S.
Pressure Rating	60bar
Power Supply	12...30Vdc
Current Consumption	≤20mA
Output	3-wire pusle output/1...10V analog output/
	4...20mA analog output
Wiring Protection	Reverse polarity, Short-circuit
Ambient Temperature	-20...85℃
Medium Temperature	-20...85℃
Protection Class	IP65
Materials	
Housing	Stainless steel 304
Body	Stainless steel 316 / anodizing aluminum
Rotor	PVDF
Shaft	Tungsten steel
Bearings	Ruby jewel
O-ring	EPWM
Electrical Connection	M12x1 plug, Solenoid plug

Applications

- Water treatment
- Circulating water system
- Hydraulic system
- Lubrication system

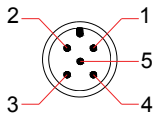
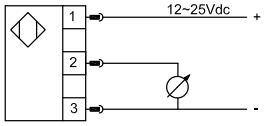
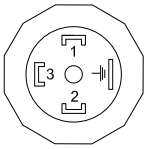
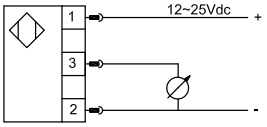
Wiring 1 – Pusle Output

Wiring	PNP output	NPN output
 M12x1plug		
 Solenoid plug		

Signal	Plug	Cable
U+	1	Brown
Pulse	4	Black
U-	3	Blue

Signal	Plug
U+	1
Pulse	3
U-	2

Wiring 2 – Analog Output

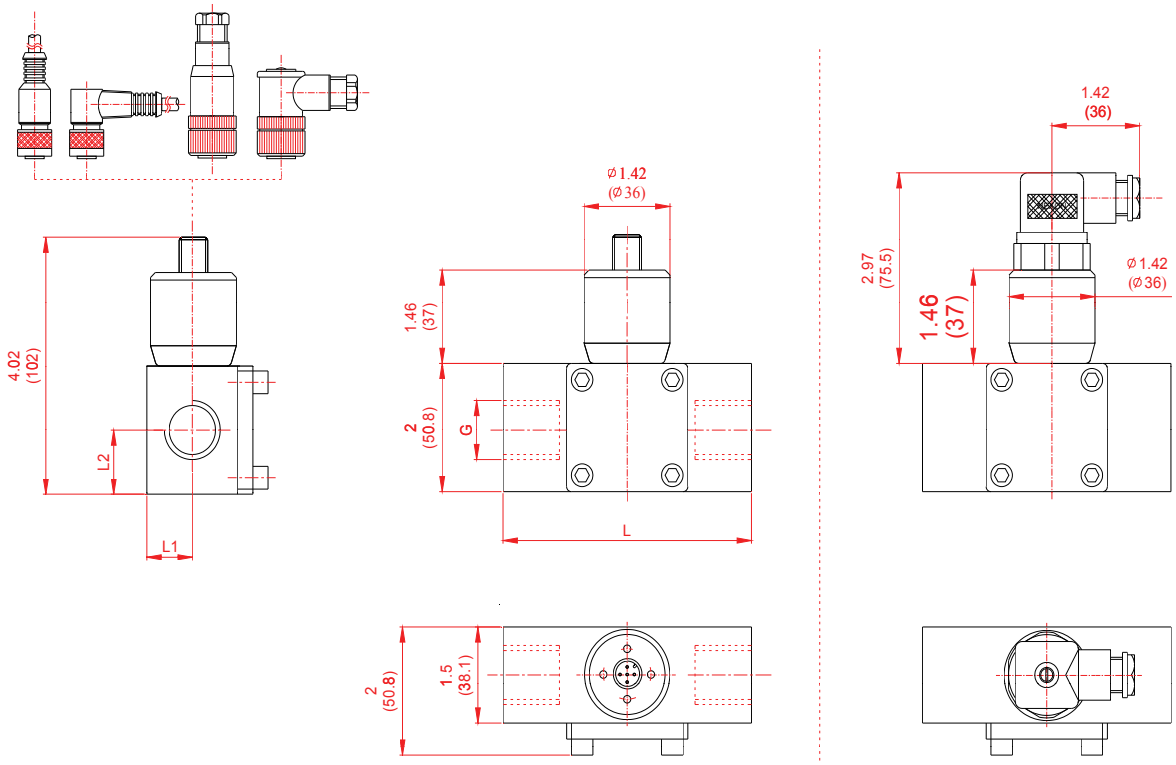
Wiring	0...10V / 4...20mA analog output
 M12x1plug Signal / Plug / Cable: U+ / 1 / Brown; Output / 2 / White; U– / 3 / Blue	
 Solenoid plug Signal / Plug: U+ / 1; Output / 3; U– / 2	

Technical Data

Thread/ Nominal Diameter G	Measuring Range (water l/min)	Measuring Range (water gal/min)	K coefficient (pulses/l)	L inch (mm)	L1 inch (mm)	L2 inch (mm)
1/2" (DN15)	0.38...38	0.1...10	141	4.1 (104)	0.82 (20.8)	1.04 (26.4)
3/4" (DN20)	0.75...60	0.2...16	103	4.1 (104)	0.82 (20.8)	1.04 (26.4)
1" (DN25)	1.8...100	0.5...26.5	58	5 (127)	0.75 (19.0)	1 (25.4)

Note： More accuracy of the flow range please refer to the meter on delivery.

Dimensions in inches (mm)



Order Code

FPW :	Paddlewheel flow meter
200 :	Series# – compact
N :	NPT thread
G :	BSP thread
12 :	Thread size – 1/2“
34 :	Thread size – 3/4“
01:	Thread size – 1“

FPW	200	G	12	P	S	S	038L

P :	3-wire pusle output
V :	3-wire 1...10V analog output
A :	3-wire 4...20mA analog output
S :	M12 x 1 plug
H :	Solenoid plug
S :	Stainless steel body
A :	Anodizing aluminum body

Measuring range : (see technical data for details)

038L :	0.38...38 l/min
060L :	0.75...60 l/min
100L :	1.8...100 l/min

Special Order on Request

- Electrical / process connection
- Body material
- Rotor material
- Shaft and bearings material

Augmented Product – Optional LED Digital Display

DWE-FPW200 SERIES
2 switching outputs + 1 analog output
Switching point set through menus
Analog output set through menus
Flow rate display
Total flow display
Batch control
8 LED for switching state
4-digit of 7-segment red LED for flow rate or setting menus