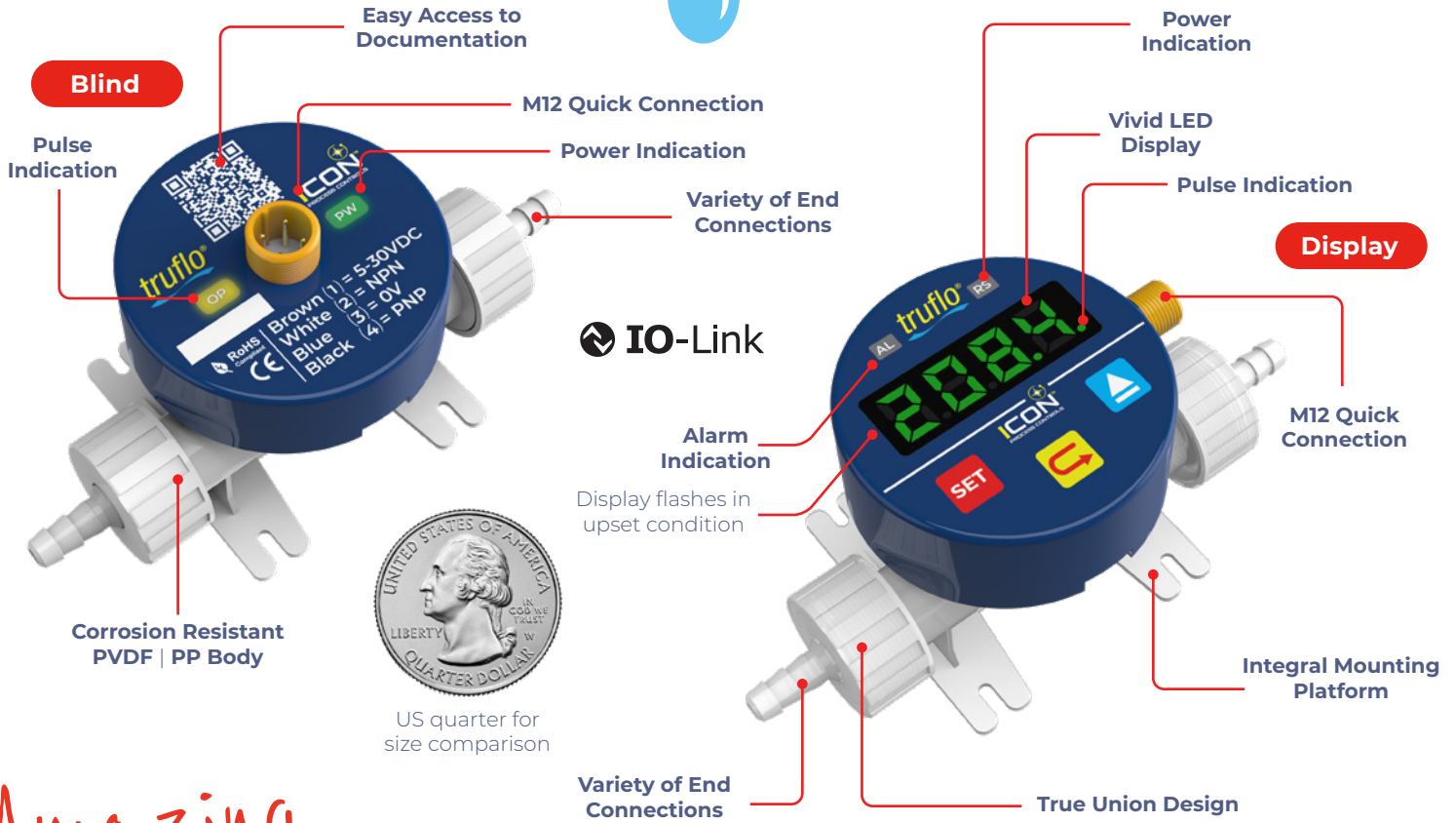


## Precision in Every Drop: Monitoring Low Dosing Flows



*Amazing*

**Good things come in small packages**

### Featuring:

- ✓ Excellent Chemical Resistance
- ✓ Perfect for Metering or Dosing Applications
- ✓ Ultra Low Flow Ranges | 40 ml/min | 0.01 GPM
- ✓ Variety of End Connections: Hose Barb | Threaded | Flared | Straight Pipe
- ✓ NPN or PNP Pulse Output | 4 – 20mA | RS485 | IO-Link
- ✓ Compact Lightweight Design



### Small but mighty

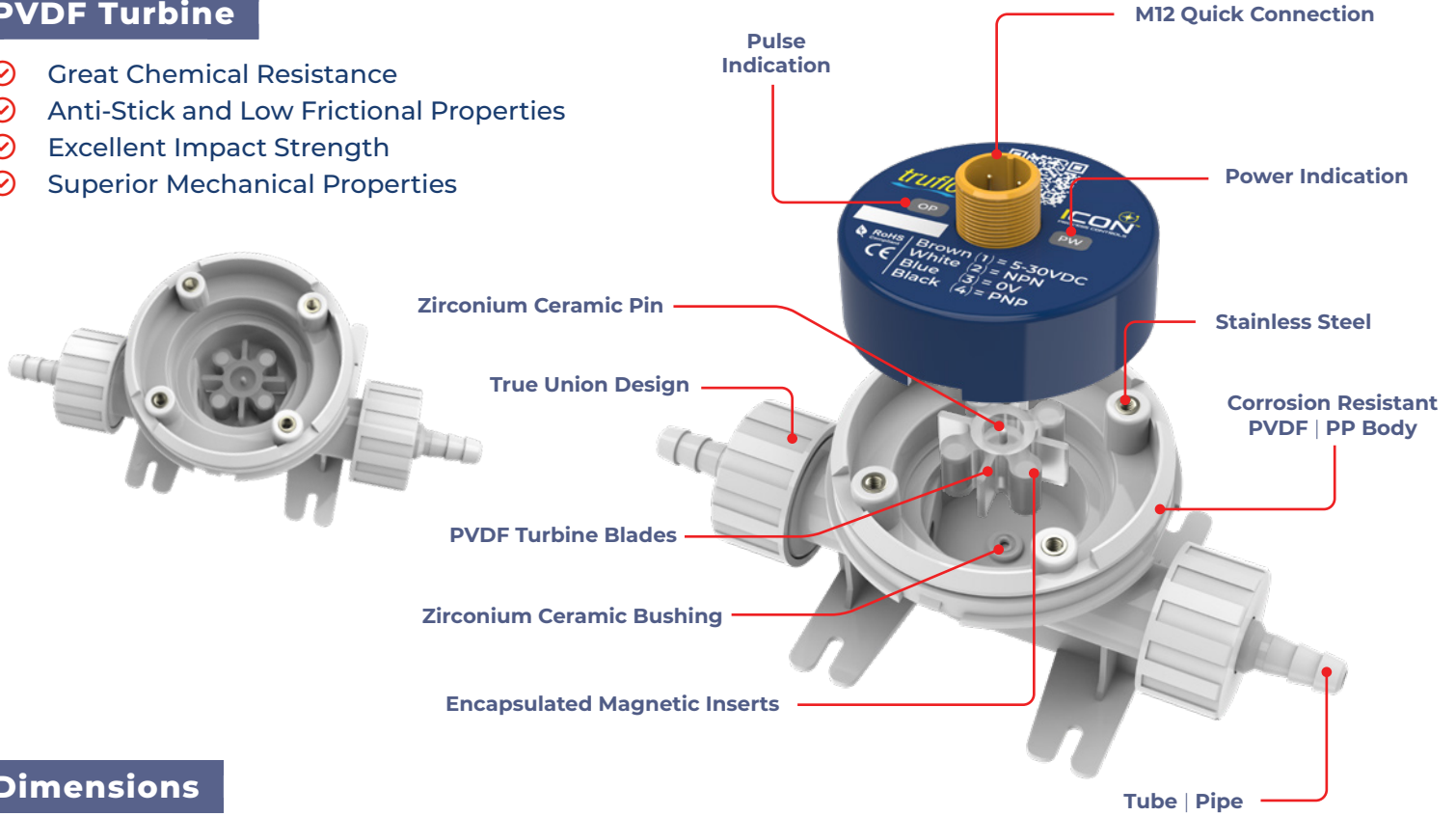
The ProPulse® 2 provides superior performance and delivers accurate ultra-low flow measurement that is highly repeatable under the most demanding of industrial environments.

The ProPulse® 2 operates using a PVDF rotor with encapsulated magnetic inserts, which rotate on a long-wearing set of zirconium ceramic bushings, designed to provide years of reliability. As the rotor spins, the magnetic field produced by the magnets is picked up via a Hall Effect Sensor, which converts the rotation into a square wave NPN pulse, 4-20mA, or RS485 output that can be sent directly to a metering pump or local display.

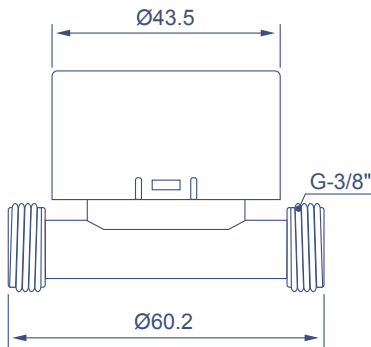
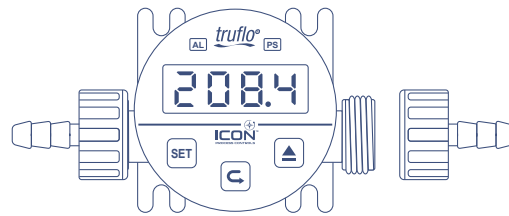
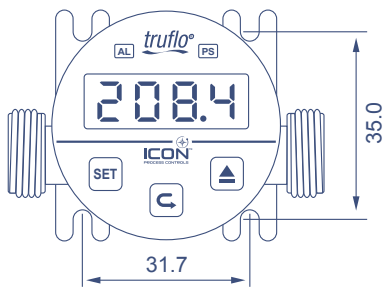
## Small in size — REALLY BIG ON VALUE

### PVDF Turbine

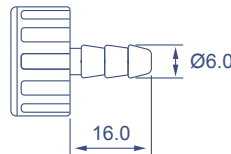
- ✓ Great Chemical Resistance
- ✓ Anti-Stick and Low Frictional Properties
- ✓ Excellent Impact Strength
- ✓ Superior Mechanical Properties



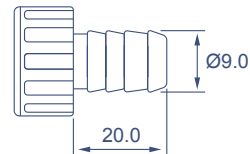
### Dimensions



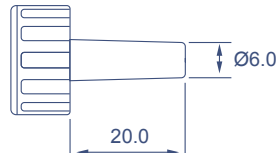
Hose Barb : 03H



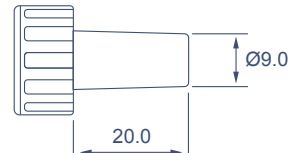
Hose Barb : 06H



Straight Tube : 04T



Straight Tube : 06T



# Truflo® — ProPulse® 2 Series

## Mini Turbine Flow Meter

### Specifications

Body Material	PP   PFA   PVDF   PVC
O-Ring	Viton®
Environmental Conditions	-4°F – 176°F   -20°C – 80°C (35% – 85% RH)
Operating Temperature	PP : -4°F – 203°F   -20°C – 95°C PFA : -40°F – 250°F   -40°C – 120°C PVDF : -40°F – 250°F   -40°C – 120°C PVC : -32°F – 140°F   0°C – 60°C
Max. Working Pressure   Non-Shock	PP: 142 Psi   10 Bar, PFA: 213 Psi   15 Bar, PVDF: 213 Psi   15 Bar, PVC: 142 Psi   10 Bar
Accuracy	± 2.0% of F.S. @ 25°C
Output Current	PPW (Blind) 50mA max   PPM & PPR (Display) 150mA max
Operating Voltage	10 – 30 VDC (PPM & PPR models)   5 – 30 VDC (PPW model)
Protection Class	NEMA 4X, IP65 (PPM & PPR models)   NEMA 4X, IP65 (PPW model)
Display	4 digits: 0.0 – 9999 (PPM & PPR models)

### Flow Characteristics

Connection	Flow Range (LPM)	Flow Range (GPM)	K Factor (LPM)	K Factor (GPM)
02N 1/8" NPT	0.12 – 16.20	0.032 – 4.280	1,295	4,900
03H 3/16" Hose Barb	0.04 – 2.20	0.010 – 0.581	8,400	31,794
04T 1/4" Straight Tube	0.12 – 8.20	0.032 – 2.166	2,420	9,160
04F 1/4" Flared	0.40 – 2.80	0.106 – 0.740	1,480	5,602
06T 3/8" Straight Tube	0.12 – 16.20	0.032 – 4.280	1,295	4,900
06H 3/8" Hose Barb	0.12 – 16.20	0.032 – 4.280	1,295	4,900
06F 3/8" Flared	0.40 – 9.80	0.106 – 2.589	1,268	4,800

Keyed to ensure correct connection

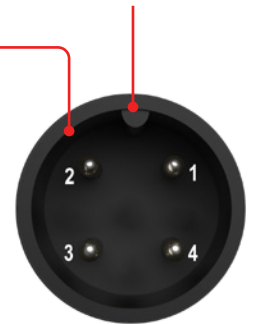
### Electrical Connections

M12 Connection (no Internal wiring required)

PPW – Blind (Pulse)		
Pin	Color	Function
1	Brown	+ 10-30 VDC
2	White	NPN Output
3	Blue	0V
4	Black	PNP Output

PPM – Display (4-20mA + Pulse)		
Pin	Color	Function
1	Brown	+ 10-30 VDC
2	White	NPN Alarm Output
3	Blue	0V
4	Black	V+ or +mA Output

PPR – Display (RS485 + Pulse)		
Pin	Color	Function
1	Brown	+ 10-30 VDC
2	White	RS+
3	Blue	0V
4	Black	RS-



### Model Selection

PP - M - 03H - PP

Version	Process Connection	Material
<b>W</b> : Blind with Pulse   4-20mA	<b>02N</b> : 1/8" NPT	<b>PP</b> : PP
<b>N</b> : Blind with NPN   PNP	<b>03H</b> : 3/16" Hose Barb	<b>PF</b> : PVDF
<b>M</b> : LED Display with 4-20mA   NPN	<b>04T</b> : 1/4" Straight Tube	<b>PA</b> : PFA
<b>R</b> : LED Display with RS485	<b>04F</b> : 1/4" Flared	
<b>P</b> : LED Display with NPN   PNP	<b>06T</b> : 3/8" Straight Tube	
	<b>06H</b> : 3/8" Hose Barb	
	<b>06F</b> : 3/8" Flared	

