Truflo[®] — ProPulse[®] 2 Series Mini Turbine Flow Meter





Small in size

REALLY BIG ON VALUE

Monitoring Low Dosing Flows With Precision

Truflo® — ProPulse® 2 Series Mini Turbine Flow Meter



Precision in Every Drop: Monitoring Low Dosing Flows



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
- Pulse | 4 20mA | RS485 | IO-Link
- Compact Lightweight Design
- 1/8" to 1/2" sizes



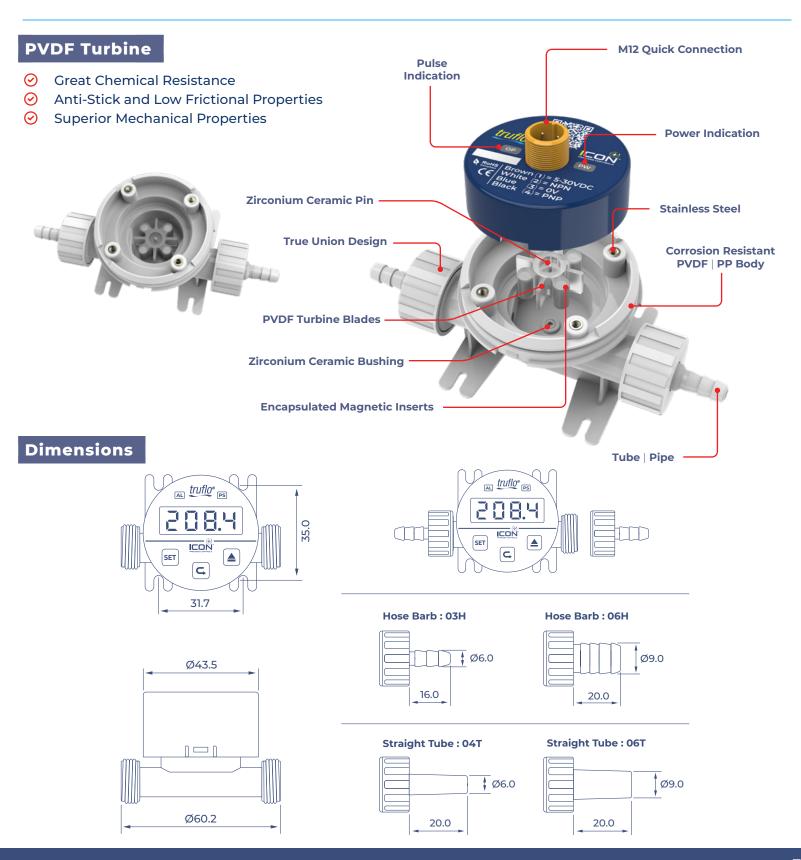
Small but mighty

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.



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Mini Turbine Flow Meter



Specifications

Body Material	PP PVDF	
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 PVDF : -40°F – 250°F -40°C – 120°C	
Max. Working Pressure Non-Shock	PP: 145 Psi 10 Bar, PVDF: 217 Psi 15 Bar	
Accuracy	± 1.0% of F.S. @ 25°C (PPW model) ± 0.5% of F.S. @ 25°C (PPM & PPR models)	
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	
Display	4 digits: 0.0 - 9999 (PPM & PPR models)	

Flow Characteristics

	Connection	Flow Range (LPM)	Flow Range (GPM)	K Factor (LPM/GPM)
02N	⅓a" NPT	0.12 – 16.20	0.032 – 4.280	5,350
03H	³∕₁6" Hose Barb	0.04 – 2.20	0.010 – 0.581	5,350
04T	1/4" Straight Tube	0.12 – 8.20	0.032 – 2.166	1,700
04F	1/4" Flared	0.40 – 2.80	0.106 – 0.740	1,700
06T	⅓" Straight Tube	0.12 – 16.20	0.032 – 4.280	875
06H	³⅓" Hose Barb	0.12 – 16.20	0.032 – 4.280	875
06F	³⁄≈" Flared	0.40 – 9.80	0.106 – 2.589	875
06T	3/8" Straight Tube 3/8" Hose Barb	0.12 – 16.20 0.12 – 16.20	0.032 - 4.280 0.032 - 4.280	875 875

Electrical Connections

PPW – Blind (Pulse)			
Pin	Color	Function	
1	Brown	+ 5-30 VDC	
2	White	NPN Output	
3	Blue	OV	
4	Black	PNP Output	

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

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

M12 Connection

(no Internal wiring required)

Keyed to ensure correct connection



Model Selection

ProPulse® 2 — Turbine Flow Meter (Display)			
Ciro	Display Version	Material: PP	Material: PVDF
Size	Display Version	Part Number	Part Number
⅓" NPT	LED: RS485	PP-R-02N-PP	PP-R-02N-PF
³∕₁6" Hose Barb	LED: RS485	PP-R-03H-PP	PP-R-03H-PF
1/4" Straight Tube	LED: RS485	PP-R-04T-PP	PP-R-04T-PF
1/4" Flared	LED: RS485	PP-R-04F-PP	PP-R-04F-PF
3/4" Straight Tube	LED: RS485	PP-R-06T-PP	PP-R-06T-PF
³%" Hose Barb	LED: RS485	PP-R-06H-PP	PP-R-06H-PF
3%" Flared	LED: RS485	PP-R-06F-PP	
⅓" NPT	LED: 4-20mA + Pulse	PP-M-02N-PP	PP-M-02N-PF
³ ∕ ₁₆ " Hose Barb	LED: 4-20mA + Pulse	PP-M-03H-PP	PP-M-03H-PF
1/4" Straight Tube	LED: 4-20mA + Pulse	PP-M-04T-PP	PP-M-04T-PF
1/4" Flared	LED: 4-20mA + Pulse	PP-M-04F-PP	PP-M-04F-PF
¾" Straight Tube	LED: 4-20mA + Pulse	PP-M-06T-PP	PP-M-06T-PF
³⁄₀" Hose Barb	LED: 4-20mA + Pulse	PP-M-06H-PP	PP-M-06H-PF
3/8" Flared	LED: 4-20mA + Pulse	PP-M-06F-PP	

ProPulse® 2 — Turbine Flow Meter (Blind)			
Size	Display Version	Material: PP	Material: PVDF
		Part Number	Part Number
⅓" NPT	Blind: NPN PNP	PP-W-02N-PP	PP-W-02N-PF
³∕₁6" Hose Barb	Blind: NPN PNP	PP-W-03H-PP	PP-W-03H-PF
1/4" Straight Tube	Blind: NPN PNP	PP-W-04T-PP	PP-W-04T-PF
1/4" Flared	Blind: NPN PNP	PP-W-04F-PP	PP-W-04F-PF
¾" Straight Tube	Blind: NPN PNP	PP-W-06T-PP	PP-W-06T-PF
3/6" Hose Barb	Blind: NPN PNP	PP-W-06H-PP	PP-W-06H-PF
3%" Flared	Blind: NPN PNP	PP-W-06F-PP	



