

- Up to 24" Pipe Size
- Zirconium Ceramic Rotor | Bushings
- Accuracy $\pm 0.5\%$
- Retrofits Into Signet® Type Fittings



SERIES : TIR



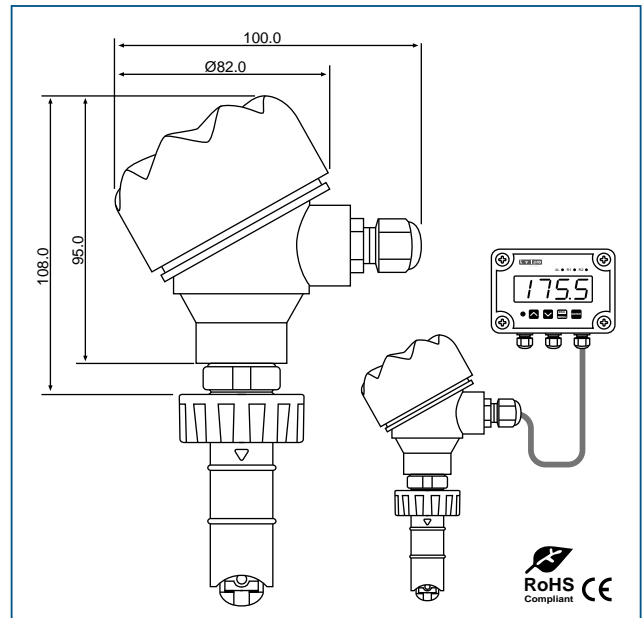
Features

- Lifetime Warranty on Paddle Wheel Assembly
- Excellent Chemical Resistance
- 4-20mA + Relay Output
- Size Range 2 - 24"
- Easy To Install
- Quick Disconnect DIN Connection
- High Accuracy | $\pm 0.5\%$ of Full Scale
- Tefzel® Paddle
- NEMA 4X Rating
- Zirconium Ceramic Shaft & Bearings
- Double O-Ring Seal
- Retrofits into Signet® Type Fitting

Applications

- Water Usage
- Waste Treatment
- Chemical Addition
- Water Recycling
- Scrubber | Gas Stacks
- Process Measurement

Dimension (unit : mm)



The TIR digital flow meters are easy to install with exceptional long life performance. Truflo TIR Series Paddle Wheel Flow Sensors are highly repeatable, rugged sensors that offer exceptional value with little or no maintenance. The TIR Series has a process-ready open collector signal with a wide dynamic flow range of 0.1 to 10 m/s (0.3 to 33 ft/s). The sensor measures liquid flow rates in full pipes and can be used in low pressure systems.

The Truflo TIR Series sensors are offered in a variety of materials for a wide range of pipe sizes and insertion configurations. The many material choices including PVC, PP and PVDF make the model highly versatile and chemically compatible to many liquid process solutions.

Sensors can be installed in 2 - 24" pipes using Truflo's comprehensive line of custom fittings. These custom fittings, which include tees, saddles and weldolets, seat the sensor to the proper insertion depth into the process flow.

Wiring Diagram

With Transmitter or RS-485

Power		Tr RS		Output		
1	2	3	4	5	6	7
+V	0V	-	+	COM	NO	NC

Power = 10-30VDC
 Tr = 4 ~ 20mA
 RS = RS-485 (Modbus)
 Output = Relay (1A/30VDC)

Specifications

General		
Operating Range	0.3 to 33 ft/s	0.1 to 10 m/s
Pipe Size Range	2 to 24"	DN50 to DN600
Linearity	±0.5% of F.S @ 25 °C (77 °F)	
Repeatability	±0.5% of F.S @ 25 °C (77 °F)	

Wetted Materials	
Sensor Body	PVC PP PVDF
O-rings	FKM (std) EPDM
Rotor Pin Bushings	Zirconium Ceramic
Rotor	ETFE TEFZEL®

Electrical	
Supply Voltage	9 - 24 VDC

Max. Temperature/Pressure Rating - Standard and Integral Sensor		
PVC	180 psi @ 68 °F	12.5 bar @ 20 °C
	25 psi @ 140°F	1.7 bar @ 60 °C
PP	180 psi @ 68 °F	12.5 bar @ 20 °C
	25 psi @ 180 °F	1.7 bar @ 85 °C
PVDF	200 psi @ 68 °F	14 bar @ 20 °C
	25 psi @ 240 °F	1.7 bar @ 60 °C

Operating Temperature		
PVC	32 °F to 140 °F	0 °C to 60 °C
PP	0 °F to 195 °F	-20 °C to 90 °C
PVDF	-40 °F to 250°F	-40 °C to 120 °C

Standards and Approvals	
CE FCC	
RoHS Compliant	

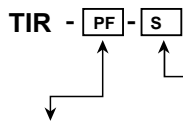
See Temperature and Pressure Graphs for more information

Temperature | Pressure Graphs

Note: The pressure/temperature graphs are specifically for the Truflo Flow sensors. During system design the specifications of all components must be considered.

Ordering Notes: Most common part number combinations shown. For all other combinations contact factory.

MODEL SELECTION



Material of Inserting Tube	Signal Output Option	Length of Tube	Seals
P - PVC PP - PP PF - PVDF	4-20mA Output (Std) Suffix 'RS' For RS485 Output	S - 1"- 4" Pipe L - 6"- 24" Pipe	FKM (Std) Suffix 'E' For EPDM

