## **TIR SERIES**

### **Paddle Wheel Flow Transmitter**



- Up to 24" Pipe Size
- Zirconium Ceramic Rotor | Bushings
- Accuracy ±0.5% of Full Scale
- Retrofits Into Signet® Type Fittings



Simple to install with time-honored reliable 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 33ft/s). The sensor measures liquid flow rates in full pipes and can be used in low pressure systems.

The 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 this model highly versatile and chemically compatible to many liquid process solutions.

Sensors can be installed in ½ to 24" pipes using Truflo's comprehensive line of custom fittings.



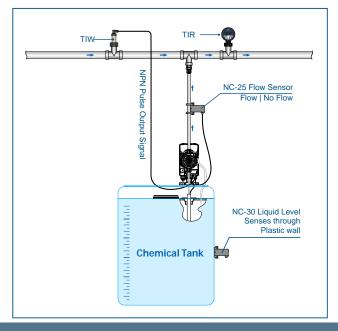
**SERIES: TIR** 

### **Features**

- Excellent Chemical Resistance
- 4-20mA + Relay Output
- Size Range ½ 24"
- Easy To Install
- Quick Disconnect DIN Connection
- High Accuracy | ±0.5% of Full Scale
- Tefzel® Paddle
- NEMA 4X Rating
- Zirconium Ceramic Shaft & Bearings
- Excellent Double O-Ring Seal High
- Pressure Rating | Up to 200 psi
- Retrofits into Signet® Type Fitting

## **Applications**

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



# **TIR SERIES**

## **Paddle Wheel Flow Transmitter**



# **Specifications**

General					
Operating Range	0.3 to 33 ft/s	0.1 to 10 m/s			
Pipe Size Range	½ to 24"	DN15 to DN600			
Linearity	±0.5% of F.S @ 25 °C (77 °F)				
Repeatability	±0.5% of F.S @ 25 °C (77 °F)				
Min. Reynolds Number Required	4500				
Wetted Materials					
Sensor Body	PVC   PP   PVDF				
O-rings	FKM   EPDM				
Rotor Pin & Bushings	Zirconium Ceramic				
Rotor	ETFE TEFZEL®				
Electrical					
Supply Voltage	9 - 24 VDC				
Max. Temperature/Pressure Rating	g - Standard and Integ	gral 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	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	4 °F to 185 °F		-20 °C to 85 °C		
PVDF	-40 °F to 240°F		-40 °C to 120 °C		

Standards and A	pprovals	
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CE, FCC,

RoHS compliant,

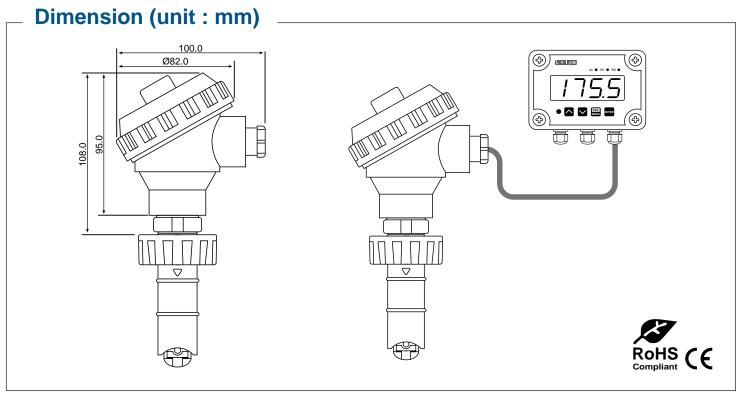
Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety

See Temperature and Pressure Graphs for more information





Material of Inserting Tube	Signal Output Option	Function Option	Seals
PV = PVC PP = PP PF = PVDF	RS = MODBUS RTU Transmitter (4 ~ 20mA) (STD)	S = (1"~ 4") Pipe L = (6"~ 24") Pipe	FKM (Std) E=EPDM



# **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**

1) Most common part number combinations shown. For all other combinations contact factory.

