

- ❑ Pipe Sizes ½ - 24"
- ❑ Lifetime Warranty
- ❑ Industry's Highest Accuracy: ±0.5%



PVC

PP

PVDF

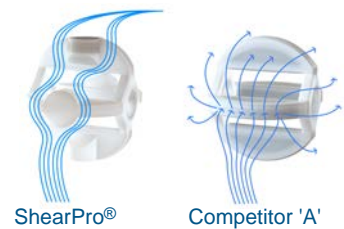
Features

- ❑ 4-20mA + 1 Amp Relay Output
- ❑ Flow Range | 0.3 to 33 ft/s
- ❑ NEMA 4X | IP66 Protection
- ❑ Double O-Ring Seal
- ❑ Retrofits into Signet® Type Fitting
- ❑ PP Cord Grip Included



New ShearPro® Design

- ❑ Superhydrophobic Design
- ❑ Contoured Flow Profile
- ❑ Reduced Turbulence
- ❑ Reduced Friction
- ❑ 78% Less Drag than Old Flat Paddle Design*



*Ref: NASA "Shape Effects on Drag" **

Zirconium Ceramic Rotor | Bushings

- ❑ Industry's Highest Impact and Chemical Resistant Properties
- ❑ Up to 15x the Wear Resistance vs. Regular Ceramic
- ❑ Nano-Polished Mirror Finished vs. Regular Ceramic - Less Friction
- ❑ Integral Rotor Bushings, Reduce Wear & Fatigue Stress



Through-Pin Design

- ❑ Eliminates Finger Spread
- ❑ No Lost Paddles
- ❑ Increased Temp. Rating
- ❑ Protects Rotor Pin
- ❑ Reduced Turbulence



ETFE Tefzel® Paddle

- ❑ Patent Pending ShearPro® Contoured Paddle
- ❑ Reduced Turbulence = Reduced Wear = Longer Life
- ❑ Outstanding Flex Fatigue & Creep Resistance
- ❑ Surpassed Only by Teflon® in Chemical Resistance
- ❑ Excellent Mechanical & Impact Properties
- ❑ Superior Wear Resistance vs PVDF

The TIR Digital Flow Meters are easy to install with exceptional guaranteed long-life performance. The TIR Series Paddle Wheel Flow Meters are highly repeatable, exceptionally accurate, extremely rugged and offer outstanding value and require no maintenance.

TIR Series has a process-ready output signal with a wide dynamic flow range of 0.3 to 33 ft/s | 0.1 to 10 m/s.

TIR Series sensors are offered in various materials and are available to measure ½ - 24" pipe sizes.

The many material choices, including PVC, PP and PVDF make this model highly adaptable and chemically resistant to many corrosive liquid process applications.

The TIR Flow Meters can be installed using TruFlo's® extensive line of ANSI and DIN fittings. TruFlo® offers SDR Pipe Saddles from DN15 - DN600 in GFPP material.

Technical Specifications

General			
Operating Range	0.3 to 33 ft/s	0.1 to 10 m/s	
Pipe Size Range	½ to 4"	DN15 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 (Dark) PP (Pigmented) PVDF (Natural)		
O-Rings	FKM EPDM* FFKM*		
Rotor Pin Bushings	Zirconium Ceramic ZrO ₂		
Paddle Rotor	ETFE Tefzel®		
Electrical			
Frequency	49 Hz per m/s nominal	15 Hz per ft/s nominal	
Supply Voltage	10-30 VDC ±10% regulated		
Supply Current	<1.5 mA @ 3.3 to 6 VDC	<20 mA @ 6 to 24 VDC	
Max. Temperature/Pressure Rating - Standard and Integral Sensor Non-Shock			
PVC	180 psi @ 68°F	40 psi @ 140°F	12.5 bar @ 20°C 2.7 bar @ 60°C
PP	180 psi @ 68°F	40 psi @ 190°F	12.5 bar @ 20°C 2.7 bar @ 88°C
PVDF	200 psi @ 68°F	40 psi @ 240°F	14 bar @ 20°C 2.7 bar @ 115°C
Operating Temperature			
PVC	32°F to 140°F	0°C to 60°C	
PP	-4°F to 190°F	-20°C to 88°C	
PVDF	-40°F to 240°F	-40°C to 115°C	
Standards and Approvals			
CE FCC RoHS Compliant			

See Temperature and Pressure Graphs for more information

Optional*

Temperature | Pressure Graphs | Non-Shock

Note: The Pressure/Temperature graphs are specifically for the Truflo® Flow Sensors. During system design the specifications of all components must be considered.

Model Selection

TIR - PF - L - S

Body Material	Pipe Size	Seals
P - PVC PP - PP PF - PVDF	S - ½"- 4" Pipe L - 6"- 24" Pipe	FKM Std - S Suffix 'E' For EPDM

