

TI3R SERIES

Insertion Paddle Wheel Flow Meters



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



316 SS

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

- ❑ Chemically Inert to Virtually All Chemicals
- ❑ Superior Anti-Stick and Low Frictional Properties
- ❑ Excellent Mechanical Properties
- ❑ Exceptional Impact Strength
- ❑ Superior Chemical and Wear Resistance vs PVDF

The TI3R Digital Flow Meters are easy to install with exceptional guaranteed long-life performance. The TI3R Series Paddle Wheel Flow Meters are highly repeatable, exceptionally accurate, extremely rugged and offer outstanding value and require no maintenance.

TI3R 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.

TI3R 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 TI3R 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.

<https://www.grc.nasa.gov/www/k-12/airplane/shaped.html>

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Insertion Paddle Wheel Flow Meters



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 DN100
Linearity	±0.5% of F.S @ 25°C 77°F	
Repeatability	±0.5% of F.S @ 25°C 77°F	

Wetted Materials

Sensor Body	316 SS	
O-Rings	FKM (std) 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

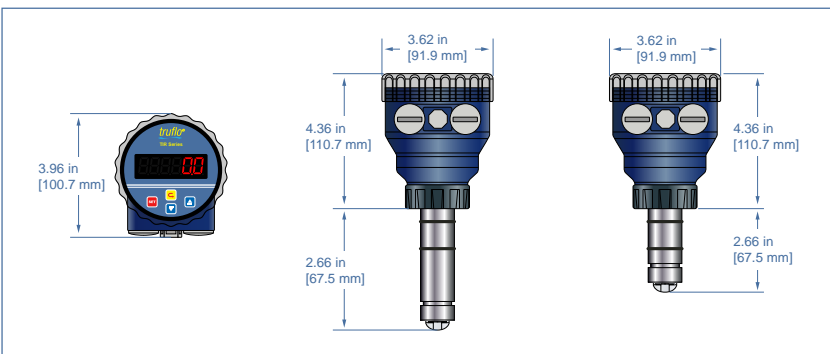
Operating Temperature

316 SS	-40°F to 212°F	-40°C to 100°C
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Standards and Approvals

CE | FCC | RoHS Compliant

DIMENSIONS | unit : mm



Model Selection

TK3R - L - S

Pipe Size	Seals
S - ½" - 4" Pipe	FKM (Std)
L - 6" - 24" Pipe	Suffix 'E' For EPDM

Typical Application

