

# TKS SERIES

## Paddle Wheel Flow Meter



- ❑ No Programming | Quick Installation
- ❑ Lifetime Warranty
- ❑ Industry's Highest Accuracy:  $\pm 0.5\%$



Bright LED  
Display

Display Rotates 360°

True Union Design



### 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 TKS Series Digital Flow Meters are easy to install with exceptional guaranteed long-life performance. TKS Series Paddle Wheel Flow Sensors are highly repeatable, extremely rugged sensors that offer outstanding value and require no scheduled maintenance.

The TKS 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. The sensor measures liquid flow rates in full pipes.

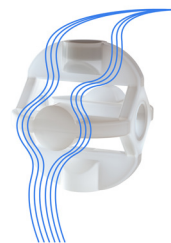
The Truflor® TKS Series sensors are offered in various materials and are available from 1/2 - 4" pipe sizes. The many material choices, including PVC, PP and PVDF make this model highly adaptable and chemically resistant to many corrosive liquid process applications.

The TKS Series flow meter bodies are true-union designed up to 4" just as any true-union ball valve is designed. All models come completely pre-programmed with a bright LED Display that rotates 360°.

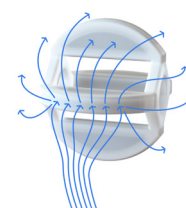
The Truflor® TKS Series also comes equipped with a lifetime warranty on the paddle wheel assembly.

### New ShearPro® Design

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



ShearPro®

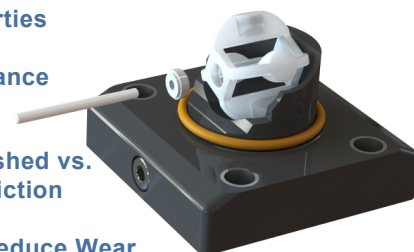


Competitor 'A'

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

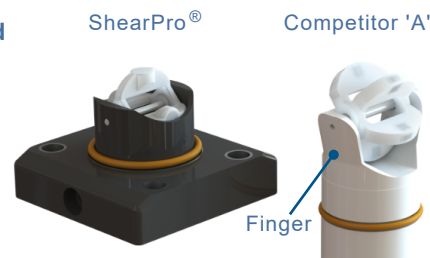
### Zirconium Ceramic Rotor | Bushings

- ❑ 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
- ❑ 360° Housing | Protects Paddle from Particulate, Reducing Wear



### Features

- ❑ Display Rotates 360°
- ❑ Bright LED Display | Visible in the Dark
- ❑ No Programming Required
- ❑ Low Pressure Drop
- ❑ NEMA 4X | IP 66 Protection
- ❑ Password Protected Security
- ❑ True Union Design 1/2 - 4"
- ❑ Pulse + 1 Amp Relay Output



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

### 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	PVC (Dark)   PP (Pigmented)   PVDF (Natural)
O-Rings	FKM   EPDM*   FFKM*
Rotor Pin   Bushings	Zirconium Ceramic   ZrO <sub>2</sub>
Paddle   Rotor	ETFE Tefzel®

Optional\*

### Electrical

Frequency	49 Hz per m/s nominal	15 Hz per ft/s nominal
Supply Voltage	5 to 24 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	12.5 bar @ 20°C
	40 psi @ 140°F	2.7 bar @ 60°C
PP	180 psi @ 68°F	12.5 bar @ 20°C
	40 psi @ 190°F	2.7 bar @ 88°C
PVDF	200 psi @ 68°F	14 bar @ 20°C
	40 psi @ 240°F	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

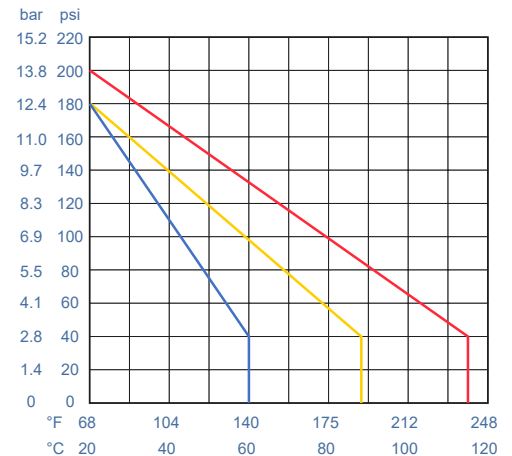
CE   FCC
RoHS Compliant

See Temperature and Pressure Graphs for more information

### 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.

■ = PVC ■ = PP ■ = PVDF



### Model Selection

TKS - P - 25

Body Material	Pipe Size	Seals
P - PVC	15 - ½"	FKM (Std) Suffix 'E' For EPDM
PP - PP	20 - ¾"	
PF - PVDF	25 - 1"	
	40 - 1 ½"	