

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



### New Tefzel® Rotor Design

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

The TK 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.

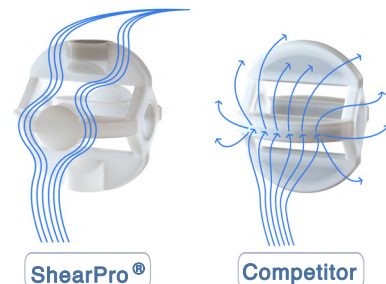
The Truflo® TK Series sensors are offered in various materials and are available from 1/2" - 4" pipe sizes. The many material choices, including PVC, PP and PVDF make this model highly adaptable and chemically resistant to many corrosive liquid process applications.

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

### New ShearPro® Rotor Design

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



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

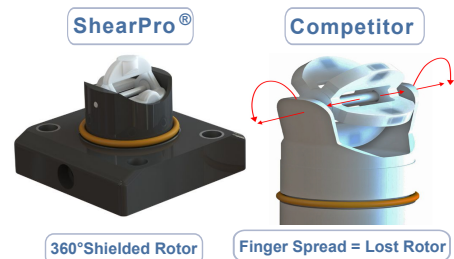
### Zirconium Ceramic Rotor | Bushings

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



### Shielded Rotor Design

- ❑ Eliminates Finger Spread
- ❑ No Lost Paddles
- ❑ Increased Temp. Rating
- ❑ 360° Housing Protects Rotor



### Features

- ❑ Display Rotates 360°
- ❑ 1/2" - 4" Size Range
- ❑ Bright LED Display | Visible in the Dark
- ❑ No K-Factor Programming Required
- ❑ No Pressure Drop
- ❑ Password Protected Security
- ❑ 4-20mA Output



\* Paddle Assembly Warranty: 10 years / 100,000 hours

\*\* <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    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

### Outputs

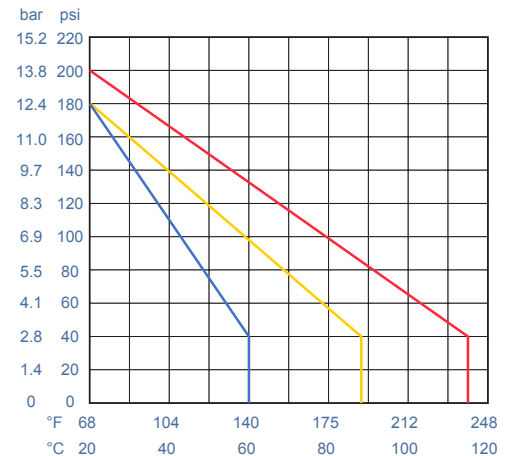
<b>TKP Series</b>   Frequency Pulse - Flow   Frequency Pulse - Total   RS-485 Option
<b>TKM Series</b>   4-20mA + Frequency Pulse - Flow   Frequency Pulse - Total

See Temperature and Pressure Graphs for more information

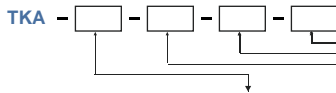
### Temperature | Pressure Graphs | Non-Shock

**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



Model	Material	Pipe Size	End Connections	Seals
M - 4-20mA + Pulse Output	P - PVC	15 - ½"	S - Sch 80 Soc	FKM I Std
	PP - PP	20 - ¾"	T - NPT	E - EPDM
	PF - PVDF	25 - 1"	F - ANSI 150lb Flange	K - FFKM I Kalrez®
		40 - 1 ½"	B - Butt Fusion	