

Truflo® — TCB Series

In-Line Paddle Wheel Flow Meter Sensor

ICON™ Corrosion-Free
PROCESS CONTROLS Instrumentation Equipment

Battery Powered | Flow | Total | Pulse



truflo®

Industry's **Longest Lasting** Paddle Wheel Flow Meter

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- ✓ No Programming | Quick Installation
- ✓ Pulse Output
- ✓ Flow | Total
- ✓ High Accuracy: $\pm 1.0\%$
- ✓ Low Pressure Drop
- ✓ Password Protected Security
- ✓ True Union Design 1" - 3" (PVC)

Engineered for accuracy, ruggedness and longevity

The Truflo® TCB Series digital in-line flow meter sensors are easy to install with exceptional long-life performance. They are highly repeatable, extremely rugged sensors that offer outstanding value and require no scheduled maintenance.

The TCB Series has a process-ready output signal with a wide dynamic flow range of 1 to 33 ft/s | 0.3 to 10 m/s. The sensor measures liquid flow rates in full pipes.

TCB Series flow meter sensors are offered in PVC and 316SS materials and are available from 1" - 3" pipe sizes, making this model highly adaptable and chemically resistant to many corrosive liquid process applications.

The TCB Series flow meter bodies (PVC, PP, PVDF) are true-union designed up to 3". They come completely pre-programmed with a bright LCD Display.

Model Selection

PVC — No Pulse Output		
Size	End Connections	Part Number
1"	Sch 40 Soc	TCB-25-D-N
1 ½"	Sch 40 Soc	TCB-40-D-N
2"	Sch 40 Soc	TCB-50-D-N
3"	Sch 40 Soc	TCB-80-D-N
PVC — With Pulse Output		
Size	End Connections	Part Number
1"	Sch 40 Soc	TCB-25-D-P
1 ½"	Sch 40 Soc	TCB-40-D-P
2"	Sch 40 Soc	TCB-50-D-P
3"	Sch 40 Soc	TCB-80-D-P

Zirconium Ceramic Rotor | Bushings

- ✓ Up to 15x the Wear Resistance vs. Regular Ceramic
- ✓ Integral Rotor Bushings Reduce Wear and Fatigue Stress

ShearPro® Through-Pin Design

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



by



Corrosion-Free
Instrumentation Equipment

Phone: 905.469.9283 • Sales: sales@iconprocon.com • Support: support@iconprocon.com



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Specifications

General		
Operating Range	1 to 33 ft/s	0.3 to 10 m/s
Pipe Size Range	1" to 3"	DN25 to DN80
Linearity	±1.0% of F.S @ 25°C 77°F	
Repeatability	±0.5% of F.S @ 25°C 77°F	
Wetted Materials		
Sensor Body	PVC	
O-Rings	FKM EPDM* FFKM*	
Rotor Pin Bushings	Zirconium Ceramic ZrO ₂	
Paddle Rotor	PVDF	
Electrical		
Battery	2x AAA	
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
316 SS	Consult Factory	
Operating Temperature		
PVC	32°F to 140°F	0°C to 60°C
316 SS	-40°F to 300°F	-40°C to 149°C
Outputs		
TCB Series	NPN Pulse Output	
Standards and Approvals		
CE FCC RoHS Compliant		

See Temperature and Pressure Graphs for more information

*Optional

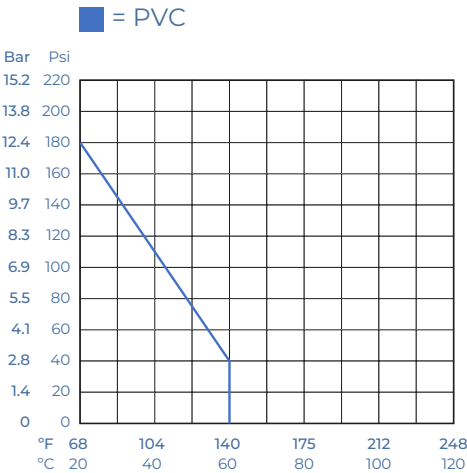
K-Factors

Size	LPM	GPM
1"	55.1	209.4
1½"	18.8	71.4
2"	10.2	38.8
3"	4.7	18

⚠ K-Factor is Pre-Programmed

Min/Max Flow Rates

Pipe Size (O.D.)	LPM GPM	LPM GPM
	0.3m/s min.	10m/s max.
DN25 (1")	9.0 2.5	300 79
DN40 (1½")	25.0 6.5	850 225
DN50 (2")	40.0 10.5	1350 357
DN80 (3")	90.0 24.0	2800 739



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.