

# TCF Series Sanitary Turbine Flowmeter

Smooth Flowmeters



## Features:

- ◆ Measurement Accuracy of  $\pm 0.5\%$  of measured value. Repeatability  $\pm 0.05\%$ .
- ◆ Explosion proof Amplifier Assembly.
- ◆ Pneumatic or electronic filling controls.
- ◆ Meter mounted & remote displays.
- ◆ Rugged Design & Reliable Functions.
- ◆ Complete tailor made solutions to meet requirement.
- ◆ Meters with Sanitary End connections & Specifications.
- ◆ Versions with PTFE coated internals for corrosive applications.

## Advantages:

- ◆ Low total cost of ownership.
- ◆ Long Life with low maintenance.
- ◆ Long term accuracy without recalibration.
- ◆ Wide range of fluid applications, fast response, stability.

## Application:

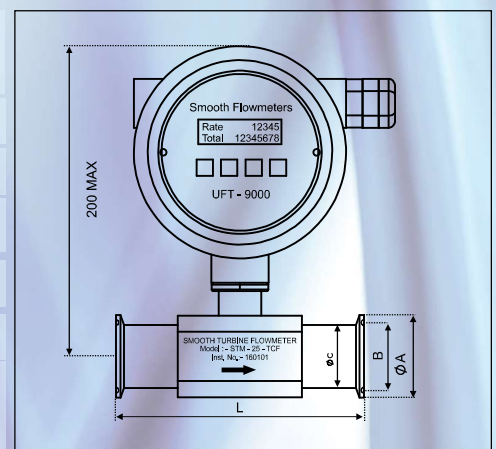
Typical applications include measuring or batch controlling water, WFI, USP water, deionized water, vaccines, clean pharmaceuticals, milk, cream, vegetable oil, wine, beer, spirits, soft drinks, juices and any other clean, consumable liquid

## Description:

A turbine flow meter is a volumetric flow metering device. The meter consists of a rotor and bearing assembly suspended on a shaft, which is mounted to a support device. This assembly is mounted inside a housing of a calibrated internal diameter. As fluid passes through the flow meter housing, the rotor will spin at a rate proportional to the volume of liquid passing through the housing. A magnetic or modulated pick-off sensor is used to detect the passage of each rotor blade and generate a frequency output. The frequency output can be read directly with the end users electronics or further processed to convert to a linear analog output.

## Technical Data ( TCF Series)

Nominal Diameter DN / mm Inch	20 3/4"	25 1"	40 1.5"	50 2"
Min / Max. Flow Range (LPM)	13 - 133	26 - 266	56 - 560	110 - 1100
Rated Nominal Pressure Bar	15 Max.			
Max Temperature	120°C (Special 250°C on request)			
Viscosity Range	upto 100 cp			
End Connections	Triclover Connection			
Linearity	$\pm 0.5\%$ (of Actual Flow)			
Repeatability	0.05%			
Rangeability	10 - 100%			
Pressure Drop	0.2 Bar			
Material of Construction	Body - SS316 Rotor - SS430 / ANC 21 Bearing Support - ANC 21 Bearing - TC / SS Ball Bearing			



Model	A	B	C	L
TCF 20	50.5	43.5	38.6	118
TCF 25	50.5	43.5	38.6	152
TCF 40	64.0	56.5	51.6	184
TCF 50	77.5	70.5	64.1	200

**We Measure And Control Every Drop & Molecule**





## ABOUT SMOOTH FLOWMETERS

The industries have now become more advanced and thanks to the highly developed solutions providers!!! One such name is Smooth Flowmeters. As the very name implies, our company deals with flow meters required by many industries to accurately monitor, measure and control the flow. Mr. Sushant Sahu, the Founder of Smooth Flowmeters, established the company in 2012 with a dream to serve efficiently as a manufacturer, importer & exporter of Flow meters such as Turbine Flowmeter, Electromagnetic Flowmeter Hydraulic oil Flowmeter and the so on. The driving force of our company is the pioneering spirit of the founder & promoter and the zeal to achieve complete satisfaction of our customers. Apart from creating our own range, we partnered with a German based company – KRACHT GmbH. The products ranges from KRACHT Gear and Screw type PD Flowmeters. Besides this, In 2014, M/S EPO Signal, Russia also partnered with us to market their products like Ultrasonic based air and gas Flowmeters and EVC. Also, we provide the After Sales Service.

### OUR INFRASTRUCTURE

Smooth Flowmeters is a company which deals with a complete flow and pressure measurement solutions to various Industries. Our large factory is located in a prime location of Thane, a city in the Indian state of Maharashtra. The manufacturing of flowmeters is carried out by making use of progressive tools and equipments. The facility is upgraded a several times since establishment to keep it in pace with the latest technology to meet the increasing requirements. The units wherein the operations are conducted are:

- R&D unit
- Manufacturing unit
- Quality testing unit
- Warehouse and packaging unit

### HISTORY

Previously, the Company started with commissioning and After Sales Services of Instruments. Wherein, the customers started relying on our services, we expanded our domains by entering into manufacturing and marketing field. The founder, an Instrumentation Engineer, utilized his more than 12 years of on-site experience of handling Flowmeters, Gas Meters and Regulating skid to start his own business. He leveraged his knowledge, skills and experience in oil and gas sector to grow his business.

### WATER FLOW CALIBRATION SETUP

Smooth Flowmeters is having a well equipped Calibration Laboratory. The systems is designed in standard (ISO-RP-31) Gravimetric Method with master weighing Scale. The calibration is done on the most precise weighing scale having least count of 100 gms on the maximum scale of 2000 Kgs. 10gms on the maximum scale of 100 Kgs. Both Weighing Scales are Calibrated in NABL Accreditation LAB. The Weighing Scale accuracy is endorsed by the Weights & Measures Dept. of Govt. of Maharashtra. The setup is designed for calibration of size ranging from 10 mm to 150 mm. We do 100% Calibration of each unit at our precise calibration setup.

### OTHER FLOWMETERS FROM SMOOTH



Turbine Flowmeters



Electromagnetic Flowmeters



Hydraulic Oil Tester



Screw Type PD Flowmeter



Ultrasonic Gas Flowmeter

**Note:** Development Dictates That From Time To Time The Data Shown Above Is Subject To Change Without Notice..pl Obtain A Offer.

## Smooth Flowmeters

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