Turbine Flow Meter
StaTurb TF300 Series - Oil Measurement

Introduction

Optimized for low-to-medium viscosity oil measurement, the TF300 features a rotor with up to 12 blades. To mitigate the effects of temperature-driven viscosity fluctuations, an optional temperature sensor is available to ensure high measurement accuracy. Features:
High Resolution & Response Time: Equipped with up to 12 blades for enhanced performance.
Wide Turndown: The inclusion of a ball bearing mechanism extends the meter's operational range.
Accuracy: Optional temperature compensation ensures consistent performance across varying temperatures.
Versatility: A wide range of electronics are available to meet specific application requirements.

Characteristics

Designed for oil measurement

Compact design

High accuracy and repeatability

Fast response

Optional temperature sensor

High working temperature

Applications

Hydraulic and Lubrication

Gas and Oil

Lab equipment

Automobile industry

Test bench

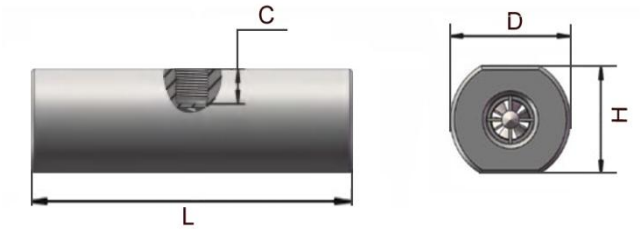
Specifications

Size	1/2", 3/4", 1"
Applicable medium	Low-to medium viscosity oil
Accuracy	1%; 0.5% of reading
Repeatability	0.1% of reading
Pressure rating	Up to 6000 psi (420 bar)
Ambient Temperature	-4…185°F (-20…85°C)
Medium Temperature	-4…248°F (-20…120°C)
Materials	Body: 304SS / 316SS Flow straightener: 304SS / 316SS Rotor: 316SS Rotor shaft: 304SS / 316SS Bearing: SS ball bearing
End Fitting	Female NPT, Female G Customization available

Flow Range

Part Code	Meter Size (mm)	End Fitting (Female)	Flow Range		Max. Filter Diameter (Micron)
			(Gal/min)	(L/min)	
R13	13	1/2"	1.6…20	6…75	30
R20	20	1"	6.6…80	25…300	50
R25	25	1-1/4"	13.2…160	50…600	50

Dimensions in mm



Part Code	C	L	D	H
R13	16	152	53	48
R20	16.5	160	60	55
R25	16.05	179	66	62

Order Code

Example: TF300-R20SB

1. Model	
TF300-	Turbine Flow Meter for Oil Measurement

2. Part Code (see flow range for details)	
R13	End fitting 1/2" (1.6…20 gal/min)
R20	End fitting 1" (6.6…80 gal/min)
R25	End fitting 1-1/4" (13.2…160 gal/min)

3. End fitting	
GF	Female G thread
NF	Female NPT thread
	Other on request (UNF, AN etc.)

4. Body material	
S4	Stainless steel 304
S6	Stainless steel 316

5. Accuracy	
A	0.5% of reading
B	1% of reading

6. Temperature compensation (optional)	
T	With temperature compensation

Sensor Options

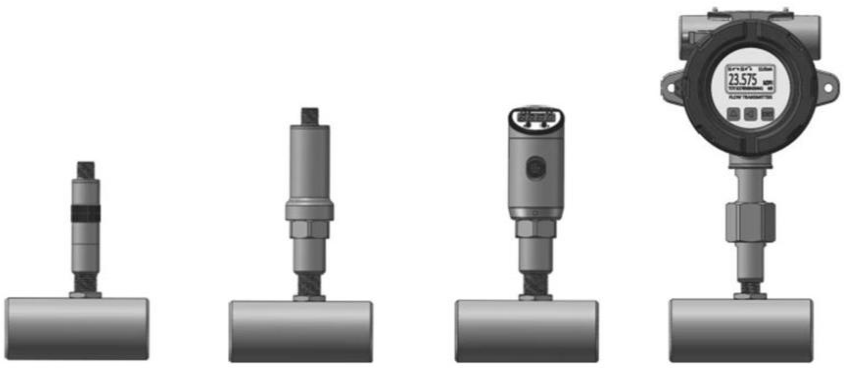
1. Model	
S1000-	Sensor for turbine flow meter

2. Pickup	
M	Magnetic (standard)
H	Hall effect
R	RF

3. Output	
P1	Pulse output
P2	Linearized pulse output
A	Analog output
D	Digital transmitter
E	Ex-proof transmitter

4. Temperature	
T1	-40…212°F (-40…100°C)
T2	-40…302°F (-40…150°C)
T3	-40…446°F (-40...230°C)

See sensor's datasheet for details



Pulse output | Analog output | Digital display | Ex-proof digital display