

SurgePro™ TFM1

TURBINE FLOW METER DATA SHEET



DESCRIPTION

The SurgePro™ TFM1 turbine flow meters are designed to meet the demands of the most rigorous flow measurement applications. Originally developed for the secondary oil recovery market, this meter is ideal for liquid flow measurement on or off the oil field. The meter features a 316 stainless steel housing and rotor support, CD4MCU stainless steel rotor and abrasion resistant tungsten carbide rotor shaft and journal bearings. These materials help the meter to maintain accuracy and mechanical integrity when measuring the corrosive and abrasive fluids found in many industries.

SPECIFICATIONS

Accuracy	± 1% of reading
Repeatability	± 0.1%
Operating Temperature	-150°F to +350°F (-101°C to +177°) standard Temperatures to +425°F (+232°C) with high-temp pick-up
Turndown Ratio	About 10:1
End Connections	NPT, BSP, Flange, Grooved End

Note: Please Consult Factory for Special Requirements

FEATURES & BENEFITS

- Offers accurate and repeatable flow measurement in ranges from 0.6 to 5,000 GPM
- Rugged 316 stainless steel construction offers long service life in severe operating environments
- Cost-effective solution for turbine flow meter applications
- Installation in pipe sizes from 1/2" to 10"

TECHNOLOGY

Fluid entering the meter first passes through an inlet flow straightener that reduces its turbulent flow pattern. Fluid then passes through the turbine, causing the turbine to rotate at a speed proportional to fluid velocity. As each turbine blade passes through the magnetic field generated by the meter's magnetic pick-up, an AC voltage pulse is generated. These pulses provide an output frequency that is proportional to volumetric flow.

Ordering Information

FLO-CORP MODEL NUMBER BUILDER

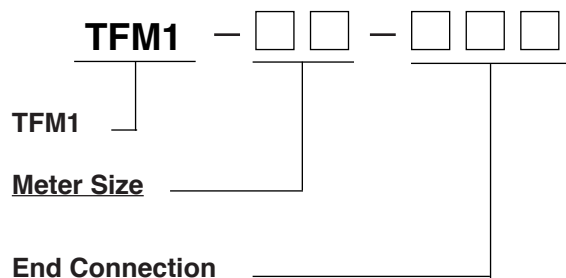
For Assistance Call **877.356.5463**

Use the diagram below, working from left to right to construct your FLO-CORP Model Number.

Simply match the category number to the corresponding box number.

Example: TFM1-03-04M

TurboFlo TFM1 3/8" Meter Size, 1/2" x 1/2" Male NPT End Connection with 5,000 PSI Maximum Pressure, 0.6 - 3 GPM Flow Range, 18,000 K-Factor Pulses/Gal.



MODEL NUMBER (1)	METER SIZE	END CONNECTION (2)	MAXIMUM PRESSURE	FLOW RANGES		K-FACTOR PULSES/GAL (3)
				GPM	BPD	
TFM1-03-04M	3/8"	1/2" x 1/2" MALE NPT	5,000 PSI	0.6 - 3	20 - 100	18,000
TFM1-04-04M	1/2"	1/2" x 1/2" MALE NPT	5,000 PSI	0.75 - 7.5	25 - 250	13,000
TFM1-06-04M	3/4"	1/2" x 1/2" MALE NPT	5,000 PSI	2 - 15	68 - 515	3,300
TFM1-03-08M	3/8"	1" x 1" MALE NPT	5,000 PSI	0.6 - 3	20 - 100	18,000
TFM1-04-08M	1/2"	1" x 1" MALE NPT	5,000 PSI	0.75 - 7.5	25 - 250	13,000
TFM1-06-08M	3/4"	1" x 1" MALE NPT	5,000 PSI	2 - 15	68 - 515	3,300
TFM1-07-08M	7/8"	1" x 1" MALE NPT	5,000 PSI	3 - 30	100 - 1000	3,100
TFM1-08-08M	1"	1" x 1" MALE NPT	5,000 PSI	5 - 50	170 - 1700	870
TFM1-12-12M	1.5"	1.5" x 1.5" MALE NPT	5,000 PSI	15 - 180	515 - 6000	330
TFM1-12-16M	1.5"	2" x 2" MALE NPT	5,000 PSI	15 - 180	515 - 6000	330
TFM1-16-16T	2"	2" x 2" FEMALE NPT	5,000 PSI	40 - 400	1300 - 13000	52
TFM1-24-00G	3"	GROOVED END	800 PSI	60 - 600	2100 - 21000	57
TFM1-32-00G	4"	GROOVED END	800 PSI	100 - 1200	3400 - 41000	29
TFM1-48-00G	6"	GROOVED END	800 PSI	200 - 2500	6800 - 86000	7
TFM1-64-00G	8"	GROOVED END	800 PSI	250 - 3500	12000 - 120000	3
TFM1-80-00G	10"	GROOVED END	800 PSI	500 - 5000	17000 - 171000	1.6

Ordering Notes:

- (1) Select the best configuration based on your requirements.
- (2) If you require a Special End Connection, please consult factory with your requirements. Grooved or Flange End Connections may be requested on all units.
- (3) All K-Factors are approximate.