

FLOW RATE	1-12000 GPM (4-45500 LPM)	TMC SERIES
LINE SIZE	1/2 TO 12 INCH	
PRESSURE	5000 PSI	1/2% ACCURATE

TMC Cryogenic Turbine

UNIVERSAL[®] Flow Monitors

Highly accurate cryogenic flow measurement

The TMC series cryogenic turbine flow meter is specifically engineered for extreme temperature applications. Utilizing an all stainless steel body and shaft, with a nickel rotor, the meter is capable of handling a temperature range of -450°F to 450°F.

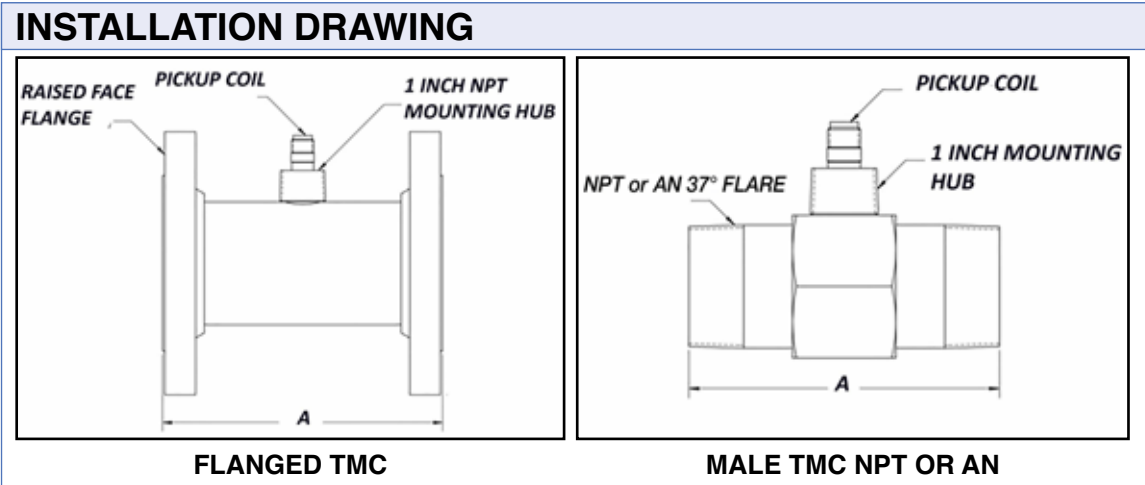


TMC TURBINE FOR CRYOGENICS

Performance Data	
Calibration	+/- 0.5% over standard flow range
Repeatability	+/- 0.1% over standard flow range
Linearity	+/- 0.5% over standard flow range
Operating Temperature	-450° F to +450° F
Connection	37° AN Flares, NPT or RF Flanged (150 & 300 LB)
Flow Rate	1 to 12000 GPM
Materials	
Meter Body	316 stainless steel
Rotor	Nickel 200
Bearings	Cryogenic grade
Certifications	NIST, CRN, CTOP, NTEP, OIML R81 and R117
Additional Information	Full line of economical Retrofit Kits are available

Installation

1. Magnetic pickup coils included with each turbine meter at no extra charge
2. Turbine meter is linear and accurate over its designed operating range
3. Minimum recommended piping installation: 10 diameters upstream & 5 diameters downstream
4. Locate valves or chokes downstream
5. For best meter performance and to avoid bearing wear, do not exceed maximum rated flow for long periods of time
6. Consult factory for warranty details



EXAMPLE 1: TMC0050 - N

Part Number	End Connection Size (in)	Flow in GPM		Flow in LPM		A Dimension Inches
		Min	Max	Min	Max	
TMC0050-N	1/2" x 1/2" Male NPT	1	10	4	38	3
TMC0050-F150	1/2" x 1/2" with 150 LB RF Flange	1	10	4	38	5
TMC0050-F300	1/2" x 1/2" with 300 LB RF Flange	1	10	4	38	5
TMC0050-AN	1/2" x 1/2" with AN37 Flare	1	10	4	38	2.56
TMC0075-N	3/4" x 3/4" Male NPT	2.5	30	9	110	3.25
TMC0075-F150	3/4" x 3/4" with 150 LB RF Flange	2.5	30	9	110	5.5
TMC0075-F300	3/4" x 3/4" with 300 LB RF Flange	2.5	30	9	110	5.5
TMC0075-AN	3/4" x 3/4" with AN37 Flare	2.5	30	9	110	3.25
TMC0100-N	1" X 1" Male NPT	4	60	15	225	3.5
TMC0100-F150	1" X 1" with 150 LB RF Flange	4	60	15	225	5.5
TMC0100-F300	1" X 1" with 300 LB RF Flange	4	60	15	225	5.5
TMC0100-AN	1" X 1" with AN37 Flare	4	60	15	225	3.5
TMC0125-N	1 1/4" X 1 1/4" Male NPT	6	93	23	350	3.875
TMC0125-F150	1 1/4" X 1 1/4" with 150 LB RF Flange	6	93	23	350	6
TMC0125-F300	1 1/4" X 1 1/4" with 300 LB RF Flange	6	93	23	350	6
TMC0125-AN	1 1/4" X 1 1/4" with AN37 Flare	6	93	23	350	3.875
TMC0150-N	1 1/2" X 1 1/2" Male NPT	8	130	30	490	4.375
TMC0150-F150	1 1/2" X 1 1/2" with 150 LB RF Flange	8	130	30	490	6
TMC0150-F300	1 1/2" X 1 1/2" with 300 LB RF Flange	8	130	30	490	6
TMC0150-AN	1 1/2" X 1 1/2" with AN37 Flare	8	130	30	490	4.375
TMC0200-N	2" X 2" Male NPT	15	225	55	850	4.75
TMC0200-F150	2" X 2" with 150 LB RF Flange	15	225	55	850	6.5
TMC0200-F300	2" X 2" with 300 LB RF Flange	15	225	55	850	6.5
TMC0200-AN	2" X 2" with AN37 Flare	15	225	55	850	4.75
TMC0300-N	3" x 3" Male NPT	40	650	150	2460	10
TMC0300-F150	3" x 3" with 150 LB RF Flange	40	650	150	2460	10
TMC0300-F300	3" x 3" with 300 LB RF Flange	40	650	150	2460	10
TMC0400-F150	4" x 4" with 150 LB RF Flange	75	1250	280	4700	12
TMC0400-F300	4" x 4" with 300 LB RF Flange	75	1250	280	4700	10
TMC0600-F150	6" x 6" with 150 LB RF Flange	200	2900	750	11000	14
TMC0600-F300	6" x 6" with 300 LB RF Flange	200	2900	750	11000	14
TMC0800-F150	8" X 8" with 150 LB RF Flange	330	5200	1250	19700	16
TMC0800-F300	8" X 8" with 300 LB RF Flange	330	5200	1250	19700	16
TMC1000-F150	10" x 10" with 150 LB RF Flange	650	8000	2500	30300	20
TMC1000-F300	10" x 10" with 300 LB RF Flange	650	8000	2500	30300	20
TMC1200-F150	12" x 12" with 150 LB RF Flange	900	12000	3400	45500	24
TMC1200-F300	12" x 12" with 300 LB RF Flange	900	12000	3400	45500	24

STANDARD OUTPUTS WITH NO DIGITAL VISUAL OR PROGRAMMABLE FLOW MONITOR	SYMBOL
Standard mag pickup sine wave good to 30 ft	N
In a Y Enclosure (conduit box)	NY
4-20 mA Analog Transmitter in Y Enclosure	X
Want 20 mA at lower than max possible? Express as % of max flow eg. 50% is X50	X50

Note: Y Enclosure is UL rated, Class I, Groups A, B, C & D Class II Groups E, F & G; CSA

EXAMPLE 2: TMC0100 - FML250-P-SM

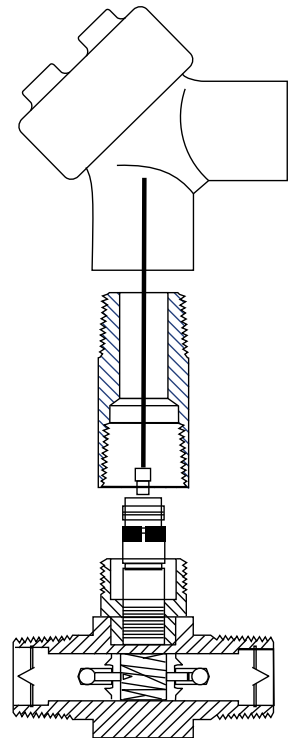
PROGRAMMABLE FLOW MONITOR WITH DIGITAL VISUAL READOUT MOUNTED ON THE FLOW METER		
Added flow meter control box (see FML250 literature) with visual display and programming		
Note: units are pre-set with unit K-factor		
On unit mounting options fixed and on a swivel for better visibility		
Standard Pulse Output	FML250-P	FML250-P-SM
4-20mA Loop Output (4)	FML250-P4	FML250-P4-SM
Linearization (2-40 point)	FML250-PL	FML250-PL-SM
Pulse, 4-20mA, Linearization	FML250-P4L	FML250-P4L-SM
Temperature Compensation	FML250-PTC	FML250-PTC-SM

Note: FML250 Enclosure is NEMA 4 – CSA/UL

Note: Select with your maximum flow at 50% to 100% of the max flow listed above to have sufficient rangeability.

Note: These meters are typically ordered with attached flow monitor display (See FML250 data sheet).

By putting this FML250 part number at the end of the model selected, it will come installed on the meter and pre-configured for k factor Eg. HA0300-FML250-P-SM.



Y ENCLOSURE WITH HUB EXTENDER MOUNTED ON TMC METER



FML ENCLOSURE WITH HUB EXTENDER MOUNTED ON TMC METER