

TM 1/2" - 2" - PULSE OUT Water Meters

TM SERIES



TM Series Meters are designed for use in water applications. The five sizes with two fitting types available, Spigot (pipe end) or NPT.

ACCURACY: $\pm 3.0\%$ READING

Features and Benefits:

- ✓ Includes pulse output cable for interfacing with customer equipment.
- ✓ Displays in gallons and litres.
- ✓ Indicates Batch, Cumulative Totals and Rate of Flow.
- ✓ Available in NPT or Spigot fittings.
- ✓ Lithium battery life: 5 years.
- ✓ Non-volatile totals means amounts are retained when batteries are replaced or power is lost.

Applications:

- OEM water treatment equipment / skids
- Small waste water treatment equipment
- Sub-metering of facility water usage
- Water based cooling systems

TM SERIES – SPECIFICATIONS

Design Type:	Turbine				
Fitting Size:	1/2"	3/4"	1"	1-1/2"	2"
Fitting Type:	Schedule 80 Spigot (Pipe) End, NPT (Female) or *BSPP (Female)				
Flow Range:					
1/2" - TM050:	1 - 10 GPM (3.8 - 38 LPM)				
3/4" - TM075	2 - 20 GPM (7.6 - 76 LPM)				
1" - TM100:	5 - 50 GPM (19 - 190 LPM)				
1-1/2" - TM150	10 - 100 GPM (38 - 380 LPM)				
2" - TM200	20 - 200 GPM (76 - 760 LPM)				
Accuracy:	± 3.0% of reading				
Pressure Rating:	225 PSI / 15.3 BAR at 73° F (23° C)				
BSP:	150 PSI / 10.3 BAR at 73° F (23° C)				
Operating Temperature:	+32° F to +140° F (0° to +60° C)				
Pulse Out Description:	NPN Open Collector (Current Sinking)				
Pulse Amplitude:	5 to 30 VDC				
Scaling:	Unscaled				
Shielded Cable:	5 ft. / 1.5 meters (26 AWG)				
Typical K-Factor:					
1/2" - TM050:	2,500 PPG / 660 PPL				
3/4" - TM075	1,100 PPG / 291 PPL				
1" - TM100:	565 PPG / 149 PPL				
1-1/2" - TM150	215 PPG / 57 PPL				
2" - TM200	100 PPG / 26 PPL				
Battery Life:	5 Years				
Wetted Materials:					
Housing:	PVC				
Bearings:	Ceramic				
Shaft:	Tungsten Carbide				
Rotor:	PVDF				
Rings:	316 Stainless Steel				
Shipping Weight (approx.):	Spigot		NPT / BSP		
1/2" - TM050:	.38 lbs. (.172 kg)		.55 lbs. (.249 kg)		
3/4" - TM075:	.43 lbs. (.304 kg)		.67 lbs. (.304 kg)		
1" - TM100:	.49 lbs. (.222 kg)		.49 lbs. (.381 kg)		
1-1/2" - TM150:	.66 lbs. (.299 kg)		1.38 lbs. (.626 kg)		
2" - TM200:	.78 lbs. (.354 kg)		1.78 lbs. (.807 kg)		
Display Features:	Rate of Flow, Batch and Cumulative Totals, Field Calibration available.				
Calibration Report	Comes standard N.I.S.T. – Certification available.				

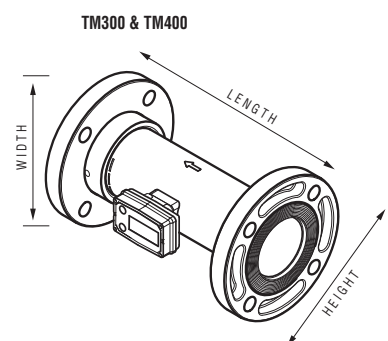
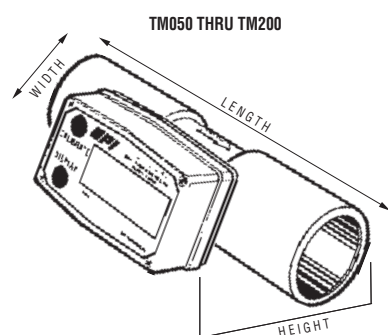
APPROVALS



* BSPP available in 1", 1 1/2" and 2" only.

FLAMEC

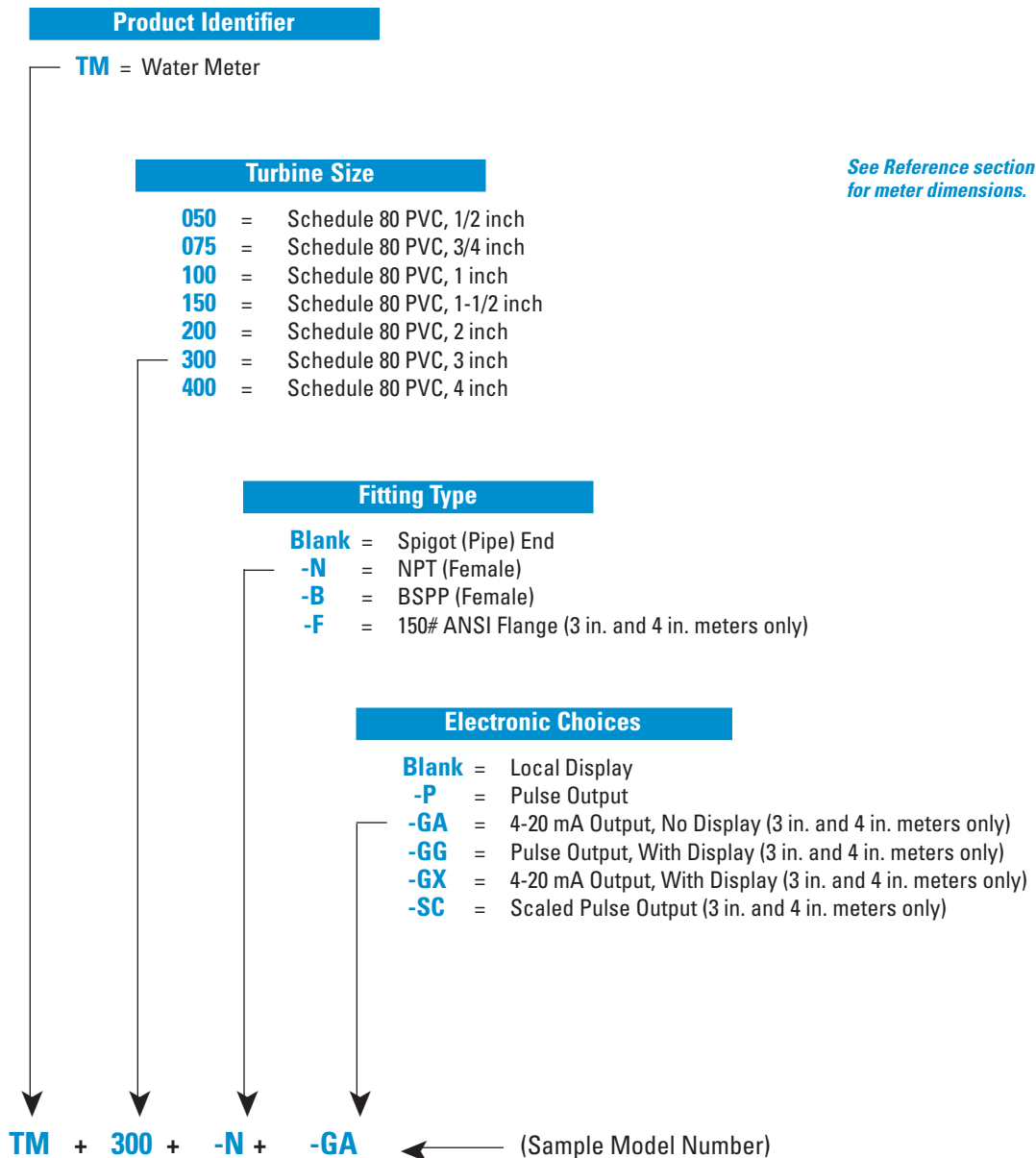
TM Meters



Model	Length* inches (mm)	Height** inches (mm)	Width inches (mm)
TM050	3.8 (96)	2.6 (66)	2.0 (51)
TM050-N	5.8 (147)	2.6 (66)	2.0 (51)
TM075	3.8 (96)	2.7 (68)	2.0 (51)
TM075-N	5.8 (147)	2.7 (68)	2.0 (51)
TM100	4.1 (104)	3.1 (79)	2.0 (51)
TM100-N	6.1 (155)	3.1 (79)	2.0 (51)
TM150	5.4 (137)	3.7 (94)	2.1 (53)
TM150-N	7.4 (188)	3.7 (94)	2.1 (53)
TM200	5.5 (140)	4.2 (107)	2.4 (61)
TM200-N	7.5 (190)	4.2 (107)	2.4 (61)
TM300 (Spigot)	11.5 (292)	5.34 (136)	3.5 (89)
TM400 (Spigot)	13.5 (343)	6.34 (161)	4.5 (114)
TM300 (NPT)	14.7 (373)	5.78 (147)	4.37 (111)
TM400 (NPT)	17.0 (432)	6.76 (172)	5.34 (136)
TM300 (Flange)	12.0 (305)	7.5 (190)	7.5 (190)
TM400 (Flange)	14.0 (356)	9.0 (229)	9.0 (229)

* Length guidelines are estimates; actual length can vary up to $\pm 1/2"$.










** Computer display adds 1.1 in. (28 mm) to height.



At Great Plains Industries, we've been building rugged, reliable, liquid flowmeters for over 35 years. The GPI Industrial Meter family includes a full line of Precision and Industrial Turbine meters plus Oval Gear meters in various materials, sizes and fitting options.

We design products to meet the needs of our customers. This includes maintaining appropriate, industry standard approvals. Approvals vary by product line and may be dependent on meter application.

The Approval symbol is listed under product specifications on individual product pages. If no approval mark is found, check the chart to the right. For details about specific "Approvals" refer to the chart.

3-A	3-A Sanitary Standards, Inc. "Flowmeters for Milk and Milk Products, Number 28-03" for GSCPS Models and L Option Meters.
ATEX 	Ex II 1 G Per 94/9/EC.
	Product reviewed for EMC Directive 2004/108/EC. Includes: Euro Norms 61000-6-2 (2005) and 61000-6-3 (2007) on A1 and G2 Series Meters. Note: For Oval Gear Meters , the CE Approval is applied when meter is part of a system.
	Factory Mutual Approved Intrinsically Safe for Class I, II, III, Division 1, All Groups. Nonincendive for Class I, II, III, Division 2 Groups A, B, C, D, F, G.
	Factory Mutual Approved Class 1, Div. 1, Group D (01A31GM Only)
	Factory Mutual Approved Intrinsically safe for Class I & II, Div. 1, Groups A, B, C, D, E, F & G, T6 Ta=-40° C to 60° C hazardous locations, and for use in Class I, Zone 0 as Ex is IIC T6 Ta=-40° C to 60° C.
	Federal Communication Commission Industry Canada Approval Class B; digital service, part 15 of FCC Rules.
	Ex ia IIC T6 Ta=60° C
IP44/IP54/IP66	Ingress Protection Code IP44 (Greater than 1 mm and splashed water); IP54 (Dust protected and splashed water); IP66 (Dust-tight and heavy seas).
IP/NEMA	Pulse versions of Oval Gear Meters have enclosure ratings that vary from IP54 / NEMA 13 to IP66 / NEMA 16 depending on the application.
NEMA 4	NEMA Requirements: Enclosure constructed for indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment. Protection against falling dirt, rain, sleet, snow, windblown dust, splashing or hose directed water that will be undamaged by the external formation of ice on the enclosure. <i>GPI products are tested to NEMA requirements.</i>
	Restriction of Hazardous Substances Directive 2002/95/EC and 2011/65/EU
	Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.