Schmidt Mess- und Regeltechnik



Turbine Flow Meter Type TM

Turbine Flow Meter without auxiliary power, for water



- Large measuring range
- Easy to install
- Off-grid operation with long-life lithium battery
- · Low operating costs
- · Cost-effective versions

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TM series meters are designed for use in water applications. Choose either Spigot (pipe end) or NPT and BSPP fittings.

TM water meters are accurate, economical and designed to last. Choose TM water meters for water processing and irrigation applications. The TM Series water meters meet Schedule 80 PVC specifications and come standard with the low-profile display.

Meters come in seven sizes with three fitting types, offering flowrates from 1 to 800 gallons per minute.

Function

In the turbine flowmeter TM, the medium to be measured moves a turbine wheel whose velocity is proportional to the flow rate. In the rotor blades are ferrite cores, which generate pulses that can be displayed electronically.

Features and benefits

- Easy to install.
- · Displays in gallons, litres and cubic feet.
- Indicates Batch, Cumulative Totals and Rate of Flow.
- · Available in NPT, BSPP or Spigot fittings.
- Meets Schedule 80 specifications.
- 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
- Sub-metering of facility water usage
- · Waste water treatment equipment
- Water based cooling systems
- Chemical feed systemsCooling towers
- Irrigation

Technical data				
Fitting type	NPT (female)			
	BSPP (female), for the sizes 1", 1½", 2"			
	150# ANSI flange or DIN 100 flange			
	Schedule 80 Spigot (pipe) end			
Fitting size	1/2", 3/4", 1", 11/2", 2", 3", 4"			
Flow range	½" (TM 050)	1-10 GPM (3.8 – 38 L/min)		
	³¼" (TM 075)	2-20 GPM (7.6 – 76 L/min)		
	1" (TM 100)	5-50 GPM (19 – 190 L/min)		
	1½" (TM 150)	10-100 (38 – 380 L/min)		
	2" (TM 200)	20-200 (76 – 760 L/min)		
	3" (TM 300) Extended range	40-400 GPM (151 – 1514 LPM) 30-600 GPM (131-2271 LPM)		
	4" (TM 400) Extended range	60-600 GPM (227 – 2271 LPM) 40-800 GPM (151 – 3028 LPM)		





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Accuracy (% of reading)		±3,0%			
Pressure rating BSP	225 PSI / 15.3 bar at 73°F (23°C) 150 PSI / 10.3 bar at 73°F (23°C)				
Operating temperature	32°F to +140°F (0°C to +60°C)				
Typical K-Factor	½" (TM 050)	½" (TM 050)		2,500 PPG / 660 PPL	
	³⁄₄" (TM 075)		1,100 PPG / 291 PPL		
	1" (TM 100)		565 PPG / 149 PPL		
	1½" (TM 150)	1½" (TM 150)		215 PPG / 57 PPL	
	2" (TM 200)	2" (TM 200) 100 PPC		00 PPG / 26 PPL	
	3" (TM 300)	3" (TM 300) 43 PP		3 PPG (11 PPL)	
	4" (400)	4" (400)		17 PPG (4.5 PPL)	
Battery life		5 years			
Wetted materials	Housing	using PVC			
	Bearings	Bearings		Ceramic (PEEK)	
	Shaft	Tungsten car		oide (stainless steel)	
	Rotor	PVDF (acetal			
	Rings	316 stainless s		steel	
Shipping weight (approx.)			Spigot	NPT / BSP	
	½" (TM 050)	.38	lbs. (.172 kg)	.55 lbs. (.249 kg)	
	³⁄₄" (TM 075)	.43 lbs. (.304 kg)		.67 lbs. (.304 kg)	
	1" (TM 100)	.49 lbs. (.222 kg)		.49 lbs. (.381 kg)	
	1½" (TM 150)	.66 lbs (.299 kg)		1.38 lbs. (.626 kg)	
	2" (TM 200)	.78 lbs (.354 kg)		1.78 lbs. (.807 kg)	
	3" (TM 300)	2.4 lbs. (1.09 kg)		3.9 lbs. (1.77 kg)	
	4" (TM 400)	3.7 lbs. (1.68 kg)		6.1 lbs. (2.77 kg)	

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Technical data		
Display features	Rate of flow, batch and cumulative totals, field calibration available	
Pulse output (-P Elec. Choice)	Open Collector (NPN)	
Calibration report	Comes standard with –P (pulse out) TM models. N.I.S.T. Certification available	
Certification	CE-Certification available	

Important instructions!

Technical changes and errors reserved.

Pictures can be similar.

The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.