

TM SERIES[®]
water meters

TM SERIES (WATER METERS)

FLOMEC[®] TM Series Water Meters are accurate, economical and designed to last. Choose TM Water Meters for water processing and irrigation applications:

- Meets Schedule 80 PVC specifications
- Standard low-profile display
- Seven sizes with three fitting types available
- Flow rates from 1 to 600 gallons per minute (3.8 to 2271 L/min)

FEATURES / BENEFITS

- Easy to install
- Displays in gallons, litres and cubic feet
- Indicates Batch, Cumulative Totals and Rate of Flow
- Available in Spigot, NPT, BSP (1 in., 1-½ in. and 2 in. only), 150# ANSI Flange (3 in. and 4 in. only) and DIN Flange (3 in. and 4 in. only) fittings
- Non-volatile totals means amounts are retained when batteries are replaced or power is lost
- Alkaline battery life: 2 years

APPLICATIONS

- OEM water treatment equipment / skids
- Sub-metering of facility water usage
- Waste water treatment equipment
- Irrigation
- Batching
- Plant process water
- Water based cooling systems
- Chemical feed systems
- Monitoring clean fluids
- Cooling towers
- Blending

FLOMEC[®]

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER:

TM = TM Series Water Meters

2 TURBINE SIZE:

05 = ½ in. **20** = 2 in.
07 = ¾ in. **30** = 3 in.
10 = 1 in. **40** = 4 in.
15 = 1-½ in.

3 METER PORT CHOICE:

N = NPT, Female (Available In All Sizes)
B = BSP, Female (1 in., 1-1/2 in., 2 in. Only)
F = Flange, ANSI (3 in., 4 in. Only)
D = Flange, DIN (3 in., 4 in. Only)
S = Spigot (Available In All Sizes)
No Meter - Electronics Only
X = No Meter - Use With X9 Electronics Only (Q9 Computer Replacement Kit)

4 ELECTRONIC CHOICE:

Local Computer w/Display, Meter Mounted
Q9 = Q9 2-Button Computer
Q1 = Q9 2-Button Computer, Vertical Mount (90° Adapter)
Local Computer w/Display & Module, Meter Mounted
P9 = Q9 2-Button Computer w/Pulse Out Module, includes External Power and 10 ft. of Cable
42 = Q9 2-Button Computer w/4-20mA Module and 10 ft. of Cable
Module, Meter Mounted (No Display)
PO = Pulse Out Conditioned Signal Module w/Cable
Replacement Computer Kit (Display Only)
X9 = Q9 2-Button Computer Replacement Kit
Retrofit Computer Kit (Display Only)
R9 = Q9 2-Button Computer Retrofit Kit (Replaces Q9 Display)
No Electronics - Turbine Only
XX = No Electronics - Turbine Only

5 CALIBRATION OF COMPUTER / DISPLAY:

GM = Gallons Per Minute (For Use With Q9, P9, 42, X9, R9 Electronics Only)
LM = Liters Per Minute (For Use With Q9, P9, 42, X9, R9 Electronics Only)
XX = No Calibration (Use With PO & XX Electronics Only)

6 PACKAGING:

A = 05 Thru 10 Turbine Only
05 Thru 10 Turbine w/Q9 Electronics
X9 & R9 Electronics Kit (Replacement Computer)
B = 15 Thru 20 Turbine Only
15 Thru 20 Turbine w/Q9 Electronics
C = 05 Thru 20 Turbine w/P9, 42, PO Electronics
D = 30N, 30S Turbine Only
30N, 30S Turbine w/Q9, P9, 42, PO Electronics
40S Turbine Only
40S Turbine w/Q9, P9, 42, PO Electronics
E = 30F, 30D Turbine Only
30F, 30D Turbine w/Q9, P9, 42, PO Electronics
40N, 40F, 40D Turbine Only
40N, 40F, 40D Turbine w/Q9, P9, 42, PO Electronics

--->>>> 1 2 3 4 5 6
 TM 10 N Q9 GM A

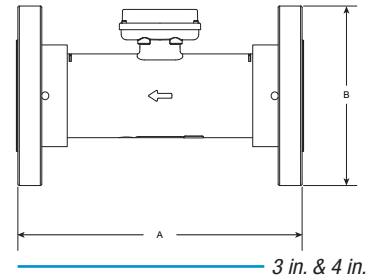
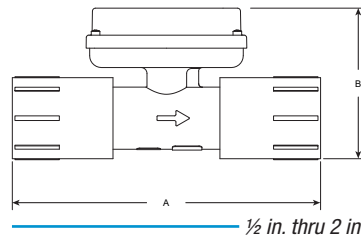
DIMENSIONS

| Meter Size & Fitting | Length | Height | Width |
|----------------------|------------------|-----------------|-----------------|
| 05 Spigot | 4.3 in. (109 mm) | 2.5 in. (63 mm) | 2.1 in. (53 mm) |
| 05 NPT | 6.0 in. (152 mm) | 2.7 in. (68 mm) | 2.1 in. (53 mm) |
| 07 Spigot | 4.4 in. (112 mm) | 2.7 in. (68 mm) | 2.1 in. (53 mm) |
| 07 NPT | 6.1 in. (155 mm) | 2.9 in. (73 mm) | 2.1 in. (53 mm) |
| 10 Spigot | 4.5 in. (114 mm) | 2.9 in. (73 mm) | 2.1 in. (53 mm) |
| 10 NPT / BSP | 6.5 in. (165 mm) | 3.1 in. (79 mm) | 2.1 in. (53 mm) |
| 15 Spigot | 5.4 in. (137 mm) | 3.6 in. (91 mm) | 2.1 in. (53 mm) |
| 15 NPT / BSP | 7.6 in. (193 mm) | 3.8 in. (96 mm) | 2.3 in. (58 mm) |

| Meter Size & Fitting | Length | Height | Width |
|----------------------|-------------------|-------------------|------------------|
| 20 Spigot | 5.5 in. (140 mm) | 4.1 in. (104 mm) | 2.4 in. (61 mm) |
| 20 NPT / BSP | 7.9 in. (200 mm) | 4.4 in. (112 mm) | 3.5 in. (89 mm) |
| 30 Spigot | 11.5 in. (292 mm) | 5.34 in. (136 mm) | 3.5 in. (89 mm) |
| 40 Spigot | 13.5 in. (343 mm) | 6.34 in. (161 mm) | 4.5 in. (114 mm) |

| Meter Size & Fitting | Length | Height | Width |
|----------------------|-------------------|-------------------|-------------------|
| 30 NPT | 14.7 in. (373 mm) | 5.78 in. (147 mm) | 4.37 in. (111 mm) |
| 40 NPT | 17.0 in. (432 mm) | 6.7 in. (170 mm) | 5.87 in. (149 mm) |
| 30 ANSI Flange | 12.0 in. (305 mm) | 7.5 in. (190 mm) | 7.5 in. (190 mm) |
| 40 ANSI Flange | 14.0 in. (356 mm) | 9.0 in. (229 mm) | 9.0 in. (229 mm) |

Length guidelines are estimates; actual length can vary up to $\pm 1/2$ in. (13 mm).
P9 & 42 Electronics adds 0.90 in. (23 mm) to height.



SPECIFICATIONS

| | | |
|---------------------------------------|--|---------------------------------|
| Fitting Type: | Schedule 80 Spigot (Pipe) End | |
| | NPT (Female) | |
| | BSP (Female) (1 in., 1-1/2 in., & 2 in. meters only) | |
| | 150# ANSI Flange or DIN 100 Flange (3 in. & 4 in. meters only) | |
| Meter Sizes Available: | 1/2 in., 3/4 in., 1 in., 1-1/2 in., 2 in., 3 in., 4 in. | |
| Flow Range: | 1/2 in. (05) | 1 - 10 GPM (3.8 - 38 L/min) |
| | 3/4 in. (07) | 2 - 20 GPM (7.6 - 76 L/min) |
| | 1 in. (10) | 5 - 50 GPM (19 - 190 L/min) |
| | 1-1/2 in. (15) | 10 - 100 GPM (38 - 380 L/min) |
| | 2 in. (20) | 20 - 200 GPM (76 - 760 L/min) |
| | 3 in. (30) | 40 - 400 GPM (151 - 1514 L/min) |
| | 4 in. (40) | 60 - 600 GPM (227 - 2271 L/min) |
| Accuracy (% of Reading): | $\pm 3.0\%$ | |
| Pressure Rating (1/2 - 2 in.): | 225 psi (15.3 bar) @ 73° F (23° C) | |
| BSP | 150 psi (10.3 bar) @ 73° F (23° C) | |
| Pressure Rating (3 - 4 in.): | 225 psi (15.3 bar) @ 73° F (23° C) | |
| DIN | 135 psi (9.1 bar) @ 73° F (23° C) | |
| For CE Applications | 135 psi (9.1 bar) @ 73° F (23° C) | |
| Operating Temperature Range: | +32° F to +140° F (0° C to +60° C)** | |

| | | |
|--|------------------------------------|--------------------------|
| Typical K-Factor: | 1/2 in. (05) | 2,500 PPG (660 Pulses/L) |
| | 3/4 in. (07) | 1,100 PPG (291 Pulses/L) |
| | 1 in. (10) | 565 PPG (149 Pulses/L) |
| | 1-1/2 in. (15) | 215 PPG (57 Pulses/L) |
| | 2 in. (20) | 100 PPG (26 Pulses/L) |
| | 3 in. (30) | 43 PPG (11 Pulses/L) |
| | 4 in. (40) | 17 PPG (4.5 Pulses/L) |
| Wetted Materials (1/2 - 2 in.): | Housing: | PVC |
| | Bearings: | 96% Alumina Ceramic |
| | Shaft: | Tungsten Carbide |
| | Rotor: | PVDF |
| | Rings: | 316 Stainless Steel |
| Wetted Materials (3 - 4 in.): | Housing: | PVC |
| | Bearings: | PEEK |
| | Shaft & Thrust Washers: | Stainless Steel |
| | Rotor & Nose Cone: | Acetal |
| | Signal Generator: | Ferrite |
| Calibration Certificate: | N.I.S.T. - Certification available | |

**PVC pressure rating will incrementally decrease above 73° F (23° C).

ELECTRONICS OPTIONS

Q9 = Standard Local Display with 2 Totals and Rate of Flow

Q1 = The Standard Q9 Display, turned 90° for a vertically installed meter body

P9 = Pulse Output Module installed between the local display and the meter body

- Provides a Scaled NPN Open Collector Pulse
- Can provide External Power to the local display
- Comes with 10 ft. of installed cable

42 = 4-20 mA Module installed between the local display and the meter body

- Provides a 4-20 mA signal
- Provides a Scaled NPN Open Collector Pulse
- Comes with 10 feet of installed cable

PO = Pulse Output Module installed in place of the display (blind meter)

- Provides an Unscaled NPN Open Collector Pulse

X9 = Replacement Q9 Computer Display for a meter body that already has a Q9 display

R9 = Replacement Q9 Computer Display for a meter body that has an old Q9 display

- Come with the extra parts required to retrofit a Q9 display in place of a Q9 display

ACCESSORIES

| Part No. | Description |
|-----------|---|
| 113275-10 | FM Approved Remote Kit - Q9 Display (will not make meter FM Approved) |
| 125260-02 | 90° Display Adapter Kit - Q9 Display |

APPROVALS



*NSF approval for 3 & 4 in. sizes only

Wichita · Sydney

GREAT PLAINS INDUSTRIES



Service & Warranty: For technical assistance, warranty replacement or repair contact your FLOMEC® or GPI® distributor. In North or South America: 888-996-3837 / FLOMECmeters.com
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