

T4000 Cold Water Meter High Flow Sizes 1 1/2" - 12"

Third-Party Products

From The Manufacturer of E-Mon D-Mon

T4000 Turbine Meter
Bronze, Magnetic Drive, Flanged Ends



Model Numbers

Model	Size
T40015	1 1/2" High Flow
T40002	2" High Flow
T40003	3" High Flow
T40004	4" High Flow
T40006	6" High Flow
T40008	8" High Flow
T400010	10" High Flow
T400012	12" High Flow

Note: Meters supplied as outdoor version with pulse output.

Sizes: 1 1/2", 2", 3", 4", 6", 8", 10", and 12"

Performance:

Sizes	Accuracy GPM		Flow GPM Continuous	Maximum
	+/- 5%	+/- 1 1/2%		
1 1/2"	1.5	3-400	220	400
2"	1.5	3-400	220	400
3"	2.2	7.5-900	600	900
4"	2.6	7.5-1,500	1,200	1,500
6"	8	13-3,100	2,500	3,100
8"	16	18-5,000	4,000	5,000
10"	20	27-8,000	6,500	8,000
12"	40	50-10,000	8,000	10,000

Performance (all sizes):

Operating Pressure psi	150
Operating Temperature °F	120

Sweep Hand Registers:

Size	USG	Cu Ft	Cu Meter
1 1/2" - 4"	100	10	1
6" - 12"	1000	100	10

Capacity of Register (millions):

Size	USG	Cu Ft	Cu Meter
1 1/2" - 4"	100	10	1
6" - 12"	1000	100	10

Register Type: Permanently sealed direct reading register
Digital register

Materials:

Main Case (1 1/2" - 8")	Waterworks Bronze or Low-lead Bronze
Main Case (10" - 12")	Epoxy Coated Cast Iron
Top Cover Plate (1 1/2" - 12")	Waterworks Bronze or Low-lead Bronze
Body O-Ring	Synthetic Rubber
Case Bolts	Stainless Steel
Measuring Element	Glass Loaded Noryl
Rotor	Glass Loaded Polypropylene
Rotor Thrust Bearing	Synthetic Sapphire
Rotor Spindle	Tungsten Carbide
Thrust Pads	Tungsten Carbide
Register Lens	Tempered Glass
Register Housing and Lid	Polymer or Bronze
Register Can	90% Copper Alloy

DISCLAIMER

E-Mon does not manufacture the products described on this page. We do not provide a warranty with respect to products we do not manufacture, and Customer must rely on the representations and warranties, if any, provided by the manufacturer of such product. We reserve the right to make changes to our products or to discontinue any product or service without notice.

Operation

T4000 Turbine Meters are designed for installation where occasional low and moderate to high sustained flows are demanded. Water passes through the meter without a change in flow direction, driving a helix rotor in direct proportion to the quantity of water passing through the meter. Rotor revolutions are transferred to a register by a magnetic drive.

Compliance to Standards

The T4000 Turbine Meter complies with all performance and material requirements of the American Water Works Association Standard C701, II In-Line (High Velocity) Type, as most recently revised.

Installation

The meter must be installed in a clean pipeline, free from any foreign materials. Install the meter with direction of flow as indicated by the arrow cast in the meter case. The meter may be installed in horizontal, inclined or vertical lines. It is recommended that a plate strainer be used to protect the turbine and help reduce the effects of turbulence. The installer should consider a bypass pipe with gate valves for use during maintenance and a down-stream test tee for future field testing.

Application

T4000 meters are for use in POTABLE COLD WATER up to 120 °F (50° C) and working pressures up to 150 psi. The meter will perform with accuracy registration of 100% +/- 1 1/2 within the AWWA recommended flow ranges. Both pressure loss and accuracy tests are made before shipment. No adjustments need be made before installation.

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Construction

The meter consists of a main case, a measuring element, a case cover and a magnetically driven register assembly. The main case is cast in bronze with raised characters showing model, size, and direction of flow. The case has a throated inlet. The measuring element assembly consists of the rotor, straightening vanes, accuracy regulator, spindles and gears. The measuring element is attached to the underside of the cover with stainless steel screws and washers. The internal accuracy regulator vane is interconnected with an external regulator located underneath the register. This allows meter calibration without depressurizing the test bench or meter service. The regulator is protected by the register assembly, assuring tamperproof performance. The main case and cover are assembled with an O-ring gasket and stainless steel bolts. The register assembly is secured to the main case with a tamperproof screw or punch pin. Sizes 4" through 8" come standard with integral test ports.

Register

The register is contained within a 90% copper seamless can which is oven cured at 150°F for 90 minutes to eliminate condensation. The 1/4" true tempered glass lens is secured in an "L" shaped gasket, and then roll sealed to produce a permanent sealed design. To assure easy reading, the totalizer wheels are large and color-coded. The applicable size, model, registration, part number and date code are printed on the calibrated dial face. Moving clockwise during operation, the extra thin sweep hand does not interfere with meter reading, and the flow indicator will detect plumbing leaks.

Connections

The 3" through 12" meters are available with round flanged end connections. The 1 1/2" and 2" meters are available with 2-bolt oval flanged-end connections. Both flanged connections conform to ANSI B16.1 cast iron pipe flange, Class 125. Both bronze and cast iron companion flanges are available. The companion flanges are faced, drilled and tapped with ANSI B2.1 internal tape pipe thread and conform to ANSI B16.1 cast-iron pipe flange, Class 125.

Maintenance

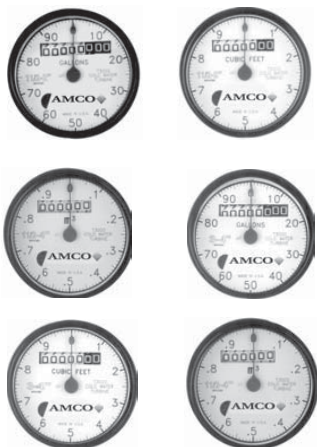
The measuring element with integral straightening vanes can be removed, repaired or replaced without removing the main case from the service line. Pretested and calibrated measuring elements with cover plates and registers are available for exchange or purchase.

Reading Options

T4000 meters come standard with a digital register to provide water usage output to the entire spectrum of electronic meter reading systems, giving flexibility to utilities implementing or upgrading reading technologies. Digital registers interface to a variety of automated meter reading systems, allowing technology upgrade without register replacement.

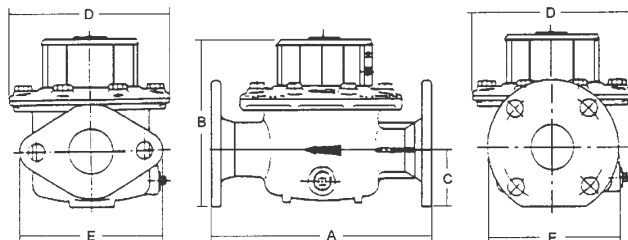
Automatic Meter Reading (AMR)

E-Mon offers RF capabilities through the GW1 tranceiver.



Dimensions and Net Weights

Meter Size	Dimensions (inches)					Weight (lbs.)
	A	B	C	D	E	
1 1/2" Oval	10	8 3/16	1 7/8	5 5/8	11 1/2	22 1/2
2" Oval	10	8 1/8	2 1/8	6 1/16	11 1/2	24
3" Round	12	9 3/8	3 13/16	7 1/2	12 11/16	37 1/2
4" Round	14	9 3/4	4 3/16	9 1/16	13 1/16	51
6" Round	18	13	5 1/2	11	16 5/16	101 1/2
8" Round	20	15 1/8	6 1/2	13 9/16	18 1/2	136 1/2
10" Round	17fl	17 1/4	17 3/4	16 1/10	21 1/2	180 3/4
12" Round	19fl	18 1/3	8 4/5	18 1/10	22 1/2	229 1/4



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