

COLD WATER TURBINES



Have a high volume application that requires a high degree of accuracy with low maintenance features? Then Carlon has a family of meters for you. Our cold water turbine meters are available from stock in sizes 2" to 8" with larger sizes available upon request. Carlon turbine meters provide an amazing +/- 2% accuracy at flow rates from 2 GPM all the way up to 4500 GPM (8" size) and 232 psi at temperatures from 35° to 122°F. Our turbine meters are all available in totalizing and electric contact configurations so that you can run your other process equipment (Carlon valves, timers, controllers and chemical pumps) directly from our turbine meter. Carlon Turbines meet or exceed AWWA C701 specifications and can be installed horizontally, vertically, or on an incline.



1710 EATON DRIVE • GRAND HAVEN, MICHIGAN 49417
PHONE (616) 842-0420 • FAX (616) 842-1265
E-MAIL CARLON@CARLONMETER.COM • WEBSITE WWW.CARLONMETER.COM

METER SELECTION CHART

METER SIZE	TOTALIZING MODEL	ELECTRIC CONTACT	CONTACT SETTINGS	*CONTINUOUS FLOW	FLOW RANGE
2"	C200T	C200EC	10 / 100 GPC	200 GPM	2 - 400 GPM
2½"	C250T	C250EC	100 / 1000 GPC	240 GPM	2 - 475 GPM
3"	C300T	C300EC	100 / 1000 GPC	450 GPM	3 - 550 GPM
4"	C400T	C400EC	100 / 1000 GPC	1000 GPM	5 - 1250 GPM
6"	C600T	C600EC	100 / 1000 GPC	2000 GPM	12 - 2500 GPM
8"	C800T	C800EC	1000 / 10,000 GPC	3500 GPM	20 - 4500 GPM

***Continuous Flow:** The size of meter selected should be based upon continuous flow, GPM, as opposed to pipe size. For example, if it is determined that continuous flow is 320 GPM, a 3" meter should be selected. Head loss = 1.5 psi at continuous flow.

ORDERING INFORMATION: Select the meter model number from the Meter Selection Chart above. For EC models, specify model number shown followed by choice of contact pulse setting desired.

Example: 2" Meter with Electric Contact and 100 gallons per contact = C200EC-100 GPC.

METER DIMENSIONS

METER SIZE	MODEL	LENGTH	HEIGHT	WIDTH	WEIGHT	FLANGE CONNECTIONS (X2) WIDTH X THICKNESS	FLANGE CLASS
2"	C200T / C200EC	7 ⁵ / ₈ "	10"	7 ¹ / ₄ "	27 lbs	6" X ³ / ₄ "	150 #
2½"	C250T / C250EC	7 ⁷ / ₈ "	10½"	7 ¹ / ₄ "	29 lbs	7 X ⁷ / ₈ "	150 #
3"	C300T / C300EC	8 ¹ / ₂ "	11"	7 ⁷ / ₈ "	35 lbs	7½" X ¹⁵ / ₁₆ "	150 #
4"	C400T / C400EC	9½"	11¼"	8 ³ / ₄ "	40 lbs	9" X ¹⁵ / ₁₆ "	150 #
6"	C600T / C600EC	11 ⁷ / ₈ "	13 ⁵ / ₈ "	11¼"	92 lbs	11" X 1"	150 #
8"	C800T / C800EC	13 ³ / ₄ "	14 ³ / ₄ "	13 ³ / ₈ "	141 lbs	13½" X 1 ¹ / ₈ "	150 #

Meters larger than 8" are available upon request.

SPECIFICATIONS

- Meter Housing:** Cast Iron Epoxy Coated, inside and out.
- Pressure Rating:** 7 – 232 psi.
- Temperature Range:** 35° - 122°F. Protect the meter from freezing.
- PH Level Range:** 6.5 – 8.0
- Accuracy:** +/- 2% of maximum flow when operating between minimum and maximum flow range.
- Register Options:** U.S. Gallons and Cubic Meter (Special Order)
- Specifics for EC Models only:** Dry Contact type, Normally Open (N/O), 24v / 10mA (for maximum life)

Installation Instructions:

A. For all types of Cold Water turbine meters:

1. Flush the line thoroughly after all plumbing changes to prevent contaminants from entering the turbine.
2. Meter may be installed either horizontally or vertically with inlet port facing the water supply line with register facing up in a horizontal installation.
3. There should be no mechanical stress to the meter when installing. Flange seals are not to protrude into the pipe.
4. To avoid air accumulating, install meter at the lowest possible point.

B. For EC type Cold Water turbine meters:

1. Connect the terminals on the pulse head to the meter input on the controlling device.
2. Connect your controlling device to the water treatment equipment (pumps, valves, etc.).
Note GPC setting to determine frequency of operation.
3. This meter is not designed for outdoor installation.

Helpful Hints:

1. All values used in a water line need to be operated slowly, and all electrically actuated valves should be slow closing. This will eliminate possible meter damage from water hammer in your system. Carlon offers an excellent slow closing valve (SCV).
2. Install a strainer upstream of your water meter to protect the meter and any other in-line process equipment from becoming jammed by particulate matter.

Warranty: Carlon Meter, Inc. warrants its products to be free of defect in material or workmanship for a period of twelve months from the date of purchase. Contact us to obtain a copy of our complete statement of warranty.