McCROMETER

Ultra Mag®

Electromagnetic Flow Meter

Flow Measurement Solution for Water and Wastewater

ULTRA MAG®

ULTRA MAG®

The Ultra Mag® from McCrometer is an electromagnetic flow meter designed specifically for the water and wastewater industry measuring liquids, slurries and sludge. With a wide flow range, no head loss, and no maintenance the Ultra Mag® delivers a highly accurate measurement you can count on.

Custom-Built Saving Time and Money

Only McCrometer offers a truly customized meter built to fit your application reducing labor during installation and ultimately saving you money.
We offer the following:

- Special lay lengths
- Flanged end connections (ANSI and AWWA)
- Meter or remote mounted converter
- Custom cable lengths up to 500 ft.
- Quick Connect sensor fittings to make installations easier

Applications

Industrial

Raw Water
Chilled Water
Cooling Water
Process Control
Effluent Wastewater

Clean Water

Well Water
Potable Water
Pump Stations
Rate-of-Flow Control
Raw Water Transmission

Wastewater

Influent
Effluent
Reclaimed
Lift Stations
Waste Activated Sludge
Return Activated Sludge

Superior Durability with Fusion-Bonded Ultraliner™

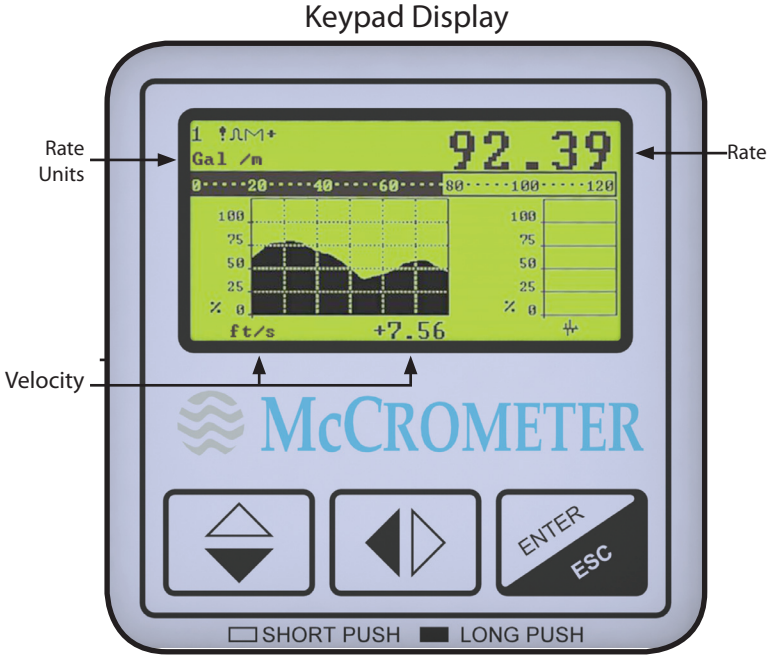
The fusion-bonded epoxy Ultraliner™ has been tested and certified by NSF. This unique liner is applied by using a fluidized bed method resulting in superior resistance against abrasion and corrosion for water and wastewater utilization. The liner provides a highly protective coating with non-conductive properties for outstanding electrical insulation.

Unlike other liners, the Ultraliner creates a seamless continuous barrier over the meter that will not delaminate, separate or collapse.

Performance Advantages

- Needs only 1 pipe diameter upstream of most flow disturbers
- No obstruction to the flow
- No moving parts to wear or break
- Maintenance free
- Worry-free accurate measurement
- Debris or solids will not clog the meter
- No head loss
- Bi-directional flow
- Empty pipe detection
- Unaffected by changes in density and viscosity
- No risk of liner delamination or separation
- Wide flow range
- Separated power and signal cables

Keypad Display

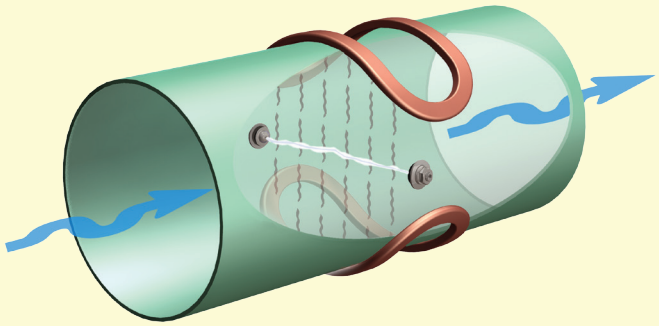


Certifications and Approvals

Listed by CSA to 61010-1: Certified by CSA to UL 61010-1 and CSA C22.2 No. 61010-1-04

ISO 9001:2015 certified quality management system

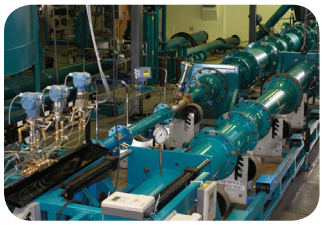
Principles of Operation



The Ultra Mag is a non-invasive flow measurement device. It uses two compact, high density magnetic coils to generate an electromagnetic field inside the pipe section. As conductive liquid flows through the pipe, a voltage is created, which is measured by electrodes inserted through the flow meter lining into the flow. The voltage is converted to a flow rate reading by the Ultra Mag's signal converter and shown on the digital display.

Pipe Size (Nominal)	Meter Pipe ID	Flow Ranges GPM Standard .2 to 32 FPS Min - Max	DIMENSIONS (Lay Lengths)							Estimated Shipping Weight (lbs.)	
			A*		B	C		D	E	UM06	UM08
			UM06	UM08		UM06	UM08				
2"	2.117	2 - 340	11.00	11.00	6.70	6.00	6.50	7.90	9.26	93	107
3"	3.220	5 - 730	13.40	13.40	6.70	7.50	8.25	9.40	10.01	97	111
4"	3.720	8 - 1,140	13.40	13.40	n/a	9.00	10.00	n/a	8.06	78	108
6"	5.692	19 - 2,660	14.60	14.60	n/a	11.00	12.50	n/a	9.06	82	138
8"	7.692	33 - 4,870	16.10	17.25	n/a	13.50	15.00	n/a	10.06	115	195
10"	9.682	52 - 7,670	18.50	18.50	n/a	16.00	17.50	n/a	10.46	144	247
12"	11.682	74 - 11,180	19.70	19.70	n/a	19.00	20.50	n/a	12.31	193	342
14"	13.440	90 - 16,070	21.70	22.75	12.00	21.00	23.00	20.30	15..46	321	476
16"	15.440	118 - 20,900	23.60	25.25	14.20	23.50	25.50	21.10	16.21	390	645
18"	17.440	150 - 26,480	23.60	25.25	14.20	25.00	28.00	21.10	17.21	446	750
20"	19.440	185 - 32,720	25.60	28.25	16.20	27.50	30.50	24.80	18.26	588	874
24"	23.440	270 - 47,180	30.70	35.75	21.70	32.00	36.00	29.60	20.11	769	1,568
30"	29.190	420 - 73,620	35.80	41.75	26.50	38.75	43.00	35.90	23.26	1,261	2,317
36"	35.190	610 - 105,930	46.10	46.10	28.20	46.00	50.00	42.70	26.66	1,696	2,915
42"	41.190	830 - 144,370	48.05	**	32.10	52.75	**	48.35	29.99	**	**
48"	47.190	1,080 - 188,430	50.00	**	36.00	59.50	**	54.00	33.31	**	**

COMMITMENT TO INTEGRITY



For over 55 years, McCrometer has demonstrated an unyielding commitment to integrity which is reflected in our stringent flow meter calibration processes. Each flow meter is individually wet calibrated in one of our two world-class NIST traceable calibration facilities and delivered with a Certificate of Calibration.

NIST National Institute of Standards and Technology

With two testing facilities in California, we have the flexibility to test flow meters that range from ½ inch to 72-inch in diameter. Our Calibration Test Lab, in Hemet, is equipped with gravimetric and volumetric systems, to test flow rates up to 4,000 gpm. Our Large Volume Test Facility, in Porterville, is one of the world's largest volumetric systems, allowing us to test flow rates up to 60,000 gpm.

For specifications visit: www.mccrometer.com/umspecs

Represented by:

McCROMETER

www.mccrometer.com
3255 West Stetson Avenue, Hemet, California 92545 USA
Phone 800-220-2279 | 951-652-6811 | Fax 951-652-3078

© 2010-2017 by McCrometer, Inc. / Printed in USA

Lit Number 30107-01, Rev. 4.1 / 8-24-18