

# BATTERY POWERED FLANGED ELECTROMAGNETIC FLOW METER

### DESCRIPTION

McCrometer's Dura Mag is the easy choice for tough applications. With a guaranteed 3-year battery life, the Dura Mag eliminates the need for power cables and generators while providing the easiest installation possible for a flanged mag flow meter.

The meter is available to fit a common range of agricultural line sizes, from 4" to 12" diameter pipe. The Dura Mag offers accuracy of +/- 1% with only 2D of upstream and 1D of downstream straight pipe required, all with the durability that the agricultural market has come to expect from McCrometer for the past 60 years.

The integrated electronic converter is secured with tamper evident screws. The meter offers flow rate and totalizer with a guaranteed 3-year battery life. The Dura Mag features two 3.6V lithiumthionyl chloride (Li-SOCl<sub>2</sub>) D size batteries and one back-up battery. The batteries are easily replaced in the field in under 10 minutes.

Pulse and 4-20mA output are available for remote meter reading or SCADA. The Dura Mag is McCrometer CONNECT wireless system compatible, which allows users to access flow data by simply logging on to the Internet. This eliminates costly manual meter reading.

**KEY APPLICATIONS - Agriculture**

- Prop Applications
- Irrigation
- Center Pivot Systems
- Well Monitoring
- Water Distribution
- Dairy Lagoons
- Chemigation Downstream
- Surface Water
- Golf Course & Park Management
- Sandy Water

**FREQUENTLY ASKED QUESTIONS**

Q: What is the estimated life of the Dura Mag?  
A: The Dura Mag has an estimated life of 10 years, and requires no regular maintenance other than replacing the battery pack.

Q: What is the expected life of the battery pack?  
A: The battery pack is covered under warranty for 3 years, but is expected to last 5 years.

Q: Is there a data logger?  
A: Yes, every Dura Mag comes standard with an internal data logger, for easy data recording and transfer.

Q: What alarms are there?  
A: Two alarms: Empty pipe alarm and low battery.

Q: What if I need to connect to telemetry?  
A: Choose the telemetry ready 7-pin connector output.

**KEY FEATURES**

- Battery powered for easy installation – eliminate the hassle of cables or AC power
- Durable design – Proven in tough environments
- 10 minute DIY replaceable battery pack, keeps your meter running
- 5 year battery life, 3 year battery warranty
- Made in the USA



**Lid protects display from sun damage**

**Battery pack is replaceable in the field and has a 3 year warranty**

**Easy push button to activate display**

**Converter settings USB port accessible with adapters - eliminates accidental setting changes**

**Included canopy protects converter from weather and extreme temperatures**

**Epoxy coating replaces liner, eliminating risk of separation or water intrusion**

**FLOW**

## SPECIFICATIONS

<b>Pipe Sizes</b>	4", 6", 8", 10", 12"
<b>Accuracy</b>	± 1% or ± 0.25% of full scale
<b>Display</b>	2-Line LCD display (no backlight), 16 characters per line <ul style="list-style-type: none"> <li>• Non-volatile memory</li> <li>• Anti-reverse totalizer (standard)</li> <li>• Total (to 9 digits of precision)</li> <li>• Flow Rate and Velocity (to 5 digits of precision)</li> <li>• Two alarms: low battery and empty pipe</li> </ul> <i>Note: To preserve battery life a button on the front of the converter activates the display.</i>
<b>Power</b>	<p><b>Battery</b> Standard: two 3.6V lithium-thionyl chloride (Li-SOCl<sub>2</sub>) D size batteries. Batteries are field replaceable</p> <p><b>DC Power</b> Linear power supply 10-35VDC, 2.4W</p>
<b>Battery Guarantee</b>	Guaranteed 3-year battery life
<b>Outputs</b>	<p><b>Pulse Output</b> Digital pulse (open collector) output for volumetric and/or alarm</p> <p><b>Analog Output</b> 4-20mA (not galvanically separated from the power supply). DC powered option only.</p>
<b>Data Storage</b>	Data logger (standard with all models), minimum of five years of data stored
<b>Environmental</b>	<p><b>Operating Temperature</b> -4° to 140°F (-20° to 60°C)</p> <p><b>Storage Temperature</b> -40° to 149°F (-40° to 65°C)</p>
<b>Electrical connects</b>	Optional quick connect for easy installation

<b>Pipe Run Requirements</b>	2D Upstream / 1D Downstream
<b>Pressure Rating</b>	150 psi
<b>Options and Accessories</b>	<ul style="list-style-type: none"> <li>• Two alarms: low battery and empty pipe</li> <li>• Data logger cable (sold separately)</li> <li>• DC power w/battery backup</li> <li>• Pulse &amp; 4 20mA output</li> <li>• Annual verification / calibration</li> </ul>
<b>Units</b>	US gallons US gallons x1000 (standard totalizer) US gallons x1,000,000 cubic inches cubic feet cubic feet x1000 cubic centimeters cubic decimeters milliliters, liters deciliters hectoliters kiloliters megaliters cubic meters cubic meters x1000 acre feet acre inches imperial gallons imperial gallons x1000 imperial gallons x1,000,000 standard barrels oil barrels miner inch days
<b>Unit Rate Scales</b>	seconds, minutes, hours, days

## METER BODY DIMENSIONS AND WEIGHTS

Pipe Size (Nominal)	Standard GPM Flow Ranges Min - Max	DIMENSIONS (Lay Lengths in Inches)			* Estimated Shipping Weight (lbs.)
		A*	B	C	
4"	30 - 1,000	13.4"	9.0"	9.25"	70
6"	60 - 2,000	14.6"	11.0"	10.25"	80
8"	105 - 3,500	16.1"	13.5"	11.25"	115
10"	165 - 5,500	18.5"	16.0"	12.5"	140
12"	195 - 6,500	19.7"	19.0"	13.5"	190

\* Shipping weights are estimated and may change due to specific order packaging.

Standard Configuration	
Pulse	1 per 100 gallons
Data logging frequency	Every 12 hours
Totalizer units	US gallons x 1000 (KGL)

Converter front (D): 6.44"

Converter side (E): 7.37"

