

# **Specifications** M-10 Meters



Liquid Controls M Series rotary motion positive displacement (PD) meters offer the ultimate in measurement accuracy for custody transfer of petroleum products and aviation fuels.

### Superior performance features

**Low pressure drop** - will operate on gravity flow or pump pressure.

Sustained accuracy - no metal-to-metal contact inside the measuring chamber means minimal wear and deterioration in accuracy over time, fewer recalibrations, and longer service life. Meters conform to NIST and International Weights and Measures accuracy requirements.

Wide viscosity range - LC meters can accurately meter products from less than 30 SSU (less than 1 centipoise) to 1,500,000 SSU (325,000 centipoise).

Maximum adaptability - choice of stock or custom elbows/fittings provides unequaled mounting flexibility to meet widely varying installation requirements.

#### Accuracy/Performance\*

#### Repeatability

Capable of 0.02% or better at any flow rate over entire range

#### Linearity

Over 5:1 range

Mech. registration: capable of  $\pm$  0.125% or better from max. nom. flow rate Elect. registration: capable of ±0.10% or better from max. nom. flow rate

#### Over 10:1 range

Mech. registration: capable of ±0.22% or better from max. nom. flow rate Elect. registration: capable of ± 0.10% or better from max. nom. flow rate

#### Over 40:1 range

Mech. registration: capable of ±0.5% or better from max. nom. flow rate Elect. registration: capable of ±0.15% or better from max. nom. flow rate

#### Temperature range

-40° F to 160° F (-40° C to 71° C)

\*Stated accuracy obtainable when all variables remain constant. Reading/measurements reflect a minimum of one minute of flow at selected rate(s). All accuracy statements based on metering safety solvent (aliphatic hydrocarbon), approximate viscosity 1 CPS. On higher viscosity products, the average deviation in accuracy will be less.

#### Industries served

LC M and MA series meters are well suited for use in industries requiring precise flow measurement and reliable, extended service

- Refined petroleum products
- Aviation fuels
- LPG
- · Agricultural chemicals
- · Paints and coatings
- Foods and beverages
- Petrochemicals
- Pharmaceuticals
- Cosmetics
- · Printing Inks
- Textiles

#### Construction

# Meter housing and rotors

Cast aluminum

#### Internal components

Aluminum, Ni-Resist, stainless steel

#### Seal materials

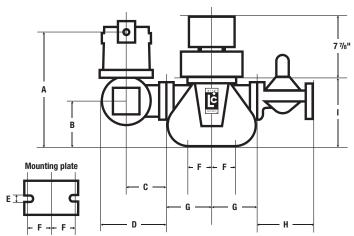
UL recognized component: Buna-N, Viton®1, Teflon®1

#### **Bearings**

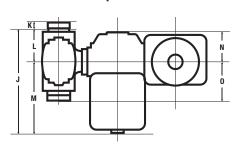
Carbon, Teflon, Ni-Resist

<sup>1</sup>Viton and Teflon are registered trademarks of DuPont Corporation.

#### **Front View**



#### Top View



#### Dimensions: flow meters with electronic registration

Note: Dimensions shown are not for construction use. Consult factory when certified engineering prints are required.

Model	Flange size	Max. nom.   Working   Dimensions								Net										
Woder	Flalige Size	Flow rate	pressure		Α	В	C	D	Е	F	G	Н	ı	J	K	L	М	N	0	Wt
M-10	2"	150 GPM	150 PSI	in	14.3	5.4	4.1	6.8	0.56	2.8	4.2	8.3	9.5	14.9	0.9	4.7	10.2	4.2	5.6	19 lbs
		(550 L/min)	(10.5 BAR)	mm	362	137	105	171	14	71	106	213	241	378	24	119	259	106	141	(8.6 kg)

Ordering Information										
Model :										
Description :		-								
Flow rates: Max Normal Min										
Operating temperatures: Max	Normal	Min								
Maximum non-shock operating pressure:										
Maximum viscosity:	_ @	(Temp°/F or C)								
Specific gravity: @ (Temp°/F c										
Construction class: (1, 2, etc.)										
Seal material: ☐ Standard Buna/Viton ☐ All Viton ☐ All Teflon										
Direction of flow:   L to R  R to L										
Read out:										
Mechanical counter and printer:□ Zero/Face up □ Zero/Face down □ Accumulative										
Strainer basket : □ 40M □ 80M □ 100M □ Other										
Flange size:										
Flange type:   NPT BSPT Slip weld ANSI DIN Other										
Options:										

# Class Description Material Refined petroleum products Ni-Resist<sup>1</sup> Aviation and jet fuel Ni-Resist<sup>1</sup>

#### **Material of Construction**

#### Class 1 Meters

For metering refined petroleum products such as leaded and unleaded gasoline, fuel oils, diesel fuel, kerosene, and ethylene glycol (antifreeze) at rated capacity. Also used on motor oils, however, rate of flow based on viscosity to pressure loss relationship. Buna-N / Viton seals standard. Teflon seals optional.

#### Class 2 Meters

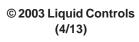
For metering aviation gasoline and jet fuels when meter is installed downstream of the filter/separator. Non-ferrous construction meters may be operated at rated capacity. Buna-N / Viton seals standard. Teflon seals optional.



## **LIQUID CONTROLS**

A Unit of IDEX Corporation 105 Albrecht Drive Lake Bluff, IL 60044-2242 1.800.458.5262 • 847.295.1050

Fax: 847.295.1057 www.lcmeter.com







<sup>&</sup>lt;sup>1</sup> Carbon bearings are standard on some meter sizes of this class. Consult factory.