

# **Specifications**M-30 Meters



Liquid Controls M and MA Series rotary motion positive displacement (PD) meters offer the ultimate in measurement accuracy for custody transfer of petroleum products, aviation fuels, LPG, and a broad range of industrial liquids.

# 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  $\pm$ 0.10% or better from max. nom. flow rate

#### Over 10:1 range

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

# Over 40:1 range

Mech. registration: capable of  $\pm 0.5\%$  or better from max. nom. flow rate Elect. registration: capable of  $\pm 0.15\%$  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 life:

- 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 or cast-iron

#### Internal components

Aluminum, Ni-Resist,

### Seal materials

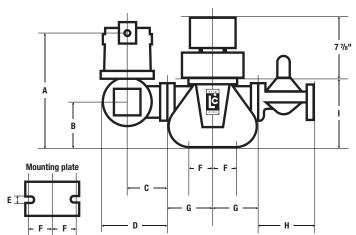
UL recognized component: Buna-N, Viton®<sup>1</sup>, Teflon®<sup>1</sup>

#### **Bearings**

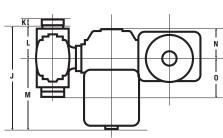
Carbon, Teflon, Ni-Resist

<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	orking Dimensions											Net					
Model	i lalige size	Flow rate	pressure		Α	В	၁	D	Е	F	G	Н	ı	J	K	L	М	N	0	Wt
M-30	3" or 4"	350 GPM	150 PSI	in	20.5	10.6	5.6	9.1	0.87	4.8	7.9	n/a	13.8	19.4	1.4	7.1	12.3	6.6	7.7	120 lbs
		(1325 L/min)	(10.5 BAR)	mm	521	270	143	230	22	122	200	n/a	351	494	36	181	313	167	195	(54.4 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 or 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: Gallons Liters	Pounds   Other						
Mechanical counter and printer:☐ Zero/Fac	ce up	own Accumulative					
Strainer basket : 🗆 40M 🗆 80M 🗀 100M	√ Dother	<del> </del>					
Flange size:							
Flange type:   NPT BSPT Slip well	Id DANSI DIN D	Other					
Options:							

Class	Description	Bearing <u>Material</u>
1	Refined petroleum products	Ni-Resist <sup>1</sup>
2	Aviation and jet fuel	Ni-Resist <sup>1</sup>
3	Variety of products includes: liquid sugars, sweeteners, syrups, vegetable oils	Ni-Resist <sup>1</sup>
4	Treated waters and solvents where no red metals are allowed	Carbon
7	Chlorinated solvents	Carbon
14	Crude oil	Ni-Resist
15	Oil - or water-bases latex products, polyester resins, adhesives, herbicides, nitrogen fertilizers	Teflon
16	General solvents	Carbon
27	Alkaline pH liquids; latex products, adhesives, liquid fertilizers	Teflon <sup>2</sup>
37	Sodium hydroxide solutions, high sulfur crude oil, alkaline pH liquids	Ni-Resist
47	Mildly abrasive liquids	Ceramic <sup>3</sup>

- <sup>1</sup> Carbon bearings are standard on some meter sizes of this class. Consult factory.
- $^{\rm 2}$  Teflon bearings optional on some meter sizes. Consult factory.
- <sup>3</sup> Consult factory



# **LIQUID CONTROLS**

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