Specifications
M-7 Meters

LIQUID CONTROLS
A Unit of IDEX Corporation
IDEX CORPORATION

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.

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

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 ± 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.

Construction

Meter housing and rotors
Cast aluminum, cast-iron, or stainless steel

Internal components
Aluminum, Ni-Resist, stainless steel

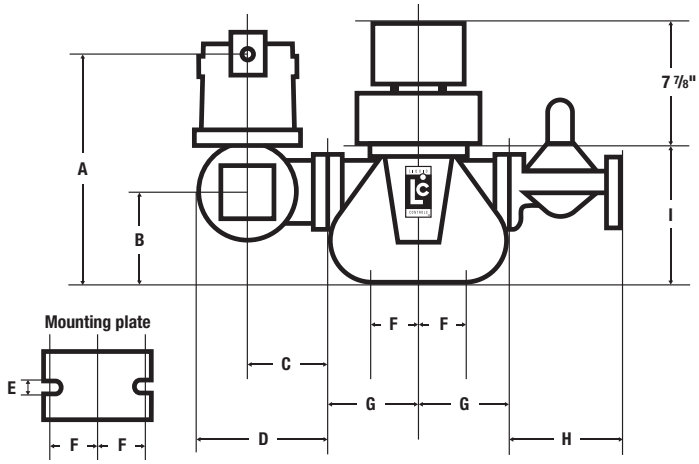
Seal materials
UL recognized component: Buna-N, Viton®[1], Teflon®[1]

Bearings
Carbon, Teflon, Ni-Resist

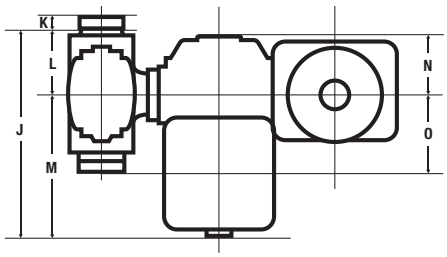
[1]Viton and Teflon are registered trademarks of DuPont Corporation.

INDORAYA POWER ENERGI

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. Flow rate	Working pressure		Dimensions															Net Wt
					A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
M-7	1 1/2" or 2"	100 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
		(380 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 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/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	Bearing Material
1	Refined petroleum products	Ni-Resist[1]
2	Aviation and jet fuel	Ni-Resist[1]
3	Variety of products includes: liquid sugars, sweeteners, syrups, vegetable oils	Ni-Resist[1]
4	Treated waters and solvents where no red metals are allowed	Carbon
7	Chlorinated solvents	Carbon
8	Acid pH liquids includes: nitric, phosphoric, glacial acetic acids, citric juces, vinegar	Carbon[2]
14	Crude oil	Ni-Resist
15	Oil - or water-bases latex products, polyester resins, adhesives, herbicides, nitrogen fertilizers	Teflon
16	General solvents	Carbon
20	Batch process water meter service	Carbon
27	Alkaline pH liquids; latex products, adhesives, liquid fertilizers	Teflon[2]
37	Sodium hydroxide solutions, high sulfur crude oil, alkaline pH liquids	Ni-Resist

[1] Carbon bearings are standard on some meter sizes of this class. Consult factory.
[2] Teflon bearings optional on some meter sizes. Consult factory.

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