

Specifications M-80 Meter

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 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 a longer service life. Meters conform to NIST and International Weight and Measures accuracy requirements.

Wide viscosity range – LCE meters can accurately meter products from less than 30 SSU (1 cP) to 1500000 SSU (325000 cP).

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

Accuracy/Performance

Repeatability

Mechanical registration: capable of 0.05% of reading over entire range Electronic registration: capable of 0.03% of reading 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)

Industries served

LC series M and MA 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 (other metallurgies, available including brass, cast-iron and stainless steel)

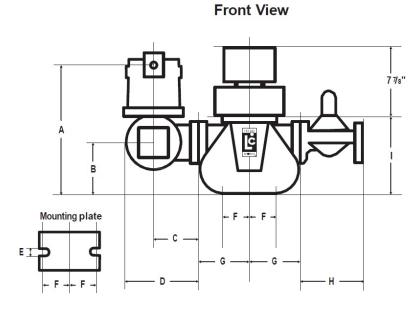
Internal components Aluminum, Ni-Resist, stainless steel

Seal material UL recognize component: Buna-N, Viton, Teflon

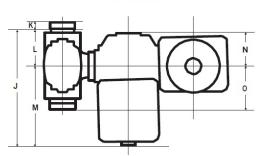
Bearings Carbon, Teflon, Ni-Resist

Dimensions: flow meters with electronic registration

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



Top View



| Model | Flange size | Max nom. Flow rate | Working pressure | Net weight | Dimensions | | | | | | |
|------------|----------------|-----------------------|-----------------------|----------------------|------------|------|------|-----|-----|-----|-----|
| Woder | | | | | | А | В | С | D | E | F |
| M-80 | 4" or 6" | | 10,5 bar (150 PSI) | 91,2 kg (201 lbs) | in | 25.4 | 16.6 | 5.6 | 9.1 | n/a | 1.5 |
| IVI-80 | | | | | mm | 645 | 421 | 143 | 230 | n/a | 38 |
| Dimensions | | | | | | | | | | | |
| | G | н | 1 | | 1 | к | L | N | 1 | N | 0 |
| in | 14.3 | n/a | 20 | 2 | 21 | 1.4 | 7 | 14 | 1 | 8 | 10 |
| mm | 362 | n/a | 498 | 5 | 40 | 36 | 181 | 35 | 9 | 213 | 241 |

Construction and application classes

LC series M and MA PD meters are suitable for metering a broad range of products as listed below. The appropriate meter class can be used to specify a desired meter by using the table on the next page of this publication.

| Class | Description | Bearing Material | | |
|-------|--|---------------------|--|--|
| 1 | Refined petroleum products | Ni-Resist | | |
| 2 | Aviation and jet fuel | Ni-Resist | | |
| 3 | Variety of product includes: liquid sugars, sweeteners, syrups, vegetable oils | Ni-Resist | | |
| 4 | Treated waters and solvents where no red metals are allowed | Carbon | | |
| 8 | Acid pH liquids includes: nitric, phosphoric, glacial acetic acids, citric juices, vinegar | Carbon | | |
| 14 | Crude oil | Ni-Resist | | |
| 16 | General solvents | Carbon | | |
| 30 | Herbicides | Carbon | | |
| | | | | |



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