



# Specifications

## M-25 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 unequalled mounting flexibility to meet widely varying installation requirements.

### 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

### 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)

### Construction

Meter housing and rotors  
Cast aluminum (other metallurgies, available including brass, cast-iron and stainless steel)

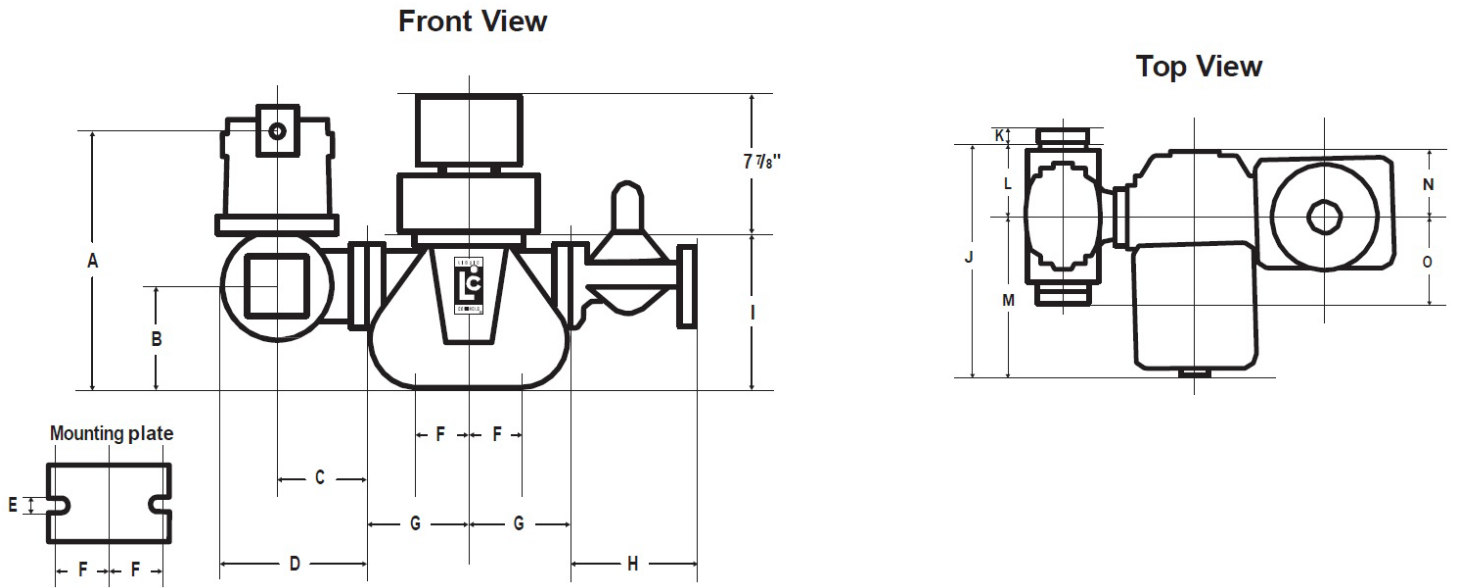
Internal components  
Aluminum, Ni-Resist, stainless steel

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.



| Model | Flange size | Max nom. Flow rate      | Working pressure      | Net weight          | Dimensions |     |     |     |     |     |     |
|-------|-------------|-------------------------|-----------------------|---------------------|------------|-----|-----|-----|-----|-----|-----|
|       |             |                         |                       |                     | A          | B   | C   | D   | E   | F   |     |
| M-25  | 3"          | 1150 l/min<br>(304 GPM) | 10,5 bar<br>(150 PSI) | 16,8 kg<br>(37 lbs) | in         | 17  | 7.5 | 5   | 7.7 | .69 | 3.8 |
|       |             |                         |                       |                     | mm         | 432 | 191 | 127 | 195 | 17  | 95  |

| Dimensions |     |     |      |      |     |     |      |     |     |
|------------|-----|-----|------|------|-----|-----|------|-----|-----|
|            | G   | H   | I    | J    | K   | L   | M    | N   | O   |
| in         | 5.5 | n/a | 10.8 | 16.1 | 1.3 | 5   | 11.1 | 5.1 | 6.5 |
| mm         | 140 | n/a | 273  | 410  | 32  | 127 | 238  | 129 | 165 |

## 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           |



**LIQUID CONTROLS EUROPE**

Manufactured by SAMPI

A Unit of IDEX Corporation

S.A.M.P.I. spa - Via Amerigo Vespucci, 1

55011 Altopascio (Lucca) - ITALY

Phone: +39 0583 24751

Fax: +39 0583 264748