

OM CHEM OVAL GEAR FLOWMETERS



The **FLOMEC® Chemical Flow Meter** provides precise volumetric flow measurement of a broad range of clean water based products and aggressive chemicals and is also suitable for most fuels, fuel oils and lubricating liquids. Applications include Batching, dosing or packaging of various corrosive chemicals as a more economical alternative to a complete 316 stainless steel meter for liquids such as Diesel Exhaust Fluid (Adblue).

FEATURES/BENEFITS

- High accuracy & repeatability, direct reading flow meter
- No requirement for flow conditioning (straight pipe runs)
- Measures high & low viscosity liquids
- Quadrature pulse output option & bi-directional flow

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER **1**

OM = Oval Gear Meter

METER SIZE **2**

025 = 1" (25 mm), 10-150 L/min

BODY MATERIAL **3**

P = PPS

ROTOR MATERIAL / BEARING TYPE **4**

00 = PPS / No bearing

10 = Keishi cut PPS / No bearing

O-RING MATERIAL **5**

1 = Viton™ minimum -15° C

3 = PTFE encapsulated Viton™ minimum -15° C

4 = Buna-N (Nitrile), minimum -40° C

MAXIMUM TEMPERATURE LIMIT **6**

-8 = 80° C max.

PROCESS CONNECTIONS **7**

1 = BSPP (G) female threaded (ISO 228)

2 = NPT female threaded

CABLE ENTRIES **8**

1 = M20 x 1.5 mm (M16 x 1.5 mm for R4 option)

2 = 1/2 in. NPT

6 = 3 x 16 mm drilled holes (for F instruments only)

INTEGRAL OPTIONS **9**

___ = Combination Reed Switch and Hall Effect Sensor

QP = Quadrature pulse (2 NPN phased outputs)

R4 = RT40 rate totaliser with backlit large digit LCD [scalable pulse output, backlight]*#

R5 = RT14 backlit rate totaliser with all outputs (GRN Housing)*#

F18 = F018 backlit rate/tot, pulse, 4-20mA, 10 point linearisation, HART#

1 2 3 4 5 6 7 8 9
 --->>>> **OM 025 P 10 1 -8 1 1 R5**

METER SELECTION

• PPS meters are used for non-aromatic/non-halogenated organic chemicals, water based liquids, Diesel Exhaust Fluid and petroleum products including oils and grease, fuels and fuel oils. It is unsuitable for strong acids and oxidizers.

• PPS meters with standard ceramic rotor pins are suitable for applications where stainless steel is not suited or permitted.

• Blind pulse meters are available with Reed Switch and Hall Effect outputs. Quadrature pulse and integral displays with 4-20mA outputs are optional.

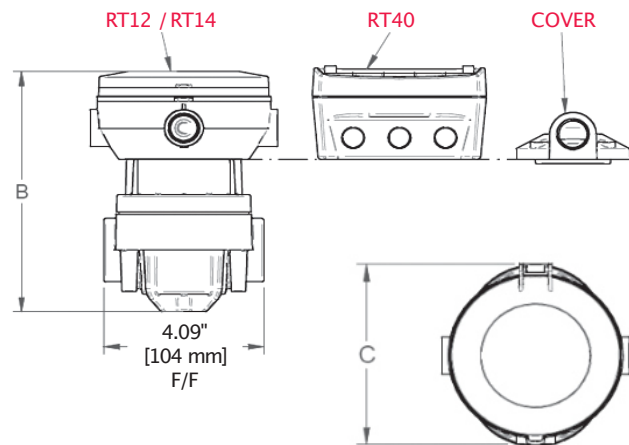
SPECIFICATIONS

| | OM025 |
|---------------------------|--|
| Nominal Size: | 1" (25 mm) |
| Nominal Flow Range* @3cP: | 2.6 - 40 GPM (10-150 L/min) |
| Accuracy: | ±0.5% of reading (±0.2% of reading with optional RT14) |
| Repeatability: | Typically ± 0.03% of reading |
| Temperature Range: | -40°C - +80°C (-40°F - +180°F) |
| Max. Pressure | 70 psi (5 bar) |
| Electrical: | |
| Output Pulse Resolution: | Pulses / gallon (Pulses / L) - Nominal |
| Reed Switch: | 102 (27) |
| Hall Effect: | 405 (107) |
| QP Quadrature Pulse | 204 (54) |
| Reed Switch Output: | 30V (dc) x 200mA max. (maximum thermal shock 18°F [10°C] / minute) |
| Hall Effect Output: | 3 wire open collector. 5-24V (dc) max., 20mA max. |
| Recommended Filtration | 200 mesh [75 µm] |

*Maximum flow is to be reduced as viscosity increases, see flow de-rating guide.
Maximum recommended pressure drop is 14.5psi [1 Bar]

DIMENSIONS

| | B | C |
|------------|-------------------|-------------------|
| RT12/ RT14 | 6.57" (167 mm) | 4.88" (124 mm) |
| RT40 | 6.69" (170 mm) | 3.78" (96 mm) |
| COVER | 4.84" (123 mm) | 2.91" (74 mm) |



APPROVALS

NEMA 4 IP65 CE