OM SERIES CHEMICAL FLOW METER

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
- Optional NMI Pattern Approval (Australia Ontly)
- Meets DEF (Diesel Exhaust Fluid)/AdBlue Standards

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER 1
OM = Oval Gear Meter

METER SIZE 2
025 = 1" (25 mm), 2.6 - 40 GPM (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 = FKM (Viton™) 5º F minimum (-15º C)
3 = PTFE encapsulated FKM (Viton™) 5º F minimum (-15º C)
4 = Buna-N (Nitrile), -40º F minimum (-40º C)

MAXIMUM TEMPERATURE LIMIT 6
-8 = 176º F (80º 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)
QPN = Quadrature pulse (2 NPN phased outputs) with Australian NMI & NZ approval for trade sale
R4 = RT40 rate totalizer with backlit large digit LCD [scalable pulse output, backlight]*#
R4G = RT40 rate totalizer with backlit large digit LCD (Alloy housings with facia) (with gallons calibration)*#
R5 = RT14 backlit rate totalizer with all outputs (GRN Housing)*#
R5G = RT14 backlit rate totalizer with all outputs (GRN Housing) (with gallons calibration)*#
F18 = F018 backlit rate/tot, pulse, 4-20mA, 10 point linearization, HART#

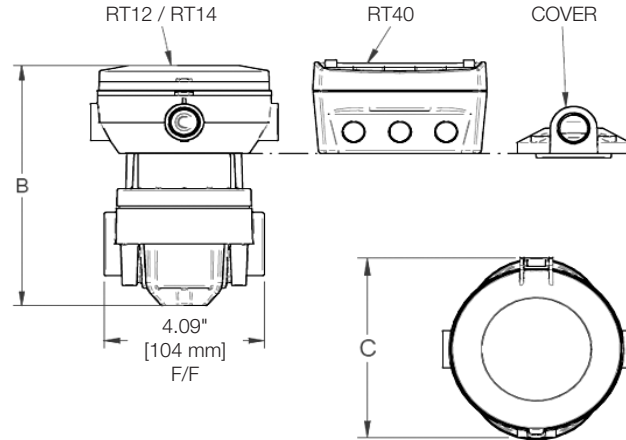| 1	2	3	4	5	6	7	8	9
---->>>> OM	025	P	10	1	-8	1	1	R5

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 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]

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)

RT12 / RT14   RT40   COVER

B

4.09" [104 mm] F/F

C

APPROVALS

NEMA 4   IP65   CE   *ISO 22241-2 Annex C, D, E, F, G, H, I, Diesel Exhaust Fluid (DEF)/Adblue standards*

Wichita / Sydney   GREAT PLAINS INDUSTRIES GPI

IND-1043_OM_Chemical Meter