



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 Only)
- Meets DEF (Diesel Exhaust Fluid)/AdBlue Standards

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER

OM = Oval Gear Meter

2 METER SIZE

025 = 1" (25 mm), 2.6 - 40 GPM (10-150 L/min)

3 BODY MATERIAL

P = PPS

4 ROTOR MATERIAL / BEARING TYPE

00 = PPS / No bearing
10 = Keishi cut PPS / No bearing

5 O-RING MATERIAL

1 = FKM (Viton™) 5° F minimum (-15° C)
3 = PTFE encapsulated FKM (Viton™) 5° F minimum (-15° C)
4 = Buna-N (Nitrile), -40° F minimum (-40° C)

6 MAXIMUM TEMPERATURE LIMIT

-8 = 176° F (80° C) max.

7 PROCESS CONNECTIONS

1 = BSPP (RP) female threaded (ISO 7)
2 = NPT female threaded

8 CABLE ENTRIES

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)

9 INTEGRAL OPTIONS

___ = 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]*#

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

R7 = RT40 backlit rate totaliser in GRN housing*#^

B11 = EB11 dual stage batch controller in GRN housing*#

F15 = F115 bi-directional flow rate/totaliser, 4-20mA and pulse outputs, in a GRN housing

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

10 DISPLAY CALIBRATION:

___ = Displays in Litres (DEFAULT)

G = Displays in US Gallons

*Temp code 5 required for integral instruments between 176°F (80°C) & 250°F (120°C)

#Temp code 8 required for integral instruments below 176°F (80°C)

^Requires Cable Entry option 6

1	2	3	4	5	6	7	8	9	10
----	OM	025	P	10	1	-8	1	1	R4 G

METER SELECTION

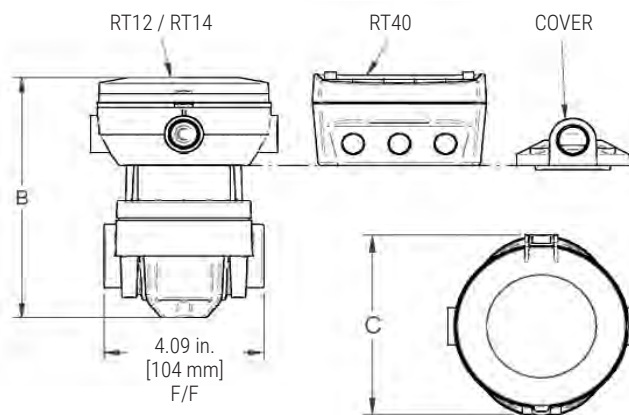
- PPS meters are used for non-aromatic/non-halogenated organic chemicals, water based liquids, Diesel Exhaust Fluid and petroleum products including oils and grease, fuels and fuel oils. It is unsuitable for strong acids and oxidizers.
- PPS meters with standard ceramic rotor pins are suitable for applications 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	174 psi (12 bar)
Burst Pressure	522 psi (36 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 in. (167 mm)	4.88 in. (124 mm)
RT40	6.69 in. (170 mm)	3.78 in. (96 mm)
COVER	4.84 in. (123 mm)	2.91 in. (74 mm)



APPROVALS

NEMA
4

IP65 CE

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

GREAT PLAINS INDUSTRIES



IND-1143-OM-CHEMICAL METER REV C EN 2/24

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