FLOMEC®

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)

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)*#
E0 = EB10 batch cwontroller [2 stage DC batchewr & totalizer] (GRN Housing)*#
E0G = EB10 batch controller [2 stage DC batcher & totalizer] (with gallons calibration) (GRN Housing)*#
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.
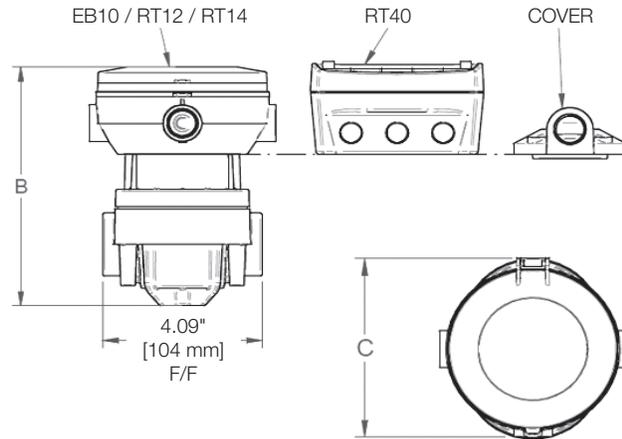
SPECIFICATIONS

	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]

*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
EB10 / 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)

EB10 / RT12 / RT14   RT40   COVER

B

4.09" [104 mm] F/F

C

APPROVALS

NEMA 4   IP65   CE

Authorized GPI / Flomec Distributor

A3	**3-A Sanitary Standards, Inc.** is an independent, not-for-profit corporation dedicated to advancing hygienic equipment design for the food, beverage, and pharmaceutical industries.
ATEX	European directive describing the equipment allowed in an environment with an explosive atmosphere.
⟨Ex⟩	European Explosive Atmosphere Symbol
CE	**Conformity European.** Product has been reviewed to one or more of 21 European directives
FM APPROVED	**Factory Mutual Approved** to US Standards.
c FM us APPROVED	**Factory Mutual Approved** to Canadian and US standards
c FM APPROVED	**Factory Mutual Approved** to Canadian standards
FC	**Federal Communication Commission**
IEC **IECEx**	**International Electrotechnical Committee** logo; use of the logo by an organziation only shows an association with the IECEx, it does not infer any compliance with standards.
IPxx	**Ingress Protection Code**
NEMA	**National Electrial Manufacturers Association**
RoHS 2002/95/EC	**European Directive on Restriction of Hazardous Substances**
CSA®	**Canadian Standards Association**
CSA C US	**Canadian Standards Association** certified to Canadian and US standards
NSF Certified to NSF/ANSI 61-G & 372	Manufacturers, regulators and consumers look to **NSF International** for the development of public health standards and certification programs that help protect the world's food, water, consumer products and environment.

This guide is a generic explanation of the approval marks listed throughout the catalog. See individual product pages for what approvals apply to what products. Approvals vary by product line and may be dependent on meter application.

For additional approval details, please visit gpi.net/approvals.

UL LISTED	**Underwriters Laboratories** listed to US standards
c UL us LISTED	**Underwriters Laboratories** listed to Canadian and US standards
c UL LISTED	**Underwriters Laboratories** listed to Canadian standards
♲	European directive on waste electrical and electronic equipment (WEEE)