



OM SERIES SMALL CAPACITY (OVAL GEAR METERS)

PRODUCT CONFIGURATION

The FLOMEC® OM Small Capacity Oval Gear Meters have an increased flow range and offer the ability to handle a wide range of fluid viscosities with exceptional levels of repeatability

FEATURES / BENEFITS

- High accuracy and repeatability, direct volumetric reading. Measures high and low viscosity liquids.
- Stainless Steel rotors (Optional PPS rotor for OM008 meter only).
- Quadrature pulse output option and bi-directional flow. Blind 4-20mA output option.
- Optional Exd I/IB approval (ATEX, IECEx)
- PF option available for metering pulsating flows.
- Only two moving parts.

PRODUCT IDENTIFIER **1**

OM = Oval Gear Meter

METER SIZE **2**

004 = 1/8 inch (4mm), 0.13-9.5 GPH (0.5-36 LPH)

006 = 1/4 inch (6mm), 0.5-27 GPH (2-100 LPH)

008 = 3/8 inch (8mm), 4-145 GPH (15-550 LPH)

BODY MATERIAL **3**

A = Aluminum

S = 316L Stainless Steel

N = Intermediate Pressure 316L SS (1450 PSI / 100 bar)

H = High Pressure 316 SS (5580 PSI / 400 bar)

ROTOR MATERIAL **4**

0 = PPS - PTFE filled (Polyphenylene Sulfide) (Available for OM008 only)

5 = Stainless Steel (Standard on OM004 & OM006, optional for OM008)

7 = Keishi cut Stainless Steel rotors for high viscosity liquids (Available for OM008 only)

BEARING TYPE **5**

0 = No Bearing - PPS rotor option only (Available for OM008 only)

1 = Carbon Ceramic (Standard with Stainless Steel rotors)

O-RING MATERIAL **6**

1 = FKM (Viton™) (standard for Alum.) -5° F minimum (-15° C)

2 = EPR (Ethylene Propylene Rubber) - for ketones only

3 = PTFE encapsulated FKM (Viton™) - (standard for SS)

4 = Buna-N (Nitrile), -40° F minimum (-40° C)

MAXIMUM TEMPERATURE LIMIT **7**

-2 = 250° F (120° C) max. (reduced to 80° C when fitted with integral instruments)

-3 = 300° F (150° C) max. (Hall Effect output only, not available with HP meters)

-5 = 250° F (120° C) max. (includes integral cooling fin)

-8 = 176° F (80° C) max. (ONLY to OM008 with PPS rotors)

PROCESS CONNECTIONS **8**

1 = BSPP (G) female threaded

2 = NPT female threaded

CABLE ENTRIES **9**

0 = 3-6mm cable gland or no cable entry [Exclusive to B2 & B3 Electronic options]

1 = M20 x 1.5 mm

2 = 1/2" NPT

INTEGRAL OPTIONS **10**

--- = Combination Reed Switch and Hall Effect Sensor

G5 = [GG 500] Rate / Total Display with pulse out and optional Ex. Power ... [Local Display w/ Pulse (60° C)]

G6 = [GX 500] Rate / Total Display w/ 4-20mA out [Local Display w/ 4-20mA (60° C)]

G7 = [GA 500] Loop powered 4-20mA analog output [Local 4-20mA (60° C)]

RS = Reed Switch only - to suit Intrinsically safe installations

E1 = Explosion proof Exd IIB T4/T6 (aluminum & stainless meters) [IECEx & ATEX mines approved]

E2 = Explosion proof Exd I/IB T4/T6 (stainless meters only) [IECEx & ATEX mines approved]

QP = Quadrature pulse (2 NPN phased outputs) [not available with high press models]

Q1 = Explosion proof Exd (with quadrature pulse, but not available with high pressure meter) [IECEx & ATEX approved]

PF = Pulsating flow option (Hall effect output only) [for injected combustion engines]

P1 = Explosion proof - Exd with PF pulsating flow option [IECEx & ATEX approved]

B2 = BT11 totalizer with pulse output [with scalable pulse output]

B3 = Intrinsically safe BT11 with pulse output [IECEx & ATEX approved]

R0 = RT12 rate totalizer with all outputs (Alloy housing) [scaled pulse, alarms, 4-20mA]

R2 = RT12 rate totalizer with all outputs (GRN housing) [scaled pulse, alarms, 4-20mA]

R3 = Intrinsically safe RT12 with all outputs (GRN housing) [IECEx & ATEX . approved]

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

E0 = EB10 batch controller [2 stage DC batcher & totalizer]

1 2 3 4 5 6 7 8 9 10

---->>>> **OM + 006 + A + 5 + 1 + 2 + -5 + 2 + 1 + G5 = SAMPLE**

SPECIFICATIONS

Meter Size:	OM004 - 1/8 inch (4mm)		
	OM006 - 1/4 inch (6mm)		
	OM008 - 3/8 inch (8mm)		
*Flow Range:	OM004	0.13-9.5 GPH	0.5-36 LPH
	OM006	0.5-27 GPH	2-100 LPH
	OM008	4-145 GPH	15-550 LPH
**Accuracy @3cp:	± 1.0% of reading (accuracy is ± 2.0% of reading with optional RT12 with non-linearity correction)		
Repeatability:	Typically ± 3.0% of reading		
Temperature Range:	-4° F to +250° F (-20° C to +120° C) refer to factory for lower temperature		
Pressure Rating (Threaded Meter):			
Aluminum	150 PSI / 10.3 BAR		
316 Stainless Steel	225 PSI / 15.3 BAR		
DIN	135 PSI / 9.1 BAR		
For CE Applications	135 PSI / 9.1 BAR		
Recommended Filtration:	200 mesh (75 microns)		

*Maximum flow is to be reduced as viscosity increases, see flow de-rating guide. Max recommended pressure drop is 100Kpa (14.5 psi).

**QP and PF Options are not available with High Pressure Meters.

Electrical:			
Output Pulse Resolution:	Pulses / gallon (Pulses / litre) - Nominal		
Reed switch	10600 (2800)	3975 (1050)	1345 (355)
Hall effect	10600 (2800)	3975 (1050)	2690 (710)
QP-Quadrature Hall option	10600 (2800)	3975 (1050)	2690 (710)
PF-Pulsating Flow (Hall Effect)	10600 (2800)	3975 (1050)	675 (178)
HR-High Resolution Hall Effect	42400 (11200)	15900 (4200)	N/A
Reed switch output	30Vdc x 200mA max. [maximum thermal shock 18° F (10° C) / minute]		
Hall Effect output (NPN)	3 wire open collector, 5-24Vdc max., 20mA max.		
Optional outputs	4-20mA, scaled pulse, quadrature pulse, flow alarms or two stage batch control		

APPROVALS

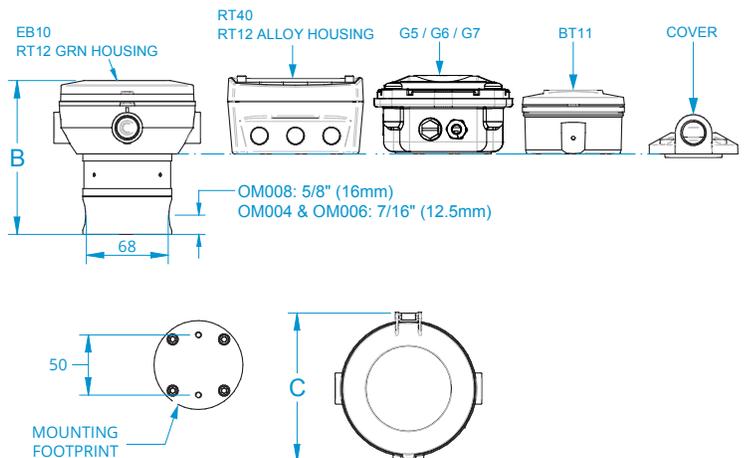


APPLICATIONS

- Oils
- Fuel
- Diesel
- Truck Metering
- Chemical Additive Injection
- Batching
- Molasses
- Clean Fluids
- Bunker C Fuel Oil
- Oil-Based Paints
- Industrial Fluids
- Chemical Feed Lines

DIMENSIONS

All dimensions are inches ± .079" (millimeters ±2mm)	B			C
OPTION	OM004	OM006	OM008	
EB10 / RT12 GRN HOUSING	4.8 inches (122 mm)	4.8 inches (122 mm)	5.0 inches (129 mm)	4.9 inches (124 mm)
RT40 / RT12 ALLOY HOUSING, G5 / G6 / G7	4.9 inches (125 mm)	4.9 inches (125 mm)	5.2 inches (132 mm)	3.8 inches (96 mm)
BT	4.4 inches (113 mm)	4.4 inches (113 mm)	4.7 inches (120 mm)	3.7 inches (94 mm)
COVER	3.6 inches (92 mm)	3.6 inches (92 mm)	3.9 inches (99 mm)	2.8 inches (72 mm)



Service & Warranty: For technical assistance, warranty replacement or repair contact your **FLOMEC®** or **GPI®** distributor: In North or South America: **888-996-3837 / GPI.net**
Outside North or South America: **+61 2 9540 4433 / flomec.com.au**

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