



OM SERIES SMALL CAPACITY (OVAL GEAR METERS)

The **FLOME[®] 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.
- No requirement for flow conditioning (straight pipe runs)
- Stainless Steel rotors (Optional PPS rotor for OM008 meter only).
- Quadrature pulse output option and bi-directional flow.
- Optional Exd I/IB approval (ATEX, IECEx).
- Only two moving parts.

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER **1**

OM = Oval Gear Meter

METER SIZE **2**

004 = 1/8 inch (4mm), 0.26-9.5 GPH (1.0-36 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)

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.

-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 in. 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]

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]

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]

R5 = RT14 option

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 in. (4mm)		
	OM006 - 1/4 in. (6mm)		
	OM008 - 3/8 in. (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 ± 0.2% of reading with optional RT14 with non-linearity correction)		
Repeatability:	Typically ± 0.03% of reading		
Temperature Range:	-40° F to +250° F (-40° C to +120° C) refer to factory for lower temperature		
Pressure Rating (Threaded Meter):			
Aluminum	220 PSI / 15 BAR		
316 Stainless Steel	495 PSI / 34 BAR		
Recommended Filtration:	200 mesh (75 microns)		

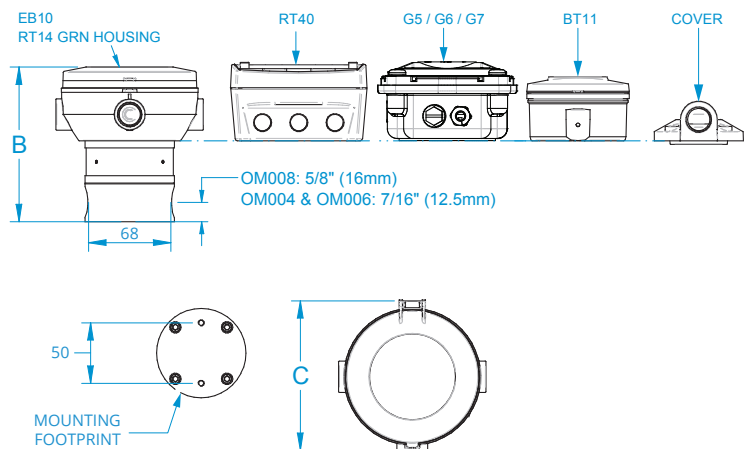
Electrical:	Pulses / gallon (Pulses / litre) - Nominal		
Output Pulse Resolution:			
Reed switch	10600 (2800)	3975 (1050)	1345 (355)
Hall effect	10600 (2800)	3975 (1050)	2690 (710)
QP-Quadrature Hall option	10600 (2800)	3975 (1050)	2690 (710)
HR-High Resolution Hall Effect	42400 (11200)	15900 (4200)	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		

*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.

DIMENSIONS

All dimensions are inches ± .079" (millimeters ±2mm)	B			C
	OPTION	OM004	OM006	OM008
EB10 / RT14 GRN HOUSING	4.8 in. (122 mm)	4.8 in. (122 mm)	5.0 in (129 mm)	4.9 in (124 mm)
RT40 / G5 / G6 / G7	4.9 in. (125 mm)	4.9 in (125 mm)	5.2 in (132 mm)	3.8 in (96 mm)
BT	4.4 in. (113 mm)	4.4 in (113 mm)	4.7 in (120 mm)	3.7 in (94 mm)
COVER	3.6 in. (92 mm)	3.6 in (92 mm)	3.9 in (99 mm)	2.8 in (72 mm)



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

APPROVALS



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