



## PRODUCT CONFIGURATION

### PRODUCT IDENTIFIER **1**

**OM** = Oval Gear Meter

### METER SIZE **2**

**004** = 1/8" (4 mm), 0.26-9.5 GPH (1-36 L/hr)

**006** = 1/4" (6 mm), 0.5-27 GPH (2-100 L/hr)

**008** = 1/4" (6 mm), 4-145 GPH (15-550 L/hr)

### BODY MATERIAL **3**

**H** = High Pressure 316L SS  
5580 psi (400 bar)

### ROTOR MATERIAL / BEARING TYPE **4**

**00** = PPS (Not available for 300° F (150° C) meters) / No bearing (Available for OM008 only)

**51** = Stainless Steel / Carbon Ceramic (Standard on OM004 & OM006, optional for OM008)

**71** = Keishi cut Stainless Steel (For high viscosity liquids) / Carbon Ceramic (Available for OM008 only)

### O-RING MATERIAL **5**

**1** = Viton™ 5° F min. (-15° C)

**3** = Teflon encapsulated Viton™ 5° F min. (-15° C)

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

### MAXIMUM TEMPERATURE LIMIT **6**

**-2** = 250° F (120° C) max.

**-3\*** = 300° F (150° C) max. (Hall Only) (includes SS terminal cover)

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

**-8** = 176° F (80° C) max. (meters with integral instruments, OM008 with PPS rotors)

### PROCESS CONNECTIONS **7**

**1** = BSPP (G) female threaded (ISO 228)

**2** = NPT female threaded

**B** = Bottom Entry Manifold (Intermediate Pressure Only)

### CABLE ENTRIES **8**

**1** = M20 x 1.5 mm (M16 x 1.5 mm for R4 options)

**6** = 3 x 16 mm drilled holes (for F instruments only)

## OM SERIES SMALL CAPACITY HIGH PRESSURE METERS

**FLOMEC® OM Series, Small Capacity, High Pressure Flow Meters** provide volumetric measurement of low flow, clean liquids up to 5800 psi (400 bar). Suitable for applications including metering lubricants, chemicals, grease, additives, and other high viscosity fluids.

## FEATURES / BENEFITS

- High accuracy and repeatability, direct volumetric reading
- No requirement for flow conditioning (straight pipe runs)
- Measures both high and low viscosity liquids
- Optional Exd I/IB approval (ATEX, IECEx)
- High pressure rated up to 5580 psi (400 bar)

### INTEGRAL OPTIONS **9**

\_\_\_ = Combination Reed Switch and Hall Effect Sensor

**SS** = Stainless steel terminal cover]

**RS** = Reed Switch only - to suit Intrinsically Safe installations

**E1** = Explosion proof Exd IIB T3...T6 [IECEx & ATEX approved]

**E2** = Explosion proof Exd I/IB T3...T6 [IECEx & ATEX mines approved]

**HR** = High resolution Hall Effect output (Hall Effect only) (not available on 008 size) [OM004:11200ppL, OM006:4200ppL]

**H1** = Explosion proof - Exd with HR Hi-Res. Hall option [IECEx & ATEX approved] (not available on 008 size)

**R3** = Intrinsically Safe RT12 with all outputs (GRN housing) [IECEx & ATEX approved]\*#

**R3G** = RT12 Intrinsically Safe rate totalizer with all outputs (GRN Housing) [IECEx & ATEX approved] (with gallons calibration)\*#

**R4** = RT40 backlit rate totalizer with all outputs (Alloy housing with facia protector) [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) [scaled pulse, alarms, 4-20mA, backlight]\*#

**R5G** = RT14 backlit rate totalizer with all outputs (GRN Housing) (with gallons calibration)\*#

**E0** = EB10 batch controller [2 stage DC batcher & totalizer] (GRN Housing)\*#

**E0G** = EB10 batch controller [2 stage DC batcher & totalizer] (with gallons calibration) (GRN Housing)\*#

**E18** = E018 backlit rate/tot, pulse, 4-20 mA, lin, HART (Al), Incl. Line Bushing [IECEx & ATEX approved]\*#

**E19** = E018 backlit rate/tot, pulse, 4-20 mA, lin, HART (SS), Incl. Line Bushing [IECEx & ATEX approved]\*#

**F18** = F018 backlit rate/tot, pulse out, 4-20mA, 10 pt lin, HART#

**F19** = F018 Intrinsically Safe backlit rate/tot, pulse out, 4-20mA, 10 pt lin, HART [IECEx & ATEX approved]\*#

**F31** = F130 Intrinsically Safe 2 stage batch controller [IECEx & ATEX approved]\*#

\*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)

\*Option will de-rate meter pressure ratings by 20%

## SPECIFICATIONS

	OM004	OM006	OM008H
Nominal Size:	1/8" (4 mm)	1/4" (6 mm)	1/4" (6 mm)
Nominal Flow* Range @ 3cP:	0.26-9.6 GPH (1 - 36 L/hr)	2.6-27 GPH (2-100 L/hr)	4-145 GPH (15-550 L/hr)
Accuracy*:	± 1% of reading (± 0.2% of reading with optional RT14)		
Repeatability:	Typically ± 0.03% of reading		
Max. Pressure - High pressure meter (threaded):	5800 psi (400 bar)		
Protection Class:	IP66/67 (NEMA 4X), optional EXd I/IB T3...T6, Integral ancillaries can be supplied with I.S. (Intrinsically Safe)		
Recommended Filtration:	200 mesh (75 µm)		
Electrical:			
Output Pulse Resolution:	Pulses / gallon (Pulses / L) - Nominal		
Reed Switch:	10,600 (2,800)	3,975 (1,050)	1,345 (355)
Hall Effect:	10,600 (2,800)	3,975 (1,050)	2,690 (710)
High Resolution Hall Effect:	42,400 (11,200)	15,900 (4,200)	n/a
Quadrature Pulse (Not available with High Pressure):	10,600 (2,800)	3,975 (1,050)	n/a
Reed Switch Output:	30V (dc) x 200mA Max (Maximum thermal shock 18°F/min [10°C/min])		
Hall Effect Output:	3 wire open collector, 5 - 24V (dc) max, 20mA max.		

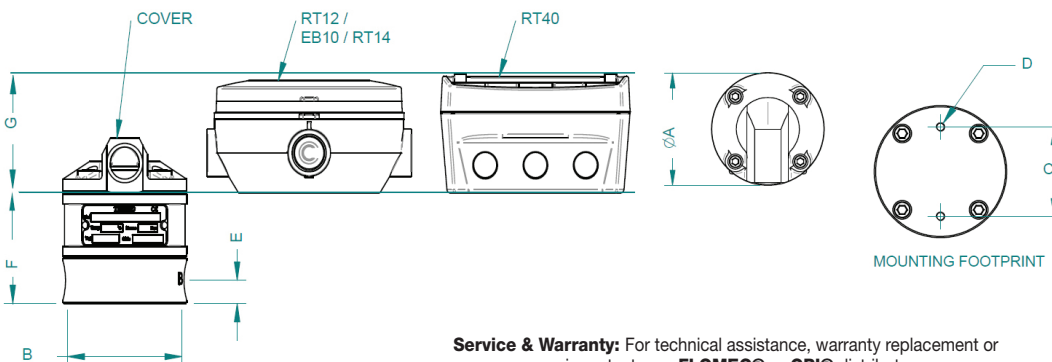
\*Maximum flow reduces as viscosity increases, see flow de-rating guide.  
Max recommended pressure drop is 14.5 psi (1 bar).  
\*When used to meter rate, at very low flow rates, the rate can jump, due to resolution (not accuracy).

## DIMENSIONS

All dimensions are ± .079" (±2 mm)

	OM004H	OM006H	OM008H
A	2.91" (74 mm)	2.91" (74 mm)	3.93" (100 mm)
B	2.67" (68 mm)	2.67" (68 mm)	3.74" (95 mm)
C	1.97" (50 mm)	1.97" (50 mm)	2.36" (60 mm)
D	M5 x 12	M5 x 12	M5 x 12
E	0.49" (12.5 mm)	0.49" (12.5 mm)	3/8" (8 mm)
F	2.36" (60 mm)	2.36" (60 mm)	3.38" (86 mm)

	EB10 / RT12 / RT14	RT40	COVER
G	2.44" (62 mm)	2.56" (65 mm)	1.26" (32 mm)



**Service & Warranty:** For technical assistance, warranty replacement or repair contact your **FLOMEC®** or **GPI®** distributor:

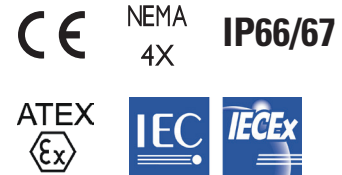
In North or South America: **888-996-3837 / FLOMEC.net**

Outside North or South America: **+61 2 9540 4433 / FLOMEC.net**

## APPLICATIONS

- Automotive
- Aviation
- Mining
- Power
- Chemical
- Pharmaceutical
- Food
- Paint
- Petroleum Industries
- Environmental

## APPROVALS



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GREAT PLAINS INDUSTRIES **GPI**