OM SERIES SMALL CAPACITY (OVAL GEAR METERS)

The FLOMEC® OM Small Capacity Oval Gear Meters have a large 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 IIB approval (ATEX, IECEx)
- Only two moving parts

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER 1
OM = Oval Gear Meter

METER SIZE 2
004 = 1/8" (4 mm), 0.26-9.5 GPH (1.0-36 L/hr)
006 = 1/4" (6 mm), 0.5-27 GPH (2-100 L/hr)
008 = 3/8" (8 mm), 4-145 GPH (15-550 L/hr)

BODY MATERIAL 3
A = Aluminum
S = 316 Stainless Steel
N = Intermediate Pressure 316L SS (1450 PSI / 100 bar)

ROTOR MATERIAL / BEARING TYPE 4
00 = PPS (Not available for 300º F (150º 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 = 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
-2 = 250º F (120º C) max.
-3 = 300º F (150º C) max. (Hall Effect)(Includes Stainless Steel terminal cover)
-5 = 250º F (120º C) max. (includes integral cooling fin)
-8 = 176º F (80º 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 (SS body only)

CABLE ENTRIES 8
1 = M20 x 1.5 mm (M16 x 1.5 mm for R4 options)
2 = 1/2" NPT
6 = 3 x 16mm drilled holes (for F instruments only)

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 (Aluminum & Stainless Steel meters) [IECEx & ATEX approved]
E2 = Explosion proof Exd IIB T3...T6 (Stainless Steel meters only) [IECEx & ATEX mines approved]
QP = Quadrature pulse (2 NPN phased outputs)
Q1 = Explosion proof ~ Exd (with quadrature pulse) [IECEx & ATEX approved]
HR = High Resolution Hall Effect output (004 – 006 only)
H1 = Explosion proof ~ Exd with HR Hi-Res. Hall option (004-006 only)
R3 = RT12 Intrinsically Safe rate totalizer with all outputs (GRN Housing) [IECEx & ATEX approved]*#
R3G = RT12 Intrinsically Safe rate totalizer with all outputs (GRN Housing) (with gallons calibration)*#
R4 = RT40 rate totalizer with backlit large digit LCD (Alloy housings with facia)*#?
R4G = RT40 rate totalizer with backlit large digit LCD (Alloy housings with facia) (with gallons calibration)*#?
R46 = 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)*#?
E18 = E018 backlit rate/tot, pulse, 4-20mA, 10 point linearization, HART, aluminium body [IECEx & ATEX approved]*#?
E19 = E018 backlit rate/tot, pulse, 4-20mA, 10 point linearization, HART, Intrinsically safe* [IECEx & ATEX approved]
F31 = Intrinsically safe F130 2 stage batch controller* [IECEx & ATEX approved]

*Temp code 5 required for integral instruments between 176ºF (80ºC) & 250ºF (120ºC)
#Temp code 8 required for integral instruments below 176ºF (80ºC)
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>NOMINAL SIZE</th>
<th>OM004</th>
<th>OM006</th>
<th>OM008</th>
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<tbody>
<tr>
<td>1/8&quot; (4 mm)</td>
<td>0.26-9.5 GPH (1.0-36 L/hr)</td>
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**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 +300° F (-40° C to +150° C)

**PRESSURE RATING (THREADED METER):**
- Aluminum: 220 psi (15 bar)
- 316 Stainless Steel: 495 psi (34 bar)
- Intermediate Pressure Stainless Steel: 1450 psi (100 bar)
- Recommended Filtration: 200 mesh (75 µm)

**DIMENSIONS**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>OM006 1/8&quot; (OM004)</td>
<td>4.8&quot; (122 mm)</td>
<td>3.6&quot; (92 mm)</td>
</tr>
<tr>
<td>OM006 1/4&quot; (OM008)</td>
<td>4.8&quot; (122 mm)</td>
<td>3.6&quot; (92 mm)</td>
</tr>
<tr>
<td>OM008 3/8&quot;</td>
<td>5.0&quot; (129 mm)</td>
<td>3.9&quot; (99 mm)</td>
</tr>
<tr>
<td>OM008 1/4&quot; (OM008)</td>
<td>4.9&quot; (124 mm)</td>
<td>2.8&quot; (72 mm)</td>
</tr>
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*All dimensions are ± .079" (±2mm)*

**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**

- ATEX
- IEC
- IECEx
- CE
- NEMA
- IP66/67

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

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