OM SERIES MEDIUM CAPACITY HIGH PRESSURE

FLOMEC® OM Medium Capacity High Pressure Flow Meters provide volumetric measurement of clean liquids for high pressure. 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/II/IIIB approval (ATEX, IECEx)
- High Pressure rated up to 5580 psi (400 bar) (4350 psi [300 bar] on 2” meter)

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER  1
OM = Oval Gear Meter

METER SIZE  2
015 = 1/2” (15 mm), 0.26-10.6 GPM (1-40 L/min)
025 = 1” (25 mm), 2.6-40 GPM (10-150 L/min)
040 = 1.5” (40 mm), 4-66 GPM (15-250 L/min)
050 = 2” (50 mm), 8-130 GPM (30-500 L/min) (PPS rotors)

BODY MATERIAL  3
H = High Pressure 316L SS
(5800 PSI / 400 bar)
(4350 PSI / 300 bar, 050 size)

ROTOR MATERIAL / BEARING TYPE  4
00 = PPS (Not available for 300ºF (150ºC) meters) / No bearing
10 = Keishi Cut PPS (for high viscosity liquids) (Not available for 300ºF (150ºC) meters) / No bearing
51 = Stainless Steel / Carbon Ceramic
71 = Keishi cut Stainless Steel (for high viscosity liquids) / Carbon Ceramic

O-RING MATERIAL  5
1 = Viton™ 5° F minimum (-15° C)
3 = Teflon encapsulated Viton™ 5° F minimum (-15° C)
4 = Buna-N (Nitrile), -40° F minimum (-40° C)

MAXIMUM TEMPERATURE LIMIT  6
-2 = 250º F (120° C) max.
-3º = 300º F (150° C) max. (Hall Only) (includes SS terminal cover)
-5º = 250º F (120° C) max. (includes integral cooling fin)
-8º = 176º 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

CABLE ENTRIES  8
1 = M20 x 1.5 mm (M16 x 1.5mm for R4 options)
2 = 1/2” NPT
6 = 3 x 16 mm 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 [IECEx & ATEX approved]
E2 = Explosion proof Exd I/II/IIIB T3...T6 [IECEx & ATEX mines approved]
R3 = Intrinsically Safe rate totalizer 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)*#
E18 = ATEX/IECEx Exd E018 backlit rate/tot, pulse, 4-20mA, lin, HART (AI), Incl. Line Bushing [IECEx & ATEX approved]#
E19 = ATEX/IECEx Exd E018 backlit rate/tot, pulse, 4-20mA, 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#
F31 = F130 Intrinsically Safe 2 stage batch controller#
SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>OM015</th>
<th>OM025</th>
<th>OM040</th>
<th>OM050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Size:</td>
<td>1/2&quot; (15 mm)</td>
<td>1&quot; (25 mm)</td>
<td>1.5&quot; (40 mm)</td>
<td>2&quot; (50 mm)</td>
</tr>
<tr>
<td>Nominal Flow Range @ 3cP:</td>
<td>0.26-10.6 GPM (1 - 40 L/min)</td>
<td>2.6-40 GPM (10-150 L/min)</td>
<td>4-66 GPM (15-250 L/min)</td>
<td>8-118 GPM (30-450 L/min)</td>
</tr>
<tr>
<td>Max. Pressure - High Pressure meter Bar [psi] (threaded)</td>
<td>5800 psi (400 bar)</td>
<td></td>
<td>4350 psi (300 bar)</td>
<td></td>
</tr>
<tr>
<td>Protection Class:</td>
<td>IP66/67 (NEMA 4X) optional EX-d I/IIB T4/T6, Integral ancillaries can be supplied with I.S. (Intrinsically Safe)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended Filtration:</td>
<td>100 mesh (150 μm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reed Switch:</td>
<td>318 (84)</td>
<td>102 (27)</td>
<td>53 (14)</td>
<td>25 (6.5)</td>
</tr>
<tr>
<td>Hall Effect:</td>
<td>636 (168)</td>
<td>405 (107)</td>
<td>212 (56)</td>
<td>99 (26)</td>
</tr>
<tr>
<td>High Resolution Hall Effect:</td>
<td>636 (168)</td>
<td>204 (54)</td>
<td>106 (28)</td>
<td>49 (13)</td>
</tr>
<tr>
<td>Reed Switch Output:</td>
<td>30V (dc) x 200mA Max (Maximum thermal shock 18°F [10°C] /min)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hall Effect Output:</td>
<td>3 wire open collector, 5 - 24V (dc) max, 20mA max.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DIMENSIONS

All dimensions are ± .079" (±2 mm)

APPLICATIONS

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

APPROVALS

- ATEX
- IEC
- IECEx

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

© 2019 Great Plains Industries, Inc. All Rights Reserved.