FL MIEC®



PRODUCT CONFIGURATION

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

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

51 = Stainless Steel / Carbon Ceramic (Standard on OM004 &

3 = PTFE encapsulated FKM (VitonTM) -5° F minimum (-15° C)

-3 = 300° F (150° C) max. (Hall Effect)(Includes Stainless Steel

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

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

71 = Keishi cut Stainless Steel (For high viscosity liquids) / Carbon

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)

ROTOR MATERIAL / BEARING TYPE 4

(Available for OM008 only)

OM006, optional for OM008)

Ceramic (Available for OM008 only)

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

 $\mathbf{1} = FKM \text{ (Viton}^{TM)} -5^{\circ} F \text{ minimum (-15}^{\circ} C)$

MAXIMUM TEMPERATURE LIMIT 6

 $-2 = 250^{\circ} \text{ F } (120^{\circ} \text{ C}) \text{ max.}$

terminal cover)

with PPS rotors)

2 = NPT female threaded

CABLE ENTRIES 8

2 = 1/2" NPT

PROCESS CONNECTIONS 7

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

B = Bottom entry manifold (SS body only)

 $1 = M20 \times 1.5 \text{ mm} \text{ (M16 x 1.5 mm for R4 options)}$

 $\mathbf{6} = 3 \times 16 \text{mm}$ drilled holes (for F instruments only)

PRODUCT IDENTIFIER 1

OM = Oval Gear Meter

METER SIZE 2

BODY MATERIAL 3

O-RING MATERIAL 5

S = 316 Stainless Steel

 $\mathbf{A} = Aluminum$

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 I/IIB approval (ATEX, IECEx)
- Only two moving parts

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 I/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]
- $\mathbf{HR} = \text{High Resolution Hall Effect output } (004 006 \text{ only})$
- **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) [IECEx & ATEX approved] (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)*#
- **R5** = RT14 backlit rate totalizer with all outputs (GRN Housing)*#
- R5G = RT14 backlit rate totalizer with all outputs (GRN Housing) (with gallons calibration)*#
- E0 = EB10 batch controller [2 stage DC batcher & totalizer] (GRN Housing)*#
- **EOG** = EB10 batch controller [2 stage DC batcher & totalizer] (with gallons calibration) (GRN Housing)*#
- 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, stainless steel body [IECEx & ATEX approved]#
- F18 = F018 backlit rate/tot, pulse, 4-20mA, 10 point linearization, HART#
- F19 = F018 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 176°F (80°C) & 250°F (120°C) #Temp code 8 required for integral instruments below 176°F (80°C)

1 2 3 4 5 6 7 8 9 --->>> OM 006 A 51 2 -8 2 1 R

SPECIFICATIONS

	OM004	ОМ006	ОМ008		
Nominal Size:	1/8" (4 mm)	1/4" (6 mm)	3/8" (8 mm)		
Flow* Range:	0.26-9.5 GPH (1.0-36 L/hr)	0.5-27 GPH (2-100 L/hr)	4-145 GPH (15-550 L/hr)		
Accuracy⁺ @ 3cp:	\pm 1.0% of reading (accuracy is \pm 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)				
Recom- mended Filtration:	200 mesh (75 μm)				

DIMENSIONS

	В			С
OPTION	OM004	OM006	800MO	_
EB10 / RT12 / RT14	4.8"	4.8"	5.0"	4.9"
GRN HOUSING	(122 mm)	(122 mm)	(129 mm)	(124 mm)
RT40	4.9"	4.9"	5.2"	3.8"
	(125 mm)	(125 mm)	(132 mm)	(96 mm)
COVER	3.6"	3.6"	3.9"	2.8"
	(92 mm)	(92 mm)	(99 mm)	(72 mm)

*All dimensions are ± .079" (±2mm)

APPLICATIONS

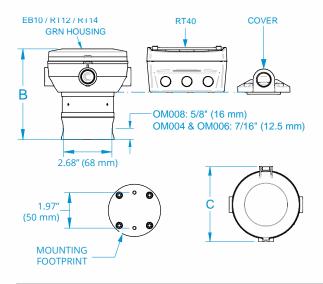
- Oils
- Fuel
- Diesel
- Truck Metering
- Chemical Additive Injection
- Batching

- Molasses
- Clean Fluids
- Bunker C Fuel Oil
- Oil-Based Paints
- Industrial Fluids
- Chemical Feed Lines

	OM004	ОМ006	OM008		
Electrical:					
Output Pulse Resolution:	Pulses / gallon (Pulses / L) - 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)		
HR - High Resolution Hall Effect	42400 (11200)	15900 (4200)	n/a		
Reed Switch Output	30V (dc) x 200mA max. [maximum thermal shock 18° F (10° C) / minute]				
Hall Effect Output (NPN)	3 wire open collector, 5-24V (dc) 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 14.5 psi (1 bar).

^{*}When used to meter rate, at very low flow rates, the rate can jump, due to resolution (not accuracy).



APPROVALS















available at