FL MEC®



PRODUCT CONFIGURATION

bar] on 2 " meter)

INTEGRAL OPTIONS 9

FEATURES / BENEFITS

- = 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/IIB T3...T6 [IECEx & ATEX mines approved]

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,

High accuracy and repeatability, direct volumetric reading
No requirement for flow conditioning (straight pipe runs)

• High Pressure rated up to 5580 psi (400 bar) (4350 psi [300

grease, additives, and other high viscosity fluids.

Measures both high and low viscosity liquids
 Optional Exd I/IIB approval (ATEX, IECEx)

- 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)*#
- $\label{eq:R4} \textbf{R4} = \text{RT40 backlit rate totalizer with all outputs (Alloy housing with facia protector) [scalable pulse output, backlight]*#$
- 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 & totaliser] (GRN Housing)*#
- **E0G** = EB10 batch controller [2 stage DC batcher & totalizer] (with gallons calibration) (GRN Housing)*#
- 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#

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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 300°F (150°C) meters) / No bearing
- 10 = Keishi Cut PPS (for high viscosity liquids) (Not available for 300°F (150°C) meters) / No bearing
- **51** = Stainless Steel / Carbon Ceramic
- 71 = Keishi cut Stainless Steel (for high viscosity liquids) / Carbon Ceramic

O-RING MATERIAL 5

- $1 = Viton^{TM} 5^{\circ}F m" (-15^{\circ}C)$
- **3** = Teflon encapsulated Viton[™] 5°F m" (-15°C)
- 4 = Buna-N (Nitrile), -40° F minimum (-40° C)

MAXIMUM TEMPERATURE LIMIT 6

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

CABLE ENTRIES 8

- $1 = M20 \times 1.5 \text{ mm} (M16 \times 1.5 \text{mm for R4 options})$
- 2 = 1/2 " NPT
- **6** = 3 x 16 mm drilled holes (for F instruments only)



*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) †Ontion will de-rate meter pressure ratings by 20%

SPECIFICATIONS	OM015	OM025	OM040	OM050
Nominal Size:	1/2" (15 mm)	1" (25 mm)	1.5" (40 mm)	2" (50 mm)
Nominal Flow* Range @ 3cP:	0.26-10.6 GPM (1 - 40 L/min)	2.6-40 GPM (10-150 L/min)	4-66 GPM (15-250 L/min)	8-118 GPM (30-450 L/min) (SS Rotors)
				8-130 GPM (30-500 L/min) (PPS Rotors)
Accuracy:	$\pm0.5\%$ of reading ($\pm0.2\%$ of reading with optional RT14)			
Repeatability:	Typically \pm 0.03% of reading			
Max. Pressure - High Pressure meter Bar [psi] (threaded)	5800 psi (400 bar)			4350 psi (300 bar)
Protection Class:	IP66/67 (NEMA 4X) optional EX-d I/IIB T4/T6, Integral ancillaries can be supplied with I.S. (Intrinsically Safe)			
Recommended Filtration:	100 mesh (150 μm)			
Electrical:				
Output Pulse Resolution:	Pulses / gallon (Pulses / L) - Nominal			
Reed Switch:	318 (84)	102 (27)	53 (14)	25 (6.2)
Hall Effect:	636 (168)	405 (107)	212 (56)	99 (26)
High Resolution Hall Effect:	636 (168)	204 (54)	106 (28)	49 (13)
Reed Switch Output:	30V (dc) x 200mA Max (Maximum thermal shock 18°F [10°C] /min)			
Hall Effect Output:	3 wire open collector, 5 - 24V (dc) max, 20mA max.			

APPLICATIONS

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

APPROVALS









*Maximum flow reduces as viscosity increases, see flow de-rating guide. Max recommended Pressure drop is 14.5 psi (1 bar).



