

OM HIGH PRESSURE (MEDIUM)



FLOMEC® OM Medium 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/IIB approval (ATEX, IECEx)
- High Pressure rated up to 400 bar, 300 bar on 2" meter

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER **1**

OM = Oval Gear Meter

METER SIZE **2**

- 015 = 1/2" (15 mm), 1-40 L/min
- 025 = 1" (25 mm), 10-150 L/min
- 040 = 1.5" (40 mm), 15-250 L/min
- 050 = 2" (50 mm), 30-500 L/min (PPS rotors)

BODY MATERIAL **3**

H = High Pressure 316L SS
400 bar, 300 bar 050 size

ROTOR MATERIAL/BEARING TYPE **4**

- 00 = PPS (Not available 150°C meters)
- 10 = Keishi Cut PPS (for high viscosity liquids) (Not available for 150°C meters)
- 51 = Stainless Steel / Carbon Ceramic
- 71 = Keishi cut Stainless Steel (for high viscosity liquids) / Carbon Ceramic

O-RING MATERIAL **5**

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

MAXIMUM TEMPERATURE LIMIT **6**

- 2 = 120° C max.
- 3* = 150° C max. (Hall Only) (includes SS terminal cover)
- 5 = 120° C max. (includes integral cooling fin)
- 8 = 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/IIB T3...T6 [IECEx & ATEX mines approved]

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

R4 = RT40 backlit rate totaliser with all outputs (Alloy housing with fascia protector) [scalable pulse output, backlight]*#

R5 = RT14 backlit rate totaliser with all outputs (GRN housing) [scaled pulse, alarms, 4-20mA, backlight]*#

R6 = Intrinsically safe RT14 backlit rate totaliser with all outputs (GRN housing) [scaled pulse, alarms, 4-20mA, backlight][IECEx & ATEX approved]*#

R7 = RT40 backlit rate totaliser with all outputs (GRN housing) [scalable pulse output, backlight]*#

E18 = E018 backlit rate/tot, pulse, 4-20 mA, lin, HART (AI), 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]#

1 2 3 4 5 6 7 8 9
---->>>> OM 025 H 00 1 -5 1 1 R5

*Temp code 5 required for integral instruments between 176oF(80oC)&250oF(120oC)
#Tempcode 8 required for integral instruments below 176oF(80oC)
*Option 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:	± 0.5% of reading (± 0.2% of reading with optional RT14)			
Repeatability:	Typically ± 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/IB 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 (6.5)
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

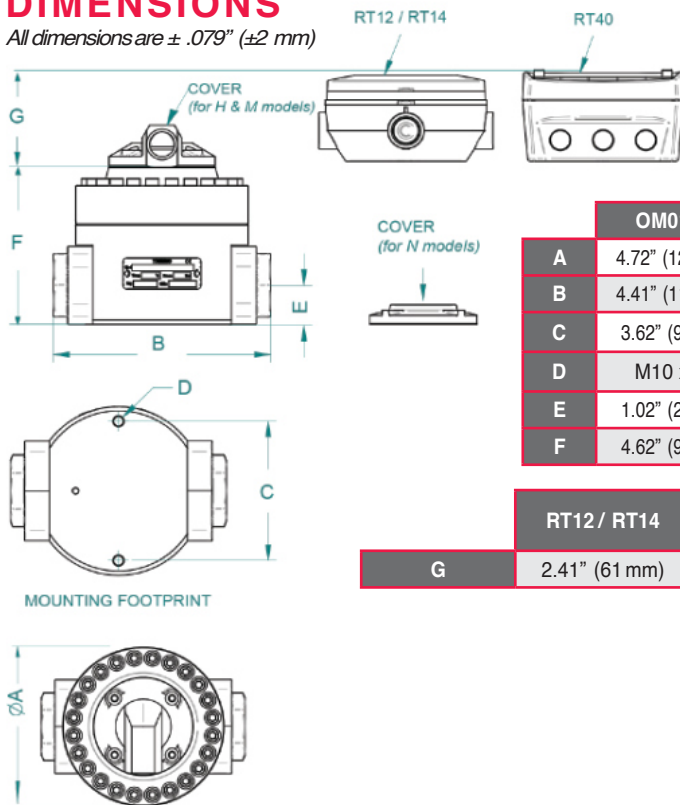
APPROVALS



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

DIMENSIONS

All dimensions are ± .079" (±2 mm)



	OM015H	OM025H	OM040H	OM050H
A	4.72" (120 mm)	4.72" (120 mm)	6.30" (160 mm)	7.09" (180 mm)
B	4.41" (112 mm)	6.03" (152 mm)	8.54" (217 mm)	9.29" (236 mm)
C	3.62" (92 mm)	3.90" (99 mm)	5.28" (134 mm)	consult distributor for mounting footprint
D	M10 x 13	M8 x 16	M10 x 16	
E	1.02" (26 mm)	1.08" (27.5 mm)	1.54" (39 mm)	2.01" (51 mm)
F	4.62" (92 mm)	4.41" (112 mm)	6.18" (157 mm)	6.77" (172 mm)

	RT12/ RT14	RT40	COVER (N Meters)	COVER (H & M Meters)
G	2.41" (61 mm)	2.48" (63 mm)	0.51" (13 mm)	1.26" (32 mm)