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/IIB 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™ 5º F minimum (-15º C)
3 = Teflon encapsulated 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 Only) (includes SS 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

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 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#

	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)*
#Temp code 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/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 (6.5)
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

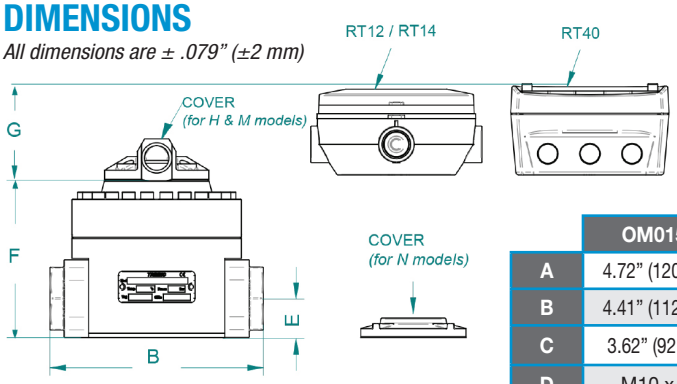
APPROVALS

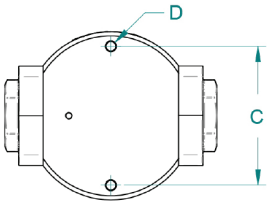
ATEX IEC IECEx CE

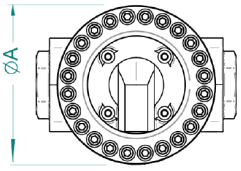
**Maximum flow reduces as viscosity increases, see flow de-rating guide. Max recommended Pressure drop is 14.5 psi (1 bar).*

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)

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**