



## OM SERIES MECHANICAL FLOWMETER

Volumetric flow measurement of clean liquids. Suitable for applications for safe area metering of fuel oils, lubricants, and other non-flammable viscous chemicals.

### FEATURES / BENEFITS

- High accuracy oval gear technology with low pressure drop can be used in gravity-fed applications
- No requirement for flow conditioning or straight pipe runs makes them ideal for compact installations with limited space
- Robust aluminum mechanical registers
- Optional air eliminator/strainers

## 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 1/2" (40 mm), 4-66 GPM (15-250 L/min)  
**050** = 2" (50 mm), 8-130 GPM (30-500 L/min) (PPS rotors)  
**080** = 3" (80 mm), 10-200 GPM (35-750 L/min)  
**080E** = 3" Extended flow (80 mm), 13-260 GPM (50-1000 L/min)  
**100** = 4" (100 mm), 20-400 GPM (75-1550 L/min)  
**100E** = 4" Extended Flow (100 mm), 40-660 GPM (150-2500 L/min) (only available with Aluminum Rotors)

### BODY MATERIAL 3

**A** = Aluminum  
**E** = Extended flow Aluminum (OM080E & OM100E)  
**S** = 316L Stainless Steel (OM015 - OM080)

### ROTOR MATERIAL / BEARING TYPE 4

**00** = PPS / No Bearing  
**10** = Keishi cut PPS / No Bearing  
**44** = Aluminum / hardened steel roller bearing (OM100E only)  
**51** = Stainless Steel / Carbon Ceramic (OM015-OM080)  
**71** = Keishi cut, Stainless Steel / Carbon Ceramic (OM015-OM080) (for high viscosity liquids)

### O-RING MATERIAL 5

**1** = Viton™ 5° F minimum (-15° C)  
**3** = Teflon encapsulated Viton™ (includes KALREZ shaft seals on 080 - 100E sizes) 5° F minimum (-15° C)  
**4** = Buna-N (Nitrile), -40° F minimum (-40° C)

### MAXIMUM TEMPERATURE LIMIT 6

**-8** = 176° F (80° C) maximum

### PROCESS CONNECTIONS 7

**00** = No fittings (025-100E)  
**10** = BSPP (G) female threaded (ISO 228)  
**20** = NPT female threaded  
**40** = ANSI-150 RF Flanged  
**50** = ANSI-300 RF Flanged (015-050)  
**60** = PN16 DIN Flanged

### MECHANICAL REGISTERS 8

**M3** = 4 digit mechanical totalizer - litre  
 Totalizer capacity  
 (OM015-OM040) 9999.9 litre  
 (OM050-OM100E) 99999 litre  
**M4** = 4 digit mechanical totalizer - US gallons  
 Totalizer capacity  
 (OM015-OM040) 9999.9 gallon  
 (OM050-OM100E) 99999 gallon  
**V1** = 5 digit mechanical reset register - litre  
 Total capacity  
 (OM50-OM100E) 999999 litre

1 2 3 4 5 6 7 8  
 --->>>> OM 100 A 51 1 -8 10 M3

## APPLICATIONS

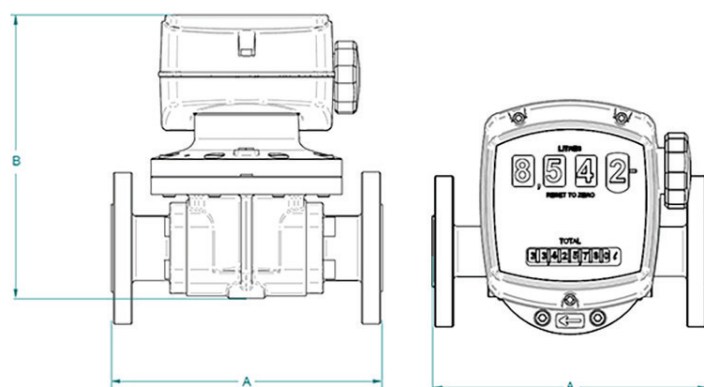
- Automotive
- Aviation
- Mining
- Power
- Chemical
- Pharmaceutical
- Food
- Paint
- Petroleum Industries
- Environmental Applications

## SPECIFICATIONS

|                                          | OM015                              | OM025                        | OM040                      | OM050                                                  | OM080                               | OM80E                         | OM100                         | OM100E                         |
|------------------------------------------|------------------------------------|------------------------------|----------------------------|--------------------------------------------------------|-------------------------------------|-------------------------------|-------------------------------|--------------------------------|
| Nominal Size:                            | 1/2" (15 mm)                       | 1" (25 mm)                   | 1-1/2" (40 mm)             | 2" (50 mm)                                             | 3" (80 mm)                          | 3" (80 mm)                    | 4" (100 mm)                   | 4" (100 mm)                    |
| Nominal Flow Range* @ 3cP:               | 0.26-10.6 GPM<br>(1 - 40 L/min)    | 2.6-40 GPM<br>(10-150 L/min) | 4-66 GPM<br>(15-250 L/min) | 8-118 GPM<br>(30-450 L/min)<br>(SS rotors)             | 10-200 GPM<br>(35-750 L/min)        | 13-260 GPM<br>(50-1000 L/min) | 20-400 GPM<br>(75-1500 L/min) | 40-660 GPM<br>(150-2500 L/min) |
|                                          |                                    |                              |                            | 8-130 GPM<br>(30-500 L/min)<br>(PPS rotors)            |                                     |                               |                               |                                |
| Accuracy:                                | ±1% of reading for M registers     |                              |                            | ±1% of reading for M registers (±0.5% for V registers) |                                     |                               |                               |                                |
| Repeatability:                           | Typically ± 0.03% of reading       |                              |                            |                                                        |                                     |                               |                               |                                |
| Ambient Temp. Range                      | 5° F - 176° F (-15° C - 80° C)     |                              |                            |                                                        |                                     |                               |                               |                                |
| Max. Pressure (threaded)                 | 580 psi (40 bar)                   | 580 psi (40 bar)             | 435 psi (30 bar)           | 285 psi (20 bar)                                       | 175 psi (12 bar)                    | 175 psi (12 bar)              | 145 psi (10 bar)              | 145 psi (10 bar)               |
| M Register                               | 4 digit resettable & NEMA 4 (IP65) |                              |                            |                                                        |                                     |                               |                               |                                |
| V Register                               | n/a                                |                              |                            |                                                        | 5 digit resettable & NEMA 3S (IP54) |                               |                               |                                |
| Recommended Filtration:                  | 100 mesh (150 µm)                  |                              |                            |                                                        | 40 mesh (400 µm)                    |                               |                               |                                |
| Face-to-Face Dimension A - Threaded      | 4.33" (110 mm)                     | 5.39" (137 mm) AL            | 7.4" (188 mm)              | 8.35" (212 mm)                                         | 10.5" (266 mm)                      | 11.6" (294 mm)                | 11.6" (294 mm)                | 12.6" (320 mm)                 |
|                                          |                                    | 6.93" (176 mm) SS            |                            |                                                        |                                     |                               |                               |                                |
| Face-to-Face Dimension A - Flanged       | 7.44" (189 mm)                     | 7.8" (198 mm) AL             | 9.92" (252 mm)             | 10.91" (277 mm)                                        | 13.93" (354 mm)                     | 15.04" (382 mm)               | 15.28" (388 mm)               | 16.3" (414 mm)                 |
|                                          |                                    | 9.33" (237 mm) SS            |                            |                                                        |                                     |                               |                               |                                |
| Meter Base-to-Register Top - Dimension B | 7.01" (178 mm)                     | 7.4" (188 mm) AL             | 8.94" (227 mm)             | 9.33" (237 mm)                                         | 10.63" (270 mm)                     | 11.34" (288 mm)               | 13.11" (333 mm)               | 16.4" (416 mm)                 |
|                                          |                                    | 8.43" (214 mm) SS            |                            |                                                        |                                     |                               |                               |                                |
| Meter Cap Width                          | 4.33" (110 mm)                     | 4.72" (120 mm)               | 6.23" (160 mm)             | 7.09" (180 mm)                                         | 9.53" (242 mm)                      | 11.5" (292 mm)                | 11.5" (292 mm)                | 13.1" (332 mm)                 |

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

## DIMENSIONS



## APPROVALS



NEMA  
3S / 4

IP54/65

**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**  
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