

OM080 (3"), OM080E (3") and OM100 (4") Oval Gear Meters



The OM Large Capacity Oval Gear Meters have fitting sizes of 3 inches and 4 inches and handle volumetric flow measurement of clean liquids used in a wide range of applications.

OM Electronic Choices:

Options include electronic LCD totalisers, flowrate totalisers and batch controllers (4-20mA, scaled pulse, alarms and batch control)

- G5 LCD 6-digit reset, cumulative totalizer and flow rate, pulse output
- G6 LCD 6-digit reset, cumulative totalizer and flow rate analog (4-20mA) and pulse outputs
- G7 Blind analog (4-20mA) output
- BT11 LCD 5-digit reset, 8-digit cumulative totalizer, pulse outputs
- RT12 LCD 6-digit reset, cumulative totalizer and flow rate, analog and pulse outputs
- RT40 LCD 6-digit reset, cumulative totalizer and flow rate. Backlit Display, pulse outputs
- EB LCD 6-digit 2 stage batcher and cumulative totaliser (Available for remote mounting and with I.S. approvals - RT12 and BT11 only)

ACCURACY: $\pm 0.5\%$ OF READING

Select Your Body Material:

Aluminum or Stainless Steel

Features and Benefits:

- ✓ High accuracy and repeatability, direct volumetric reading
- ✓ No requirement for flow conditioning (straight pipe runs)
- ✓ Various rotor material options
- ✓ Measures high and low viscosity liquids
- ✓ Quadrature pulse output option and bi-directional flow
- ✓ Blind 4-20mA output option
- ✓ Optional Exd I/IIB approval (ATEX, IECEx)
- ✓ Only two moving parts

SPECIFICATIONS

Model Prefix:	OM080	OM080E	OM100
Nominal size (inches):	3" (80mm)	3" (80mm) E	4" (100mm)
*Flow range - (GPM):	10 - 200	13 - 260	20 - 400
- (LPM):	35 - 750	50 - 1000	75 - 1500
**Accuracy @ 3cp:	$\pm 0.5\%$ of reading (accuracy is $\pm 0.2\%$ of reading with optional RT12 with non-linearity correction)		
Repeatability:	Typically $\pm 0.03\%$ of reading		
Temperature range:	-4° F - +250° F (-20° C - +120° C), refer factory for lower temperature		
Maximum pressure:	PSI (bar) Threaded Meters		
Aluminium meters	175 (12)	175 (12)	145 (10)
316 stainless steel	175 (12)	-	-

Electrical - for pulse meters (see below for optional outputs)

Output pulse resolution:	Pulses / gallon (Pulses / litre) - nominal		
Reed switch:	10.0 (2.65)	5.68 (1.55)	4.15 (1.10)
Hall effect:	40.5 (10.70)	22.7 (6.00)	8.30 (4.40)
Quadrature Hall option:	20.0 (5.33)	11.4 (3.00)	8.30 (2.20)
Reed switch output:	30Vdc x 200mA max. [maximum thermal shock 18° F (10° C) / minute]		
Hall effect output (NPN):	3 wire open collector, 5-24Vdc max., 20mA max.		
Optional outputs:	4-20mA, scaled pulse, quadrature pulse, flow alarms or two stage batch control		

Physical

Protection class:	IP66/67 (NEMA4X), optional Exd I / IIB T4/T6, integral ancillaries can be supplied I.S. (intrinsically safe)
Overall dimensions:	Refer Below
Recommended filtration:	40 mesh (350 microns)

* Maximum flow is to be reduced as viscosity increases, see flow de-rating guide. Max. recommended pressure drop is 100Kpa. (15 psi)

** Accuracy $\pm 1\%$ of reading with M - Series mechanical registers and accuracy $\pm 0.5\%$ of reading with V-series mechanical register.