

OM Positive Displacement Flowmeter

This range of positive displacement flowmeters offers an economical means of measuring high or varying viscosity liquids

- High accuracy & repeatability ✓
- Cost effective ✓
- Various rotor material options ✓
- Independent of viscosity ✓
- Quadrature pulse output option ✓
- Bi-directional flow ✓
- Optional Exd I/IB approval (ATEX, IECEx) ✓



Application

OM series positive displacement flowmeters can be used to provide precise volumetric flow measurement in a broad range of industries including automotive, aviation, mining, power, chemical, pharmaceutical, food, paint and petroleum.

Principle of Operation

The positive displacement meter operates on the oval rotor principle. Two oval rotors rotate on stainless steel shafts and sweep the measuring chamber. Each revolution of the rotors measures a precise volume of liquid through the meter. This volume is independent of the viscosity and density.

Construction

The body is available in either aluminium or stainless steel. Rotor options include stainless steel, PPS, and aluminium. Stainless steel rotors have a carbon ceramic bearing, aluminium have hardened steel roller bearings to suit more lubricous fluids. The meters come with a variety of end connections which include; BSP, NPT, Tri clamp (hygienic), ASA 150, ASA 300, PN16, JIS.

Integral Instruments

Meter options include integral LCD totalisers, flow rate totalisers & batch controllers. These instruments provide monitoring & control outputs including 4~20mA, scaled pulse, alarms & batch control and are also available with robust mechanical registers:

BT LCD 5 digit reset, 8 digit cumulative totaliser.

RT12 LCD 6 digit reset, cumulative totaliser & flow rate. Analogue and Pulse Outputs

RT40 LCD 6 digit reset, cumulative totaliser & flow rate. Backlit Display

EB LCD 6 digit 2 stage batcher & cumulative totaliser.

M / V* = Mechanical registers (see model numbering)

(Instruments also available for remote mounting and with I.S approvals)

Blind Pulse: OM P.D meters are available with reed switch & Hall Effect outputs. Quadrature pulse & Integral 4-20mA outputs are optional.

OM Positive Displacement Meter

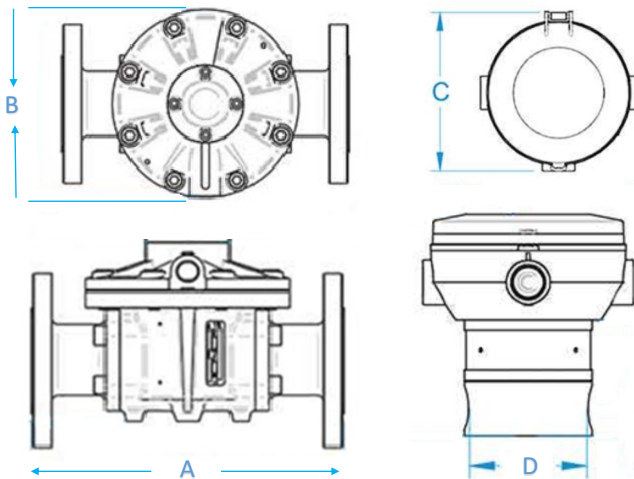
Specifications

Body:	Aluminium, Stainless steel, PPS
Rotor:	Aluminium, Stainless steel, PPS
O Ring:	Viton, EPR, Teflon Viton, Buna-N
Bearing:	Carbon ceramic, Hardened steel roller bearings
Temperature range:	-20°C - 150°C (dependant on material and model)
Accuracy:	± 0.5% for OM015 - OM100 ± 1% for OM004-OM008
Strainer size:	40 mesh (OM080-OM100) 100 mesh (OM015-OM050) 200 mesh (OM004-OM008)

Performance Characteristics

Model:	Flow range	Max pressure options AL (bar)	Max pressure options SS (bar)	Pulses/litre
OM004 (1/8")	0.5-36 L/hr	15	34, 100,400	2800
OM006 (1/4")	2-100 L/hr			1050
OM008 (3/8")	15-550 L/hr			355 or 710
OM015 (1/2")	1-40 L/m	68	68,100,400	84 or 168
OM025 (1")	10-150 L/m	68,138		27 or 107
OM040 (1.5")	15-250 L/m	30	30,50,400	14 or 56
OM050 (2")	30-450 L/m	20	38,50,300	6.5 or 26
OM050E (2")	35-580 L/m			-
OM080 (3")	35-750 L/m	12	12	2.65 or 10.70
OM080E (3")	50-1000 L/m			-
OM100 (4")	75-1500 L/m	10	-	1.10 or 4.40
OM100E (4")	150-2500 L/m	10	-	0.560 or 2.24

Dimensions



Model:	BSP, NPT (mm)	ANSI 150, DIN16, JIS 10K (mm)	Width (mm)
OM004 (1/8")	D=68	-	C=72
OM006 (1/4")	D=68	-	C=72
OM008 (3/8")	D=68	-	C=72
OM015 (1/2")	A=110	A=189	B=110
OM025 (1")	A=137	A=198	B=120
OM040 (1.5")	A=188	A=252	B=160
OM050 (2")	A=212	A=277	B=180
OM050E (2")			
OM080 (3")	A=266	A=354	B=242
OM080E (3")	A=294	A=382	B=292
OM100 (4")		A=388	B=292
OM100E (4")	A=320	A=414	B=332

Contact our flow measurement specialists for advice on your application

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Call now for free expert advice!

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