



OM SERIES MEDIUM OVAL GEAR FLOWMETER

The OM Medium Capacity Oval Gear Meters are great for medium flow ranges and have the ability to handle a wide range of fluid viscosities.

FEATURES & BENEFITS

- High accuracy and repeatability, direct volumetric reading
- Measures high and low viscosity liquids.
- Quadrature pulse output option and bi-directional flow
- No requirement for flow conditioning (straight pipe runs).
- Only two moving parts

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER

OM = Oval Gear Meter

2 METER SIZE

015 = 1/2 inch [13mm], 1-40 l/min (0.26-10.6 g/min)
 025 = 1 inch [25mm], 10-150 l/min (2.6-40 GPM)
 040 = 1 -1/2 inch [38mm], 15-250 l/min (4-66 g/min)
 050 = 2 inch [51mm], 30-450 l/min (8-120 g/min)

3 MATERIAL (Body/Gears/Bearing)

A = Aluminum
 P = P = PPS (73 PSI [5 bar]) (PPS rotors only) (OM025 only)
 M = Intermediate pressure aluminum meter
 138 Bar [2000 Psi] max.) (OM025 only)
 S = 316L Stainless Steel
 N = Intermediate Pressure 316L SS (OM025N = 100 bar / [1450 Psi]
 (OM040N-OM050N = 50 Bar [725 Psi])
 H = High Pressure 316 SS 400 Bar / [5580 Psi]
 (OM050H = 300 Bar / [4200 Psi])

4 ROTOR MATERIAL

0 = PPS - PTFE filled [Polyphenylene Sulfide] rotors
 1 = Keishi cut PPS rotors for high viscosity liquids
 5 = Stainless Steel (Standard on OM004 & OM006,
 optional for OM008)
 7 = Keishi cut Stainless Steel rotors for high viscosity liquids
 (Available for OM008 only)

5 BEARING TYPE

0 = No Bearing - PPS rotor option only
 1 = Carbon Ceramic [Standard with Stainless Steel rotors]

6 O-RING MATERIALS

1 = FKM (Viton™) [standard for Alum.] -15°C minimum [-5°F]
 3 = PTFE encapsulated FKM (Viton™) -15°C minimum [-5°F]
 4 = Buna-N (Nitrile), -40° C minimum [-40° F]

7 TEMPERATURE/PROCESS CONNECTION

-2 = 120°C [250°F] max.
 -3 = 150°C [300°F] max. [Hall Effect output only, not available with HP meters]
 -5 = 120°C [250°F] max. [includes integral cooling fin]
 -8 = 80°C [176°F] max. when fitted with integral instruments and OM025P

8 PROCESS CONNECTIONS

1 = BSPP (G) female threaded
 2 = NPT female threaded
 3 = Sanitary Fittings (are 1/2" larger than meter size)
 4 = ANSI-150 RF Flanged
 5 = ANSI-300 RF Flanged
 6 = PN16 DIN Flanged

9 CABLE ENTRIES

0 = 3-6mm cable gland or no entry (OM025P)
 1 = M20 x 1.5mm
 2 = 1/2" NPT

10 INTEGRAL OPTIONS

RS = Reed Switch only - to suit Intrinsically Safe installations
 E1 = Explosion proof Exd IIB T4/T6 (aluminum & stainless meters) [IECEx & ATEX approved]
 E2 = Explosion proof Exd I/IIB T4/T6 (mines approval, SS meters only) (IECEx & ATEX approved)
 E3 = ANZEx certified Exd IIB T4/T6 (aluminium and SS meters)
 E4 = ANZEx certified Exd IIB T4/T6 (mines approval, SS meters only)
 QP = Quadrature pulse (2 NPN phased outputs)
 Q1 = Explosion proof Exd with quadrature pulse [IECEx & ATEX approved]
 R3 = Intrinsically Safe rate totaliser with all outputs (GRN housing) (IECEx & ATEX Approved)
 R4 = RT40 backlit large digit LCD rate totaliser (Alloy housing with facia protector)
 R5 = RT14 backlit large digit LCD rate totaliser (GRN housing with facia protector)
 E0 = EB10 batch controller [2 stage DC batcher & totalizer]
 E18 = Exd E018 backlit rate totaliser, pulse, 4-20mA, lin, HART (AI), Incl. Line Bushing [IECEx & ATEX Approved] (Not available as OM015)
 E19 = Exd E018 backlit rate totaliser, pulse, 4-20mA, lin, HART (SS), Incl. Line Bushing [IECEx & ATEX Approved] (Not available as OM015)
 F18 = F018 backlit rate totaliser, pulse out, 4-20mA, 10 point linearisation, HART
 F19 = F018 backlit rate totaliser, pulse out, 4-20mA, 10 point linearisation, HART [IECEx & ATEX Approved]
 F30 = F130 2 stage batch controller backlit

1 2 3 4 5 6 7 8 9 10

----->>> OM 025 A 5 1 1 - 5 2 1 R5 SAMPLE

APPLICATIONS

- Oils
- Fuel
- Diesel
- Truck Metering
- Chemical Additive Injection
- Batching
- Molasses
- Clean Fluids
- Bunker C Fuel Oil
- Oil-Based Paints
- Industrial Fluids
- Chemical Feed Lines

SPECIFICATIONS



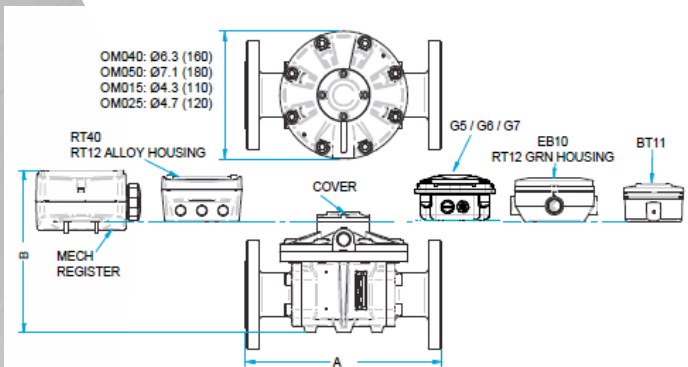
	OM015	OM025	OM040	OM050
Meter Size	1/2" [15 mm]	1" [25 mm]	1-1/2" [38 mm]	2" [51 mm]
*Flow Range	1 - 40 l/min	10-150 l/min	15-250 l/min	30-450 l/min
**Accuracy @3cp	± 1.0% of reading (accuracy is ± 0.2% of reading with optional RT14 with non-linearity correction)			
Repeatability	Typically ± 0.03% of reading			
Temperature range	-20°C to +120°C (-4° F to +250° F) refer to factory for lower temperature			
Pressure Rating For Threaded Meters - PSI (bar)	OM015 /	OM025 /	OM040 /	OM050
Aluminum	990 (68) /	990 (68) /	435 (30) /	285 (20)
Intermediate Pressure Alum.	138 (2000)			
316 Stainless Steel	990 (68) /	990 (68) /	435 (30) /	550 (38)
Intermediate Pressure SS	1450 (100) /	1450 (100) /	725 (50) /	725 (50)
***High Pressure models	5800 (400) /	5800 (400) /	5800 (400) /	4350 (300)
Recommended Filtration	100 mesh (150 microns)			

ELECTRICAL



	OM015	OM025	OM040	OM050
Output Pulse Resolution	Pulses/litre (Pulses / Gallon) - Nominal			
Reed Switch	84 (318)	27 (102)	14 (53)	6.5 (25)
Hall effect	168 (636)	107 (405)	56 (212)	26 (99)
QP-Quadrature hall option	168 (636)	54 (204)	28 (106)	13 (49)
Reed switch output	30Vdc x 200mA max. [maximum thermal shock 10°C (18°F) / 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			

APPROVALS



*Maximum flow is to be reduced as viscosity increases, see flow derating guide. Max recommended pressure drop is 100Kpa (14.5 Psi).

**Accuracy ±1% of reading with M-Series mechanical registers and accuracy ±0.5% of reading with V-Series mechanical register.

***QP and PF Options are not available with High Pressure Meters.

DIMENSIONS

Dim.	A	A	A	A	A	A		B	B	B	B	B	B	B	B
Connection type	OM015A	OM025A	OM025S	OM040	OM050A	OM050S	fitted with...	OM015A	OM015S	OM025A	OM025S	OM040A	OM040S	OM050A	OM050S
A.N.S.I. 150	-	198	237	252	272	277	RT14 register	154	148	168	165	203	194	218	268
DIN 16	-	198	237	252	272	277	RT40 register	157	151	171	168	206	197	221	271
B.S.P	110	137	176	188	212	212	cover	106	100	120	117	155	146	170	220
N.PT	110	137	176	188	212	212	mech register	178	176	188	214	227	222	237	286

Service & Warranty: For technical assistance, warranty replacement or repair contact your distributor:

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