OM SERIES SMALL OVAL GEAR FLOWMETER

The OM small capacity oval gear meters have an increased flow range and offer the ability to handle a wide range of fluid viscosities and exceptional levels of repeatability.

FEATURES & BENEFITS

- High accuracy and repeatability, direct volumetric reading
- Stainless Steel rotors (Optional PPS rotor for OM008 metre only)
- Quadrature pulse output option & bi-directional flow.
- Measures high and low viscosity liquids
- Optional Exd I/IIB approval (ATEX, IECEx)
- PF option available for metering pulsating flows
- Only two moving parts

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER

OM = Oval Gear Meter

2 METER SIZE

004 = 1/8 inch [4mm] 1 - 36 l/hr (0.26 - 9.5 g/hr)
006 = 1/4 inch [6mm] 2 - 100 l/hr (0.5 - 27 g/hr)
008 = 3/8 inch [8mm] 15 - 550 l/hr (4 - 145 g/hr)

3 MATERIAL (Body/Gears/Bearing)

A = Aluminum
S = 316L Stainless Steel
N = Intermediate Pressure 316L SS [100 bar/1450 Psi]
H = High Pressure 316 SS [400 bar/5580 Psi]

4 ROTOR MATERIAL

0 = PPS - PTFE filled [Polyphenylene Sulfide] [Available for OM008]
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 (Available for OM008 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. [reduced to 80°C when fitted with integral instruments]
-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. [Only to OM008 with PPS rotors] & when fitted with integral instruments

8 PROCESS CONNECTIONS

1 = BSPP (G) female threaded
2 = NPT female threaded

9 CABLE ENTRIES

0 = 3-6mm cable gland or no cable entry [Exclusive to B2 & B3 Electronic options]
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]
HR = High resolution Hall effect output (OM004:11200ppL, OM006:4200ppL)
H1 = Explosion proof - Exd with HR Hi-res. Hall option (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
F31 = F130 Intrinsically Safe 2 stage batch controller [IECEx & ATEX Approved]

	1	2	3	4	5	6	7	8	9	10	
---»»	OM	006	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

	OM004	OM006	OM008
Meter Size	1/8" [4 mm]	1/4" [6 mm]	3/8" [8 mm]
*Flow Range	0.5-36 l/hr	2-100 l/hr	15-550 l/hr
Accuracy	± 1.0% of reading (accuracy is ± **0.2**% of reading with optional RT1**4** with non-linearity correction)		
Repeatibility	Typically ± 0.03% of reading		
Temperature range	-20° C to +120°C (-4° F to +250° F) refer to factory for lower temperature		
Pressure Reading (Threaded Meter)			
Aluminum	**15** Bar / **220** Psi		
316 Stainless Steel	**34** Bar / **495** Psi		
Intermediate Pressure Stainless Steel	**100** Bar / **1450** Psi		
High Pressure Stainless Steel	**400** Bar / **5800** Psi		
Recommended Filtration	200 mesh (75 microns)		

*Maximum flow is to be reduced as viscosity increases, see flow de-rating guide.
Max recommended pressure drop is 100Kpa (14.5 psi). **QP and PF Options are not available with High Pressure Meters.

ELECTRICAL

	OM004	OM006	OM008
Output Pulse Resolution	Pulses/**litre** (Pulses /**Gallon**) - Nominal		
Reed Switch	2800 (10600)	1050 (3975)	355 (1345)
Hall effect	2800 (10600)	1050 (3975)	710 (2690)
QP-Quadrature hall option	2800 (10600)	1050 (3975)	710 (2690)
PF-Pulsating How (Hall Effect)	2800 (10600)	1050 (3975)	178 (675)
HR-High Resolution (Hall Effect)	11200 (42400)	4200 (15900)	N/A
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		

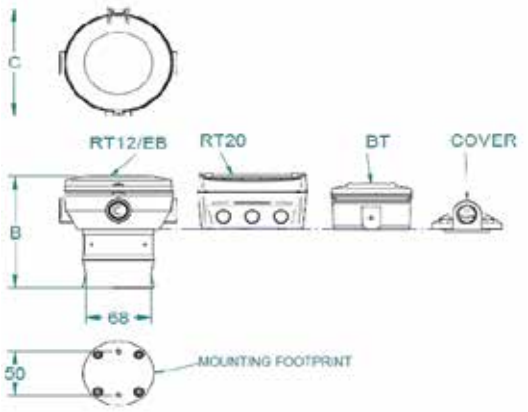
APPROVALS

CE

DIMENSIONS

	B	B	B	C
Sizes fitted	OM004	OM006	OM008	
RT14	122	122	129	124
RT40	125	125	132	96
COVER	92	92	99	72

All dimensions are in millimeters (inches)



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