



# UK Flowtechnik

Specialists in flow metering, pumps, couplings  
and process measurement equipment

## PRODUCT DATASHEET



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# OM Small Series Oval Gear Flowmeter

The FLOMEC® OM Small Capacity Oval Gear Meters have a large flow range and offer the ability to handle a wide range of fluid viscosities with exceptional levels of repeatability.



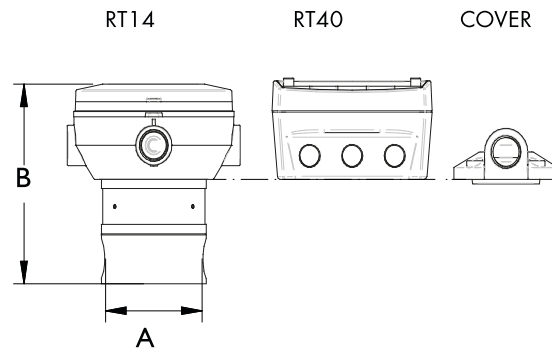
## Features & Benefits

- High accuracy and repeatability, direct volumetric reading
- Measures high and low viscosity liquids
- No requirement for flow conditioning (straight pipe runs)
- Stainless Steel rotors (Option PPS rotor for OM008)
- Quadrature pulse output option
- Optional Exd I/IIB approval (ATEX, IECEx)
- Only two moving parts

## Technical Data

	OM004	OM006	OM008
Flow Range L/HR	1-36	2-100	15-550
Connection Size	1/8"	1/4"	3/8"
Meter Factor Reed Switch (Pulses per litre)	2800	1050	355
Meter Factor Hall Effect (Pulses per litre)	2800	1050	710
Meter Factor High Resolution	11,200	4,200	/
Body Material	Aluminium or 316 Stainless Steel		
Gear Material	Carbon filled PPS or Stainless Steel (OM008 only) with Carbon/Ceramic bearings		
Seals	Viton (standard), options for PTFE encapsulated Viton or Buna-N (Nitrile)		
Linearity	+/- 1.0% of reading		
Max Pressure (Bar)	15 Bar (Aluminium), 34 Bar (Stainless Steel), 100 Bar (intermediate pressure version)		
Max Temperature (°C)	120°C standard, 150° high temperature version, 80°C with directly mounted display and OM008 with PPS gears		
Output	Reed switch (30V, 200 mA max) or Hall effect NPN pulsed output (5-24 Vdc, 20 mA max)		
Options	Explosion Proof, high resolution and directly mounted battery powered displays (ATEX/IECEX versions)		

## Dimensional Data



	004	006	008
<b>A</b>		68	
<b>B (RT14)</b>	122	122	129
<b>B (RT40)</b>	125	125	132
<b>B (cover)</b>	92	92	99

## Ordering Information

0M008 A 00 I - 8 I I R5									
<b>Meter Size</b>		<b>Cable Entries</b>		<b>Connections</b>		<b>Temperature Limits</b>		<b>Integral Options</b>	
0.5-36 L/Hr (1/8")	OM004	M20x1.5 (M16x1.5 for R4 & R7)	1	BSPF female	1	120 °C	2	No option (just pulsed output)	--
2-100 L/Hr (1/4")	OM006	1/2" NPT	2	NPT female	2	150 °C (Hall effect output only)	3	Reed Switch Only (for Intrinsically safe applications)	RS
15-550 L/Hr (3/8")	OM008	3x 16mm drilled holes (for F series & RT40 instruments only)	6			120 °C (for integral instruments and includes cooling fin)	5	Explosion proof Exd IIB T3...T6 (Aluminium & Stainless Steel meters) [IECEX & ATEX approved]	E1
<b>Body Material</b>		<b>Connections</b>		<b>Temperature Limits</b>		<b>Integral Options</b>		Explosion proof Exd I/IIB T3...T6 (Stainless Steel only) [IECEX & ATEX mines approved]	E2
Aluminium	A					80 °C (Meters with integral instruments or OM008 with PPS gears)	8	Quadrature pulse (2 NPN phased outputs)	QP
316 Stainless Steel	S							Explosion proof ~ Exd (with quadrature pulse) [IECEX & ATEX approved]	Q1
Intermediate Pressure 316 Stainless Steel (100 Bar Max)	N							High Resolution Hall Effect output (004 - 006 only)	HR
<b>Gear Material</b>		<b>Connections</b>		<b>Temperature Limits</b>		<b>Integral Options</b>		Explosion proof ~ Exd with HR Hi-Res. Hall option (004-006 only)	H1
PPS (not available for 150oC meters)	00							RT40 backlit rate totaliser with all outputs (Alloy housing with facia protector) [scalable pulse output, backlight]*#	R4
Stainless Steel (standard on OM004 & OM006, option for OM008)	51							RT14 backlit rate totaliser with all outputs (GRN housing) [scaled pulse, alarms, 4-20mA, backlight]*#	R5
Keishi cut High Viscosity Gears (Only for OM008)	71							Intrinsically safe RT14 backlit rate totaliser with all outputs (GRN housing) [scaled pulse, alarms, 4-20mA, backlight][IECEX & ATEX approved]*#	R6
<b>Seal Material</b>		<b>Connections</b>		<b>Temperature Limits</b>		<b>Integral Options</b>		RT40 backlit rate totaliser with all outputs (GRN housing) [scalable pulse output, backlight]*#	R7
Viton (standard) -15 to +200oC	1							E018 backlit rate/tot, pulse, 4-20 mA, lin, HART (All, Incl. Line Bushing [IECEX & ATEX approved])#	E18
PTFE encapsulated Viton	3							E018 backlit rate/tot, pulse, 4-20 mA, lin, HART (SS), Incl. Line Bushing [IECEX & ATEX approved])#	E19
Buna-N (Nitrile) -65 to +100oC	4							F018 backlit rate/tot, pulse out, 4-20mA, 10 pt lin, HART#	F18
								F018 Intrinsically Safe backlit rate/tot, pulse out, 4-20mA, 10 pt lin, HART [IECEX & ATEX approved])#	F19
								F130 Intrinsically Safe 2 stage batch controller [IECEX & ATEX approved])#	F31

\*Temp code 5 required for integral instruments between 176 °F (80 °C) & 250 °F (120 °C)

#Temp code 8 required for integral instruments below 176 °F (80 °C)