

# Product information

## Metra-flow OG2 4 L/Min oval gear meter

- Excellent chemical resistance
- Rugged construction
- Individual calibration
- High viscosity capability
- Low pressure loss
- No flow conditioning required
- Compact meter assembly
- Hall or reed switch sensor
- Accuracy 1.0% FSD water,  
0.5% FSD oil
- $\pm 0.5\%$  reading \*
- 0.1% repeatability
- IP67/NEMA 4 protection
- Models to 400 Bar
- Non-metallic option

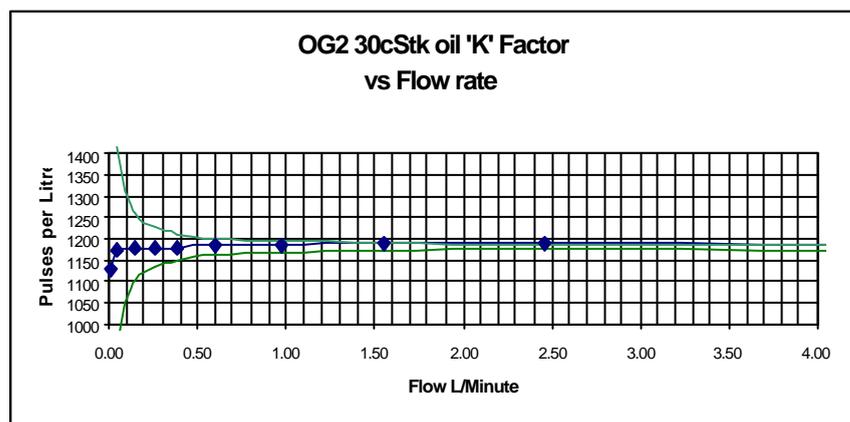
\* When used with our metra-smart instrument

### Ideal for

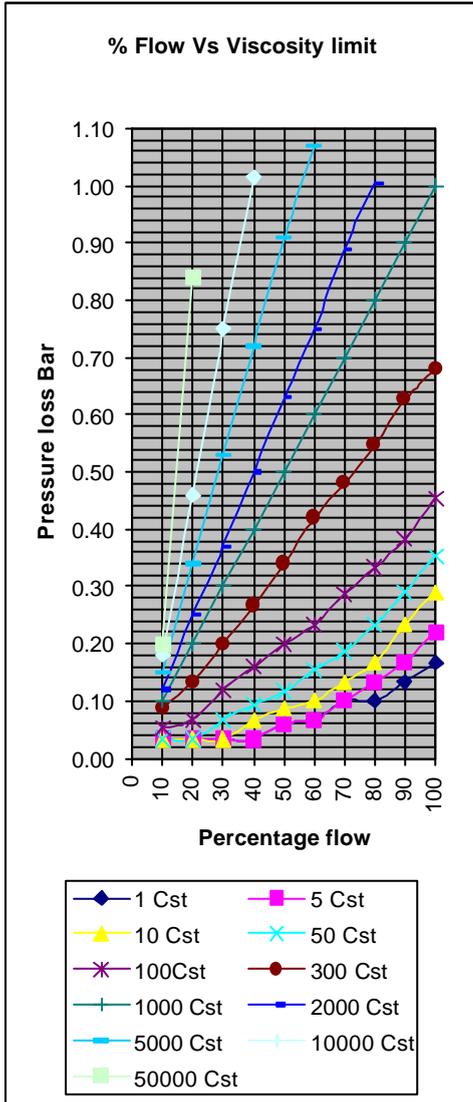
- ◆ Engine test
- ◆ Oil flow
- ◆ High viscosity fluids
- ◆ OEM equipment



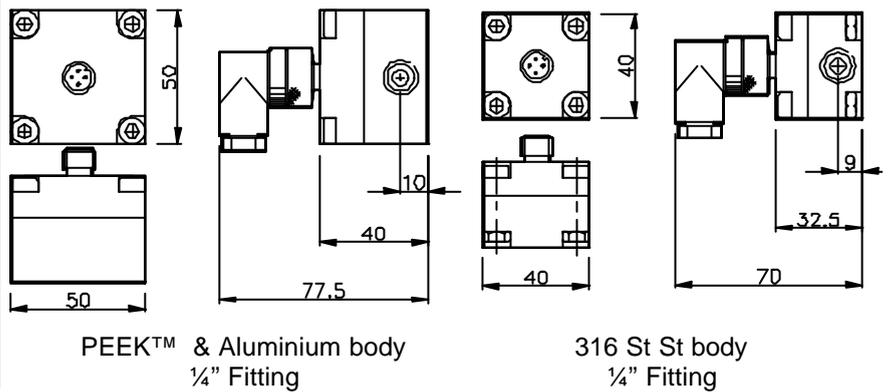
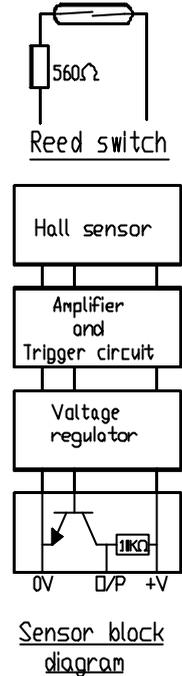
The compact rugged OG2 oval gear flowmeter is designed to give high performance with a low cost of ownership. It has a standard flow range from 0.03 to 4 L/Min on 30 Cstk oil and 0.15 to 4 L/min on water like liquids. It can have totally non-metallic wetted components, PEEK™, ceramic and an elastomer which makes this the ideal choice for the metering of aggressive chemicals. The standard inlet and outlet are ¼" female threads. For OEM use alternatives, including manifold mountings, are available. The standard model is 316 St St with Viton™ 'O' ring seal.



Sample product codes →	Stainless standard OG2-SS5-VHQ-B	Aluminium standard OG2-AS1-VHQ-B	PEEK Standard OG2-PS1-VHQ-B
Flow range - Water - 30 cSt Oil	0.15– 4.0 LPM 0.03-4.0LPM	0.15– 4.0 LPM 0.03-4.0LPM	0.15– 4.0 LPM 0.03-4.0LPM
Wetted materials - Body - Gears - Seal - Magnet	316 Stainless steel Carbon filled PEEK™ Viton™ Ceramic	Aluminium Carbon filled PEEK™ Viton™ Ceramic	PEEK™ Carbon filled PEEK™ Viton™ Ceramic
Accuracy - Water - 30 cSt oil	± 1.0 % FSD ± 0.5% FSD	± 1.0 % FSD ± 0.5% FSD	± 1.0 % FSD ± 0.5% FSD
Repeatability	± 0.1%	± 0.1%	± 0.1%
Detector type	Hall effect	Hall effect	Hall effect
Terminations	M12 instrument socket	M12 instrument socket	M12 instrument socket
Approximate 'K' factor - Pulses/Litre	1100	1100	1100



At the heart of the meter are a pair of toothed oval gears one of which contains chemically resistant magnets, the gears rotate freely on robust bearings. Rotation is detected through the chamber wall by a Hall effect detector or a reed switch giving approximately 1100 pulses per litre passed. The output is an NPN pulse or a voltage free contact closure either of which is readily interfaced with most electronic display or recording devices. This combination of materials and technology ensures a long life product with reliable, accurate operation throughout.



Model	Body material	Temp rating	Pressure rating	Seal material	Detector type	Pipe thread	Connections	Display mounting options
OG2 OG2	316 St St 50 Bar std	S 80°C 158°F	S 50 Bar 750 PSI	Viton V	Hall effect H	1/4" (OG1&2 standard)	Q BSP F	C Rate & Total on meter
	Aluminium 10 Bar max	A 100°C 212°F	1 10 Bar 150 PSI	Nitrile N	Reed switch R	1/2" (OG3 Standard)	H NPT F	E Rate & total Ex on meter
	PEEK™ 10 Bar max	P 150°C 300°F	4 400 Bar 5880 PSI	EPDM E		3/4" (OG4 standard)	T Flanged (specify)	U Rate & Total plus 4-20mA Ex
				Kalrez K		1" (OG5 standard)	U	X Rate & total + 4-20mA Ex
						1 1/2" (OG6 standard)	P	B Metra-Batch on meter
						2" (OG7 standard)	D	R Metra-Batch remote

A stainless steel meter rated at 80°C, 50 Bar, with Viton™ seal, Hall effect detector and a 1/4" BSP thread would have the order code :-OG5-SS5-VHQ-B