Product information

Metra-flow OG3 10 L/Min oval gear meter

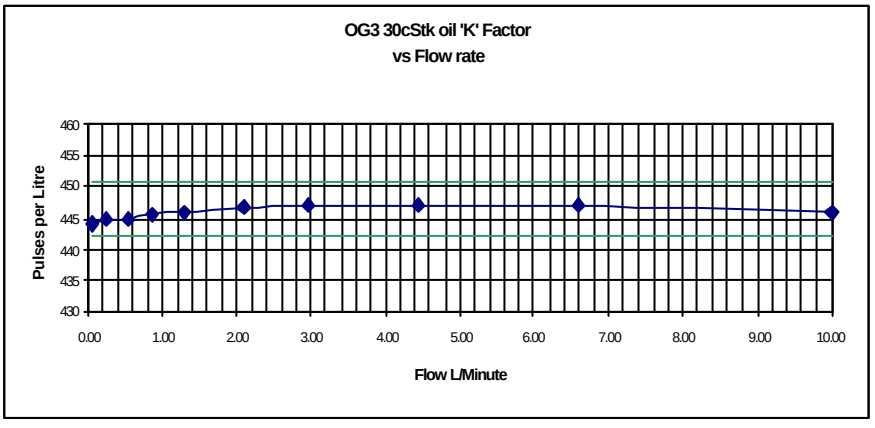
- Excellent chemical resistance
- Rugged construction
- Individual calibration
- High viscosity capability
- Low pressure loss
- No flow conditioning required
- Compact meter assembly
- Hall or reed switch sensor
- Accuracy 0.5% FSD water, 1.0% reading oil
- ±0.5% reading *
- 0.1% repeatability
- IP67/NEMA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

* When used with our metra-smart instrument

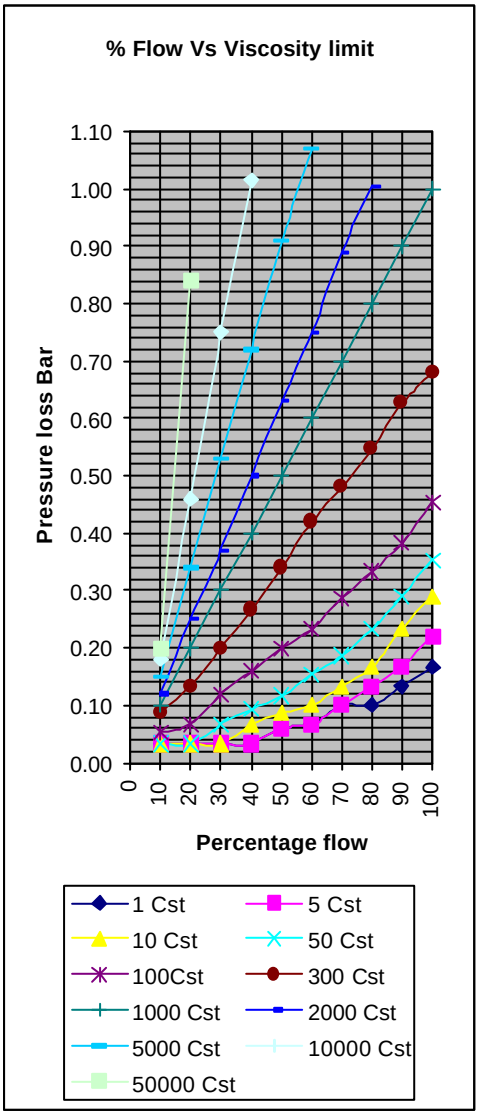
Ideal for

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

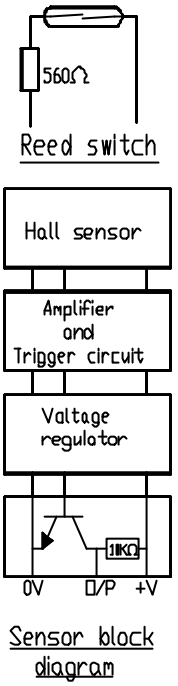
The compact rugged OG3 oval gear flowmeter is designed to give high performance with a low cost of ownership. It has a standard flow range from 0.05 to 10 L/Min on 30 Cstk oil and 0.5 to 10 L/min on water like liquids. It can have totally non-metallic wetted components, PEEK™, ceramic and an elastomer which makes this the ideal choice for the metering of aggressive chemicals. The standard inlet and outlet are ½" female threads. For OEM use alternatives, including manifold mountings, are available. The standard model is 316 St St with Viton™ 'O' ring seal.



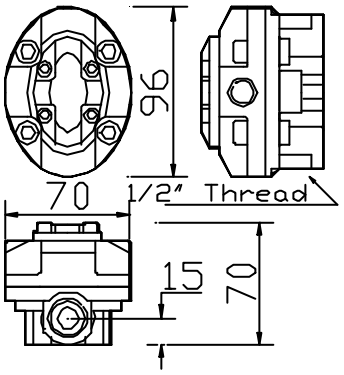
Sample product codes⇒		Stainless standard OG3-SS5-VHH-B	Aluminium standard OG3-AS1-VHH-B	PEEK Standard OG3-PS1-VHH-B
Flow range	- Water	0.5 - 10.0 LPM	0.5– 10.0 LPM	0.5– 10.0 LPM
	- 30 cSt Oil	0.05 - 10.0 LPM	0.05-10.0 LPM	0.05-10.0 LPM
Wetted materials	- Body	316 Stainless steel	Aluminium	PEEK™
	- Gears	Carbon filled PEEK™	Carbon filled PEEK™	Carbon filled PEEK™
	- Seal	Viton™	Viton™	Viton™
	- Magnet	Ceramic	Ceramic	Ceramic
Accuracy	- Water	± 0.5 % FSD	± 0.5 % FSD	± 0.5 % FSD
	- 30 cSt oil	± 1.0% Reading	± 1.0% Reading	± 0.5% FSD
Repeatability		± 0.1%	± 0.1%	± 0.1%
Detector type		Hall effect	Hall effect	Hall effect
Terminations		Via M20 cable gland	MIL style instrument socket	MIL style instrument socket
Approximate 'K' factor - Pulses/Litre		400	400	400



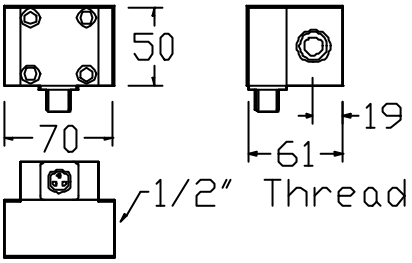
At the heart of the meter are a pair of toothed oval gears one of which contains chemically resistant magnets, the gears rotate freely on robust bearings. Rotation is detected through the chamber wall by a Hall effect detector or a reed switch giving approximately 400 pulses per litre passed. The output 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.



Sensor block diagram



316 St St body



PEEK™ & Aluminium body

Model		Body material		Temp rating		Pressure rating		Seal material		Detector type		Pipe thread		Connections		Display mounting options	
OG3	OG3	316 St St 50 Bar std	S	80°C 158° F	S	50 Bar 750 PSI	5	Viton	V	Hall effect	H	1/4"(OG1&2 standard)	Q	BSP F	B	Rate & Total on meter	C
		Aluminium 10 Bar max	A	100°C 212°F	T	10 Bar 150 PSI	1	Nitrile	N	Reed switch	R	½" (OG3 Standard)	H	NPT F	N	Rate & total Ex on meter	E
		PEEK™ 10 Bar max	P	150°C 300°F	U	400 Bar 5880 PSI	4	EPDM	E			3/4" (OG4 standard)	T	Flanged (specify)	F	Rate & Total plus 4-20mA	U
								Kalrez	K			1" (OG5 standard)	U			Rate & total + 4-20mA Ex	X
												11/2" (OG6 standard)	P			Metra-Batch on meter	B
												2" (OG7 standard)	D			Metra-Batch remote	R

A stainless steel meter rated at 80°C, 50 Bar, with Viton™ seal, Hall effect detector and a ½" BSP thread would have the order code :-OG3-SS5-VHH-B