

OG4 50L/Min Oval Gear Meter

Technical Product data sheet



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The compact rugged OG4 oval gear flowmeter is designed to give high performance with a low cost of ownership. It has a standard flow range from 0.25 to 50 L/Min on 30 Cstk oil and 2.5 to 50 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 3/4" female threads. For OEM use alternatives, including manifold mountings, are available. The standard model is 316 St St with Viton™ 'O' ring seal.

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 113 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.

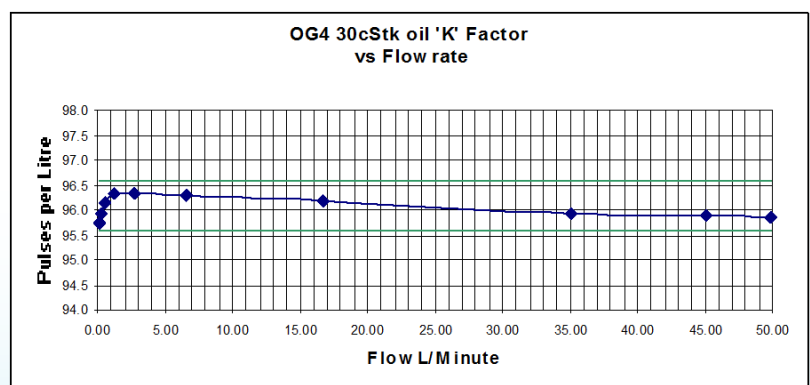
Features

- Excellent chemical resistance
- Rugged construction
- Individual calibration
- High viscosity capability
- Low pressure loss
- No flow conditioning required
- Compact meter assembly
- Hall, reed switch or Namur sensor
- Accuracy 1.0% reading water
0.5% reading oil
- ±0.5% reading *
- 0.1% repeatability
- IP67/NEMA 4 protection
- Models to 700 Bar
- Non-metallic option

* When used with our metra-smart instrument

Ideal for

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



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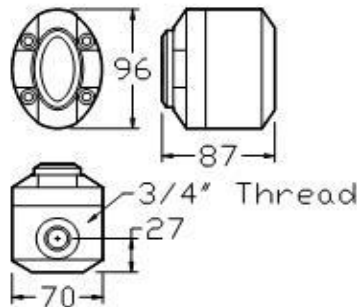
Order Codes

Model	OG4
Body mat'l	S - 316 St St 50 bar std A - Aluminium 10bar max P - PEEK™ 10 bar max
Temp rating	S = 80°C / 158°F T = 100°C / 212°F U = 150°C / 300°F
Pressure Rating	5 - 50 Bar 750 PSI (St St) 1 - 10 Bar 150 PSI (Al/ PEEK™) 4 - 400 Bar 5880 PSI (St St) 7 - 700 Bar 10150 PSI (St St)
Seal material	V - Viton™ N - Nitrile E - EPDM K - Kalrez
Detector type	H - Hall effect R - Reed switch N - Namur
Pipe thread	T - 3/4" (OG4 std)
Connections	B - BSP F N - NPT F F - Flanged (specify)

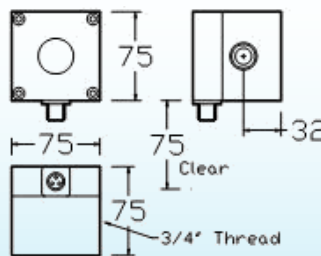
e.g. A stainless steel meter rated at 80°C, 50 Bar, with Viton™ seal, Hall effect detector and a 3/4" BSP thread would have the order code :- **OG4-SS5-VHT-B**

Sample product codes→	Stainless standard OG4-SS5-VHT-B	Aluminium standard OG4-AS1-VHT-B	PEEK™ standard OG4-PS1-VHT-B
Flow range - Water - 30 cSt Oil	2.5 - 50.0 LPM 0.25 - 50.0LPM	2.5 - 50.0 LPM 0.25 - 50.0LPM	2.5 - 50.0 LPM 0.25 - 50.0LPM
Wetted mats - Body - Gears - Seal - Magnet	316 St St Carbon filled PEEK™ Viton™ Ceramic	Aluminium Carbon filled PEEK™ Viton™ Ceramic	PEEK™ Carbon filled PEEK™ Viton™ Ceramic
Accuracy - Water - 30 cSt oil	± 1.0 % Reading ± 0.5% Reading	± 1.0 % Reading ± 0.5% Reading	± 0.5 % FSD ± 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	M12 connector
Approx 'K' factor - Pulses/Litre	113	113	113

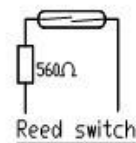
Weight in kg		
St St	- 50 Bar	1.600
Peek™	- 10 Bar	0.550
Aluminium	- 10 Bar	1.000
St St	- 400 Bar	7.550



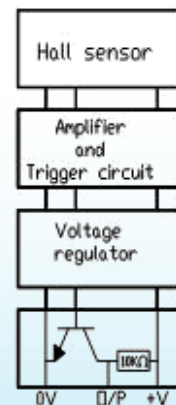
316 St St body



PEEK™ & Aluminium body



Reed switch



Sensor block diagram