

# OG5 100L/Min Oval Gear Meter

## Technical Product data sheet



### OG 5 100L/Min Oval Gear Meter

The compact rugged OG5 oval gear flowmeter is designed to give high performance with a low cost of ownership. It has a standard flow range from 0.5 to 100 L/Min on 30 Cstk oil and 4 to 100 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 1" female threads. For OEM use alternatives, including manifold mountings, are available. The standard model is 316 St St with Viton™ 'O' ring seal.

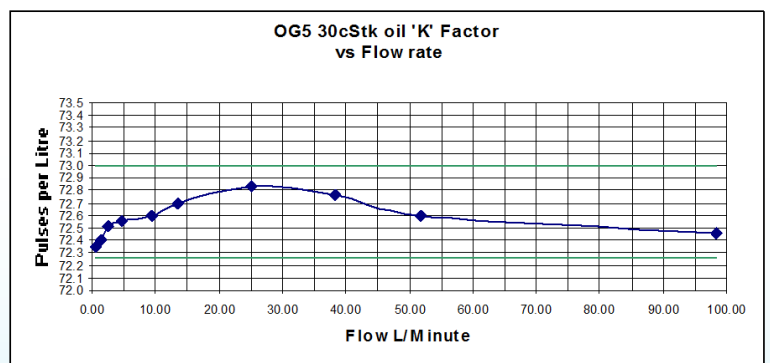
At the heart of the meter are a pair of toothed oval gears one of which contains chemically resistant magnets, the gears rotate freely on robust bearings. Rotation is detected through the chamber wall by a Hall Effect detector or a reed switch giving approximately 70 pulses per litre passed. The output 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 0.75% reading water  
0.5% reading oil
- ±0.25% reading \*
- 0.1% repeatability
- IP67/NEMA 4 protection
- Models to 400 Bar
- \* When used with our metra-smart instrument

#### Ideal for

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



## OG5 100L/Min Oval Gear Meter

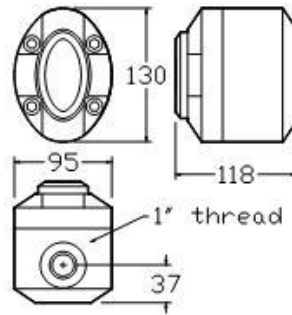
### Order Codes

Model	<b>OG5</b>
Body mat'l	<b>S</b> - 316 St St 50 bar std <b>A</b> - Aluminium 10bar max <b>P</b> - PEEK™
Temp rating	<b>S</b> = 80°C / 158°F <b>T</b> = 100°C / 212°F <b>U</b> = 150°C / 300°F
Pressure Rating	<b>5</b> - 50 Bar 750 PSI (St St) <b>1</b> - 10 Bar 150PSI (Al/ PEEK™) <b>4</b> - 400 Bar 5880 PSI (St St)
Seal material	<b>V</b> - Viton™ <b>N</b> - Nitrile <b>E</b> - EPDM <b>K</b> - Kalrez
Detector type	<b>H</b> - Hall Effect <b>R</b> - Reed switch <b>N</b> - Namur
Pipe thread	<b>U</b> - 1" (OG 5 std)
Connections	<b>B</b> - BSP F <b>N</b> - NPT F <b>F</b> - Flanged (specify)

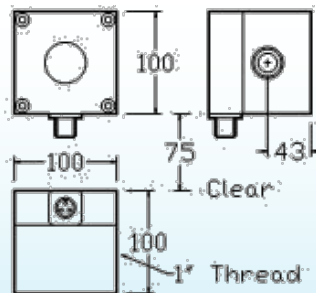
e.g. A stainless steel meter rated at 80°C, 50 Bar, with Viton™ seal, Hall effect detector and a 1" BSP thread would have the order code : **OG5-SS5-VHU-B**

Sample product codes⇒	Stainless standard OG5-SS5-VHU-B	Aluminium standard OG5-AS1-VHU-B	PEEK™ standard OG5-PS1-VHU-B
Flow range			
- Water	4.0 - 100.0 LPM	4.0 - 100.0 LPM	4.0 - 100.0 LPM
- 30 cSt Oil	0.5 - 100.0 LPM	0.5 - 100.0 LPM	0.5 - 100.0 LPM
Wetted mats			
- Body	316 St St	Aluminium	PEEK™
- Gears	Carbon filled PEEK™	Carbon filled PEEK™	Carbon filled PEEK™
- Seal	Viton™	Viton™	Viton™
- Magnet	Ceramic	Ceramic	Ceramic
Accuracy			
- Water	± 0.75 % Reading	± 0.75 % Reading	± 0.75 % Reading
- 30 cSt oil	± 0.5% Reading	± 0.5% Reading	± 0.5% Reading
Repeatability	± 0.1%	± 0.1%	± 0.1%
Detector Type	Hall effect	Hall effect	Hall effect
Terminations	M20	MIL connector	M12
Approx 'K' factor - Pulses/Litre	70	70	70

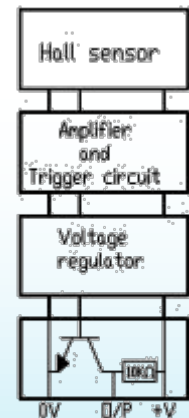
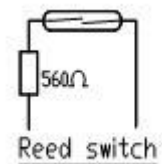
Weight in kg	
St St - 50 Bar	5.000
Peek™ - 10 Bar	2.250
Al - 10 Bar	2.250
St St - 400 Bar	9.400



316 St St body



Aluminium body



Sensor block diagram