

OG2 4L/Min Oval Gear Meter

Technical Product data sheet



OG2 4L/Min Oval Gear Meter

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.

Features

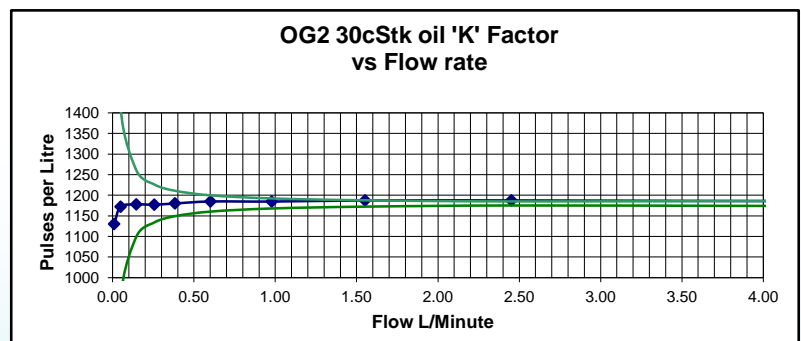
- Excellent chemical resistance
- Rugged construction
- Individual calibration
- High viscosity capability
- Low pressure loss
- No flow conditioning required
- Compact meter assembly
- Hall, reed switch or Namur sensor
- Accuracy 1.0% FSD water, 0.75% FSD oil
- ±0.5% reading *
- 0.1% repeatability
- 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

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.



OG2 4L/Min Oval Gear Meter

Order Codes

Model	OG2
Body mat'l	S - 316 St St 50 bar std 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 (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	Q - 1/4" (OG2 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 1/4" BSP thread would have the order code :-

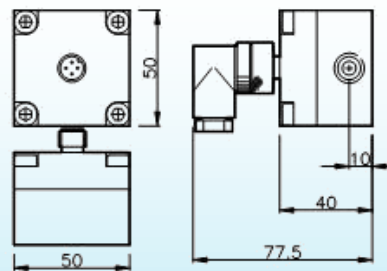
OG2-SS5-VHQ-B

Sample product codes→	Stainless standard OG2-SS5-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
Wetted mats - Body - Gears - Seal - Magnet	316 St St Carbon filled PEEK™ Viton™ Ceramic	PEEK™ Carbon filled PEEK™ Viton™ Ceramic
Accuracy - Water - 30 cSt oil	± 1.0 % FSD ± 0.75% FSD	± 1.0 % FSD ± 0.75% FSD
Reliability	± 0.1%	± 0.1%
Detector Type	Hall effect	Hall effect
Terminations	M12 instrument socket	M12 instrument socket
Approx 'K' factor - Pulses/Litre	1100	1100

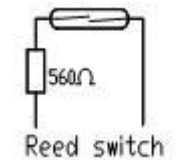
Weight in kg	
St St - 50 Bar	0.360
Peek™ - 10 Bar	0.184
St St - 400 Bar	3.000



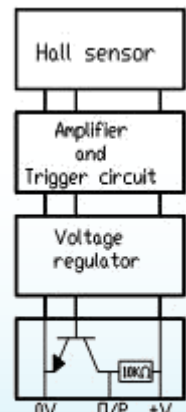
316 St St body
1/4" Fitting



PEEK™ body
1/4" Fitting



Reed switch



Sensor block
diagram