OG4 50L/Min Oval Gear Meter

Technical Product data sheet





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

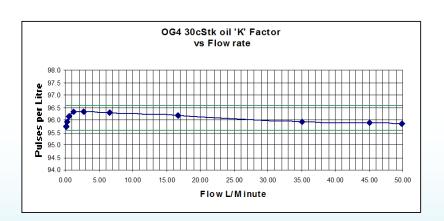
Ideal for

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

OG4 50L/Min Oval Gear Meter

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 ¾" 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.







OG4 50L/Min Oval Gear Meter

Order Codes

Model OG4

Body mat'I

S - 316 St St 50 bar std

A - Aluminium 10bar max

P - PEEKTM 10 bar max

Temp rating

S = 80°C / 158°F

T = 100°C / 212°F

U = 150°C / 300°F

Pressure

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

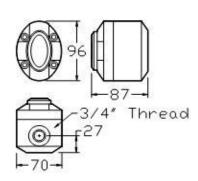
T - %" (OG4 std)

Connections

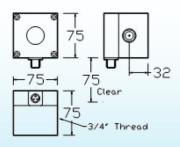
B - BSP F
N - NPT F
F - Flanged
(specify)

e.g. A stainless steel meter rated at 80°C, 50 Bar, with Viton™ seal, Hall effect detector and a ¾" 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
- Water - 30 cSt oil	± 1.0 % Reading ± 0.5% Reading ± 0.1%	± 1.0 % Reading ± 0.5% Reading ± 0.1%	± 0.5 % FSD ± 0.5% FSD ± 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

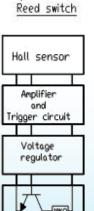


316 St St body



PEEK™ & Aluminium body

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



Sensor block diagram