

Datasheet

RS Pro Oval Gear Flow Meter

Stock Number: **447-449**



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 cSt 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 1/4" 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. 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.



IDEAL FOR

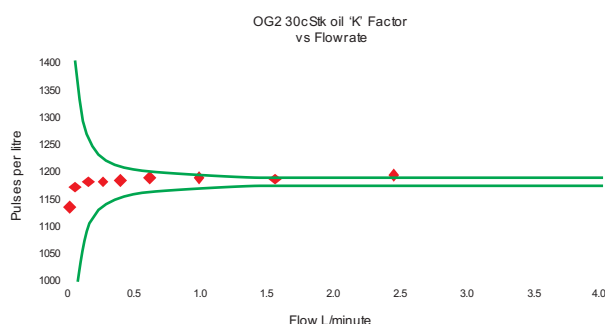
- Engine test
- Oil flow
- High viscosity fluids
- OEM equipment
- Hazardous areas



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





Ordering codes

Model

OG2

Body material

S = 316 St St 50 bar std

P= PEEK™ 10 Bar max

H= Hastelloy C

Temprating

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

P= PTFE (50 Bar max)

K= Kalrez

Detector Type

H = Hall effect

R= Reed switch & Resistor

N= Namur

X= Reed switch (Hazardous area)

Pipe Thread

Q = 1/4" (OG2std)

Connections

B = BSPF

N = NPTF

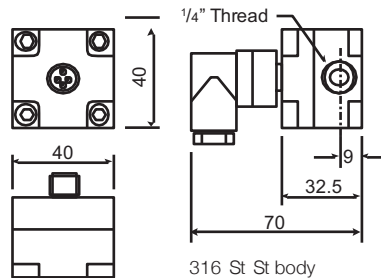
F = Flanged (specify)

e.g. **OG2-SS5-VHQ-B** is a stainless steel meter rated at 80°C, 50 Bar, Viton™ seal, Hall effect detector and a 1/4" BSP thread.

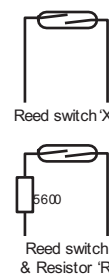


TECHNICAL SPECIFICATIONS

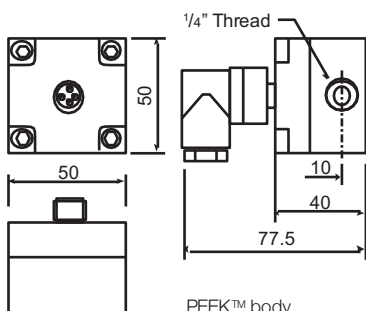
Sample product codes →	Stainless standard OG2-SS5-VHQ-B	PEEK™ standard OG2-PS1- VHQ-B
Flow range	-Water -30 cSt Oil 0.15 - 40 L/min 0.03 - 40 L/min	0.15 - 40 L/min 0.03 - 40 L/min
Wetted parts	- Body - Gears - Seal - Magnet 316 St St Carbon filled PEEK™ Viton™ Ceramic	PEEK™ Carbon filled PEEK™ Viton™ Ceramic
Accuracy	-Water -30 cSt oil ± 1.0% Reading ± 0.75% Reading	± 1.0% Reading ± 0.75% Reading
Repeatability	± 0.1%	± 0.1%
Detector Type	Hall effect	Hall effect
Terminations	M12 instrument socket	M12 instrument socket
Approx 'K' factor - Pulses/Litre	1100	1100



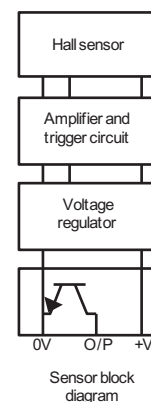
316 St St body



Reed switch & Resistor 'R'



PEEK™ body



Sensor block diagram

Weight (kg)

St St	50 Bar	0.360
PEEK™	10 Bar	0.184
St St	400 Bar	3.000