



Oval Gear Pressure Drop Information 1.00 -1000 cSt -300 cSt 0.90 100 cSt 0.80 -50 cSt -10 cSt Expected Pressure Drop (bar) 0.70 5 cSt -1 cSt 0.60 0.50 0.40 0.30 0.20 0.10 0.00 0% 20% 40% 60% 80% 100% % Max Flow of 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 cSt oil and 0.15 to 4 L/min on water-like liquids. It can have totally non-metallic wetted components, PEEK, PTFE encapsulated magnets and elastomer seals, which makes this the ideal choice for the metering of aggressive chemicals. The standard inlet and outlet are ½" female threads. For OEMs, alternatives are available, including manifold mountings. The standard model is 316 St St with Viton™ 'O' ring seals.

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.



FEATURES

- · Excellent chemical resistance
- · Rugged construction
- · Individual calibration
- · High viscosity options
- · Low pressure drop
- · No flow conditioning required
- · Compact meter assembly
- · Hall, reed switch or Namur sensor
- Accuracy 1.0% FSD water 0.75% FSD oil
- 0.1% repeatability
- IP65 protection
- Models to 700 bar (see High Pressure Data Sheet)
- Non-metallic option



IDEAL FOR

- · Engine test
- · Oil flow
- · High viscosity liquids
- OEM equipment
- · Hazardous areas
- Batching





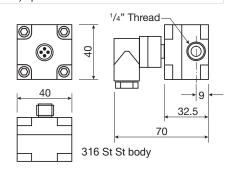
Ordering codes

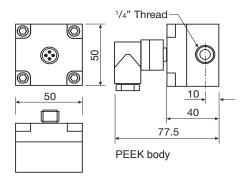
Model
OG2
Body Material
S = 316 St St 50 bar std
P = PEEK 10 bar max (at 80°C max)
Temp Rating
S = 80°C / 158°F
T = 100°C / 212°F
$U = 150^{\circ}C / 300^{\circ}F (\pm 1.25\%)$
Pressure Rating
5 = 50 bar 750 PSI (St St)
1 = 10 bar 150 PSI (PEEK)
4 = 400 bar 5880 PSI (St St)
7 = 700 bar 10150 PSI (St St)
Seal Material
V = Viton™
N = Nitrile
E = EPDM
P = PTFE (50 bar max)
K = Kalrez [®]
Detector Type
H = Hall effect R = Reed switch & Resistor
N = Namur
11 11411141
X = Reed switch (hazardous area)
Process Fitting Size $Q = \frac{1}{4} \text{ (OG2 std)}$
Process Fitting Type
B = BSP F
N = NPT F

e.g. **0G2-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.



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 L/min 0.03 - 4.0 L/min	0.15 - 4.0 L/min 0.03 - 4.0 L/min	
Wetted material	s - Body - Gears - Seal - Magnet - Spindles	316 St St Carbon filled PEEK Viton™ PTFE St St	PEEK* Carbon filled PEEK Viton™ PTFE St St	
Accuracy	- Water - 30 cSt oil	± 1.0% FSD ± 0.75% FSD	± 1.0% FSD ± 0.75% FSD	
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	
Viscosity Range [^]		1-1000 cSt	1-1000 cSt	
* Hastelloy C spin	dles			
^ High viscosity (above 1000 cSt) options available				





Weight (kg)				
St St	50 bar	0.360		
PEEK	10 bar	0.184		