



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 60% 80% 100% 0% 40% % Max Flow of 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 cSt oil and 2.5 to 50 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 3/4" female threads. For OEMs, alternatives are available, including manifold mountings. 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 115 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% reading water
 0.5% reading oil (30 cSt)
- 0.1% repeatability
- IP65 protection
- · Models to 700 bar
- · Non-metallic option



IDEAL FOR

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





Ordering Codes

Model			
OG4			
Body Material			
S = 316 St St 50 bar std			
A = Aluminium 10 bar max			
P = PEEK 10 bar max (at 80°C 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 (AI / 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)			
Process Fitting Size			
$T = {}^{3}/4$ " (OG4 std)			
Process Fitting Type			
B = BSP F N = NPT F			
N=NPIF			

e.g. **0G4-SS5-VHT-B** is a stainless steel meter rated at 80°C, 50 bar, Viton[™] seal, Hall effect detector and a ³/4" BSP thread.

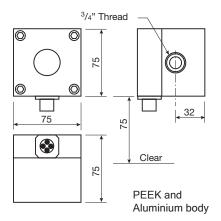


TECHNICAL SPECIFICATIONS

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 L/min 0.25 - 50 L/min	2.5 - 50 L/min 0.25 - 50 L/min	2.5 - 50 L/min 0.25 - 50 L/min
Materials - Gears	PEEK Viton™ PTFE	Aluminium Carbon filled PEEK Viton™ PTFE St St	PEEK* Carbon filled PEEK Viton™ PTFE St St
Accuracy - Water - 30 cSt oil	•	± 1.0% Reading ± 0.5% Reading	± 0.5% FSD ± 0.5% FSD
Repeatability	± 0.1%	± 0.1%	± 0.1%
Detector Type	Hall effect	Hall effect	Hall effect
Terminations	Via M20 cable gland	MIL style instrument socket	4 PIN M12 connector
Approx 'K' factor (Pulses/Litre)	115	115	115
Viscosity Range [^]	1-1000 cSt	1-1000 cSt	1-1000 cSt

^{*} Hastelloy C spindles

[^] High viscosity (above 1000 cSt) options available



Weight (kg)			
St St	50 bar	1.600	
PEEK	10 bar	0.550	
Aluminiun	n 10 bar	1.000	
St St	400 bar	7.550	