## **OVAL GEARS FLOWMETERS 10 I/min Serie OG3**

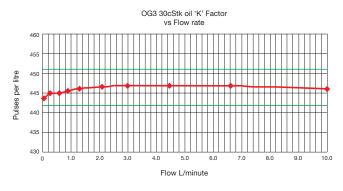


The compact rugged OG3 oval gear flowmeter is designed to give high performance with a low cost of ownership. It has a standard flow range from 0.05 to 10 L/Min on 30 cSt oil and 0.5 to 10 L/min on water like liquids. It can have totally non-metallic wetted components, PEEK<sup>™</sup>, ceramic and an elastomer which makes this the ideal choice for the metering of aggressive chemicals. The standard inlet and outlet are ½" female threads. For OEM use alternatives, including manifold mountings, are available. The standard model is 316 St St with Viton<sup>™</sup> (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 440 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.



- Engine test
- Critical oil flow
- High viscosity fluids
- OEM equipment
- Hazardous areas





- 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 0.5% FSD water
  - 1.0% reading oil (30 cSt)
- ±0.50% reading \*
- 0.1% repeatability
- IP67/NEMA 4 protection
- Models to 700Bar
- Non-metallic option
- \* When used with our Metra-Smart instrument

# IMS Controls



#### **Ordering codes**

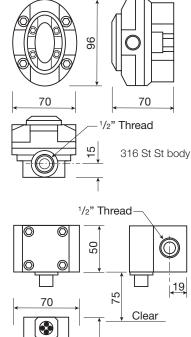
| Model                               |  |  |  |  |
|-------------------------------------|--|--|--|--|
| 0G3                                 |  |  |  |  |
| Body material                       |  |  |  |  |
| S = 316 St St 50 bar std            |  |  |  |  |
| A = Aluminium 10 Bar max            |  |  |  |  |
| P = PEEK <sup>™</sup> 10 Bar max    |  |  |  |  |
| H = Hastelloy C                     |  |  |  |  |
| Temp rating                         |  |  |  |  |
| S = 80°C / 158°F                    |  |  |  |  |
| $T = 100^{\circ}C / 212^{\circ}F$   |  |  |  |  |
| 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 <sup>®</sup>              |  |  |  |  |
| N = Nitrile                         |  |  |  |  |
| E = EPDM                            |  |  |  |  |
| P = PTFE (Max 50Bar)                |  |  |  |  |
| K = Kalrez                          |  |  |  |  |
| Detector Type                       |  |  |  |  |
| H = Hall effect                     |  |  |  |  |
| R = Reed Switch & Resistor          |  |  |  |  |
| N = Namur                           |  |  |  |  |
| X = Reed Switch (Hazardous area)    |  |  |  |  |
| Pipe Thread                         |  |  |  |  |
| $H = \frac{1}{2} (0G3 \text{ std})$ |  |  |  |  |
| Connections                         |  |  |  |  |
| B = BSP F<br>N = NPT F              |  |  |  |  |
| F = Flanged (specify)               |  |  |  |  |
| r = ridiyeu (speciry)               |  |  |  |  |

e.g. **0G3-SS5-VHH-B** is a stainless steel meter rated at 80°C, 50 Bar, Viton™ seal, Hall effect detector and a 1/2" BSP thread.

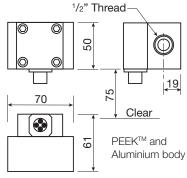


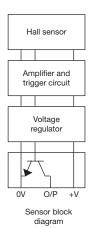
### **TECHNICAL SPECIFICATIONS**

| Sample product<br>codes ⇒           | Stainless<br>standard<br>OG3-SS5-VHH-B | Aluminium<br>standard<br>OG3-AS1-VHH-B   | PEEK™<br>standard<br>OG3-PS1-VHH-B   |
|-------------------------------------|--|--|--|
| Flow range – Water<br>– 30 cSt Oil  | 0.5 - 10 L/min<br>0.05 - 10 L/min      | 0.5 - 10 L/min<br>0.05 - 10 L/min  | 0.5 - 10 L/min<br>0.05 - 10 L/min  |
|                                     | Carbon filled<br>PEEK™<br>Viton™       | Aluminium<br>Carbon filled<br>PEEK <sup>™</sup><br>Viton <sup>™</sup><br>Ceramic | PEEK <sup>™</sup><br>Carbon filled<br>PEEK <sup>™</sup><br>Viton <sup>™</sup><br>Ceramic |
| Accuracy – Water<br>– 30 cSt oil    | ± 0.5% FSD<br>± 1.0% Reading           | ± 0.5% FSD<br>± 1.0% Reading   | ± 0.5% FSD<br>± 0.5% FSD   |
| Repeatability                       | ± 0.1%                                 | ± 0.1%   | ± 0.1%   |
| Detector Type                       | Hall effect                            | Hall effect  | Hall effect  |
| Terminations                        | Via M20 cable<br>gland                 | MIL style<br>instrument socket   | 4 Pin M12  |
| Approx 'K' factor<br>– Pulses/Litre | 440                                    | 440  | 440  |



Reed switch 'X' -560Ω Reed switch & Resistor 'R'





| Weight (kg) |         |       |  |
|-------------|---------|-------|--|
| St St       | 50 Bar  | 1.350 |  |
| PEEK™       | 10 Bar  | 0.230 |  |
| Aluminium   | 10 Bar  | 0.422 |  |
| St St       | 400 Bar | 3.000 |  |
| St St       | 700 Bar | 9.000 |  |

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