

Metra-Flo

High accuracy oval gear flow meters

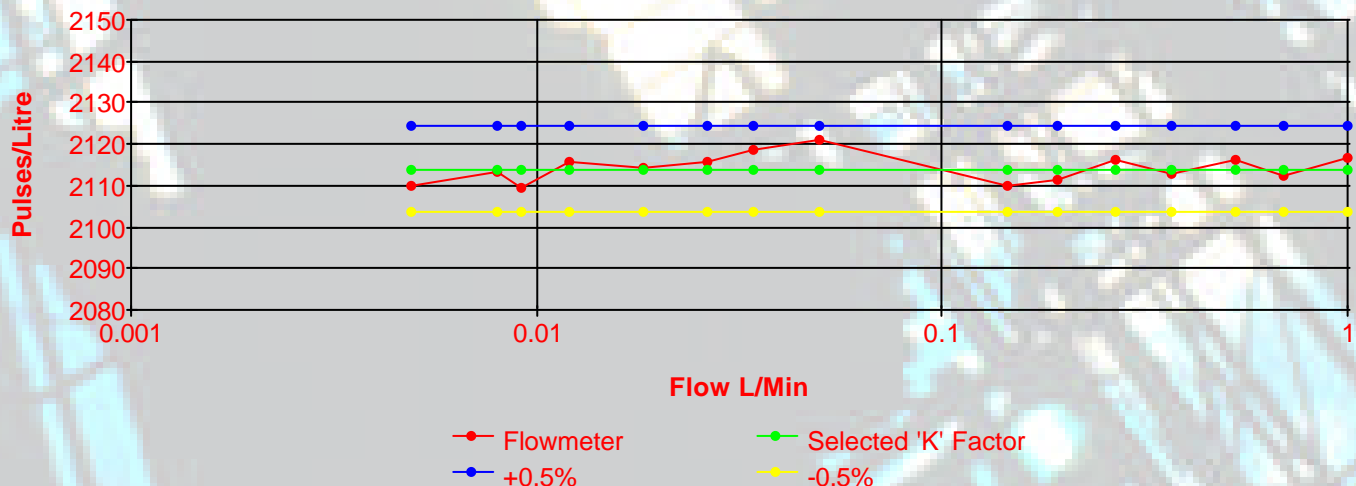
- Comprehensive product range
- Excellent chemical resistance
- Rugged construction
- Individual calibration
- Proven design
- High accuracy oval gear design
- High viscosity capability
- Low pressure loss
- No upstream conditioning required
- Various display options
- Ex version

For flows up to ...

| Gear Size | Standard port size | Litres / US Gallons per second | | Litres / US Gals per minute | | Litres / US gals per hour | |
|-----------|--------------------|--------------------------------|-------|-----------------------------|------|---------------------------|-------|
| | | | | | | | |
| OG1 | 1/4" | 0.016 | 0.004 | 1.0 | 0.26 | 60 | 16 |
| OG2 | 1/4" | 0.064 | 0.016 | 4.0 | 1.0 | 240 | 64 |
| OG3 | 3/4" | 0.17 | 0.004 | 10 | 2.6 | 600 | 160 |
| OG4 | 3/4" | 0.8 | 0.22 | 50 | 13.0 | 3,000 | 780 |
| OG5 | 1" | 1.60 | 0.44 | 100 | 26.0 | 6,000 | 1,560 |
| OG6 | 1 1/2" | 4.0 | 1.10 | 250 | 65.0 | 15,000 | 3,900 |
| OG7 | 2" | 8.0 | 2.20 | 500 | 135 | 30,000 | 7,800 |

OG1 Typical performance curve

Oil @160 cSt



- Compact meter assembly
- Low pressure drop
- Solid state or reed switch sensor
- Accuracy 0.5% reading water, 0.25% reading oil
- 1.0 and 0.5% FSD OG1 & OG2
- 0.05% repeatability
- IP67/NEMA 4 protection
- Models to 670 Bar
- Rugged construction
- High resolution pulse output
- Local/remote display instrumentation



| | OG1 | OG2 | OG3 | OG4 | OG5 | OG6 | OG7 |
|-----------------------------|-------------------------------|------------------------------|-----------------------------|-------------------------------|--------------------------------|----------------------------|----------------------------------|
| Flow range - Water | 0.1– 1.0 LPM 0.026-0.26 USGPM | 0.2– 4.0 LPM 0.05-1.0 USGPM | 0.5– 10 LPM 0.13-2.65 USGPM | 2.0– 50 LPM 0.5 - 13.2 USGPM | 4.0– 100 LPM 1.0 - 37.8 USGPM | 10– 250 LPM 2.6 - 66 USGPM | 20– 500 LPM 5.2 - 66 - 133 USGPM |
| - 30 cSt Oil | 0.01-1.0LPM 0.0026-0.26 USGPM | 0.01-4.0LPM 0.0025-1.0 USGPM | 0.05-10LPM 0.013-2.65 USGPM | 0.2– 50 LPM 0.05 - 13.2 USGPM | 0.5– 100 LPM 0.13 - 37.8 USGPM | 1– 250 LPM 0.26 - 66 USGPM | 2– 500 LPM 0.52 - 66 USGPM |
| Body | 316 St St, Alu or PEEK™ | 316 St St, Alu or PEEK™ | 316 St St, Alu or PEEK™ | 316 St St, Alu or PEEK™ | 316 St St, Alu or PEEK™ | 316 St St, Alu or PEEK™ | 316 St St, Alu or PEEK™ |
| Gears | PEEK™ | PEEK™ | PEEK™ | PEEK™ | PEEK™ | PEEK™ | PEEK™ |
| Seal | Viton™ | Viton™ | Viton™ | Viton™ | Viton™ | Viton™ | Viton™ |
| Magnet | Ceramic | Ceramic | Ceramic | Ceramic | Ceramic | Ceramic | Ceramic |
| Accuracy - Water | ± 1.0 % FSD | ± 1.0 % FSD | ± 1.0 %Actual | ± 0.5 %Actual | ± 0.5 %Actual | ± 0.5 %Actual | ± 0.5 %Actual |
| 30 cSt oil | ± 0.5% FSD | ± 0.5% FSD | ± 0.5%Actual | ± 0.25%Actual | ± 0.25%Actual | ± 0.25%Actual | ± 0.25%Actual |
| Repeatability | ± 0.05% | ± 0.05% | ± 0.05% | ± 0.05% | ± 0.05% | ± 0.05% | ± 0.05% |
| Detector type | Hall effect or Reed switch | Hall effect or Reed switch | Hall effect or Reed switch | Hall effect or Reed switch | Hall effect or Reed switch | Hall effect or Reed switch | Hall effect or Reed switch |
| Terminations | M12 socket | M12 socket | M20 Gland | M20 Gland | M20 Gland | M20 Gland | M20 Gland |
| Approx Pulses/Litre | 2020 | 1010 | 400 | 100 | 70 | 30 | 15 |
| Approx Pulses/USG | 7636 | 3818 | 1512 | 380 | 265 | 83 | 42 |
| Process fitting size | ¼" | ¼" | ¾" | ¾" | 1" | 1½" | 2" |

| Gear size/max flow | Body material | Temp rating | Pressure rating | Seal mat'l | Detector type | Pipe thread | Process connections | Display options |
|-------------------------------|---------------|--------------------|-------------------------|------------|---------------|-------------------------|---------------------|----------------------------|
| OG1 1 L/Min 0.26 USGPM | 1 316 St St | S 70°C S 158°F | S 50 Bar S 750 PSI | S Viton | S Hall effect | S 1/4"(OG1&2 standard) | Q BSP F | B Rate & Total on meter |
| OG2 4.0 L/Min 1.0 USGPM | 2 Aluminium | A 100°C A 212°F | P 10 Bar P 150 PSI | P Nitrile | N Reed switch | N ½" | H NPT F | N Rate & total Ex on meter |
| OG3 10 L/Min 2.6 USGPM | 3 PEEK | P 150°C P 300°F | F 400 Bar F 5880 PSI | F EPDM | E | T 3/4"(OG3&4 standard) | T Flanged (specify) | F Rate & Total plus 4-20mA |
| OG4 50 L/Min 13 USGPM | 4 | | G 670 Bar G 10000PSI | G Kalrez | K | U 1"(OG5 standard) | | U Rate & total + 4-20mA Ex |
| OG5 100L/Min 26 USGPM | 5 | | | | | P 1 1/2" (OG6 standard) | | P Metra-Batch on meter |
| OG6 250L/Min 65 USGPM | 6 | | | | | D 2" (OG7 standard) | | D Metra-Batch remote |
| OG7 500 L/min 135 USGPM | 7 | | | | | | | |