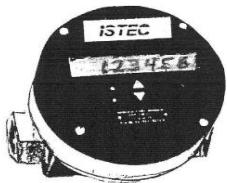
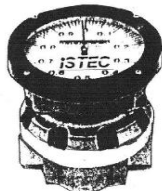
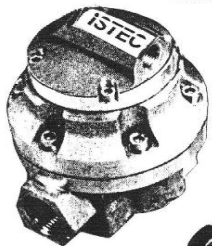
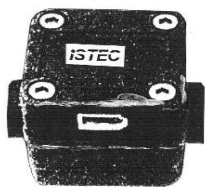
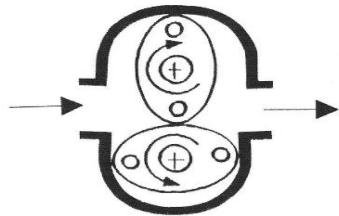


Oval Gear Meter



The diagram of the oval gear meter illustrates the main parts which are two interconnected, very precise, oval gears manufactured from Ryton or 316 Stainless Steel. The teeth of these gears are machined for a very tight connection so that no liquid can pass between the meshed gears. The measured liquid moves between the teeth and the housing as well as the cavities created by the rotating oval gears and the housing. Oval gear meters are available with contact closures produced by reed contacts or hall-effect sensors to activate remote reading panels, computer counting, etc. Magnets are embedded in the gear material so that every time the gear moves underneath the sensor, a signal is created. All electronic and electrical parts are located on the outside of the measuring chamber to assure highest reliability. Some meters are also available with hall-effect switches, mechanical, or electronic displays with pulsing.

Positive displacement flow meters do not need straight pipe connections into the meter or any flow conditioning. The viscosity range can be from 1 to 1 million centipoise. The fluid has to be clean and without sediments, otherwise a strainer is required. The body and top plate can be PPS, aluminum or 316 SST; the precision gears PPS or 316

SST. O-Rings are available in EPDM and several other materials.

With the oval gear system, the viscosity (from 1 centipoise to 1,000,000 centipoise) does not influence the high accuracy of $\pm 1\%$ (or better) of the reading. The precision gears are manufactured from Ryton (polyphenylene sulfide resins) which is tough and unaffected by most chemical and temperature variations.

NOTE: The pressure drop of this meter should not exceed 15 PSI, which is the combination of viscosity, temperature, flow rate, lubricating effect of the liquid, etc. Make sure that the liquid to be measured does not contain any solid parts. These characteristics are common to all positive displacement meters.

KEY:
T=NPTF
F=FLANGED
SS=316 STAINLESS STEEL
FR=FLANGE RULE
AL=ALUMINUM
SPECIFICATIONS

| PROD # | PIPE Ø | DESCRIPTION | ACCURACY | PSI | PULSES/GAL | FLOW RANGE |
|--------|--------|---|----------|-----|------------|----------------|
| 9011 | 1/4" T | RYTON SS AXEL | 1% | 75 | 3785 HALL | .26 - 26 GPH |
| 9012 | 1/4" T | SS BODY RYTON GEARS | 1% | 150 | 3785 HALL | .26 - 26 GPH |
| 9021 | 1/4" T | RYTON SS AXLE | 1% | 75 | 1514 HALL | 0.6 - 132 GPH |
| 9022 | 1/4" T | SS BODY RYTON GEARS | 1% | 150 | 1514 HALL | 0.6 - 132 GPH |
| 9051 | 1/2" T | AL BODY RYTON GEARS | 0.5% | 800 | 306 REED | .2 - 6.6 GPM |
| 9053 | 1/2" T | SS BODY AND GEARS | 0.5% | 800 | 306 REED | .2 - 6.6 GPM |
| 9054 | 1/2" T | AL WITH LCD DISPLAY AND PULSE | 0.5% | 800 | 306 REED | .2 - 6.6 GPM |
| 9101 | 1" T | AL BODY RYTON GEARS | 0.5% | 800 | 136 REED | 1.6 - 32.0 GPM |
| 9103 | 1" T | SS BODY & GEARS | 0.5% | 800 | 136 REED | 1.6 - 32.0 GPM |
| 9104 | 1" T | ALUMINUM BODY WITH MECHANICAL TOTALIZER | 1% | 800 | -- | 1.6 - 32.0 GPM |

| | | | | | | |
|------|------------------|--|------|-----|-----------|-------------------|
| 9120 | 1 1/2" T or F | AL BODY RYTON GEARS | 0.5% | 500 | 54.9 REED | 2.6 - 66.0 GPM |
| 9121 | 1 1/2" T or F | SS BODY & GEARS | 0.5% | 500 | 54.9 REED | 2.6 - 66.0 GPM |
| 9122 | 1 1/2" T or F | ALUMINUM BODY WITH MECHANICAL TOTALIZER | 1% | 500 | -- | 2.6 - 66.0 GPM |
| 9175 | 2" F | AL BODY RYTON GEARS | 0.5% | FR | 25.1 REED | 4 - 106 GPM |
| 9176 | 2" F | SS BODY & GEARS | 0.5% | FR | 25.1 REED | 4 - 106 GPM |
| 9177 | 2" F | AL WITH LCD DISPLAY & PULSE | 0.5% | FR | 25.4 REED | 4 - 106 GPM |