



FLOW MEASUREMENT AND CONTROL



OVAL GEAR FLOWMETERS (OGF)

FLUIDEX Oval Gear Flowmeters stand as precision-positive displacement instruments, incorporating a duo of oval-gear rotors. These meters excel in accurately measuring the flow of a diverse range of clean liquids.

FLUIDEX Stainless Steel flowmeters are engineered to handle a spectrum of liquid products and chemicals, including water-based liquids, acids, bases, salt solutions, while Aluminum meters are well-suited for fuels, oils, and most non-aggressive lubricating liquids. Moreover, we offer PPS (Polyphenylene Sulfide) meters, specially designed to withstand the challenges of handling aggressive chemicals.

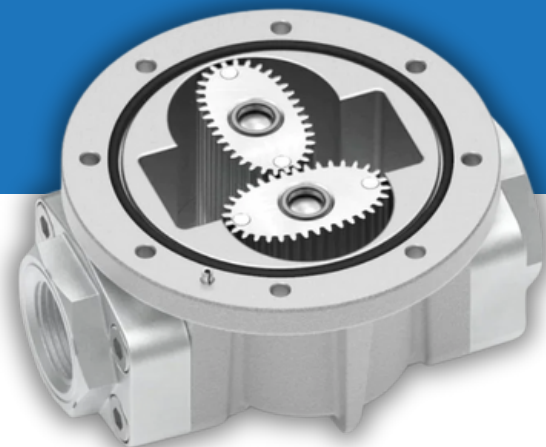
These Oval Gear flowmeters are available in configurations such as blind meters with pulse signal output, seamlessly interfacing with a variety of monitoring and control instrumentation. Additionally, they can be equipped with instruments like totalizers, rate totalizers, or batch controllers. These instruments offer monitoring and control output options, including 4-20mA, scaled pulse, flow-rate alarms, and batch control logic for preset metering.

FEATURES:

- Operates on the positive displacement principle for high accuracy and repeatability in flow measurement.
- Capable of measuring both thick and non-conductive liquids for enhanced applicability.
- Material Options for Diverse Applications: Stainless Steel, Aluminum, and PPS (Polyphenylene Sulfide).
- Electronic and Mechanical Register Options.
- Different pressure ratings available, including standard, intermediate, and high (up to 400 BAR) for meters equipped with electronic registers.
- Various End Connection Options including threaded and flanged options, to suit diverse installation requirements.
- Bi-Directional Flow Measurement.
- No Need for Flow Conditioning: Allows simplified installation and maintenance with no requirement for flow conditioning or straight pipe runs.
- Compact Installation and Low Maintenance: Streamlined design for easy installation in compact spaces and low-maintenance operation.

Applications

- Fuel additive injection
- Fuel consumption measurements
- Diesel injector/pump test equipment
- Water treatment chemical dosing (flocculants, surfactants, biocides, etc.)
- Corrosion inhibitor dosing
- Demineralised / RO water dosing or dispensing
- Monitoring of oil or grease lubricants
- Molasses
- Clean Fluids
- Oil-Based Paints
- Chemical Additive Injection



OPERATION PRINCIPLE

Fluidex Oval Gear Flowmeters, equipped with both electronic and mechanical registers, operate on the positive displacement principle. This design incorporates a pair of precisely machined oval-gear rotors rotating within a precision measuring chamber as the liquid flows through the meter. With each revolution, a fixed volume of liquid is displaced, progressing through the meter.

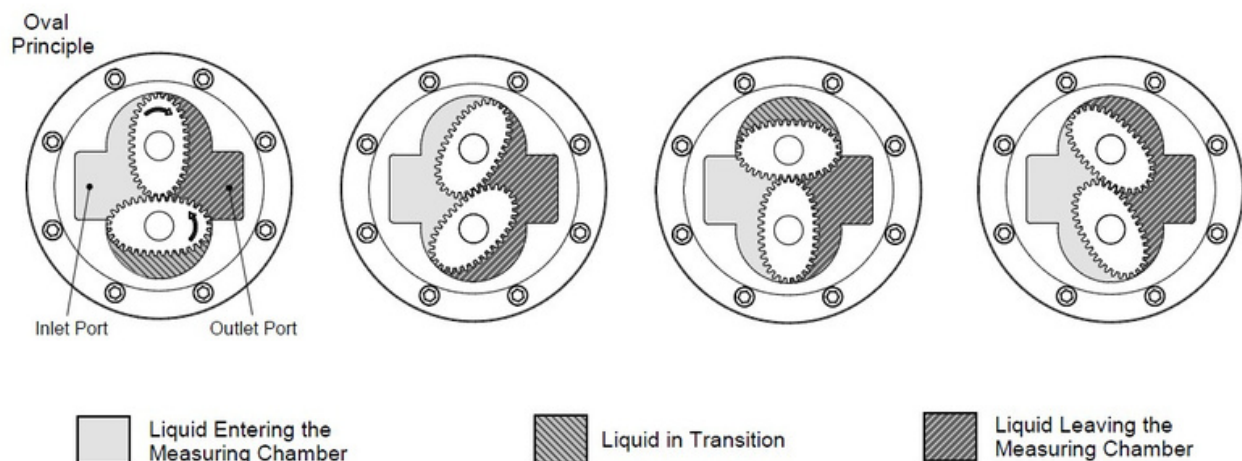
Electronic Register:

In meters with electronic registers, magnets embedded within the rotors initiate a high-resolution pulse train output. This electronic pulse output is then wired directly to process control and monitoring equipment or used as an input to instruments integrated with or directly fitted to the meter.

Mechanical Register:

For meters fitted with mechanical registers, the rotation of the rotors is mechanically translated into readable data. The mechanical components of the register capture the rotations and convert them into numerical values. This provides a straightforward and reliable indication of the flow rate, offering a pulse-free, mechanically-driven system that ensures accurate flow measurement without relying on electronic components.

This dual-register system combines the precision of electronic technology with the robustness of mechanical operation, making Fluidex Oval Gear Flowmeters adaptable to various industrial applications where both electronic and mechanical features are advantageous.



POGF

SERIES

PLASTIC OGF

- Model: POGF025
- Size: 1" (25mm)
- Flow Range @ 3cP: 2.6 - 40 GPM (10 -150 LPM)
- Accuracy: $\pm 0.2\%$ ~ $\pm 0.5\%$ of reading
- Repeatability: Typically $\pm 0.03\%$ of reading
- Temperature Range: -40°C - $+80^{\circ}\text{C}$ (-40°F - $+180^{\circ}\text{F}$)
- Pressure Range: Up to 174 psi (12 bar)
- Material: PPS
- Ends: Threaded NPT and BSP



SMALL CAPACITY OGF

SOGF

SERIES



- Models: SOGF004, 006 and 008
- Sizes: 1/8" (4mm) to 3/8" (8mm)
- Flow Range @ 3cP : 0.26-145 GPH (1.0-550 LPH)
- Accuracy @ 3cP: $\pm 0.2\%$ to 1.0% of reading
- Repeatability: Typically $\pm 0.03\%$ of reading
- Temperature: -40°C - $+150^{\circ}\text{C}$ (-40°F - $+300^{\circ}\text{F}$)
- Pressures: 200 psi (15 Bar) to 5800 psi (400 Bar)
- Material: Aluminium and Stainless steel
- Ends: Threaded NPT and BSP



MOGF

SERIES

MEDIUM CAPACITY OGF

- Models: MOGF015, 025, 040 and 050
- Sizes: 1/2" (15mm) to 2" (50mm)
- Flow Range @ 3cP: 0.26-30 GPM (1-450 LPM)
- Accuracy @ 3cP: $\pm 0.2\%$ to 0.5% of reading
- Repeatability: Typically $\pm 0.03\%$ of reading
- Temperature: -40°C - $+150^{\circ}\text{C}$ (-40°F - $+300^{\circ}\text{F}$)
- Pressures: 285 psi (20 Bar) to 5800 psi (400 Bar)
- Materials: Aluminium and Stainless Steel
- Ends: Threaded NPT/BSP and Flanged ANSI / DIN



LARGE CAPACITY OGF

LOGF

SERIES



- Models: LOGF080, 080E, 100 and 100E
- Sizes: 3" (80mm) and 4" (100mm)
- Flow Range @ 3cP: 10-600 GPM (35-2500 LPM)
- Accuracy @ 3cP: ± 0.2 to $\pm 0.5\%$ of reading
- Repeatability: Typically $\pm 0.03\%$ of reading
- Temperatures: -40°C - $+150^{\circ}\text{C}$ (-40°F - $+300^{\circ}\text{F}$)
- Pressures: 145 psi (10 Bar) to 174 psi (12 Bar)
- Material options: Aluminium and Stainless Steel
- Ends: Threaded NPT/BSP and Flanged (ANSI/DIN)



MECHANICAL

SERIES

MECHANICAL OGF

- Models: MOGF015, 025, 040, 050, LOGF080, 080E, 100 and 100E
- Sizes: 1/2" (15mm) to 4" (100mm)
- Flow Range @ 3cP: 0.26-660 GPM (1-2500 LPM)
- Accuracy @ 3cP: $\pm 0.5\%$ to $\pm 1\%$ of reading
- Repeatability: Typically $\pm 0.03\%$ of reading
- Temperature: -15°C - $+80^{\circ}\text{C}$ (5°F - 176°F)
- Pressures: 145 psi (10 Bar) to 580 psi (40 Bar)
- Material options: Aluminium and Stainless Steel
- Ends: Threaded NPT/BSP and Flanged (ANSI/DIN)



Note: The mentioned flow ranges, accuracy, repeatability, temperature limits, pressures, material options, and end connections are provided as general specifications for the Meter series. It's important to note that these values may vary between different models and sizes within the series. For precise details about a specific model and size required, Please refer to the corresponding flowmeter data sheet.

INSERTION PADDLE WHEEL FLOWMETERS

FLUIDEX Paddle Wheel Insertion Flowmeters present a cost-effective solution for measuring liquid flow in large pipes. Their design allows easy insertion into existing pipe bodies, making them a practical choice for various industrial applications. These flowmeters strike a balance between functionality and affordability.

With a linearity typically within +/- 1.5%, Fluidex Paddle Wheel Insertion Flowmeters provide reliable and consistent flow measurement. The inclusion of a hot-tap feature, as seen in the PWF2500 model, simplifies installation and maintenance, facilitating seamless integration into existing systems without disrupting operations.

Whether for monitoring liquid flow in industrial processes or managing water systems, Fluidex Paddle Wheel Insertion Flowmeters are adaptable to different pipe diameters. Their simplicity and reliability make them a practical choice for industries where efficiency and affordability are paramount.

FEATURES:

- Simple design for economical use and easy installation in existing pipe bodies.
- Adaptable to Pipe Size: Compatible with various pipe diameters, providing installation flexibility.
- Ease of Installation: Designed for easy insertion into existing pipes, minimizing modification needs.
- Constructed with SS316 for durability and compatibility with various liquids.
- Reliable Performance: Ensures consistent and reliable flow rate measurements in varied environments
- Low Maintenance: Minimal maintenance requirements contribute to overall cost-effectiveness.
- Integrated Electronics: Some models feature integrated electronics for convenient data monitoring.
- Bi-Directional Flow Measurement: Capable of measuring flow in both directions for versatile applications.
- Compatibility with Various Liquids: Suited for measuring the flow of liquids with different viscosities and compositions.
- IP68 (NEMA6) Submersible: Offers submersible capability with a stainless steel (SS316) construction for enhanced durability, suitable for cable connection only.

Applications

- HVAC
- Hot and cold water
- Fire systems
- Water Distribution (Management and treatment)
- Boiler feed water
- Waste water
- Hydrant flow testing

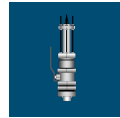


PWF

SERIES

PADDLE WHEEL FLOWMETER

- Models: PWF900 and PWF2500
- Suits Pipe Sizes: Up to 100" (2500mm)
- Pipe Connection: 1.5" or 2"
- Connection Standard: BSPT or NPT male thread
- Linearity: Typically $\pm 1.5\%$ of reading
- Temperature Range: -40°C - $+150^{\circ}\text{C}$ (-40°F - $+300^{\circ}\text{F}$)
- Pressure Range: Up to 1160 psi (80 Bar)
- Material: SS316 Body and Rotor Shaft



RT14

FLOWRATE TOTALIZER

- Display: 8 digit alpha-numeric backlight LCD.
- Instantaneous Flow Rate
- Signal Input: Reed, NPN/PNP, mV sinewave (Turbine flowmeters), Weigand
- Linearization 10 point correction
- Output: Analogue 12 bit 4-20mA ($\pm 0.05\%$ FS at 25°C)
- Engineering Units: Selectable.
- Power: Battery + External DC + Loop (12 - 30V dc)
- Temperature Range: -30°C - +80°C (-22°F - +176°F)
- Body: Glass Reinforced Nylon (PA6) with a Polycarbonate lens
- Protection Class: IP66/67
- Mounting Options: On meter, stem, wall, pipe or panel.
- Approvals: Intrinsically Safe - IECEx / ATEX (optional) Ex ia IIB T4 Gb (-30°C <Ta <+70°C)



FLOWRATE TOTALIZER

RT40



- Display: Large backlit LCD 6-digit + 8-digit secondary line.
- Temperature Range: -20°C - +80°C (-4°F - +176°F)
- Signal Inputs: Reed switch, Hall effect, Namur proximity detectors, voltage, current and coil (15mV P-P min)
- Signal Output: NPN transistor, scalable
- Power: Battery + External Power Regulated 8-24 V (dc)
- Protection Class: IP65 (NEMA 4)
- Body Material: Aluminium
- Mounting options: Field, on meter or panel.
- Engineering Units: Selectable



EB SERIES

BATCH CONTROLLER

- Backlit LCD 7-digit display for easy reading
- Sturdy IP66/67-NEMA4X universal mount glass-reinforced nylon enclosure with rubberized buttons and polycarbonate lens
- Wide range of engineering units
- 2 digital NPN outputs with a current rating of up to 300mA, allowing for direct control of solenoid valves or connection to relays to control large valves and pumps.
- Non-volatile memory ensures data retention



FLOWRATE TOTALIZER

F SERIES



- Robust IP65 GRP enclosure
- Multi-line LCD displays flow rate and total simultaneously
- Battery powered with 5 year life span
- Broad operating temperature range; -40°C to +80°C or -40°C to +70°C when intrinsically safe.
- 15 point linearization of flow meter accuracy curve
- 4-20mA loop powered analogue output with 12 bit resolution and exceptional accuracy.
- NPN scaled pulse output is well suited to remote recording of total volume, particularly in PLC's with low input frequency restrictions.
- Flow alarms for high, low, or high/low allows precise control over critical processes such as coolant flow or bearing lubrication.
- Two totals (1 x resettable, 1 x non-resettable), 1x flow rate display
- Wide range of engineering units
- Mounting options: Field, on meter or panel.
- Optional Intrinsically Safe approval

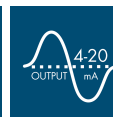


HART
COMMUNICATION PROTOCOL

- Explosionproof according to ATEX, IECEx, FM, and CSA.
- Aluminium or Stainless Steel Explosionproof enclosure
- Highly sophisticated LCD displays flow rate, total, measuring units, and a flow rate indicating speedometer.
- 15 point linearization of flow meter accuracy curve
- Very broad operating temperature range; -40°C to +70°C
- 4-20mA loop powered analogue output with 12 bit resolution and exceptional accuracy.
- NPN scaled pulse output is well suited to remote recording of total volume, particularly in PLC's with low input frequency restrictions.
- Flow alarms for high, low, or high/low allows precise control over critical processes such as coolant flow or bearing lubrication.
- Two totals (1 x resettable, 1 x non-resettable), and one flow rate display
- Wide range of engineering units
- Mounting options: Field, on meter or panel.



HART
COMMUNICATION PROTOCOL



For more information about FLUIDEX
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Specifications are subject to change without notice

