



Flow Meters: Types of Flow Meters

1.1 Ultrasonic Flow Meters (Transus)

Ultrasonic flow meters are a high-precision and reliable solution for measuring natural gas in custody transfer, distribution, and process control. Their non-intrusive technology reduces maintenance and provides stable readings even in turbulent or pulsating flow conditions.

- Multipath measurement technology (4 paths) optimizing flow accuracy and stability.
- Size range from 3" to 36", with ANSI 150 - 900 flanges (more diameters and pressure classes available upon request).
- Compact and robust design, with high-efficiency titanium transducers resistant to extreme conditions.
- Low power operation (<1W), ideal for solar or battery-powered applications.
- Compatibility with integrated pressure and temperature sensors for real-time PTZ compensation.
- Compliant with AGA-9, OIML R137, and MID standards for custody transfer.

1.2 Turbine Flow Meters (FMG – Flow Meter Group)

Turbine flow meters are widely used in custody transfer applications for the precise measurement of natural gas and other non-corrosive gases such as propane, butane, air, nitrogen, and hydrogen.

- Wide flow range: From 3 m³/h to 40,000 m³/h.
- Available diameters: DN50 to DN600 (2" - 24").
- Pressure range: PN 10 - 100, ANSI 150 - 600.
- High accuracy: ±1% in the range 0.2 Qmax to Qmax, ±2% in the range Qmin to 0.2 Qmax.
- Multi-stage flow conditioner, eliminating turbulence and reducing installation requirements.
- Compliant with EN 12261, OIML R137, MID 2014/32/EU, ATEX, and other international standards.

1.3 Rotary Flow Meters

Rotary flow meters are widely used in custody transfer and natural gas distribution, providing high accuracy even at low flow rates.

- Wide flow range: From 0.2 m³/h to 1,000 m³/h.
- Available diameters: DN25 to DN200 (1" - 8").
- Pressure range: PN 10 - 100, ANSI 150 - 600 (more diameters and pressure classes available upon request).
- High accuracy: ±1% in the range Qt - Qmax, ±2% in the range Qmin - Qt.
- Compact and robust design with an interchangeable cartridge, allowing maintenance without removing the meter from the line.
- Compatible with monitoring systems: Equipped with low and high-frequency pulse sensors, compatible with flow computers and SCADA systems.
- Built to withstand harsh industrial conditions.
- Operating temperature range: From -40°C to +70°C without affecting performance.
- Complies with international standards: EN12480, OIML R137 1&2, MID 2014/32/EU.

1.4 Coriolis Flow Meters

Coriolis flow meters offer high accuracy in measuring mass flow, density, and fluid temperature, making them ideal for custody transfer and process control applications across multiple industries.

- Wide flow range: From 600 kg/h to 1,000,000 kg/h.
- Available diameters: DN10 to DN250 (3/8" - 10") (more sizes available upon request).
- Pressure range: Up to 100 barg (ANSI 600), with options up to 200 barg (depending on material and configuration).
- High accuracy: ±0.1% for liquids and ±0.35% for gases, with ±0.05% options for critical applications.
- Extended temperature range: From -200°C to +400°C, allowing for cryogenic applications such as LNG.
- Entrained Gas Management (EGM) technology for stable operation in multi-phase flows with up to 100% entrained gas.
- Certified for custody transfer: OIML R117, OIML R137, MID MI 002 and MI 005, API, AGA, ATEX, NACE MR0175.

1.5 Orifice Plate Flow Meters

Orifice plate flow meters are a cost-effective and reliable solution for gas and liquid flow measurement, widely used in custody transfer and process control applications.

- Economical and low-maintenance solution.
- Measurement principle based on differential pressure (dP).
- Easy installation and maintenance, ideal for pipelines and oil and gas transportation.
- Compliant with AGA and ISO standards for custody transfer applications.