



Technology for Precision Measurements



Fiscal Skid



REAL-TIME MEASUREMENT

Provides real-time measurement at the point of Fiscal & Custody transfer in an integrated package that includes a Micro Motion Coriolis Flow Meter and a Phase Dynamics Water Cut Analyzer.

FLOW COMPUTING

Determines Total Oil and Water to API guidelines.

TOUCHSCREEN DISPLAY

High resolution 6-inch touchscreen display provides convenient interface for user interaction and observation of measurements.

DATA LOGGING

Convenient data logging function provided.

APPLICATIONS

- Fiscal Measurement
- Custody Transfer
- Lease Automatic Custody Transfer (LACT)
- Loading / Unloading Depots
- Ship / Rail / Pipeline / Truck

PRECISE & REPEATABLE

The metering elements provide the best of both technologies with a Coriolis Flow Meter for total fluid volume and density and a Phase Dynamics Water Cut Analyzer for the measurement of water in oil. This configuration offers precise and repeatable measurements that are field proven.

QUALITY & DURABILITY

These Measurement Systems are manufactured to the highest standard to provide quality & durability over the long-term. Electronic assemblies are subjected to burn-in cycles. Measurement Sections are inspected and hydrostatically tested. Factory calibration is the final and distinguishing step in the manufacturing process. Phase Dynamics is an ISO 9001 certified company.

CERTIFICATIONS

- CSA Class 1, Div 1, Grp C&D, Zone 1, Grp IIB
- FM Approvals Class 1, Div 1, Grp C&D
- ATEX EEx d IIB T5, PED A1
- CE Mark, Ex II 2 GD

SPECIFICATIONS

Parameter	Low Range Water Cut Analyzers		
Range	0-4%	0-10%	0-20%
Uncertainty (2 σ)	$\pm 0.04\%$	$\pm 0.04\%$, 0-4% $\pm 0.1\%$, 4-10%	$\pm 0.04\%$, 0-4% $\pm 0.1\%$, 4-10% $\pm 0.2\%$, 10-20%
Repeatability	$\pm 0.02\%$		$\pm 0.1\%$
Resolution	0.01%		0.1%

Features

- Built-in temperature compensation
- Automatic density correction
- Measurement in accordance with API guideline
- Sensors measure the entire volume of fluids
- Proven technologies combined into one system
- Skid mounted for fast installation

Electronics Enclosure

Explosion proof: aluminum or stainless steel, IP66 rated enclosure.

Display

6-inch color touchscreen

Power

Supply: 100—240Vac or 24Vdc

Consumption: 18 Watts typical, 33 Watts maximum

Input / Output Interface

Analog I/O 4-20mA, 1x or 5x

Pulse input, 1x or 3x

MODBUS RTU RS-485, 4x

HART v5/6, 1x

Alarm Relay, 2x

Temperature

Ambient: -40°C to $+60^{\circ}\text{C}$

Process: 0°C to $+204^{\circ}\text{C}$

Process Connections

ANSI Class 150# through 600# raised face flanges, typical. Others available.

Measurement Section

Flow-through diameter: 1, 2, or 3 inch

Configuration shapes: "U" as standard

Suggested flow-rates: 2 to 14 feet/second

Materials: 316/316L stainless steel, typical

Temperature compensation: built-in RTD sensor

Micro Motion Coriolis Flow Meter

Workmanship Standards

- ASME Section IX
- ASME B 31.3
- EN 10204
- NACE MR0175-99

Reports

- PMI—Positive Material Identification