

The Flo • Point™ instrument body is cast 316 stainless steel and rated to ANSI 150, 300 or 600. The housing is rated Class 1, Division 1, Groups C & D. Two 1/2"-NPT holes provide wiring access to the electronics for power and data communications or simply communicate with the Flo • Point™ via an optional C1 D1 junction box with on/off switch.

ANSI 150 applications - Complete tool ANSI 150 connections working pressure (1895kPa / 275psig)

ANSI 300 applications - Complete tool ANSI 300 connections working pressure (4960kPa / 720psig)

ANSI 600 applications - Complete tool ANSI 600 connections working pressure (10204kPa / 1480psig)

Flo • Point™ Water Cut Sensor Specifications

Performance

Measurement range:	0-100% water cut
Measurement method:	100% of flow volume through the sensor
Measurement rate:	factory set to approximately one measurement/second
Measured variables:	water cut, fluid temperature and electronics temperature, accumulated oil and water volumes when coupled with a flow meter
Accuracy:	+/- 1% of full scale over water cut range
Resolution:	0.5%
Repeatability:	1.0%
Salinity range:	0 - 100,000 (NaCl) mg/L (0-13 ounce/gallon [U.S])
Compensation:	automatic internal salinity, temperature, and density compensation.

Operating temperature range

Electronics:	-40°C to +80°C (-40°F to 176°F)
Fluid temperature range:	0°C to +80°C (+32°F to 176°F)

Call ESI for higher temperature applications.

Electrical

Power requirements:	10 - 15VDC @ 750mA
Outputs:	five analog and one digital 0-5V, 0-10V, 0-20mA, 0-25mA, 4-20mA, (RS232)

Mechanical

Dimensions:	63 x 17 x 17 cm (24-1/2 x 6-5/8 x 6-5/8 in)
Construction:	cast 316 stainless steel
Piping:	2" diameter, in-line connection
Weight:	approx 54kg (120lbs)

Recommended ancillary equipment: inline static mixer for low flow rates

CSA No. 210467, CRN No. 0F4060.1.2.3

Designed to meet CSA for hazardous locations Class 1, Div 1, Groups C & D.

Flo • Point™

A Revolutionary Water Cut Sensor for the Oil Industry



E.S.I. Environmental Sensors Inc.

Tel: 1.250.479.6588 · Fax: 1.250.479.1412

Toll Free (in North America): 1.800.799.6324

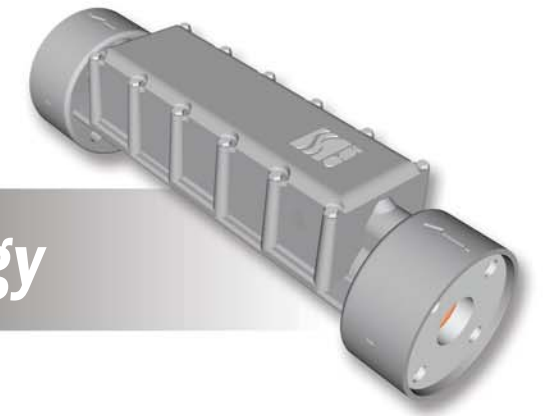
Email: flopoint@esica.com · www.esica.com



There's a lot happening below the surface™

Full Volume Real-time Monitoring

Flo • Point™ enables increased efficiency with rugged, zero-maintenance technology



What Is It?

Flo • Point™ is a patented, water cut sensor, based on leading edge technology, that electronically measures the volumetric water content of a 100% of the fluid stream.

Flo • Point™ utilizes Time Domain Transmissiometry (TDT) technology to read a full range of water cuts (0-100%) while automatically compensating for salinity variations.

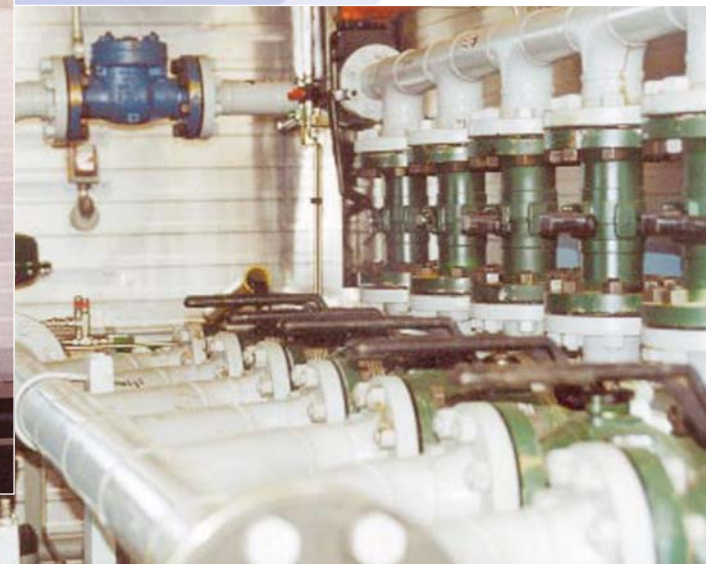
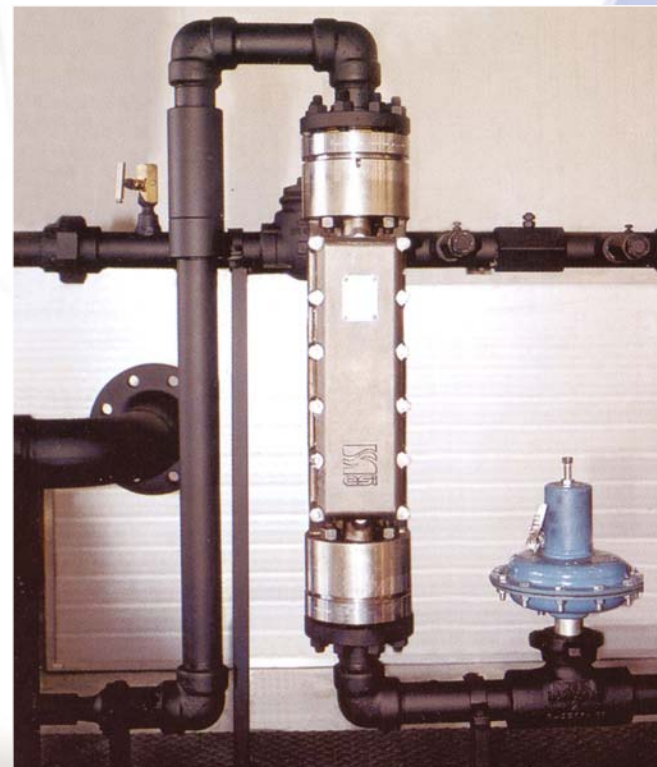
Flo • Point™ can be used to monitor water content accurately (+/- 1%) in a full range of oil densities from very heavy to light.

The Primary Benefits

Flo • Point™ continuously measures the percentage of water content in oil on a REAL TIME basis over a wide range of oil production conditions. Net revenue can be increased by:

- Tuning a well or reservoir for maximum oil production
- Reducing the volume and cost of treating water
- Increasing the mean time between well work-overs
- Eliminating manual water cut sampling and decreasing labour cost

Flo • Point™, when combined with a data logger, SCADA or portable computer, offers a comprehensive display of production information. By adding a wireless modem and internet access, data can be accessed quickly and efficiently to increase well profitability.



Easy to Install...

Flo • Point™ is installed in-line with the fluid flow and can be mounted in any orientation or configuration - vertical, horizontal or slanted. Other installation features include:

- Integration of flow meter data to accurately measure oil & water volumes
- Water cut readings adjusted for salinity, temperature and oil density
- Easy to use calibration and logging software
- In-line real-time readings of the total fluid flow
- Multiple data outputs for a variety of installation configurations
- SCADA compatibility
- Allowance for in-situ calibration confirmation, sampling verification and "Prover" certification
- Units have no moving parts

Industry-Wide Applications Include...

- Monitor a single well, the well test header or a group manifold
- Characterize the well and the reservoir to optimize production and size equipment
- Real time water cut information that is unaffected by sand salinity and temperature
- Detect upset conditions in storage and treatment facilities

A Source You Can Trust

Environmental Sensors Inc. is a world leader in precision water monitoring products with three generations of water monitoring instruments sold in 45 countries.

World Leader in Precision Water Monitoring Products