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:  $-40^{\circ}\text{C} \text{ to } +80^{\circ}\text{C} \text{ (-}40^{\circ}\text{F to } 176^{\circ}\text{F)}$ Fluid temperature range:  $0^{\circ}\text{C to } +80^{\circ}\text{C (+}32^{\circ}\text{F to } 176^{\circ}\text{F)}$ 

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)

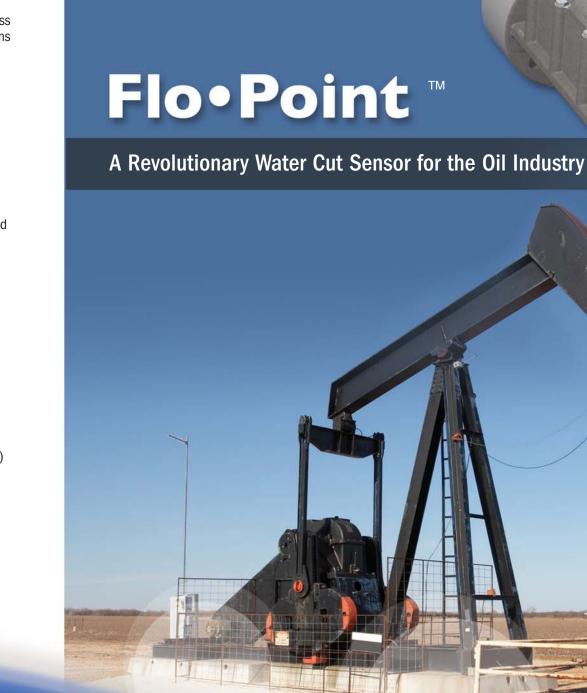
Mechanical

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.





There's a lot happening below the surface™

E.S.I. Environmental Sensors Inc.



Toll Free (in North America): 1.800.799.6324 Email: flopoint@esica.com · www.esica.com

# 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

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.



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

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:

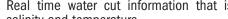
- · Integration of flow meter data to accurately measure oil & water volumes
- · Water cut readings adjusted for salinity, temperature and oil
- Easy to use calibration and logging software
- In-line real-time readings of the total fluid flow
- Multiple data outputs for a variety of installation configurations
- 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