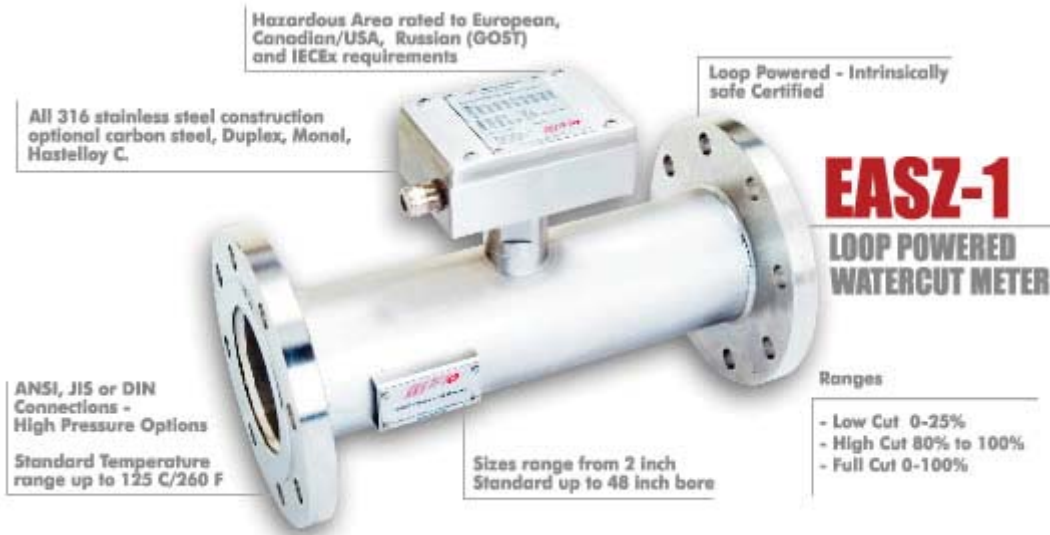


PRODUCT DETAILS AND GENERAL SPECIFICATIONS

The EASZ-1 is a loop powered water-cut meter with exceptional accuracy and repeatability in water/oil measurements. It is certified to CSA/US, ATEX, IECEx and PED and available in standard low cut (0-25%) , high cut (80-100%) and full cut (0-100%) configurations.



GENERAL MEASUREMENT SPECIFICATIONS – see note *

Table 1.0

| Range Setting | 0-1% | 0-25% | 80-100% | 0-100% |
|---------------------------|----------------------|----------------------|----------------------|----------------------|
| Accuracy | +/- 0.05% | +/- 0.2% | +/- 0.2% | +/- 1% |
| Resolution | 30 ppm | 30 ppm | 30 ppm | 30 ppm |
| Fluid Temperature Min/Max | 0-140 °C 32-284°F | 0-140 °C 32-284°F | 0-140 °C 32-284°F | 0-140 °C 32-284°F |

* The EASZ-1 is an electronically based dielectric constant type measurement device using modern components that do not experience the inherent drift seen in legacy designs. Accuracy and repeatability from an electronics standpoint are unsurpassed but ultimately depend on a well-mixed liquid stream. The precision of the EASZ-1 can be vastly improved through inclusion of our built-in EESiMix static mixer.

Stream conditioning by EESIFLO

The EASZ-1 Water-cut meter can be manufactured with either separate or integral mixers. The mixers ensure unmatched accuracy and repeatability.

Sample ports can also be manufactured downstream of the mixer so that correlations can be made between laboratory samples and water-cut measurements.

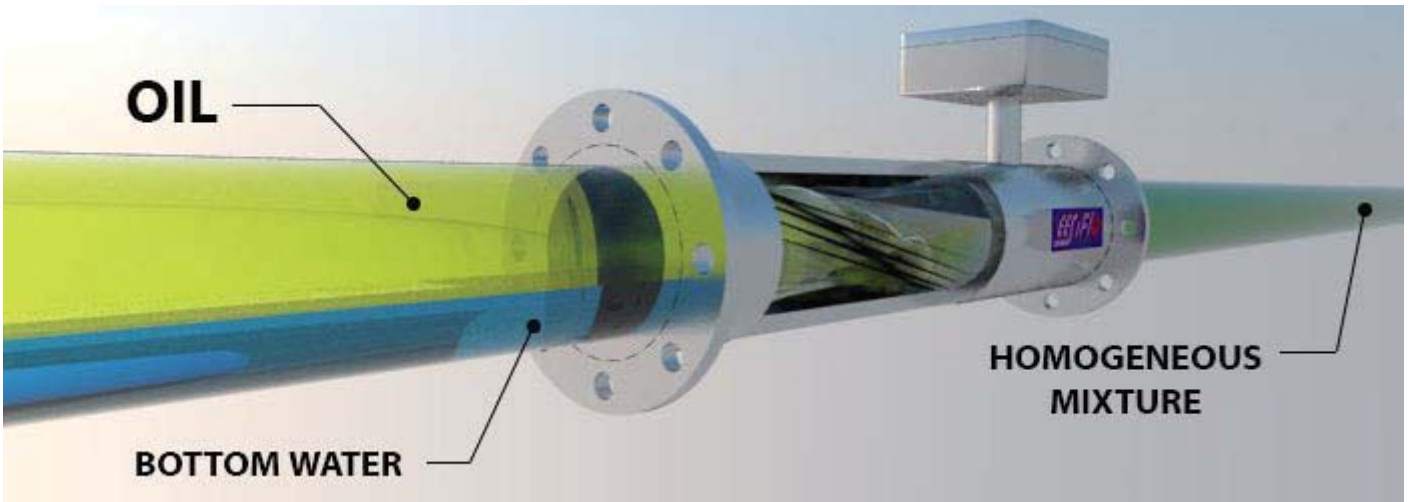




EASZ-1 with Integral mixing



Triple action mixer ensures oil/ water mixing before measurement



REPRESENTATIVE ISOKINETIC WATER CUT MEASUREMENT

Oil and water traveling down a process pipe tend to separate. Engineers with experience in corrosion monitoring will know that water tends to build up at the bottom. In the Oil and Gas Industry this is often referred to as "Bottom Water" and in water cut measurements it is sometimes known as the "missed water". Both API and ISO have written recommendations for sampling with reference to the need to mix the oil/water stream with reference to custody transfer sampling. These same principles can be used in water cut analyzer designs to improve accuracy and repeatability.

GENERAL ORDERING SPECIFICATIONS

- Manufacturer: EESIFLO®
- Product: EASZ-1 Watercut Meter

Integral EESIMIX

- Integral EESIMIX + sampling port – option no mixing required (stand alone unit)
- **Standard Sizes:** 2 inch to 48 inches
- **Available Flange Types:** ANSI RF, DIN, JIS – other
- **Flange Rating:** 150, 300, 600, 900 1500
- **Material of Construction:** Wetted parts all 316 stainless steel as standard
- **Optional Materials of Construction:** Duplex, Hastelloy C, Monel
- **Spacer Material:** PEEK (*polyether ether ketone*)
- **Fluid Type:** Crude Oil/Crude Oil Mixture/Crude Oil Emulsions - Hydrocarbons
- **Fluid Temperature:** 0 - 140 ° C/ 284°F
- **Installation:** Full Bore Inline Isokinetic w/EESIMIX (optional stand alone unit or bypass configuration)

ONLINE MEASUREMENT RANGES:

- Low Cut 0-25% water in crude oil
- High Cut 80-100% water in crude oil
- Full Cut 0-100% water in crude oil
- **Accuracy/Repeatability :** Well Mixed Conditions- See Table 1.0
- **Electronics Enclosure:** Stainless Steel IP66 Rated
- **Hazloc Certification Type:** Intrinsic Safety – ATEX/GOST/CSA-US
- **IECEx Marking:** Ex ia/IIB T4 Ga (-20°C <Ta<+60°C)
- **Operating Power:** 24vdc (Loop Powered)
- **Measurement Output:** 4-20mA
- **Response Time:** 1 second
- **Communication Protocols :** RS232 /HART
- **Software:** EASZ-GUI for Windows™