# TD-2500 ULTRASONIC OIL IN WATER MONITOR

## **High Concentration Detection**

The TD-2500 combines ultrasonics and a time-tested insertion probe to offer the ultimate in early detection of high concentrations, or slugs, of oil in waste water.

## **Ultrasonic Technology**

Ultrasonic technology measures oil at high concentrations, typically seen after oil/water separation, is sensitive to droplets, solids or gas bubbles and is easier to maintain than optical technologies.

## **Easy Process Insertion**

The TD-2500's simplified design allows for easy installation, at any point in the water treatment process. Its fast response time makes the TD-2500 ideal for improving water treatment efficiency and tuning the chemical injection rate.





#### **OPERATION BENEFITS**

- Detect high oil concentration slugs before separators
- Optimize wastewater process control
- Reduce operating cost and environmental discharge issues

#### **KEY APPLICATIONS**

- Oil & water separators feed monitor
- Storage tank dewatering control
- Desalter water effluent monitoring
- Disposal well monitoring

#### **INSERTION PROCESS MONITOR**

- Measures oil in water (10 ppm-30,000 ppm)
- Rated to high temperatures and pressure
- Customized materials of construction
- Zero downtime sensor removal—process insertion with ball valve
- No moving parts, low maintenance



## **SPECIFICATIONS**

Accuracy	± 4% F.S.
Repeatability	± 4% F.S.
Sensitivity	± 2% F.S.
Response Time	T90: 1 second
Method / Technology	Acoustic back-scatter, 5 or 15 MHz [application-specific]
Range / Parameters	10 ppm-30,000 ppm (3%)

#### **SENSOR**

Pressure	17.9 bar @ 25°C (260 psi @ 77°C) — insertable
Temperature	0–150 °C [32–302 °F]
Materials of Construction	Stainless steel, Hastelloy, Monel, Teflon; PEEK detector with Kalrez O-rings
Process Connections	Ball-valve mounted or flange mounted
Pipe Diameter	≥ 3" [90 mm], adapter available for smaller pipe diameters
Units	ppm, mg/l
Cable	≤ 100 m

#### **ENVIRONMENT**

Temperature / Humidity	0–45 °C [32–113 °F], 0 to 95% relative humidity [non-condensing]
Installation	Indoors in suitable enclosure; outside under sun shield
Dimensions / Weight	350 x 300 x 173 mm [13.8 x 11.8 x 6.8 inches] / 5.76 kg. [12.7 lbs.]
Enclosure	Stainless steel or fiberglass, IP 65, NEMA 4X

#### **UTILITIES**

Power / Consumption	90–265 VAC. 15 Watts

#### **COMMUNICATIONS**

Analog Output	4-20 mA outputs [self-powered]
Relays	4
Human Machine Interface	Dot-matrix with local touch pad

### **CERTIFICATIONS**

CFC/NFC	Class I Div 2 groups ABCD T3 [purge	'd



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