Advanced sensors

Oil in Water
Analytical Experts

EX-100P/P2 - 1000P/P2

INLINE OIL IN WATER ANALYZER

Ultrasonics | Fluorescence | Spectroscopy

The EX-100P and the EX-100P2 are respectively a single and dual inline probe Oil in Water analyzers that use fluorescence to provide continuous accurate measurements of oil concentration in water. The additional probe on the EX-100P2 allows monitoring of two process points simultaneously with dual readings displayed on the analyzer. Reliable real-time data enables operators to take accurate measurements and to improve efficiency enabling cost reductions.

In addition to the standard probe features the 1000 models offer spectral analysis.

FEATURES

- Patented ultrasonic cleaning
- Laser Induced Fluorescence (LIF)
- Second probe for simultaneous dual measurement (EX-100P2/1000P2)
- Effective means of monitoring performance of separation equipment both inlet and outlet (EX-100P2/1000P2)
- Both readings available on screen and via output signals (EX-100P2/1000P2)
- Single or double block & bleed valves are available for hot insertion or extraction of probes
- Configurable measurement ranges (0-10 ppm [...] up to 0-20,000 ppm)
- Measurement repeatability ±1% of full scale range
- Remote management and diagnostics
- Easy to install (no sample conditioning required)
- Multiple communications options – 4-20 mA, HART, Modbus, Extended Ethernet
- Optional integrated spectrometer
- Auto tuning functionality
- Digital input & output

BENEFITS

- Robust and reliable
- Easy to use
- Simultaneous measurement of two streams for one device (EX-100P2 and EX-1000P2)
- Low Cost of Ownership (COO) with no routine maintenance
- No degradation of signal or recalibration required
- Inline probes allows for analyzer to be located up to 30m from probes location
- Inline probes are installed directly into process pipes
- Remote control and monitoring (suitable for un-manned locations and remote process monitoring)

Measurement Performance		
Measurement principle	Laser Induced Fluorescence (LIF)	
Cleaning	Ultrasonic (automatic)	
Range	0-20,000 ppm*	
Repeatability	±1% of full scale range	
Response time	1 Second, continuous results	
Operating Conditions		
Process temperature	Up to 200°C	
Process pressure	Up to 100 barg	
Flow Velocity	Nominal 10 m/s	
Operational ambient temperature	-20°C to 55°C	
Spectrometer Specification (1000 models only)		
Emission wavelength range	400-1,100 nm	
Resolution	0.5 nm	
Utilities		
Power Supply	110 or 230 VAC (Pre-configured)	
Power Frequency	50 or 60 Hz	
Power Consumption	60 W normal, 300 W peak	
Certification		
Ingress protection	IP66 / IP68 for wetted portion of probe	
Enclosure material	316L SS	
Analyzer	ATEX / IECEx:	EXII 2G d/de IIB T3/T4 Gb
	Canada + USA:	Class 1 Division 1 Groups C & D T3/T4 Class 1 Division 2 Groups A, B, C, D, T3/ T4 Class 1 Zone 2 AEx d/de IIB T3/T4
	IMO	MEPC-107 (49)
Weight & Dimensions (for shipping)		
Weight (including stand, termination box and isolation switch)	Single probe Dual probe	200 kg 220 kg
Dimensions	L 92 cm x W 83 cm x H 148 cm L 92 cm x W 83 cm x H 176 cm	(except 980 mm probes) (with 980 mm probes)
Communications		
4-20 mA (1)	Passive, Configurable for measurement readings/temperature	
Digital Input (1) Digital Output (s)	Start/Stop cycle control Configurable as alarm contacts	
Remote access	Windows Remote Desktop	
Internal data storage	>10 years	
Security	2 level password protection	
Optional Communications		
Second 4-20mA	Passive, Configurable for measurement readings/temperature	
HART	Yes	
Modbus RTU	Implemented via HART to Modbus converter	
Extended Ethernet	2 wire connection, capable of 1.6Km distance	
Additional Information		
Hot insertion/extraction	Optional using single or double block and bleed valves	
Flange fitting	2" ANSI RF	
Wetted parts	316L SS (other materials available upon request)	
Conduit length	Up to 50 m‡	
Dual probe (EX-100P2/1000P2)	Allows dual simultaneous measurement	

* dependent on sample matrix & instrument configuration. User may select any desired measurement from 0-10ppm, 0-100ppm [...] up to 20,000ppm

‡ Please contact ASL to discuss conduit length over 30m