Industrial Application

TD-120 OIL COOLER LEAK DETECTION SYSTEM

Simple ■ Accurate ■ Reliable

Oil in cooling water can cause tower fouling, blow down and discharge water issues. Turner Designs Hydrocarbon Instruments has been the world leader in oil in water monitoring for more than 20 years. Using ultraviolet fluorescence technology, our online monitors offer high oil sensitivity and fast, reliable detection of leaking lubricating, hydraulic or transformer oil in cooling water. The TD-120 Oil in Water Monitor joins the industry standard TD-4100XDC as a perfect solution for fast, early detection of leaks, with low installation and operating costs.

The rugged design of the TD-120 is ready for installation in power plants, steel mills, and other industries with rotating equipment and large oil coolers. A cell condition monitor and validation solution are included with the TD-120 to confirm that the monitor is ready for leak detection.

Accessories and options are available to ease installation requirements. Additionally, the TD-120 is available with a care package that includes calibration to a generic standard or calibration to your target hydrocarbon, making your installation and start-up process trouble free.

FEATURES

- Internal tablet interface for quick setup and calibration
- New auto-valve capabilities: temperature protection, fresh water flush, and process isolation
- Minimal maintenance
- Low cost of ownership—no reagents or instrument air needed for operation



ACCESSORIES

- Hazardous area classifications (TD-4100XDC)
- Sea water corrosion resistant wetted parts
- Non-contact flow cell (TD-4100XD)
- Heated and air conditioned enclosures
- Sample pump or pressure regulators
- Calibration standards
- TD Sample Thief
- Sample coolers
- Sample screens

TURNER DESIGNS
Hydrocarbon Instruments

TD-120

#1Worldwide
for process and environmental oil in water monitors

OIL COOLER LEAK DETECTION SYSTEM



SPECIFICATIONS

Application	Detection of oil cooler leaks for cooling towers and once-through cooling
Oils	Lubricating, hydraulic, transformer
Detection Range	Low PPB–6000 PPM (range is dependent on oil solubility in water and background)
Dimensions (Wall Mount)	16" H x 20" W x 5.5" D (406 mm x 508 mm x 140 mm)
Weight	24 lbs (10.9 kg)
Local Color Display	PPM, PPB, or raw signal
Controls	External touch pad for events, history log, and maintenance, with internal tablet for configuration and calibration
Power Requirement	100–240 VAC 50/60 Hz, 1.3 A max 1 phase, neutral or hot (inrush current not to exceed 40 A max)
Communications	4–20 mA isolated, selectable loop or instrument powered Optional: HART
Alarms	4x dry contact user configurable alarms: Early, High, System, Cell Condition, High Temperature
Plumbing Requirements	Feed 1/4" tube, Return 1/4" tube, Flush 1/4" tube
Sample Inlet	10–100 psig (69-690 kPag)—for higher pressures consult factory
Sample Temperature	32–122 °F (0–50 °C)—for higher temperatures consult factory
Ambient Operating Temperature	32–131 °F (0–55 °C)—ambient temperature protection available
Flow Rate	0.26–0.52 gallons/min (1–2L/min) optional sample pump available
Operational Principle	UV Fluorescence
Response Time	3 seconds default (user adjustable, down to 0.5 seconds), continuous reading
Calibration Stability	+/- 10% over 12 months or better
Certification	EN 61010-1:2010 and EN 61326-1:2013 CAN/CSA-C22.2 No. 61010-1:2012 + UPD No.:2015-07





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