ROV-based Temperature Probe Leak*log*® T1

Engineered for the demanding conditions of subsea operations, Aquatec's LEAKlog® T1 Temperature Probe delivers rapid detection of thermal plumes from leaks with sensitivity to millidegree changes. It provides absolute temperature measurements and ultra-sensitive temperature gradient data, crucial for monitoring pipeline integrity in the Oil & Gas industry. Its design facilitates easy integration with ROVs for real-time, dependable monitoring.

Specifications

Product	ROV-based Temperature Probe LEAKlog® T1
Country of origin	UK
Manufacturer	Aquatec Group Ltd.

Key features

- Dual-mode: absolute and gradient temperature.
- High sensitivity to millidegree changes.
- Depth rating to 2,000 m.
- Real-time data via AQUAtalk™ software.
- ROV deployment compatibility.

Applications

- Leak detection in subsea pipelines.
- Monitoring thermal plumes in oceanography.
- Temperature gradient analysis for engineering studiess.

Specifications

Material	Acetal
Depth rating	2.000 meter
Temperature gradient mode	Detects rapid temperature changes with precision to the millidegree level
Supply voltage	12-30 VDC
Dimensions	80 mm (3.15 in) diameter × 292 mm (11.50 in) length
Weight	1.35 Kg (2.97 lbs)

Precision thermal leak detection

Choosing the LEAKlog® T1 for leak detection means relying on precise thermal differentials, which are crucial in scenarios where the leaking substance has a distinct temperature from the surrounding environment, such as in hot product-carrying infrastructure.

The LEAKlog® T1 is engineered to exploit the principle of convection, detecting the subtle rise of warmer fluids, often indicating a leak. Temperature detection with the T1 is not affected by the visibility or noise of the surrounding waters.

It employs a high-precision thermistor that monitors temperature changes or the rate of change, making it exceptionally practical for identifying even the most minor leaks. This method is particularly powerful when the leaking fluid is warmer and rises due to its lower density, offering an efficient and direct approach to safe guarding the integrity of subsea installations.