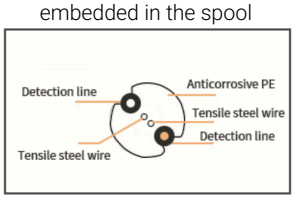
NLWLC100 – Water Leak Sensor Cable – Product Data Sheet

Overview

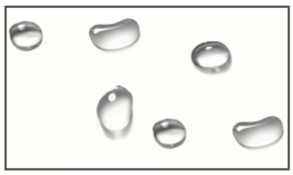
The NLWLC100 Water Leak Sensor Cable is designed for distributed sensing of water intrusion across a wide range of applications. When installed with the NLWLC100 Water Leak and Temperature Sensor, it can detect water at any point along its length and trigger a report. The cable is lightweight, flexible, and available in multiple lengths, making it suitable for coverage across large or complex areas. It features a 3.5mm jack connector for simple plug-and-play installation. Typical deployment areas include under the dishwasher, around HVAC equipment, storage areas, water tanks, or any hard-to-reach places. Its smooth surface design enables quick drying and reuse, even after exposure to water.

Features

The spiral structure makes the detection cables firmly embedded in the spool



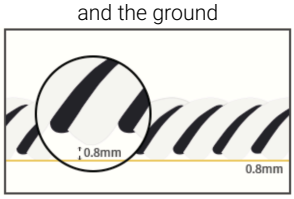
Using the liquid's capillary action, water is drawn in and contacts the detection core



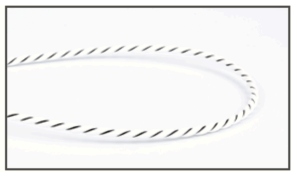
Highly reliable non-locating sensing cable, ideal for areas at risk of water leakage.

When a small water current (about 2 mA) is detected, the circuit registers a voltage change and triggers an alarm.

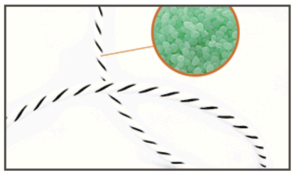
There is a gap of 0.8mm between the detection cables and the ground



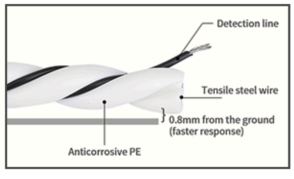
The test line's sheath is made of quick-dry material, allowing the cable to dry rapidly and return to normal



The cable is built from high-strength, corrosion resistant material that is low-smoke and non-toxic.



It consists of two lightweight HDPE wires wound around a spiral central axis, with two tensile steel wires running through the middle.



Specifications

Model	NLWLC100
Cable diameter	4 mm ± 10%
Cable weight	30 g / meter
Color	White and black
Material	HDPE
Strength	Cable only max 5 kg of force
Abrasion resistance	>65 cycles per UL719
Cleaning method	Wipe with a clean damp cloth
Drying time	15 seconds after removal from standing water
Leak size to report	50 mm at any point along sensing cable
Max length	Up to 1500 meters system length
Conditions	<70 °C

Functional Description

The NLWLC100 sensing cable works by detecting water anywhere along its length through conductive-polymer sensing wires embedded in a fluoropolymer carrier rod. When connected to a Water Leak and Temperature Sensor (NLWLC100), the system continuously monitors the cable's electrical continuity. Upon water intrusion, the module registers the change and triggers a report. The cable's robust design exposes no metal, ensuring corrosion resistance and allowing it to be reused even in aggressive environments. Its smooth construction aids in rapid drying, resetting in about 15 seconds after removal from water and requires minimal cleaning, typically with a damp cloth. This makes it ideal for installations where reliability, quick recovery, and minimal maintenance are essential.

Warranty

Nebulab Technologies Inc. warrants that for a period of 2 years from the date of purchase, this product is free from defects in material and workmanship. This warranty does not apply to damage caused by shipping or handling, or damage caused by accident, abuse, misuse, misapplication, ordinary wear, improper maintenance, failure to follow instructions or because of any unauthorized modifications. If there is a defect in materials and workmanship under normal use within the warranty period Nebulab Technologies Inc. shall, at its option, repair or replace the defective equipment upon return of the equipment to the original point of purchase. The foregoing warranty applies only to the original buyer and is in lieu of all other warranties, whether expressed or implied, and of all other obligations or liabilities on the part of Nebulab Technologies Inc. Nebulab Technologies Inc. neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty. The maximum liability for Nebulab Technologies Inc. under all circumstances for any warranty issue shall be limited to a replacement of the defective product. It is recommended that the customer check their equipment on a regular basis for proper operation.

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