

# "LS" Capacitive Point Level Detection

## Introduction

The Level Switch (LS) point level detector is designed to provide reliable point measurement in a compact sensor suitable for a broad variety of applications and installations. Particularly suited for detection of water based (>25%) liquid media in vessels or pipes, the LS excels in foamy or viscous applications. Utilizing RF capacitive technology, the LS detects changes in the dielectric constant from air to detected media. Fast reacting, the LS will detect changes in state in less than one second. Featuring a dielectric threshold adjustment, sensor sensitivity may be selected to accommodate a broad range of media while eliminating false readings. The LS is also equipped with a status LEDs and available with an optional windowed cover allowing local indication of sensor condition simplifying startup and diagnostic procedures. A simple three wire connection allows power and signal to connect directly to a PLC without the need for an external relay module. Standard Anderson quick disconnect eases installation by utilizing three conductor cable. The receptacle even maintains NEMA 4X water tight protection when disconnected. Finally the stainless steel enclosure is designed to protect from the rigors of frequent wash downs and vibration.

Complete specifications and ordering information are available on the reverse. For more information please visit our Web Site at [www.anderson-negele.com](http://www.anderson-negele.com), or contact your local Authorized Anderson-Negele Distributor.

## Authorizations



## Features

- Conductivity independent
- Fast reaction time
- Selectable sensitivity
- Simple installation and connectivity
- 3-A compliant; Third party verified

## Applications

- Level detection in vessels or pipes
- Product monitoring in pipes
- Empty vessel indication
- Pump protection
- Low conductivity fluids such as liquid sugar and Deionized water
- Foamy or Viscous media such as syrups or concentrates



**Specifications**

**OPERATION/ENVIRONMENTAL SPECIFICATIONS**

Ambient Temperature Limits: 14 - 140°F (-10 - 60°C)  
 Pressure Rating: 150 PSI (10 BAR) max  
 Process Temperature Limits: 32 - 212°F (0 - 100°C)  
 CIP Cleaning: 302°F (150°C) max 60 minutes  
 Function: Full/empty signal determined by wiring  
 Response Time: 0.1s  
 Minimum Dielectric Threshold: Selectable from 20-70

**ELECTRICAL SPECIFICATIONS**

Voltage Required: 18 to 36 Vdc (≤ 20mA)  
 Power Consumption: 0.6 W Typ. (i.e. 25mA at 24 Vdc)  
 Signal Output: PNP - Sourcing (active 50mA)  
 Optional NPN - Sinking (max 50mA)  
 Signal Transmission Power: ≤ 1mw  
 Connection: One 3 pin M12 Micro-mini electrical connector (QDR)

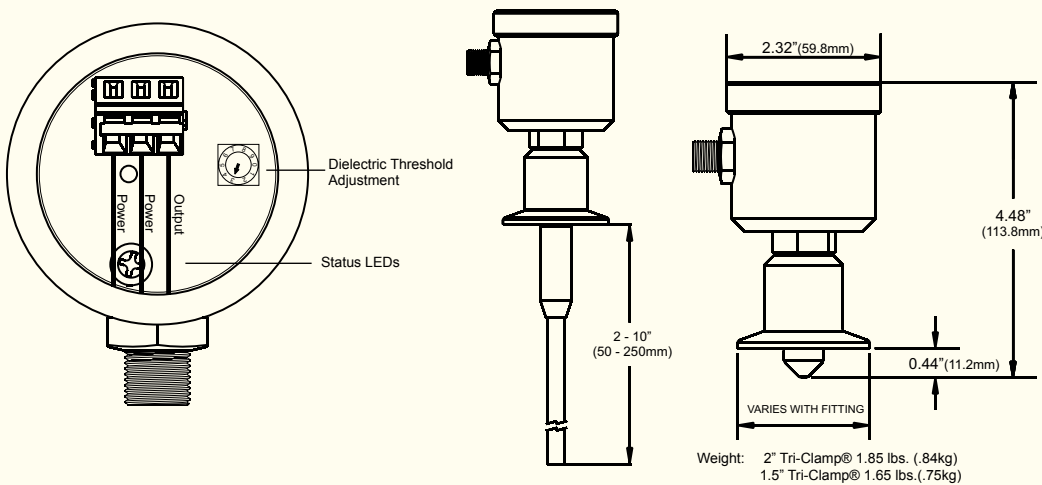
**MECHANICAL SPECIFICATIONS**

Wetted Materials: 316L Stainless Steel, PEEK  
 Wetted Finish: Better than Ra=32  
 Housing Material: 300 series Stainless Steel housing, lid and threaded connection (non contact surfaces)  
 Enclosure Protection: NEMA 4X, IP69K  
 Agency Approval: CE compliant; 3-A compliant, Third party verified

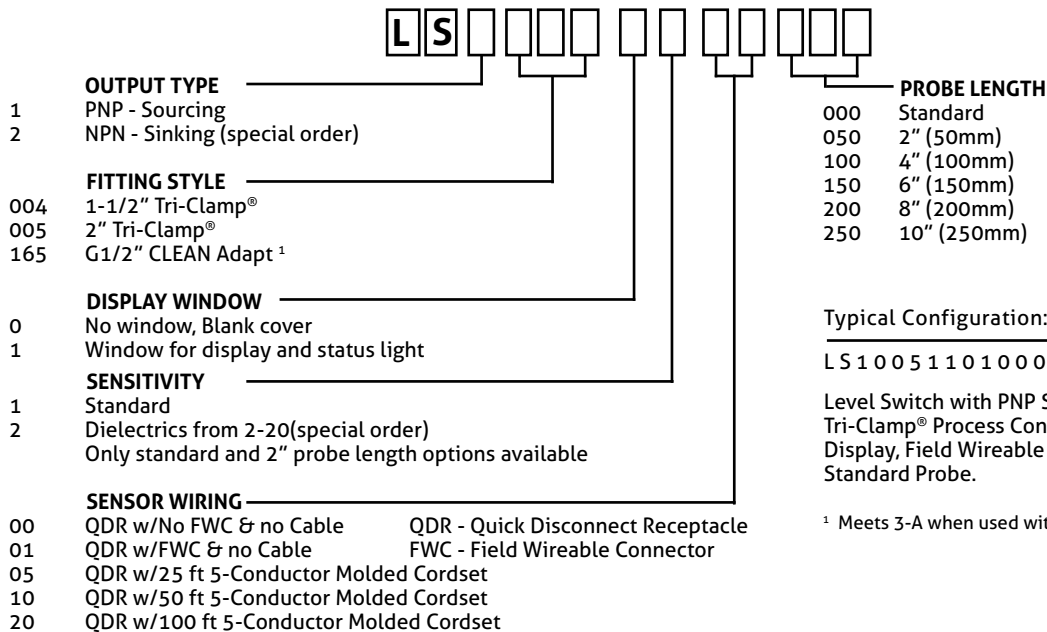
**VISUAL INDICATION**

Status LED: Red - Probe Immersed  
 Green - Probe Dry

**WARRANTY: 2 YEARS**



**Order Information**



**Typical Configuration:**

LS10051101000

Level Switch with PNP Sourcing Output, 2" Tri-Clamp® Process Connection, Window Display, Field Wireable Connector and Standard Probe.

<sup>1</sup> Meets 3-A when used with a 3-A compliant adapter