Optomistic Products®

Universal LightProbe™ Installation Accessories

MOUNTING METHODS:

The Universal LightProbe Sensor Six-Pack provides a compact and efficient way to install six Universal LightProbe Sensors in a single unit. The convenient installation provides two standard circuit-board header connectors, enabling the use of standard ribbon-cable connectors for the Universal LightProbe Sensor's output, and a single power and single ground wire is all that is needed to connect as many as six Sensors.

Sensor Six-Pack

Universal LightProbe Sensor Six-Pack shown with sensors and combination of various Fiber-Optic Probes

Part Number: S6P (Sensors and Fiber-optic Probes sold separately)

Easy Installation: Two tapped (4-40) mounting holes are used for installation with 1/4 in. stand-offs. Both 10-pin and 14-pin standard circuit-board header connectors accommodate either analog or digital Sensor outputs.

See Application Note **AN47** for details on installation

Note: Ribbon cable / wire-wrap / stand-offs to be supplied by customer

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Optomistic Products®

UNIVERSAL LIGHTPROBE™ INSTALLATION ACCESSORIES
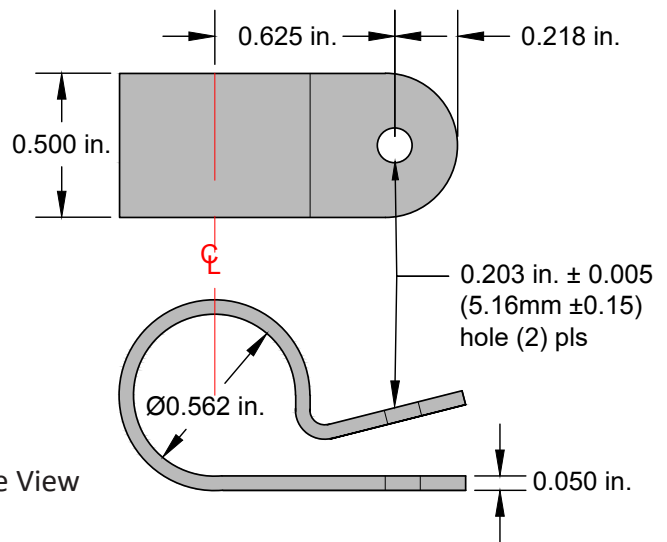
MOUNTING METHODS:

A simple method of installing the Universal LightProbe sensors is to use a single clamp **(P/N: ULP-CP)** for the sensor with a single #10-ANSI screw for one-hole fixing. Alternately, customers have also used "zip ties" as shown below.
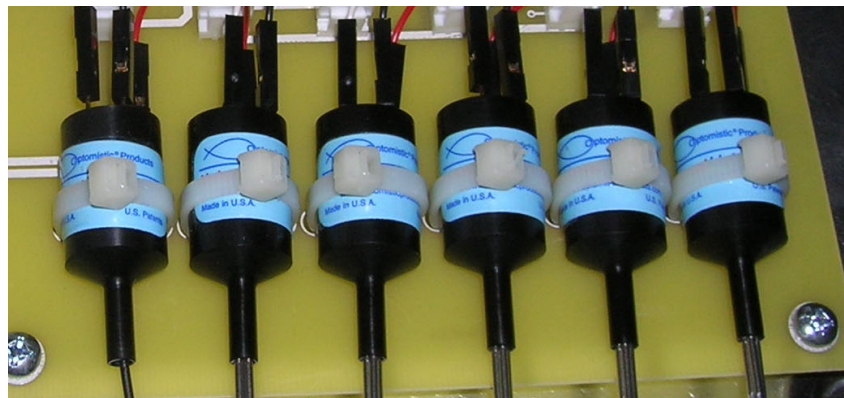
Sensor Mounting Clamp

Sensor Clamp Dimensions

Top View

0.625 in.   0.218 in.

0.500 in.

Ⅽ̵L

Ø0.562 in.

0.203 in. ± 0.005
(5.16mm ±0.15)
hole (2) pls

Side View
NTS

0.050 in.

"Zip Tie" Mounting

Universal LightProbe™ Installation Accessories

MOUNTING METHODS - Continued:

Individual plastic clamps are available for all styles of our fiber-optic probe (P/N LCP-XX), which can be used to secure the stainless-steel tip to the probe-plate, allowing the height of the probes above the LEDs to be adjusted. The clamps can also be used to set and secure the contacting-tipped probes with the correct pre-travel.

Fiber-Optic Probe Clamp

Probe Clamp Dimensions

0.600 in.
0.100 in.
0.400 in.
0.250 in.
Top View
Ø0.1250

ANSI 4-40 Flat-Head Socket Cap Screw

LCP-37P: 4 (0.158 in.)
LCP-34P: 3.4 (0.134 in.)
LCP-27P: 2.8 (0.110 in.)
LCP-21P: 2.15 (0.084 in.)
LCP-12P: 1.3 (0.051 in.)

0.250 in.
0.300 in.
Side View
NTS
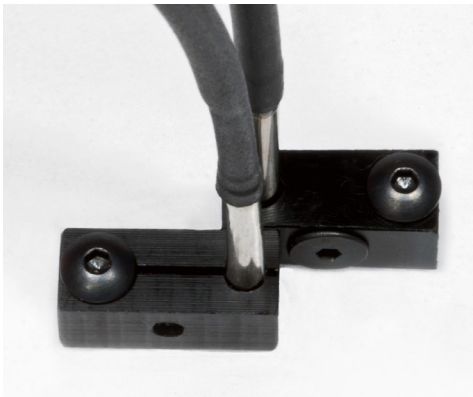
Fiber-Optic Probe Clamp

Probe Clamp Mounted On A Probe Plate

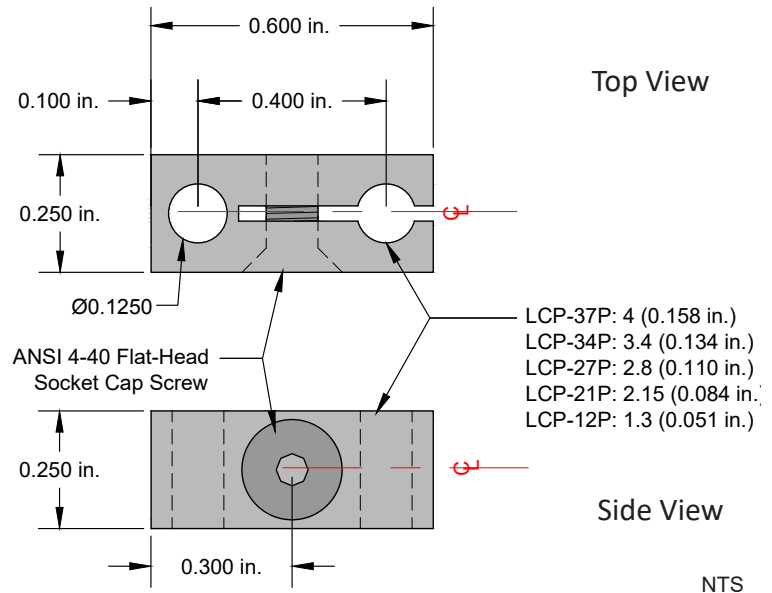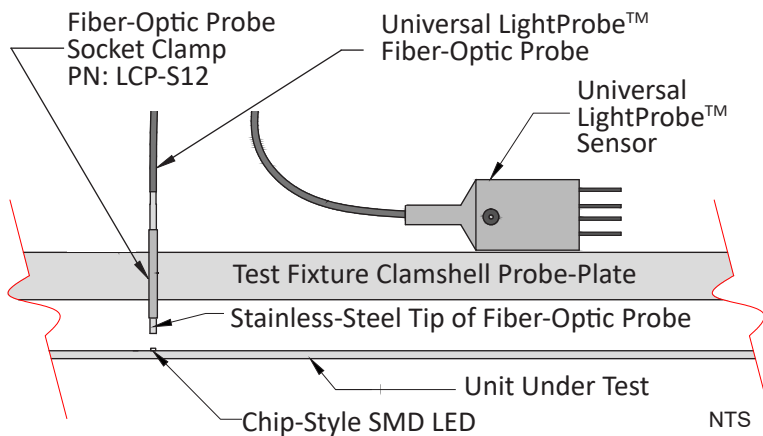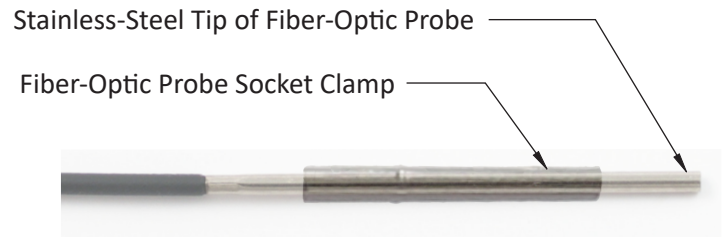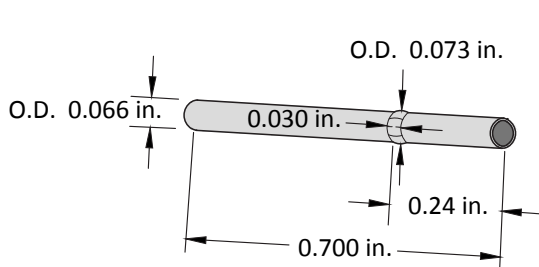# Optomistic Products®

UNIVERSAL LIGHTPROBE™ INSTALLATION ACCESSORIES

MOUNTING METHODS - Continued:

Fiber-Optic Socket Clamp

For our small-aperture fiber-optic-probes, including the popular "Trident" fiber-optic probe, we also offer Socket "Clamps" **(P/N LCP-S12)** to secure the stainless-steel tips in the probe plate.

O.D. 0.073 in.
O.D. 0.066 in.
0.030 in.
0.24 in.
0.700 in.

Stainless-Steel Tip of Fiber-Optic Probe
Fiber-Optic Probe Socket Clamp

Fiber-Optic Probe Socket Clamp PN: LCP-S12
Universal LightProbe™ Fiber-Optic Probe
Universal LightProbe™ Sensor
Test Fixture Clamshell Probe-Plate
Stainless-Steel Tip of Fiber-Optic Probe
Unit Under Test
Chip-Style SMD LED
NTS

1. Accurately align probe-plate socket holes with the LEDs under test.
2. Using No. 51 drill (0.067-0.068 in. dia.), drill holes centered and on-axis with the LED under test.
3. Use socket insertion tool to insert the socket to the desired depth into the probe plate, but sufficient to grip the annular collar of the socket.
4. Set the air-gap between the fiber-optic probe tip and the LED under test between 1mm and 3mm (1mm for closely spaced LEDs)

Fiber-Optic Probe Socket Clamp Insertion Tool

QA TECHNOLOGY ITR■-FL
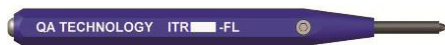
Used to install Socket Clamps in the probe plate.
P/N ITR100-FL

Fiber-Optic Probe Socket Clamp ExtractionTool

QA TECHNOLOGY ETR■

Used to extract Socket Clamps from the probe plate.
P/N ETR100-OP