

# 5730A-7002

## Low Thermal Test Lead Set

### Specification Sheet

### Introduction

This document lists the electrical and mechanical specifications of the 5730A-7002 Low Thermal Test Lead Set (the Product). The set includes two test lead cables that are 48 inches in length. Each test lead is a shielded, two-conductor cable with a separate guard/shield connection. The Product uses thermal emf material connectors that are lower than that used by standard test leads to minimize emf caused by the temperature difference between the ends of the leads.

#### Warning

To prevent possible electrical shock, fire, or personal injury:

- Do not use test leads if they are damaged. Examine the test leads for damaged insulation, exposed metal, or if the wear indicator shows.
- Do not use the Product if it is damaged.
- Disable the Product if it is damaged.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.

### Specifications

#### Mechanical Specifications

##### Length

Two (2) Test Leads ..... 48 in ±1 in (122 cm ±2.5 cm)

Connector Size..... 0.157 in (4 mm) diameter

Connector Style ..... Safety type with a retractable, spring-loaded hood. The connector engages with a wiping action.

##### Connector Materials

Main Body..... Nylon

Retractable Hood..... Nylon

Strain Reliever ..... ABS (for high leakage resistance between the center conductor and connector shield)

Center Conductor ..... Tellurium copper

Spring Tip ..... Beryllium copper

Guard Connector ..... Nylon. Stackable banana plug construction.

#### Electrical Specifications

Thermal EMF ..... <1.3  $\mu$ V per °C when measured while engaged in a five-way binding post of Tellurium Copper Alloy 145, half hard (Fluke PN 637892 or equivalent)

##### Leakage Resistance between

Center Conductor and Shield ..... >1.0 x 10<sup>13</sup>  $\Omega$  per 100 ft at 45 °C and 75 % R.H.

Cable Type ..... RG-58/U type with AWG 20 stranded and tinned center conductor (19 in x .0071 in) (Belden 8262 or equivalent)

Safety Rating ..... Designed to meet UL 1244 to 1100 V ac

## **How to Contact Fluke Calibration**

To contact Fluke Calibration, call one of the following telephone numbers:

- Technical Support USA: 1-877-355-3225
- Calibration/Repair USA: 1-877-355-3225
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31-40-2675-200
- Japan: +81-3-6714-3114
- Singapore: +65-6799-5566
- China: +86-400-810-3435
- Brazil: +55-11-3759-7600
- Anywhere in the world: +1-425-446-6110

To see product information and download the latest manuals or manual supplements, visit Fluke Calibration's website at [www.flukecal.com](http://www.flukecal.com).

To register your product, visit <http://flukecal.com/register-product>.