

HIGH VOLTAGE INSULATION METERS

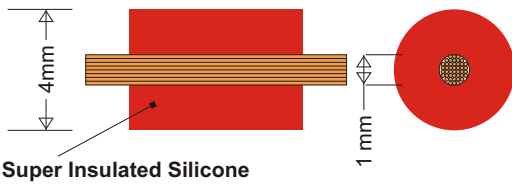
by Jacques Botte

V1.00

AL-50: A BETTER H.V. TEST LEAD !

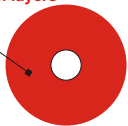
AL-30: DELUXE Test Leads

The AL-30 test lead set with **Super Insulated Silicone** flexible cable is an ideal 3 wires set for High Voltage Insulation Testers or for 3 phase testing.



Multi-Brain for Flexibility

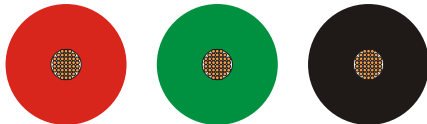
"High Quality"
-one type of material-
-no void between layers-



Super Insulated Silicone for Higher Insulation Resistance, Higher Dielectric Properties, Higher Temperature and U.V. Protection

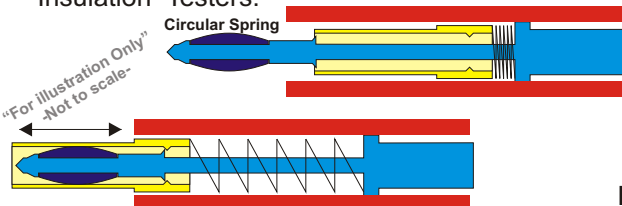
The **Super Insulated Silicone** Insulation offers High Flexibility, Higher Insulation Resistance and extra protection against cold conditions or direct heat such as soldering irons.

(*) SuperSafety First :up to 25 kV/mm



1.5mm of Super Insulated Silicone Wall ±5%

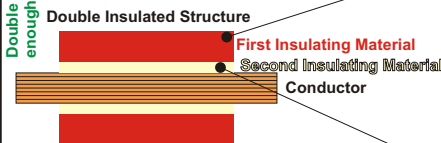
Those color coded cables and the body of the test lead are made of U.V. resistant material which last longer under severe U.V. exposure than other normal A.B.S. or P.V.C. material. Furthermore, specifications are kept stable longer than normal or double insulated leads. The test probe handle, crocodile and banana plug are made out of long lasting Nylon. AL-30 has been designed to comply with the IEC 1010 **1000V Cat III** Safety Requirements. This professional set is fitted with 4mm shrouded straight terminals and can also be used on Digital or Analog Multimeters, Clamp Meters and Insulation Testers.



Super Insulated Vs double insulated

Super Insulated have the advantage of not having "voids" between layers of insulation. Ionization build-up is not possible and treeing inside the insulation material is not present. For High Voltage, Super Insulation Silicone leads have superior properties

Double Insulated is not good enough for H.V. insulation testing.



Voids and Microscopic Dirt accelerates Ionization Process at High Voltage. They reduce Insulating Properties.

Contamination (microscopic dirt of unknown specs) and voids (air or non plane contact) between insulation material causes early ionization failure, deterioration of specifications, movement between layers and early treeing phenomenon.

COMPATIBILITY

The test lead can accommodate many combinations of alligators or adapters to be used in the most difficult places. The following accessories from third party are compatible:

- Wide Grip Crocodile Clips
- Stackable Leads
- Mini Crocodile Clip
- Safety Thin Spike
- Sprung Hook
- Long Rach Probe.
- Flex Pincer Grabber.
- Spade Terminals.
- Flex Crocodile Grabber

HAND FREE OPERATION

The Crocodile (alligator) female adaptor clips simply snap into the shrouded male probe, giving hand free operation.

The alligator or any other adaptor plugs onto the 4mm shrouded part of the probe.

Both, the probe and the adapter have been specially shaped to ensure they do not turn into each other and therefore stay in the same position once adapted together.

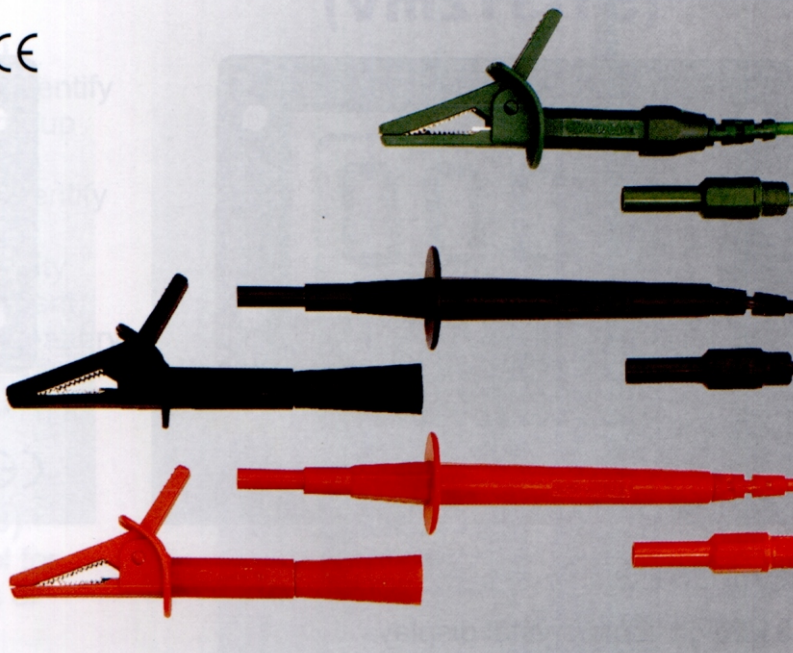
4 mm Female Alligator with High Tension Spring Mouth. Fits all compatible 4mm male leads. (available separate)

Hexagonal Anti-rotation part. Fitted standard with complete set of AL-30.

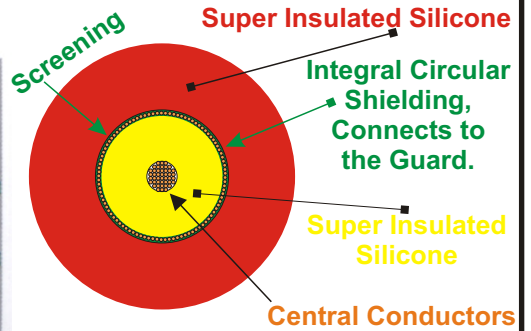
Typical test lead set type: AL-30, supplied with most High Voltage Testers as Standard.



AL-30



AL- 50: INTEGRAL SHIELDING



Due to the shielding, electric charges stays inside the shielded area (measured signal), no external charge influence the central conductor, the measurement is not subject to any external influence.

The measurement taken using the AL-50 is more accurate. Longer leads can be used.

AL-50 is supplied with a standard length of 2.7M. It's heavy duty probe is compatible with all optional accessories of AL-30. The spring-shrouded

4mm compatible, banana plug is made of Nylon. AL-50 is supplied RED (Line) / GREEN (Guard) standard.

AL-50; HIGHLY RECOMMENDED

The AL-50 test lead set is made of **Super Insulated Silicone** and it's **INTEGRAL SHIELDING** has been designed to be connected to the guard of the High Voltage Insulation Meter.

The AL-50 **eliminates** surface leakage, capacitance effect and insulation resistance errors between test leads and between test lead and other objects.

The AL-50 configuration is similar to Coaxial type cables, but with much higher insulating properties.

AL-50 has it's own stackable Guard Connection with extra possibility for still, an other guard.

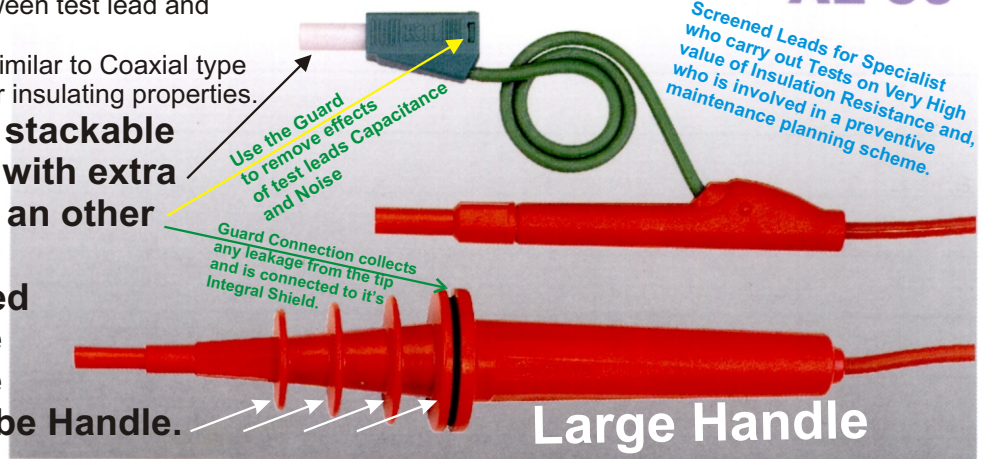
AL-50 has Increased Creepage Distance built into the Large shrouded Test Probe Handle.

GUARDED TEST LEAD

Read Application Note # 2

USE THE GUARD - ITS BETTER!

AL-50



The New Global Alliance in T&M.



STANDARD ELECTRIC WORKS CO. LTD

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