Test Leads
for Use with Megger 5-kV & 10-kV Insulation Resistance Testers

- **Designed in full compliance with IEC61010-031:2008**
- **Wide range of lead sets and clips from the leader in insulation resistance testing**
- **Facilitates connection to a variety of de-energized systems**
- **Used with Megger 5-kV and 10-kV insulation resistance testers**

DESCRIPTION

Megger provides a range of lead sets and clips in various sizes and electrical characteristics for use with our 5- and 10-kV insulation resistance testers enabling the user to choose the most applicable lead set for virtually all applications. These high quality, extremely flexible, silicon leads exhibit a number of key features which ensure outstanding levels of safety, reliability, and productivity are maintained for the user. Regardless of the version chosen, each lead has been carefully designed to provide minimal leakage, a critical factor when measuring high (TΩ) resistance values. Poor quality leads can skew the results, cause inaccurate readings, and result in unnecessary and costly equipment replacement.

When stable measurements are required over long distances or in electrically noisy environments where electrical pickup from nearby energized systems is likely, Megger's screened test leads should be selected. These special leads couple the unwanted electrical noise to the instrument's guard terminal where it is automatically subtracted from the measurement signal, ensuring the results obtained are not distorted.

Safety is paramount when working on high-voltage systems. Megger test leads are designed to the latest edition of IEC61010. The relevant installation category ratings are clearly marked. The insulated test clips are touch-proof with the clip closed, thus preventing inadvertent contact with hazardous voltages or shorting of conductors.

Inherent in the design of all Megger insulation test leads is a number of additional safety features such as unique locking connections at the instrument and non-removable clips which help to ensure that the integrity of connection is maintained in order to safely discharge the load under test every time.

Designed for Everyday Use

Test leads are a key component of any precision instrument and safety, long life, and the ability to provide reliable connections to a variety of test pieces found in everyday applications are of the utmost importance.

These leads are designed based on Megger's extensive knowledge of insulation testing using the latest technology. They are in compliance with IEC61010-31:2008 which requires a fully insulated clip design. During the testing stage, each lead undergoes extensive environmental, mechanical, and electrical testing to ensure it will continue to deliver ultimate performance throughout the life of the lead.

Locking HV Insulated Plugs/ Non-removable Test Clips

All Megger 5-kV an 10-kV insulation tester leads are fitted with locking HV plugs. This reduces the likelihood of a plug losing connection and the capacitance of a long cable remaining lethally charged.

When testing high capacitance items, fully discharging the test sample after test is critical to operator safety. All Megger insulation testers discharge the item under test once the test is completed, but the tester cannot perform this operation if the leads are not connected to the unit and the test item. To reduce the chance of an inadvertent test lead disconnection, the Megger leads are designed with non-removable clips and a locking mechanism that locks them into the instrument.

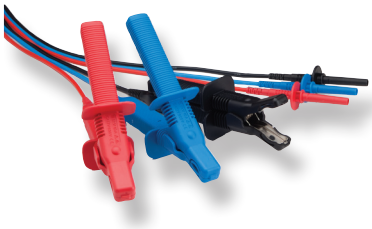
Megger

Test Leads

for Use with Megger 5-kV & 10-kV Insulation Resistance Testers

Large Test Clips

These clips are designed for clamping on larger diameter test pieces. The insulation is designed only to protect the user from the output of Megger 5 kV and 10 kV insulation resistance testers and systems below 600 V. These clips provide double insulation to 600 V CAT IV in the event of connection to live ac systems. Cable insulation rating: 12 kV dc (marked on cable).



Cable type: flexible dual insulated silicon (inner insulation layer colored white to highlight damage)

Medium Clips

These clips are designed for clamping on larger diameter test pieces but where space is at a premium. The insulation is designed only to protect the user from the output of Megger 5-kV and 10-kV (set below 6 kV) insulation resistance testers. These clips provide double insulation to 600 V CAT IV in the event of connection to live ac systems.

Cable insulation rating: 12 kV dc (marked on cable)

Cable type: flexible dual insulated silicon (inner insulation layer colored white to highlight damage)

Compact Test Clip Leads

These clips are designed for clamping on test pieces where access is limited. There is no insulation on these clips. Extreme care must be taken to avoid electric shock when connecting/disconnecting due to the bare metallic clips.

Cable insulation rating: 12 kV dc (marked on cable)

Cable type: flexible dual insulated silicon (inner insulation layer colored white to highlight damage)

Compact Test Clip with 5 or 10 kV Screened Cable

These leads are the ideal choice when stable measurements are required over long distances or in electrically noisy environments where electrical pickup from nearby energized systems is likely. The clips are designed for clamping on test pieces where access is limited. There is no insulation on these clips. Extreme care must be taken to avoid electric shock when connecting/disconnecting due to the bare metallic clips.

The screened test lead set consists of:

- A black/negative test lead that has been screened.
- A red/positive test lead that is not screened.

Cable insulation rating: 5 kV or 10 kV dc

Cable type: flexible screened PVC

Note: Screened test leads are an important accessory for those working in high noise environments, and/or locations where test lead leakage could be a problem.

Control Circuit Test Sets

These clips are designed for testing low voltage circuits with test voltages up to 1 kV. The insulation is designed only to protect the user from the output of Megger 5 kV and 10 kV insulation resistance testers set to a maximum output voltage of 1 kV. Do not use this leadset at voltages above 1 kV.

Cable insulation rating: 1 kV dc

Cable type: flexible double insulated silicon (inner insulation layer colored white to highlight damage)

Safety Warnings

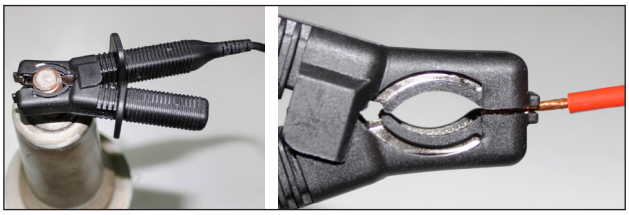
The circuit under test must be switched off, de-energized, isolated and checked to be safe before insulation test connections are made. Make sure the circuit is not reenergized while the instrument is connected. Circuit connections must not be touched during an insulation test.

After completing a test, capacitive circuits must be completely discharged before disconnecting the test leads. Capacitive charges can be lethal.

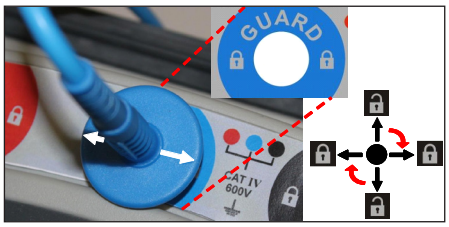
Tested items should be firmly shorted out with a shorting link, after discharge, until required for use. This is to guard against any stored dielectric absorption charge subsequently being released, thereby raising the voltage to potentially dangerous levels.

Test leads, including crocodile clips, must be in good condition, clean, dry, and free of broken or cracked insulation. The leadset should not be used if any part of it is damaged.

These accessories are designed to provide safety isolation by compliance with IEC 16010-031:2008. They provide double insulation where practical. However, at higher voltages where the large physical dimensions would render this impractical for a usable clip, single insulation is provided. Safe working practices must be used, and clips and connections must not be touched while energized.

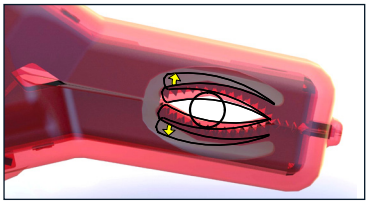


Curved jaws allow reliable connection around test pieces and flat jaw tips provide excellent connection and gripping of individual wires.



Test leads lock into instrument panel.

Megger clip being tested with IEC standard test finger to verify touch-proof contact.

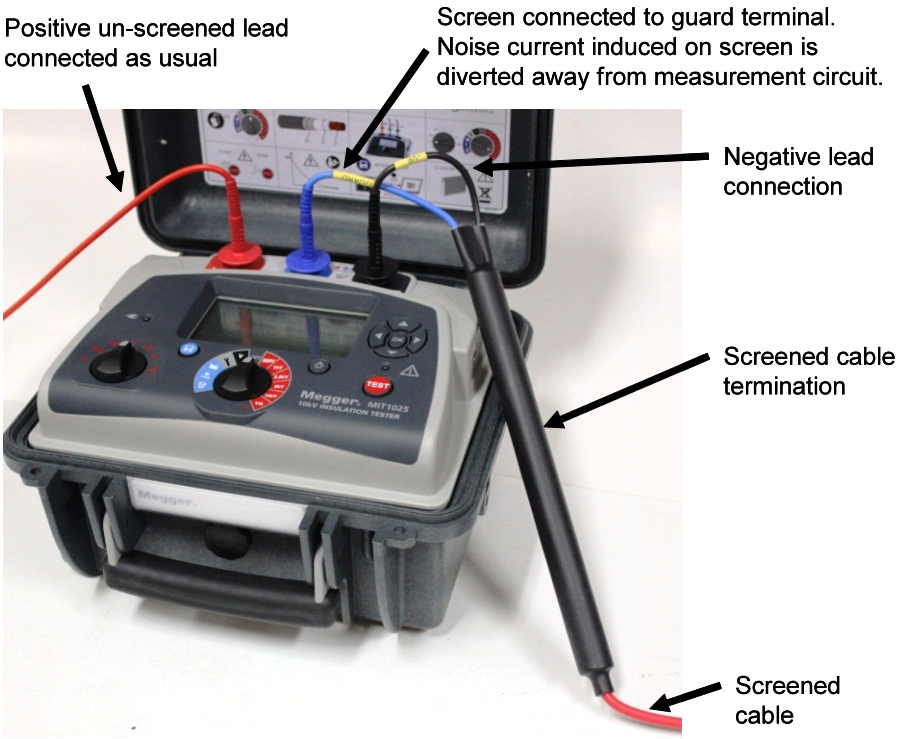


Moving jaw fingers maintain the clip's touch-proof safety when clip is closed but flex back to allow metal teeth of the clip to contact test piece unimpeded when in use.

Selection Guide for 5/10-kV Test Leads

Cat. No.	Description	Length	Dimensions (Closed)	Jaws Opening	# in Set	Insulation Rating		CAT rating
						Basic	Double	
1002-534	Large Test Clip	10 ft (3 m)	8.7 x 5.2 in. (220 x 134 mm)	1.3 in. (34 mm)	3	10 kV dc	5 kV dc	600 V ac CAT IV
1000-443		33 ft (10 m)						
1000-432		50 ft (15 m)						
1002-531	Medium Test Clip	10 ft (3 m)	5.4 x 2.9 in. (139 x 73 mm)	1.3 in. (34 mm)	3	6 kV dc	3 kV dc	600 V ac CAT IV
1000-441		33 ft (10 m)						
1000-442		50 ft (15 m)						
8101-181	Compact Test Clip	10 ft (3 m)	2.2 x1 in. (58 x 25 mm)	0.7 in. (18 mm)	3	None	None	N/A
8101-182		33 ft (10 m)						
8101-183		50 ft (15 m)						
6311-080	Compact Test Clip - 5 kV Screened Cable	50 ft (15 m)	2.2 x1 in. (58 x 25 mm)	0.7 in. (18 mm)	3	None	None	N/A
6220-834	Compact Test Clip - 10 kV Screened Cable	10 ft (3 m)	2.2 x1 in. (58 x 25 mm)	0.7 in. (18 mm)	3	None	None	N/A
6220-861		33 ft (10 m)						
6220-833		50 ft (15 m)						
6220-822	Control Circuit Test Set	10 ft (3 m)	2.2 x1 in. (58 x 25 mm)	0.7 in. (18 mm)	2	N/A	1 kV dc clip or prod	1000 V ac CAT II

Screened Test Leads Set in Use



ORDERING INFORMATION

Item (Qty)	Cat. No.
Large Test Clip, 10 ft (3 m)	1002-534
Large Test Clip, 33 ft (10 m)	1000-443
Large Test Clip, 50 ft (15 m)	1000-432
Medium Test Clip, 10 ft (3 m)	1002-531
Medium Test Clip, 33 ft (10 m)	1000-441
Medium Test Clip, 50 ft (15 m)	1000-442
Compact Test Clip, 10 ft (3 m)	8101-181
Compact Test Clip, 33 ft (10 m)	8101-182
Compact Test Clip, 50 ft (15 m)	8101-183

Item (Qty)	Cat. No.
Compact Test Clip with 5-kV screened cable, 50 ft (15 m)	6311-080
Compact Test Clip with 10-kV screened cable, 10 ft (3 m)	6220-834
Compact Test Clip with 10-kV screened cable, 33 ft (10 m)	6220-861
Compact Test Clip with 10-kV screened cable, 50 ft (15 m)	6220-833
Control Circuit Test Clip, 10 ft (3 m)	6220-822

UK
Archcliffe Road, Dover
CT17 9EN England
T +44 (0) 1 304 502101
F +44 (0) 1 304 207342
UKsales@megger.com

UNITED STATES
2621 Van Buren Avenue
Norristown, PA 19403 USA
T 1 866-254-0962 (USA only)
T +1 610-676-8500
F +1 610-676-8625
VFCustomerSupport@megger.com
(*case sensitive email address*)

OTHER TECHNICAL SALES OFFICES
Dallas USA, College Station USA, Sydney AUSTRALIA, Täby SWEDEN, Ontario CANADA, Trappes FRANCE, Oberursel GERMANY, Aargau SWITZERLAND, Dubai UAE, Mumbai INDIA, Johannesburg SOUTH AFRICA, and Chonburi THAILAND

ISO STATEMENT
Registered to ISO 9001:2008 Cert. No. 110006.01

TESTLEADS-5-10KV_DS_US_V03
www.megger.com