



Left to right: TP220, AC280, AC220, AC285

Clips and probes compatibility chart

Model number	TL71	TL75	TL76	TL221	TL222	TL224	TL910
AC72	•	•	•				
AC87				•	•	•	
AC89				•	•	•	
AC220				•	•	•	
AC280				•	•	•	
AC283				•	•	•	
AC285				•	•	•	
TLK290				•	•	•	
TLK291				•	•	•	
TP1				•	•	•	
TP2				•	•	•	
TP4				•	•	•	
TP38				•	•	•	
TP74				•	•	•	
TP80				•	•	•	
TP220				•	•	•	
TP912							•
TP920	•	•					
T5 Starter Kit	(compatible with T5/T+/T+Pro/330 Series Clamp Meters)						
TP165X	(compatible with 1503/1507/1577/1587)						

Did you know?

Because they are an integral part of the complete measurement system, worn or under-rated test leads can cause inaccurate readings and pose a serious shock or electrocution hazard if live wires are read as being de-energized. To avoid these risks, use these precautions:

- Use the correct test probe for the application. Confirm that your meter and test accessory safety ratings meet or exceed the voltage level you plan to test. See the “Electrical measurement category ratings for test tools” chart on page 13 of this brochure for more information.
- Inspect your test leads before use to ensure the insulation is not nicked or cracked from age. Typically, you should plan on replacing your test leads every 18 months.
- Ensure there are no gaps or cracks at the junction between the insulated wire and banana plugs or probes at each end of the lead.
- Conduct a simple ohms measurement to confirm that your tools are electrically reliable and carry a signal within allowable loss parameters.

For more information about test lead use and safety, see the application note “Testing your test leads for electrical safety” at www.fluke.com/safe-leads.



Test lead/probe in one

Test lead and probe-in-one accessories offer the convenience of a test lead and probe-in-one unit with a variety of connections.

TL75 Hard Point™ Test Lead Set

One pair (red, black) comfort grip probes with PVC-insulated, right-angle shrouded 4 mm (0.16 in) banana plugs.

- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

TL71 Premium Test Lead Set

One pair (red, black) comfort grip probes with flexible silicone-insulated, right-angle test leads.

- Heat and cold resistant
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TL75



TL71



TL76



TL40

TL76 2mm/4mm Test Lead Set

One pair (red, black) silicone test leads with right angle shrouded 4 mm (0.16 in) banana plugs.

- Removable lantern tip for use with European wall sockets, 4 mm (0.16 in) diameter
- Removable lantern tip for easy access to terminal blocks, 2 mm (0.08 in) diameter
- Insulated IC caps (removable) allow probing on closely-spaced leads and compliance with GS38
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

TL40 Retractable Tip Test Lead Set

One pair (red, black) flexible silicone insulated test leads with sharp needle point tips adjustable to desired length from 0 mm to 76 mm.

- Extra hard probe tips to provide long service life
- Safety rating: CAT III 300 V, 3 A rating, UL listed



TL26A



TL910

TL26A 60 in 5-Way Test Lead Set

One pair (red, black) silicone-insulated leads with five different ways to connect.

- U-shaped nose for blade-shaped terminals
- Notched jaw for gripping screw heads, bare wire or terminals
- Serrated teeth for gripping threaded or wire-wrapped terminals
- Sharp needle cluster for piercing small gauge (#22-#28 AWG) wires
- Large piercing needle for penetrating larger gauge wires
- Safety rating: CAT I 30 V, 10 A

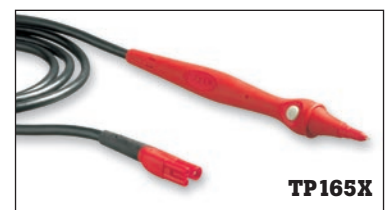
TL910 Electronic Test Probes

One pair (red, black) leads with very small tips to access hard-to-reach electronic test points.

- Includes three sets of spring-loaded gold tips and two sets of stainless steel tips
- Tip length up to 100 mm (4 in)
- Tip diameter: 1 mm (0.04 in)
- Safety rating: CAT IV 600 V, CAT III 1000 V, 3 A



TP912



TP165X

TP912 Replacement Tips for TL910

Five sets of spring-loaded, tips to refurbish TL910 Electronic Test Probes.

- Very small 1 mm (0.04 in) tips to access hard-to-reach electronic test points
- Probe tip length up to 100 mm (4 in)
- Three sets of gold-plated and two sets of stainless steel tips
- Safety rating: CAT IV 600 V, CAT III 1000 V, 3 A

TP165X Remote Control Probe

Slim probe with integrated test button simplifies measurement when accessing hard-to-reach points.

- Probe designed for 1500 Series insulation and 1650 Series installation testers
- Tip length up to .735 in
- Tip diameter: 1 mm (0.04 in)
- Safety rating: CAT III 1000 V 10 A

Probe-in-one clips

Probe-in-one clips and adapters expand the application of probe-in-one test leads.



AC72

AC72 Alligator Clip Set

One pair (red, black) slide-on alligator clips.

- 8 mm (0.32 in) clip opening
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TP920

TP920 Test Probe Adapter Set

Three pairs (red, black) push-on adapters.

- Includes IC test adapters, extended probe tips, and medium alligator clips
- Maximum opening 7.6 mm (0.3 in)
- Safety rating: CAT III 300 V, 3 A

Patch cords

Patch cords connect two test points or two test instruments or accessories together.



TL932/TL930

TL932 Patch Cords (90 cm)

One pair (red, black) multi-stacking banana plug patch cords, 90 cm (35.4 in) long.

- Nickel-plated, 4 mm (0.16 in) banana plugs
- 90 cm long PVC insulated leads
- 30 V rms or 60 V dc, 15 A

TL930 Patch Cords (60 cm)

One pair (red, black) multi-stacking banana plug patch cords, 61 cm (24 in) long.

- Nickel-plated, 4 mm (0.16 in) banana plugs
- 61 cm long PVC insulated leads
- 30 V rms or 60 V dc, 15 A

TL935 Patch Cords (60 cm, 90 cm, 120 cm)

Three sets (red and black pairs) of multi-stacking banana plug patch cords in different lengths.

- Nickel-plated, 4 mm (0.16 in) banana plugs
- 60 cm, 90 cm, and 120 cm (23.6 in, 35.4 in, and 47.2 in) long PVC insulated leads
- 30 V rms or 60 V dc, 15 A



TL935

Modular test leads

Modular test leads provide the convenience of attaching clips, hooks and grabbers, as needed. All of these leads are 1.5 m (59 in) long, offer reinforced strain relief, and include banana jack terminations that allow a great variety of test lead configurations.

Test leads



TL221



TL27

TL221 SureGrip™ Test Lead Extensions Set

One pair (red, black) silicone-insulated leads.

- Straight female connectors on both ends
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

TL222 SureGrip™ Silicone Insulated Test Leads

One pair (red, black) silicone-insulated test leads (red, black) with safety-shrouded, 4 mm (0.16 in) banana plugs.

- Right angle connectors on both ends



TL222



TL224

TL224 SureGrip™ Insulated Test Leads

One pair (red, black) silicone-insulated test leads with safety-shrouded 4 mm (0.16 in) banana plugs.

- Right angle connector on one end and straight connector on the other
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

TL27 Heavy-duty Test Lead Set

One pair (red, black) rugged, EPDM-insulated test leads with safety-shrouded 4 mm (0.16 in) banana plugs.

- Straight male connectors on both ends
- Safety rating: CAT III 1000 V, 10 A

Test lead holder

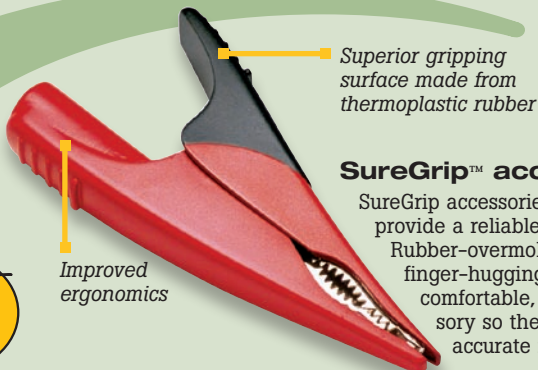


H900

H900 Test Lead Holder

Heavy-duty holder for conveniently storing test lead wires.

- Mounting holes for securing to wall or other surfaces
- For test lead wires up to 8 mm (0.31 in) in diameter
- Overall dimensions (LxWxH): 27.9 cm x 8.9 cm x 3.2 cm (11 in x 3.5 in x 1.25 in)



SureGrip™ accessories

SureGrip accessories were designed to provide a reliable grip in slippery hands. Rubber-overmolded surfaces and finger-hugging curves give the user a comfortable, steady hold on the accessory so they can focus on making an accurate measurement.



Improved ergonomics

Superior gripping surface made from thermoplastic rubber

Modular clips (for use with modular test leads)

Using modular test leads, this wide variety of clips allows the configuration of leads to individual needs.

AC285 SureGrip™ Alligator Clips

One pair (red, black) large alligator clips with insulated, nickel-plated steel jaws.

- Multi-purpose tooth pattern grips anything from fine gauge wire to a 20 mm (0.8 in) bolt
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

AC220 SureGrip™ Alligator Clips

One pair (red, black) of small, insulated, nickel-plated jaws.

- Blunt tip grabs round screw heads up to 9.5 mm (0.37 in)
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

AC280 SureGrip™ Hook Clips

One pair (red, black) nickel-plated hook-style clips.

- Profile narrows to 5.6 mm (0.22 in) at tip
- Hook opening 6.4 mm (0.25 in) at front
- Base opening of 0.2 mm (0.08 in)
- Safety rating: CAT IV 600 V, CAT III 1000 V, 3 A

AC283 SureGrip™ Pincer Clips

One pair (red, black) nickel-plated pincers open to 5 mm (0.2 in). Perfect for continuity testing on circuit board components such as diodes.

- 11.4 cm (4.49 in) flexible insulated shaft
- Safety rating: CAT IV 600 V, CAT III 1000 V, 1 A

AC89 Heavy Duty Insulation Piercing Test Clip

Ideal probe for establishing accurate contact through insulation.

- Pierces 0.25 mm to 1.5 mm (0.01 in to 0.06 in) insulated wire
- Small pin allows self-healing of the insulation
- Safety rating: CAT IV 600 V, CAT III 1000 V, 5 A

AC87 Heavy Duty Bus Bar Clip Set

One pair (red, black) flat, right angle clips designed for connecting to bus bars.

- Adjustable collar provides two ranges of jaw openings up to 30 mm (1.18 in)
- Safety rating: CAT III 600 V, 5 A



AC280



AC283



AC285



AC89



AC220



AC87

Modular test probes (for use with modular test leads)

Using modular test leads, this wide variety of test probes allows the configuration of leads for a wide variety of needs, whether industrial, electrical, or electronic.



TP220

TP220 SureGrip™ Industrial Test Probes

One pair (red, black) industrial test probes with stainless steel tip.

- Sharp, 12 mm (0.47 in) tips
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TP1



TP2



TP4



TP80

TP1 Slim Reach™ Test Probes

One pair (red, black) slender probes with flat stainless steel blade to hold securely in blade-type electrical wall sockets.

- Tip length up to 14.7 mm (0.58 in)
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

TP2 Slim Reach™ Test Probes

One pair (red, black) slender stainless steel probes for accessing closely-spaced or recessed terminals such as in electronic environments.

- 2 mm (0.08 in) diameter tip
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

TP4 Slim Reach™ Test Probes

One pair (red, black) slender stainless steel probes for accessing closely-spaced or recessed electrical terminals.

- 4 mm (0.16 in) diameter probe tip designed to fit securely into IEC (C13 and C14) electrical wall outlets
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A



TP74



TP38

TP80 Electronic Test Probes

One pair (red, black) electronics test probes.

- IC-insulated cap prevents shortening of IC legs for probing high density components or boards
- Tip length up to 3.9 mm (0.157 in)
- Tip diameter: 1 mm (0.04 in)
- Safety rating: CAT III 1000 V, 10 A

TP74 Lantern Tip Test Probes

One pair (red, black) featuring nickel-plated brass ends.

- Banana-style 4 mm (0.16 in) spring contacts
- Safety rating: CAT III 1000 V, 10 A

TP38 Slim Reach™ Test Probes

One pair (red, black) slender stainless steel probes for accessing closely-spaced or recessed terminals.

- Tip length: 24 mm (0.95 in) which includes the insulated part of the tip
- Probe tip insulated to 4 mm (0.16 in) from the end
- Meets GS38 specs for the United Kingdom
- Safety rating: CAT IV 600 V, CAT III 1000 V, 10 A

Available August 2008



NEW! FTP Fused Test Probes

In response to new CSA standards, Fluke will be the first to offer test probes with built-in fuses for additional measurement protection. And if the probe fuse does blow, these probes will still allow the meter to indicate live voltage.

These new modular probes can mount onto any modular lead format. Rated to CAT III, 600 V, these probes also have sheathed tips for additional safety. Available August, 2008.

Did you know?

Test probes with less exposed metal help reduce the risk of inadvertent shorts that could result in an arc flash explosion. The TL238 SureGrip™ Test Lead Set for High Energy Environments contains a probe that has only 4 mm (0.16 in) of exposed metal at the tip to reduce this risk. Using probe extenders between modular test leads and test probes is another way to increase the distance from live circuits by 20.5 cm (8 in).

Test leads

How to choose the best test probe for your job?

IEC 61010 Electrical measurement category ratings for test tools

Make sure that your accessory ratings meet or exceed the rating of your measurement environment.

Measurement category	Applicable environment	Examples
CAT I	Electronic	<ul style="list-style-type: none"> Protected electronic equipment Equipment connected to (source) circuits in which measures are taken to limit transient overvoltages to an appropriately low level Any high-voltage, low-energy source derived from a high-winding resistance transformer, such as the high-voltage section of a copier
CAT II	Single-phase receptacle connected loads	<ul style="list-style-type: none"> Appliance, portable tools, and other household and similar loads Outlet and long branch circuits Outlets at more than 10 m (30 ft) from CAT III source Outlets at more than 20 m (60 ft) from CAT IV source
CAT III	Three-phase distribution, including single-phase commercial lighting	<ul style="list-style-type: none"> Equipment in fixed installations, such as switchgear and polyphase motors Bus and feeder in industrial plants Feeders and short branch circuits, distribution panel devices Lighting systems in larger buildings Heavy appliance outlets with short connections to service entrance
CAT IV	Three-phase at utility connection, any outdoor conductors	<ul style="list-style-type: none"> Refers to the "origin of installation," i.e., where low-voltage connection is made to utility power Electricity meters, primary overcurrent protection equipment Outside and service entrance, service drop from pole to building, run between meter and panel Overhead line to detached building, underground line to well pump