ELECTRICAL SAFETY PRODUCTS

Tools designed for Safety & Performance

(980)265-2612
info@pentaesp.com
www.pentaesp.com

Dear Customer, Partner, and Electrical Worker,

In over 90 years of innovation, acquisitions, and organic growth, a significant number of brands have joined us, strengthening our expertise in electrical safety.

We decided to bring all our electrical safety products under a single brand. Brining together our shared and complementary expertise, we affirm that our strategy firmly focused on you, by making it easier for you to navigate our extensive offer.

We are delighted to announce that PENTA is our new umbrella brand. It now encompasses all our products and services.

With PENTA, we aim to reinforce our unique positioning as "Expert Manufacturer".

Now, under the PENTA brand, we bring together all our energy, all our combinations of product and service offerings, serving you with five brands:

PROTECT

For the Personal Protective Equipment (PPE) and Collective Protecting Equipment (CPE) required for personal safety, to protect oneself and the environment.

SECURE

For all the equipment required for lockout/tagout procedures (low, medium, and high voltage). To provide you with the necessary equipment for working on live systems in low, distribution and transmission voltage environments.

WORK

For all precision and safety-oriented tools, as well as the necessary equipment for the construction and maintenance of networks.

PENTA affirms our ambition to continue deploying an expanded range of innovative and sustainable products, with solutions specifically designed to address each situation you may encounter locally. We draw upon and capitalize on the experience of our international network.

TO SERVE YOU AND TO SERVE THE PLANET.

WHAT'S CHANGING ?
- Our former brands have merged to form our new brand, PENTA, accompanied by the 5 flagship brands
- We are thrilled to announce soon the launch of our new website: www.pentaesp.com, where you can explore our offering
- All our communication supports and materials have been redesigned and transformed to reflect the new colors of the PENTA brand

We would like to draw your attention to the gradual transition of our products and packaging to bear these new brands. As a result, during the next 18 months, some products, packaging, and marketing material may still be delivered with our previous historical brands.

WHAT REMAINS UNCHANGED
- The part numbers of our products that you are familiar with will remain the same
- The characteristics of these products remain unchanged
- Your usual contacts and representatives are still available
- The legal names of our various subsidiaries remain unchanged (company name, zip code, address, phone number, EIN, …)

PENTA solidifies our commitment to strengthening our service quality and innovating in the design and manufacture of increasingly high-performance products, in accordance with the standards and certifications applicable in your country.

Our core mission will always be, by your side, to contribute to preserving the health and safety of ALL those who build, operate, and maintain electrical networks.

TABLE OF CONTENTS

PENTA Electrical Safety Products, LLC, is a leader in electrical safety products manufacturing. Based on over 90+ years of experience, we made a commitment to the electrical workers to design and manufacture the highest quality tools to protect the people and the network. Our North American location established in 2017 and headquarterd in Charlotte NC and our factories build on decades of experience. In conjuction our engineering staff understand how to support and fulfill your electircal safety needs and requirements.

Our focus is to better serve the utility and industrial markets. From site generation of electricity through transmission and distribution, both overhead and underground. Our products have been designed to safely and efficiently help electrical workers do their jobs! In addition, PENTA ESP provides a wide range of products to service the railway industry.

PENTA Electrical Safety Products, LLC
8334 Arrowridge Blvd, Suite H
Charlotte, NC, 28273

PENTA
ELECTRICAL SAFETY PRODUCTS

Pentagonal Shaped Telescoping Stick

The unique curved pentagonal shape fits comfortably in hand while remaining close to the cylindrical shape commonly used. This shape is used to transmit torque force during any operation requiring an action of tightening or loosening. Complies with ASTM F1826 / IEC 61235 standards. The terminal tube is a round tube built on a rigid, waterproof polyurethane foam. The circular terminal tube's shape meets all requirements of the ASTM F711 / CEI60855-1 standards. The locking elements are self-searching when stick is deployed by sturdy bi-material button.

Pultruding over the foam core ensures better adhesion to the inside walls of the stick and there are no voids between the fiberglass and foam core. The pentagonal shape of the base sections keeps sections in alignment with one another without rotation, ensuring that the spring-loaded locking system will always find its place while extending. With its new and improved design, the Pentapole has a 15% higher mechanical strength, and is 13% lighter than previous generation product.

- *Structural finish further iproves mechanical properties of tubes and further increases **longevity***

- ***Our finishing varnishes increase** UV, water and oil resistance properties of our tubes*

- ***More ergonomic** tools reduce Musculoskeletal Disorder related injuries*

Ergonomically designed grip

Locking button

PPOL9/40H-PTA

Telescoping Sticks - 1-1/8" dia. top section

Part Number	Description	Number of Sections	Retracted Length (ft)	Weight (lbs)
PPOL3/12H-PTA	12' Hot Stick Telescoping Pentagonal Shape	3	4'8"	4
PPOL4/16H-PTA	16' Hot Stick Telescoping Pentagonal Shape	4	4'11"	5
PPOL5/20H-PTA	20' Hot Stick Telescoping Pentagonal Shape	5	5'2"	6
PPOL6/25H-PTA	25' Hot Stick Telescoping Pentagonal Shape	6	5'4"	8
PPOL7/30H-PTA	30' Hot Stick Telescoping Pentagonal Shape	7	5'7"	10
PPOL8/35H-PTA	35' Hot Stick Telescoping Pentagonal Shape	8	5'10"	11
PPOL9/40H-PTA	40' Hot Stick Telescoping Pentagonal Shape	9	6'	14

Compact Telescoping Sticks - 1-1/8" dia. top section

Part Number	Description	Number of Sections	Retracted Length (ft)	Weight (lbs)
PPOLC5/08H-PTA	8' Compact Hot Stick Telescoping Pentagonal Shape	5	2'4"	3.3
PPOLC5/12H-PTA	12' Compact Hot Stick Telescoping Pentagonal Shape	5	3'5"	4

Heavy Duty Telescoping Sticks - 1-1/4" dia. top section

Part Number	Description	Number of Sections	Retracted Length (ft)	Weight (lbs)
PPOLD5/20H-PTA	20' Hot Stick Telescoping Pentagonal Shape - Heavy Duty	5	5'3"	9
PPOLD6/25H-PTA	25' Hot Stick Telescoping Pentagonal Shape - Heavy Duty	6	5'5"	10
PPOLD7/30H-PTA	30' Hot Stick Telescoping Pentagonal Shape - Heavy Duty	7	5'9"	11
PPOLD8/35H-PTA	35' Hot Stick Telescoping Pentagonal Shape - Heavy Duty	8	5'9"	14

Pentagonal Shaped Telescoping Measuring Stick

Penta Pole Measuring Stick offers measurement graduations on each section easily allowing measurement of heights from 25 to 40 feet. Measurement markings are sublimated in the fiber making these markings wear resistant.

Round terminal tube ASTM F711 / CEI60855-1

The terminal tube is round and built on a rigid, waterproof polyurethane foam. The circular terminal tube's shape responds fully to the scope and requirements of the ASTM F711 / CEI60855-1 standards.

Weight / Stiffness

Each stick's component is manufactured to optimize its modulus of elasticity as well as its weight.

Shape

The unique curved pentagonal shape fits comfortably in the hand, while remaining close to a cylindrical shape commonly used for poles. This shape is used to transmit torque efforts during any operation requiring an action of tightening or loosening. Measurements are sublimated onto the stick and measurement identifiers will not creack, peel, rub off or wash away.

Locking button

A sturday wide bi-material button automatically locks in place when deploying Measuring Stick. Unlocking and folding is achieved by a simple press of the button.

Telescoping Measuring Sticks - 1-1/8" dia. top section				
Part Number	**Description**	**Number of Sections**	**Retracted Length (ft)**	**Weight (lbs)**
PPOLM6/25H-PTA	25'-2" Measuring Stick Telescoping Pentagonal Shape	6	5'4"	8
PPOLM7/30H-PTA	29'-10" Measuring Stick Telescoping Pentagonal Shape	7	5'7"	10
PPOLM8/35H-PTA	34'-7" Measuring Stick Telescoping Pentagonal Shape	8	5'10"	11
PPOLM9/40H-PTA	39'-4" Measuring Stick Telescoping Pentagonal Shape	9	6'	14

Call customer service if the metric numbers are required.

Technical specifications:

Telescopic insulating stick composed of:

- 6 to 9 pentagonal shaped tubes compliant with standards ASTM F1826 and IEC 62193, each section has imperial or metric numbers
- 1 foam cored upper tube, 1-1/8" (28 mm) in diameter, compliant with standards ASTM F711 and IEC 608551
- 1 base to protect the end of the stick
- 1 universal end fitting to fix multiple accessories and adapters
- 1 operating hook

Ergonomically designed grip

Unrivalled light weight

Exceptional rigidity

Top foam core tube

Prevent Pinching your glove

New button design in bi-material is a combination of a polyacetate body to stiffen and a TPU housing to absorb shock.
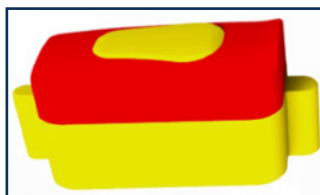
PENTA
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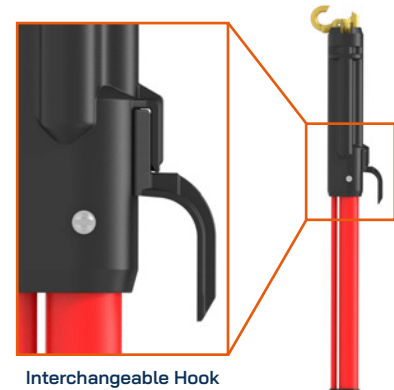## Clampstick - External Rod with or without Universal Adapter

The Clampstick is the most universal tool used to install and remove personal protective grounding clamps, to install plastic and rubber cover-up equipment, etc. Insulating tubes pultruded fiberglass over the closed cell foam core. Pole diameter 1.25" (32mm) operating rod 3/8" (10mm).

Manufactured in accordance with ASTM F711 and IEC60855-1 standards.

Clampsticks meet ASTM F1825 standard.

Available with or without universal end fitting and supplied with integrated suspension hook.

Suspension hook is easily replaceable if broken or damaged.

Interchangeable Hook

Sticks do not require field stripping to clean. All insulated parts including the operating rod are outside the main pole, readily accessible to wipe dry.
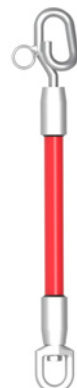
Clampstick - External Rod with Universal Adapter and without

Part Number	Description	Length	Weight (lbs)
PCT46UE-PTA	Clampstick - Universal Head	4'6"	4
PCT66UE-PTA	Clampstick - Universal Head	6'6"	5
PCT86UE-PTA	Clampstick - Universal Head	8'6"	6
PCT106UE-PTA	Clampstick - Universal Head	10'6"	7
PCT126UE-PTA	Clampstick - Universal Head	12'6"	8
PCT46-PTA	Clampstick	4'6"	4
PCT66-PTA	Clampstick	6'6"	5
PCT86-PTA	Clampstick	8'6"	6
PCT106-PTA	Clampstick	10'6"	7
PCT126-PTA	Clampstick	12'6"	8

Pentagonal Shaped Clampstick - External Rod

Part Number	Description	Length	Weight (lbs)
LW03-03-32-120	Clampstick Extension	3'11"	4

LW03-03-32-120

Rubber End Cap

Universal End Fitting

PCT66-PTA

Link Sticks

New fiberglass products will be available over the next few months.

Strap Hoist Link Stick

Part Number	Style	Maximum Capacity (lbs)	Total Length (in)	Insulated Tube Length	Opening Diameter	Weight (lbs)
ISOLINK12-1	Hoist	4000	23"	12"	–	3.5
SPIRALINK12-PTA	Spiral	2000	24"	12"	Maximum conductor size 795 MCM	2.8
SPIRALINK24-PTA	Spiral	2000	36"	24"		3.1
SPIRALINK36-PTA	Spiral	2000	48"	36"		3.5
SPIRALINK48-PTA	Spiral	2000	60"	48"		3.8
SPIRALINK60-PTA	Spiral	2000	72"	60"		4.1

Please contact PENTA ESP for additional lenghts.

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Pentagonal Sticks- External Rod with or without Universal Adapter

The Clampstick is the most universal tool used to install and remove personal protective grounding clamps, to install plastic and rubber cover-up equipment, etc. Insulating tubes pultruded fiberglass over the closed cell foam core. Pole diameter 1.25" (32mm) operating rod 3/8" (10mm).

Pentagonal stick improves operators' torque ability. With a better and more ergonomic grip, operations will requires less effort from the worker.

Manufactured in accordance with ASTM F711 and IEC60855-1 standards.

Clampsticks meet ASTM F1825 standard.

Available with or without universal end fitting and supplied with an integrated suspension hook.

Interchangeable Hook

Ergonomically designed grip

| Pentagonal Clampstick - External Rod with Universal Adapter and without			
Part Number	Description	Length	Weight (lbs)
PCT46UE-P-PTA	Pentagonal Clampstick - Universal Head	4'6"	4
PCT66UE-P-PTA	Pentagonal Clampstick - Universal Head	6'6"	5
PCT86UE-P-PTA	Pentagonal Clampstick - Universal Head	8'6"	6
PCT106UE-P-PTA	Pentagonal Clampstick - Universal Head	10'6"	7
PCT126UE-P-PTA	Pentagonal Clampstick - Universal Head	12'6"	8
PCT46-P-PTA	Pentagonal Clampstick	4'6"	4
PCT66-P-PTA	Pentagonal Clampstick	6'6"	5
PCT86-P-PTA	Pentagonal Clampstick	8'6"	6
PCT106-P-PTA	Pentagonal Clampstick	10'6"	7
PCT126-P-PTA	Pentagonal Clampstick	12'6"	8

PCT66-PTA

Pentagonal Hot Stick

Pentagonal stick improves user's torque ability. Improved more ergonomic grip require less worker effort.

Pentagonal Hot Stick With Universal End Fitting			
Part Number	Universal End Fitting Placement	Length	Weight (lbs)
US4SU-P-PTA	On One End	3'-9"	2.6
US6SU-P-PTA	On One End	5'-9"	3.3
US8SU-P-PTA	On One End	7'-10"	4.0
US10SU-P-PTA	On One End	9'-10"	4.6
US12SU-P-PTA	On One End	11'-10"	5.3
US4DU-P-PTA	On Both Ends	3'-9"	2.6
US6DU-P-PTA	On Both Ends	5'-9"	3.3
US8DU-P-PTA	On Both Ends	7'-10"	4.0
US10DU-P-PTA	On Both Ends	9'-10"	4.6
US12DU-P-PTA	On Both Ends	11'-10"	5.3
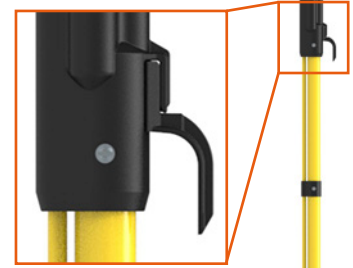
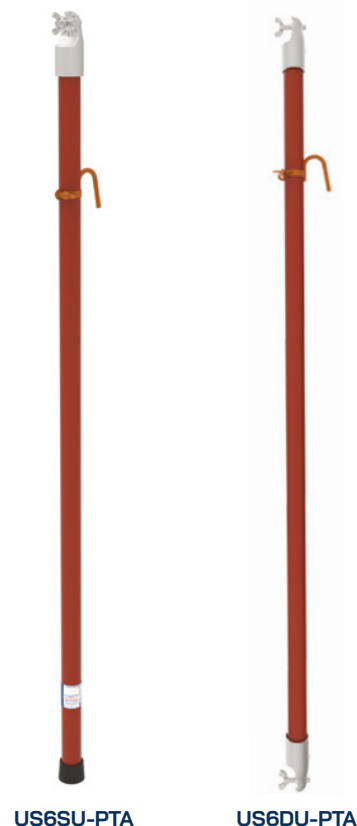Ergonomically designed grip

US6DU-P-PTA

Universal Hot Stick

Insulating foam cored fiber reinforced stick (dia. 1.25"), orange color with universal end.

Pole diameter 1.25" (32mm).

Manufactured in accordance with ASTM F711 and IEC60855-1 standards.

Hot Stick With Universal End Fitting			
Part Number	Universal End Fitting Placement	Dimensions	Weight (lbs)
		Length	
US4SU-PTA	On One End	3'-9"	2.6
US6SU-PTA	On One End	5'-9"	3.3
US8SU-PTA	On One End	7'-10"	4.0
US10SU-PTA	On One End	9'-10"	4.6
US12SU-PTA	On One End	11'-10"	5.3
US4DU-PTA	On Both Ends	3'-9"	2.6
US6DU-PTA	On Both Ends	5'-9"	3.3
US8DU-PTA	On Both Ends	7'-10"	4.0
US10DU-PTA	On Both Ends	9'-10"	4.6
US12DU-PTA	On Both Ends	11'-10"	5.3

US6SU-PTA   US6DU-PTA

Switch Stick and Disconnect stick

Insulating foam cored fiber reinforced stick, orange color with universal end.

Pole diameter 1.25" (32mm).
Manufactured in accordance with ASTM F711 and IEC60855-1 standards.

Part Number SS	Part Number DS	Length (ft)	Weight (lbs)
SS6-PTA	DS6-PTA	6'	3.3
SS6U-PTA	DS6U-PTA	6'	3.3
SS8-PTA	DS8-PTA	8'	4.0
SS8U-PTA	DS8U-PTA	8'	4.0
SS10-PTA	DS10-PTA	10'	4.6
SS10U-PTA	DS10U-PTA	10'	4.6
SS12-PTA	DS12-PTA	12'	5.3
SS12U-PTA	SDS12U-PTA	12'	5.3

For other length sticks contact customer service.
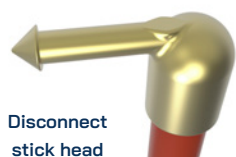
Disconnect stick head

DS6-PTA   SS6-PTA
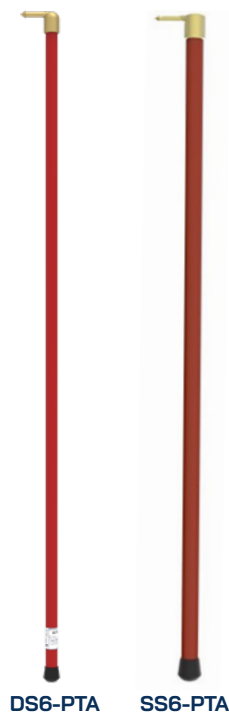
Hot Stick Bags

Hot stick bags are constructed of heavy-duty vinyl material with double stitched seams. Storage bags have reinforced carrying handle and double snap closure flap.

Our Compact Hot Stick Bags have a grommet at the top of the bag for mounting outside of the bucket for easy retrieval.

Hot Stick Bags	
Part Number	Pocket OAL (in)
STICKBAG-6	77"
STICKBAG-7	89"
STICKBAG-9	113"

Compact Hot Stick Bags	
Part Number	Pocket OAL (in)
PPOLC5/08H-BAG	26"
PPOLC5/12H-BAG	49"

STICKBAG-7   PPOLC5/12H-BAG

Universal Disconnect Hook CMU2
Used for opening and closing switches, and cutouts.

Replaceable Clampstick Hanger Hook Hot Stick HPCT32-PTA
Coated Hanger Hook For 1-1/4" Stick

Universal Fuse Holder UFH
Designed to safely remove or install overhead fuse tube barrels.

Universal Shotgun/Clampstick Adapter LW11-01
Allows for any clampstick "Shotgun" to be converted to a universal head attachment. The adapter secures in the clampstick hook and head housing.

Aluminum Conductor Cleaning Brush LW11-07
Aluminum Conductor Brush is used to clean aluminum conductors prior to making an electircal connection.

V-Brush LW11-10
V-Brush is used for cleaning copper or aluminium conductors.

1/2" Square Drive Ratchet Wrench LW11-13
Ratchet wrench is used for tightening and loosening, screwing and unscrewing nuts and bolts used with removable sockets.

Rotary Prong LW11-18
Rotary Prong is utlized for placing looped end insulator ties. Can also be used for installing or removing light ring equipment accessories e.g. long clamps.

Universal Socket LW11-30
Universal Socket is used to hold and operate wire and paint brushes with handle diameter compatible with socket's capacity.

Rotary Blade LW11-41
Rotary Blade is used for unwinding, deforming and breaking tie wire in rigid insulator groove.

Insulator Tester Rod LW11-43
This insulator tester rod is used to detect the presence of anomalies on porcelain, ceramic and glass insulators.

UFH

HPCT32-PTA

CMU2

LW11-01

LW11-07

LW11-10

LW11-13

LW11-18

LW11-30

LW11-41

LW11-43

Mirror LW11-44 Large Mirror LW11-45
Angle adjustment enables the operator to inspect insulators, and other equipment which is difficult to see without coming in contact with energized conductors.
LW11-44 8.2"x4.7"x1.4" 0.7lbs , **LW11-45** 14.5"x10.2"x1.9" 3.5lbs.

Vise Grips LW11-51
Vise Grips are used to grip or move various peices. Jaws may be lock or unlocked by using the movable arm.

1/2" Square Drive Flexible Wrench Head LW11-61
It allows to reach bots and nuts using your insulating sticks.

Pruning Saw LW11-67
Pruning saw is used to cut small branches.

Hack Saw LW11-68
Hack Saw is used to cut metal items and features a universal tip mount with removable handle.

Hawk Saw Removable Handle LW11-68-PA
Corrison resistant metal Hack Saw Handle with universal tip.

Screwdriver LW11-69
The screwdriver is used for screwing and unscrewing slotted head screws.

LW11-45
LW11-51
LW11-67
LW11-61
LW11-68
LW11-68PA
LW11-69

Insulated Rescue Hook

Designed specfically for safey and rescue purposes. PENTA Resuce Hooks are an indespensable life saving device. Ideal for switchrooms, substations, plant rooms, generator rooms, UPS battery rooms, confined spaces and any area where electircal hazards are present.

Insulated Rescue Hook handle constructed of foam cored fiberglass for unquestional electrical insulation. 18" opening - body hook is stainless steel and heat treated with a robust 0.5 (12.5mm) diameter rod. Allowng for lighter weight and ease of inspection for mechanical damage. Rescue Hook is rated for up to 300 lbs.

- Stick is available in the standard length of 6- and 8-foot. Other lengths are available on request
- The fiberglass stick meets the requirements of ASTM F711

NEW PRODUCT

RH8-PTA   RH6-PTA

Insulated Rescue Hook		
Part Number	Dimensions Feet (meters)	Weight Lbs (Kg)
RH6-PTA	6' (1.8)	4.0 (1.8)
RH8-PTA	8' (2.4)	4.5 (2.0)

PENTA
ELECTRICAL SAFETY PRODUCTS

Foam Cored and Foam Filled Insulated Hot Stick Field Inspection Tool

The TTR² is a mobile device designed for field inspection, allowing to inspect the electric insulation's defects or cleanliness of equipment before using, or within the preliminary frame of the periodical and inspection. (Not to be used by the test laboratory to meet OSHA requirements for repaired/resurfaced hot sticks.)

TTR2 is a multi-functioning device, TTR2 will also inspect fiberglass rod and insulating rope.

Minimum stick length for testing is 6".

Can inspect link sticks.

Use

- Field Inspection Tool checks the insulating quality of your poles
- The unit does not only identify surface defects. Its capacitive principle of measurement allows to detect internal and external insulation faults
- If the green light appears, the stick dielectric property is passed as rated as per Standard ASTM F711 and IEC 60855-1, that is to 100kV per foot
- It provides in-depth control which makes it a unique device

Product Information:

- Full internal self-test which tests all active parts of the unit
- Self test with external test tube
- Light indication bar graph with crossing the green area to red in case of default
- Operating temperature -5° F to +113° F

Oriented for mobility:

- Rechargeable battery-operated device
- Low battery indication and battery charge indication
- Compact and robust
- 100% safe device => no danger for the user
- Less than 5 minutes to test your hot sticks in the field

Hot Stick Field Inspection Tool	
TTR2LWPTA	Insulating stick and rope inspecting device
TTR2LWF	Insulating stick and rope inspecting device - Metric

Technical specifications

- Calibrated for the following diameters: - 5/16" – ¾", 1¼", 1½", 2", 2½" and 3"
- Calibrated to test 5/16" to 3/4" diameters rope
- Power supple by rechargeable battery
- Adapter 100V-240V 50/60 Hz
- Delivered in robust carrying case with adapter and the tube
- Dimensions: Tester - 7.5" x 4.75" x 5.3"

Weight: 3.4 lbs.

The control diameters are designed for all foam filled and foam-cored tubes insulating sticks.

TTR2LWPTA

Rubber insulating gloves

The most ergonomically designed rubber insulating gloves for electrical workers.

Part Number	Color	Class	Max. use voltage	Length	size
RIG-0-SC-11-Y*-7	Yellow Black Red	Class 0	1,000V AC 1,500V DC	11" 28 cm	7
RIG-0-SC-11-Y*-8					8
RIG-0-SC-11-Y*-9					9
RIG-0-SC-11-Y*-10					10
RIG-0-SC-11-Y*-11					11
RIG-0-SC-11-Y*-12					12

* Availlable in black and red. Denote color Y= yellow. R=red. B=black in part number prior to size designation. E.g. RIG-0-SC-11-**Y**-9.
Example : the yellow glove class 0 size one in yellow is ''RIG-0-SC-11-**Y**-9''. The same glove in black is ''RIG-0-SC-11-**B**-9''

Available Colors

Yellow

Red

Black

Leather protectors

OSHA requires rubber insulating gloves be worn with glove protectors. Our leather protectors meet the latest revision of ASTM F696 and have been tailored perfectly to fit PENTA rubber insulating gloves - "like a glove." Making them the most comfortable combination on the market.

Part Number	Length	size
LGP10C-7	10" 25.5 cm	7
LGP10C-8		8
LGP10C-9		9
LGP10C-10		10
LGP10C-11		11

AVAILABLE 2025

CLEARENCE TABLE FOR LEATHER PROTECTORS PER ASTM F496 - TABLE 4		
GLOVE CLASS	MIN. DISTANCE BETWEEN PROTECTORS AND RUBBER GLOVES	
00	1/2" from cuff	13mm
0	1/2" from cuff	13mm
1	1" from cuff	25mm
2	2" from cuff	51mm
3	3" from cuff	76mm
4	4" from cuff	102mm

Adapted, with permission, from F696 Standard Specification for In-Service Care of Insulating Gloves and Sleeves, copyright AStm International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. A copy of the complete standard may be obtained from ASTM, www.astm.org.

Finding your size | How to measure your glove size

Circle your hand with a measuring tape leaving out the thumb - as noted in the photo. Close your hand without excessive clenching and take measurement. Compare the measurement with the conversion chart below.

Recommended size*	7	8	9	10	11	12
Hand measurement	7" 18 cm	8" 20 cm	9" 23 cm	10" 25 cm	11" 28 cm	12" 30 cm

* If used with liners, you may need to use one size up.

Finding your size
Palm measurement

Protective Glove Box for Rubber Insulating Gloves

Protect and store rubber insulating gloves when not in use. Box designed to be placed in power substations, trucks, industrial applications and on electrical cabinets.

Protective Glove Box for Rubber Insulating Gloves	
BGT-PTA	Protective Glove Box for Rubber Insulating Gloves

BGT-PTA

Why inspect gloves?

Before each use, insulating gloves should be visually inspected and air pressure tested. (According to OSHA requirements 1919-137(c)(2)(iii) to (iv).

Visual and meticulous inspections of the entire surface of the glove is necessary to detect any perforations or other defects such as, but not limited to:

- **Holes**
- **Cuts, including Ozone damages**
- **Chemical stains**
- **Burn marks**
- **Material alteration**

Particular attention should be paid to palm, fingers and between the fingers.
Inspection must be done before each use.

- In the event of defect do not use the glove
- If in doubt, do not use the glove and send it back for inspection and electrical test
- **Using PENTA's glove inflator will greatly improve quality of visual inspection**

Portable Glove Inflator

Insulating equipment shall be inspected for damage before each day's use and immediately following any incident that can reasonably be suspected of causing damage. Insulating gloves shall be given an air test along with visual inspection.

Portable Glove Inflator	
EOSXL	Portable Glove Inflator
EOSXMO	Portable Glove inflator with Magnet

Additional ring for larger glove and bell cuff included

NEW PRODUCT

EOSXL-PTA

EOSXMO

Insulated Jumper - Patented

It is a natural phenomenon that the electrical lines vibrate and cause clamps to become loose. Jumper sets left online for an extended period may become loose. In some instances, clamps may move out of the applied position. Loose jumper clamps may cause fires and power outages. Use of wrenches or pliers to secure traditional clamps tighter on conductors is common, but due to the vibration and thermal cycles, clamps still may become loose. PENTA's patent pending heavy-duty spring-loaded clamp will prevent clamps from becoming loose.

The pentagonal shape of these new PENTA Jumper Clamps fit better in workers hand making them more ergonomic and provides far better torque strength when compared to traditional jumper clamps.

All insulated jumper clamps are manufactured in shatter resistant clear plastic. The body and jaw are made from copper base alloy.

- All jumper clamps meet ASTM F2321 standard
- Assemble these clamps with 5/8"-11NC threaded ferrules

Clamps will function with the following insulated cable:

- 15 kV and 25 kV - #2, 1/0, 2/0, 4/0
- 35 kV – up to 2/0

Insulated Jumper Clamps						
Part Number	Description	Main Line Range	MAX AMPS Continuous Current	Rating	OAL Length In (mm)	Weight EA Lbs (kg.)
JUMP477-S	Clear Spring-Loaded Jumper clamp	477 MCM (.9"-.162")	400	36kV ϕ – ϕ / 21kV ϕ - ⏚	12.5" (317)	2.4 (1.1)
JUMP-477	Clear Jumper Clamp	477 MCM (.9"-.162")	400	36kV ϕ – ϕ / 21kV ϕ - ⏚	12.5" (317)	2.1 (.95)
JUMP954-S	Clear Spring-Loaded Jumper clamp	954 MCM (1.25"- .162")	400	36kV ϕ – ϕ / 21kV ϕ - ⏚	13.25" (336)	2.9 (1.3)
JUMP954	Clear Jumper Clamp	954 MCM (1.25"- .162")	400	36kV ϕ – ϕ / 21kV ϕ - ⏚	13.25" (336)	2.4 (1.1)

NEW PRODUCTS

Ergonomically designed grip

Portable Load Break Tool

Is designed with the lineman in mind. Used in operation of disconnects, load break switches, capacitor banks, fuse limiters, power fuses and cutouts. Simple to use and allows exceptonal control reducing user fatigue. The PENTA ESP Load Break Tool is equipped with a reset handle allowing full tool reset without glove removal. This tool wil reduce installation and operation costs and eliminate the need of load interrupters on each device. Procedures for switching are designed to reduce complications and minimize the duration and scope of outages. The PENTA ESP Load Break Tool comply with OSHA 29 CFR Part 1910.269 – "Devices used to open circuits under load Conditions shall be designed to interrupt the current involved".

1910.269(l)(12)(i)
The employer shall ensure that devices used by employees to open circuits under load conditions are designed to interrupt the current involved.

Portable Load Break Tool			
Part Number	Voltage	Amperage	Weight (lbs)
LBT1427C	Nominal 14.4kV / 25kV - Maximum 27kV	Nominal 600A - Maximum 900A	10.25 lbs, with case
LBT2538C	Nominal 25kV / 34.5kV - Maximum 38kV	Nominal 600A - Maximum 900A	12.13 lbs, with case
LBTSERV	Recommended annual recertification service		

Built-in counter and heavy duty case are standard features for all PENTA Load Break Tools

LBT1427C
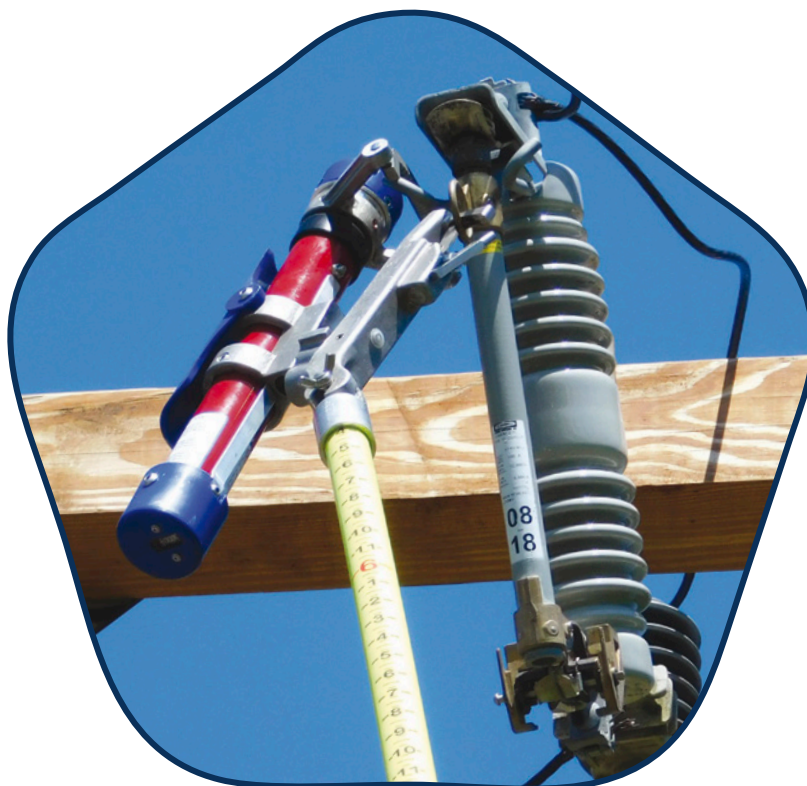
Live Line Insulator Tester IT500 and IT500W

Live Line Insulator Tester IT500 and IT500W are designed for live line testing of ceramic, procelain and glass insulator strings in energized voltage lines up to 500kV.

IT500 and IT500W are user friendly. Power on the tool and it is ready to test. One inch tall and high contrast LED indicator is easy to read at distance and under direct sunlight.
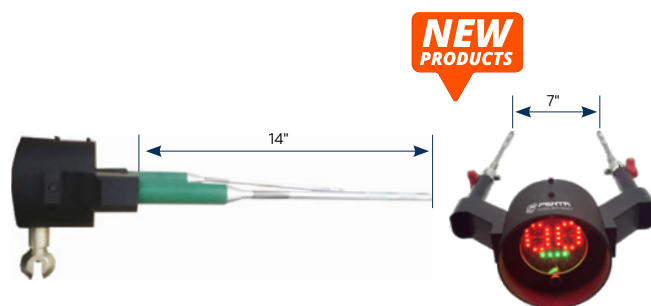
IT500

- Live measurements reading
- Requires drawing graph to analyze Wi-Fi model, remote readings

IT500W included

- No need to download an app
- Can be used by any smartphone, tablet, or PC
- Live measurement reading
- Remote readings up to 130 ft
- Curves can be saved in CSV format
- Blinking indicator on the probe to indicate correct data acquisition
- Access to user manual and lab test report storages in the probe

SPECIFICATIONS

- **Line voltage:** Auto-range from 10kV to 500kV
- **Indication:** Two 1" digits, high contrast digital LED's, easy readable in direct sunlight
- 14" Length adjustable probes, with mechanical fuse, to avoid breaks during operations in harsh environments
- Operating temperature -4° F to +122° F
- Durable aluminum case
- Universal splice
- **Battery:**
    - Type: Rechargeable AA, 2800 mAh
    - Autonomy: over 10 hr
    - Charge time: < 3 hrs
    - Battery charge indication
- **Weight:** 1.3 lb. with battery

NEW PRODUCTS

14"   7"

Live Line Insulator Tester	
Part Number	**Description**
IT500	Insulator Tester
IT500W	Insulator Tester with Wi-Fi remote readings

MVD1-GNG-C CTP Voltage Detector For Capacitive Test Points

Voltage detector for Capacitive Test Point of elbow connector. These voltage detectors are designed for "proving dead", making sure that nominal voltage is actually absent on capacitive test point of elbow connector (no-voltage verification):

Each unit of the set can check for the presenc of voltage

Optimized indication that can be understood clearly in all working conditions:

- Device will detect any nominal voltage on capacitive test point
- It will avoid detecting most induced voltages in order to allow grounding operations

Standards
- Capacitive type to be used for voltages exceeding 7 kV A.C.

Technical Specifications
- AC voltage on Capacitive Test Point of elbow connector Network frequency: 50 and 60 Hz
- Permanent standby status with automatic wake-up function
- The presence of voltage within the calibrated range or above is indicated by a RED light and a beeping sound
- Self-test OK: the OK status (ready for use) of the device is indicated by a GREEN light
- The self-test checks all the circuits, the reference detection level and the battery voltage
- The "ready for use" state is indicated by the green indication for 1.5 minutes
- A low battery level is indicated by an ORANGE light
- Designed for outdoor and indoor use
- Operating temperature: -13° to +131° F (-25° C to +55 ° C)
- Humidity: 96% max
- Power supply voltage: 9 V alkaline cell
- Accepts the use of rechargeable battery with identical supply voltage
- Orange polycarbonate housing
- Dimensions: Ø 2,32", L = 11" (O 59 mm, L = 280 mm) without the contact electrode
- Net weight: 0.8 lb (0,390 kg) with stick adaptor
- Operating manual with a choice of languages, depending on the package

MVD1

Electric Voltage Detector	Voltage Range	Frequency	Housing Color	End Fitting*	Packaging**
MVD1-GNG-CTPXHUC-PTA	MV Capacitive test point (240V)	10/60 Hz	Orange	Universal (U) & Shotgun (CR)	Soft case with conductive lining for EMC protection

* Other stick adaptor available on request. ** Soft case version available on request.

ACCESSORIES

SOFT CASE

*METAL CASE

ADVECU

ADVECUCR

PENTA
ELECTRICAL SAFETY PRODUCTS

MVD: Distribution Voltage Detectors

These voltage detectors are designed for "proving dead", making sure that nominal voltage is actually absent on a circuit in an HV distribution system between 1kV and 69kV (no-voltage verification): Comes in a storage bag or metal case.

- Device detects any nominal voltage in a system or station.
- It makes it possible to avoid detecting induced voltages in order to allow earthing operations
- Visual indication is visible in all normal working conditions, in sunlight or fog, with a wide angle of visibility and from the side
- 100dB sound signal, at 3 ft, is designed to remain audible even in traffic or strong wind, thanks to its acoustic "horn"
- Device will detect if the line become de-energized

Direct access to the battery and sealed electronics compartment. When the battery is replaced, this design prevents the following:

- Accidental interchange of housing or circuitry
- Damage to electronic circuits
- Humidity ingress into the device when the battery is replaced outdoors

Range customizable from 1kV to 69kV

The tool exists in 3 versions:

- MDV1: Single Range from 1kV to 69kV*
- MVDDR1: Dual Range from 1kV to 69kV – 2 separate ranges with their related thresholds*
- MVDX: Multi Range from 1kV to 69kV – Up to 3 Devices in 1*

Electric Voltage Detectors	
MVD1-GNG-C0425XHUC-PTA	Voltage Detector Single Range to 25kV
MVD1-GNG-C2560XHUC-PTA	Voltage Detector Single Range 25kV to 60kV
MVD1-GNG-C1235XCUC-PTA	Voltage Detector Single Range 12kV to 35kV
MVDDR1-GNG-C0469XHUC-PTA	Voltage Detector Dual Range 4kV to 23kV & 34 to 69kV
MVDDR1-GNG-C0434XHUC-PTA	Voltage Detector Dual Range 4kV to 13kV & 13 to 34kV
MVDDR1-GNG-C0435XHUC-PTA	Voltage Detector Dual Range 4kV & 13 to 35kV
MVDX1-GNG-C0469XHUC-2PTA	Voltage Detector Multi Device 4kV to13kV, 13kV to 35kV & 35kV to 69kV
MVDX1-GNG-C0446XHUC-3PTA	Voltage Detector Multi Device 4kV to 6kV, 12.5kV to 23kV & 34.5kV to 46kV
ANTMURDF	MVD URD Female Elbow Probe
ANTMURDM	MVD URD Male Bushing Probe
ADVECUCR	Replaceable Adaptor For Different Sticks End Fitting
ADVECU	Replaceable Adaptor For Different Sticks End Fitting

When placing order, indicate choice of storage bag or metal case to protect the unit.

ADVECU   **ADVECUCR**
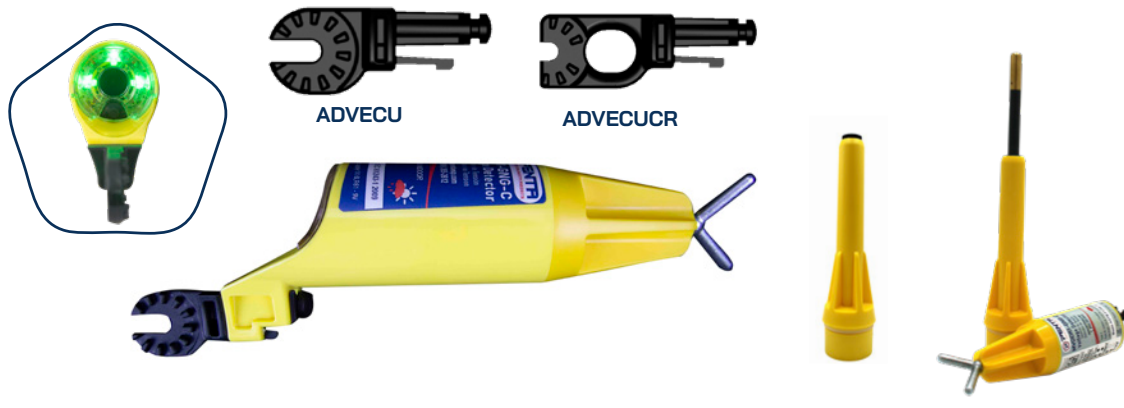
MPHASE: Wireless Phase Comparator

Designed to compare phases between two HV circuits of Three Phase system prior to connection. Enhanced indicators can be clearly understood in all working conditions.

Each unit of the set can be used for checking Voltage Presence

- Light and compact these unit may be used outdoor (overhead lines) or indoor (substations) as well as transformer bushings
- Positive indication for "in phase" voltages
- Voltage presence indication
- Indication of active radio link between the 2 units

Standards

- IEC 61487-7 (2014) Live working - Phase comparators
- Capacitive type to be used for voltages exceeding 7 kV a.c. CE

Technical Specifications

- AC voltage range: Selected ranges of voltages between 1kV and 69kV
- Network frequency: 50 and 60 Hz
- HF radio transmission operating at 433,9Mz

Range customizable from 1kV to 69kV

MPHASE

Electrical Distribution Phasing Testers - Dual testers	
MPHASE0446FCUC	Wireless phase comparator 4-46kV, Network frequency: 50 and 60 Hz

MEMPHASE : Memory Phase Concordance Indicator

Designed to compare phases between two HV circuits of Three Phase system prior to connection. May also be used for checking voltage presence on line.

Unit may also be used for checking voltage presence

- Light and compact this unit can be used safely outdoors (overhead lines) and indoor (substation) operations
- Positive indication for ''in phase'' voltages
- Voltage presence indication
- Indication of memorized reference voltage validity

Standards

- IEC 61487-7 (2014) Live working - Phase comparators

Techinical Specifications

- AC voltage range: Selected ranges of voltages between 1kV and 36kV
  - Network frequency: 50 and 60 Hz
- Class A $\pm 10° < φp < \pm 30°$
- Permanent standby status with automatic wake up function

MEMPHASE

Electrical Distribution Phasing Testers - Single Tester	
MEMPHASE0446FHUC	Memory phase comparator 4-46kV, Network frequency: 50 and 60 Hz
MEMPHASE0136FHUAANT260	Memory phase comparator 1-36kV, Network frequency: 50 and 60 Hz, 8.5" Electrode Extension

ELECTRODE EXTENSION FOR TESTING THROUGH TIGHT ACCESS OPENING IT'S AVAILABLE BOTH FOR MPHASE AND MEMPHASE

PENTA
ELECTRICAL SAFETY PRODUCTS

HVD1-GNG-C: HV Transmission Voltage Detector

The HVD1 voltage detector is designed for "proving dead." Ensuring the absence of nominal voltage on a circuit in a HV transmission system between 50kV and 765kV (no-voltage verification): Device will detect nominal voltage on overhead lines and stations and will avoid detecting most induced voltages allowing grounding operations.

Visual and audible indication are clearly reconized in all working conditions

- Visual indidcation in all working condition (fog, sunlight) is assitited by a wide angle optic ring design
- Acoutstic horn is designed for the noisiest environements with an audible siginal amplified to 100dB

With easy access to battery and sealed electronics. This design prevents the following:

- Accidental interchange of housing or circuitry
- Damage to electronic circuits
- Humidity ingress into the device when the battery is replaced outdoors

Range customizable from 50kV to 765kV

High Voltage Detectors	
HVD1-GNG-C060220XHUC-PTA	HVD1 High Voltage Detector 60kV to 220kV
HVD1-GNG-C220500XHUC-PTA	HVD1 High Voltage Detector 220kV to 500kV
HVD1-GNG-C069230XHUC-PTA	HVD1 High Voltage Detector 69kV to 230kV
HVD1-GNG-C138500-XHUC	HVD1 High Voltage Detector 138kV to 500kV
ADVECU	Replaceable Adaptor For Different Sticks End Fitting
ADVECUCR	Replaceable Adaptor For Different Sticks End Fitting

HVD1-GNG-C060220XHUC-PTA

IPROBE CURRENT FLOW PROBE
(current indicator)

IPROBE Current Flow Probe is dedicated to trouble-shooting teams tasked with determining the status of unknown cables. IPROBE offers an indication if cable is in use: Detection of 50/60Hz.

Advantages for identifying loaded cables

⚠️ **This device is a "STOP" not a "GO":
Even if a cable is not loaded it can still be live.**

This probe, which indicate the presence of a current flow, should only be used as a help to decision-making. Only destructive means (spiking tool) can guarantee the absence of a voltage.

- Prevent destroying loaded cables presumably abandoned
- Enables quick scan of cables to identify conductors under load in trench or conduit

Technical features

- 3 levels of sensitivity
- Visual and audible indication of the current flow 50/60 Hz
- Can be used with a headset (not supplied)
- Network frequencies: 50Hz and 60Hz
- Only one probe for all types of cable
- Waterproof storage and carry case
- Minimum current detected: 0.5A

⚠️ **This current flow probe should only be used:** To obtain information before cutting supposedly abandoned cables.

This current flow probe must not be used under any circumstances:

- Instead of a live LV cable identifier during energized work
- Instead of a deenergized cable identifier during an off-grid procedure
- On bare (uninsulated) conductors

IPROBE Current Flow Probe	
IPROBEPTA	50/60 Hz Detection, with case

IPROBEPTA

V CHECK

Capacitive and proximity voltage detectors testing unit

V CHECK voltage detector testing unit is designed to check most of capacitive voltage detectors that comply with IEC61243-1

- V CHECK allows you to confirm your MVD voltage detector or other capacitive detector is working properly when no "known real voltage is available
- V CHECK is used before and after using your capacitive voltage detector on-site or periodically to check functionality

This product does not replace the built-in self-test which MUST be used before and after using your voltage detector.

Advantages

- High voltage signals generated by V CHECK allows testing of most IEC 61243-1 capacitive voltage detectors
- Easy to use - simply touch the voltage detector contact electrode with V CHECK contact point and press button
- Compact and lightweight
- Battery powered (autonomy: up to 1000 tests)
- Red LED warning during the test
- Low battery indicated by orange LED

Technical specifications

- Powered with 1 x 9V alkaline battery
- Use temperature: -13° F to +130° F
- Size: 4.8" x 2.8" x 1.9"
- Weight: 0.5 lbs (without battery)

VCHECKHX-PTA

V Check	
VCHECKHX-PTA	Capacitive voltage detector proving unit

DC Voltage Detector With Remote Voltage Indicator

DC Voltage Detector consists of 2 units used for no-Voltage Testing on direct current (DC) overhead lines (mainly transport overhead line: trolleys, metro, trains).

- DC bipolar voltage detector range: Un=40V to 3600VDC
- Meets IEC 61243-2
- Double voltage indication, powerful sound and flashing light indication
- Presence of real DC voltage indicated by audible and flashing hi-vis red light
- Operating temperature -13° F to 131° F
- Presence of induced alternative voltage indicated by high-brightness blue light
- Up to 36 kV surge intensity withstanding

NEW PRODUCTS

DC Voltage Detector with Remote Voltage Indicator				
Part Number	Voltage range	End fitting	Weight	Packaging
DCC3600MU40V-PTA	40 -3600 V	Universal	17.6 lbs (with case)	Hardcase
DCC3600MU40VKIT-PTA	40 -3600 V	Universal	17.6 lbs (with case)	Hardcase
Comes with 25ft stick PPOL5/20H-PTA				

RAILROAD

DCC3600MUPTA

PENTA ELECTRICAL SAFETY PRODUCTS

Aladin Individual Voltage Alarm With Headlight

Aladin is designed to provide an extra level of safety for workers operating near energized equipment (during maintenance, rescue operations, painting, pruning). Aladin combines a headlight and personal voltage alarm providing 360 degree detection around user.

ALADINCEFC-PTA

Aladin Personal Voltage Detector			
Part Number	Description	Voltage	Weight (oz)
ALADINCEFC-PTA	Individual Voltage Alarm with Headlight	1kV to 500kV	3.5

Keeper

Keeper constantly senses **voltage and current** at distance while alerting the user before entering a dangerous area. Keeper not only indicates the hazard but also indicates the direction and distance of the hazard.

By using the Keeper you minimize:

- Electrical risk assoicated with any source of voltage from power lines, cables and downded installations in storm zones
- Risks of electric arc associated with high current sources in panels, disconnects and individual installations

When mounted on the visor of a safety helmet. Keeper alerts the user in real time through lights and audible alarm. Visor location also allows use of peripheral vision.

Keeper detects 360 degrees around user and not only indicates hazard but offers direction and approximate distance of threat.

Keeper has 4 modes of use according to the user's expertise: Rookie, Standard, Professional and Professional Plus.

Standards: EC 61243: LIVE WORKING — VOLTAGE DETECTORS — Part 6: Guidelines on non-contact voltage detectors (NCVD) for use at nominal voltages above 1 kV AC

F3283/F3283M Standard Specification for the Manufacturing of High-Voltage Proximity Alarm to be used for the Detection of Overhead High Voltage Alternating Current (AC).

KEEPER

KEEPER Personal Voltage Detector			
Part Number	Description	Voltage	Weight (oz)
KEEPER	"Keeper" Personal Voltage/Current detector, 3.75" X 1.25"	50V to 500kV	1.2

KEEPER

KEEPER MANUAL DOWNLOAD

Voltage Tester for LV network

Unipolar detector designed to test the presence of potential voltage on insulated or bare low voltage (LV) conductors. The level of detection is indicated by a LED bargraph and a audible sound increasing in speed as device approaches a live source. Commonly used for detecting stray voltage on poles and cross arms, conductor disconnection on overhead insulated LV conductors. LVD1U will not replace a standard "proving dead" device but is an ideal complement to bipolar LV detector.

CE compliant

Technical specifications

- AC LV system: From 50V up to 1000V AC
- AC frequency: 50-60 Hz
- Detection by direct contact at 50V
- CAT IV 1000V
- IP65
- Temperature : - 5° F to 113° F
- 2 x LR03 1.5 volt alkaline (AAA)
- Delivered with protective cover that can be attached to the utility belt
- Presence of voltage not presence of phase

LVD1U-P-PTA

Volatge Tester for LV network	
LVD1U-P-PTA	Hand-held, 1000V CAT IV -IP65

Phase Rotation Indicator - 480V

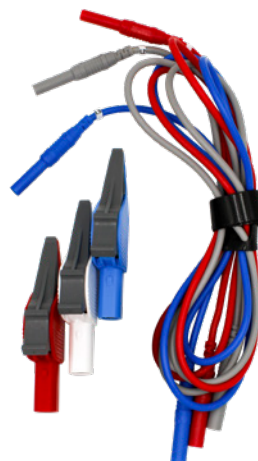Phase Rotation Indicator tests phase rotation on LV three phase system.

Device designed for field use:
- Heavy-duty water resistant housing
- Weatherproof
- Supplied in a soft case
- Product is rated IP65 & CAT IV 600v
- Other markings or colors are available on-demand

Phase Rotation Indicator - 480V	
DR706IVPTA	Phase rotation indicator

IMPROVED DESIGN

Available with probes

DR706IVPTA

Low Voltage Detectors

Heavy duty voltage detector for determining the absence of voltage or providing numeric voltage reading up to 1000V.

This device provides additional features:

- Integrated self-test
- Phase search in single-pole mode (any of the two contact tips may be used)
- Polarity display (-/+)
- Continuity test (< 80Ω)

- **Unique bright LED display can be read in sunlight**
- **Ergonomically shaped to fit comfortably in in gloved hand**
- **A revolutionary IP2X system (retractable tip sleeve): "pull and hold" grip at back of device**
- **Tip sleeve pulling is controlled, offering higher safety and visibility of contact area**
- **Ultra flexible cord (no memory effect)**
- **Watertight and dustproof device (IP65)**
- **Device protected against over-voltage 1000V CAT IV for network operation**

Technical specifications

- Voltage range: 5 to 1000V DC and AC (15 to 60 Hz)
- Audible alarm indicating the presence of voltage with a different tone according to voltage level (discontinuous tone up to 230V and continuous tone above 400V)
- Polarity indication (-/+)
- Built-in self-test
- Continuity testing (threshold 80Ω)
- Phase identification in single-pole mode (either test probe may be used)
- Front light
- Protected against water and dust : IP65
- Protected against overvoltage CATIV 1000V
- Comes with 2 AAA batteries

Instruction may be found on case

LVDVI1-GNG-CPTA

- **Check for the proving dead operation**
- **Control voltage levels from 12V to 1000V**
- **Polarity test on DC voltage**
- **Discrimination phase / neutral**
- **Phase indication (unipolar)**
- **Continuity check**
- **Self test function**

LVDDVI1-GNG-CPTA

- **Voltage detection : AC / DC**
- **Polarity test**
- **Discrimination phase / neutral (unipolar)**
- **Phase rotation, Continuity check and test connecting lead**
- **Self test function**

LVDRI1-GNG-CPTA

- **Check for the proving dead operation**
- **Control voltage levels from 12V to 1000V**
- **Polarity test on DC voltage**
- **Discrimination phase / neutral**
- **Phase indication (unipolar)**
- **Phase rotation**
- **Continuity check**
- **Functional self test**

LVD-EXTENSION

LVDDVI1-GNG-PTA

Low Voltage Detectors	
LVDDVI1-GNG-PTA	LVDV1 Low Voltage Detector 5V to 1000V, Phase rotation, bag and user manual, 3 different tips
LVDVI1-GNG-PTA	LVDV1 Low Voltage Detector 12V to 1000V, Phase indication (unipolar), bag and user manual, 2 different tips
LVDRI1-GNG-PTA	LVDV1 Low Voltage Detector 12V to 1000V, Phase rotation, bag and user manual, 2 different tips

Hydraulic Underground Cable Cutter

Hydraulic underground cable cutter with spiking blade and grounding clamp. Designed for testing and cutting of de energized underground cables securing the operator and network. Available in different sizes for all type of cable.

Characteristics

- Bluetooth remote controlled
- All cutting blades feature an integrated spike
- Compact all integrated electro-hydraulic unit with automatic double speeds
- Extended range of blades opening: 1.97", 2.56", 3.15", 3.94" and 5.51" for uses from street lighting to transmission cables
- Powerful enough to cut steel wire armored cables, refer to product sheets
- Cable retention strap to maintain the cable with this tool when cut is completed
- Autocut system on request
- 1600 PSI bar double pump hydraulic unit
- Protection mat to cover tool during operation
- IP67 waterproof housings for 1.97", 2.56", 3.15", 3.94" and 5.51" baldes opening
- Two Makita 18V rechargeable batteries and one Makita battery charger are included with all units
- 25 years of expertise in De-Energized Testing (DET) spiking and cutting tools
- Compliance to existing standards NFC1850, EN 50340

**Scan the QR-Code
to watch the how-to video**

PICOUP110

PICOUP80

PICOUP65

Hydraulic Underground Cable Cutter

| Part Number	Description	Weight (lbs)	Cutting Capacity
PICOUP110	Hydraulic Underground Cable Cutter - opening size 4.33"², Aluminium 6.56'	37	Opening diameter 4.35"
PICOUP80	Hydraulic Underground Cable Cutter - opening size 3.15"², Aluminium 6.56'	23.15	Opening diameter 3.15"
PICOUP65	Hydraulic Underground Cable Cutter - opening size 2.56"², Aluminium 6.56'	20	Opening diameter 2.56"
PICOUP50	Hydraulic Underground Cable Cutter - opening size 1.97"², Aluminium 6.56' 6.56'	18.84	Opening diameter 1.97"

Stripping Pliers for Outer Jacket

Outer jacket removal pliers cut both circular and longitidinal around cable to complete all cuts necesary for removal of outer jacket. Cutting blades are customized for any depth.

Stripping Pliers for Outer Jacket		
Part Number	Description	OD:
PG2MV/C079L079	Stripping Pliers for Outer Jacket, Cutting Depth 0.079" and 0.079"	0.82 to 1.37"
PG3MB/C039L070	Stripping Pliers for Outer Jacket w/ Handle Lock, Cutting Depth 0.039" and 0.07"	1 to 2"
PG3MV/C039L070	Stripping Pliers for Outer Jacket, Cutting Depth 0.039" and 0.07"	1 to 2"
PG3MV/C055L079	Stripping Pliers for Outer Jacket, Cutting Depth 0.055" and 0.079"	1 to 2"
PG3MV/C110L130	Stripping Pliers for Outer Jacket, Cutting Depth 0.11" and 0.13"	1 to 2"
PG4MV/C110L130	Stripping Pliers for Outer Jacket, Cutting Depth 0.11" and 0.13"	1.8 to 2.95"
PG5MV/C138L138	Stripping Pliers for Outer Jacket, Cutting Depth 0.138" and 0.138"	2.5 to 3.75"
PG6MV/C138L138	Stripping Pliers for Outer Jacket, Cutting Depth 0.138" and 0.138"	3.5 to 4.9"

Scan the QR-Code to watch the how-to video

PG3MV/C039L070
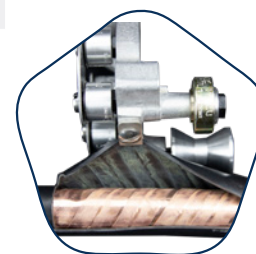
Pliers For PiLC Cable

Enables user to perform a circular cut into phases of MV cable with impregnated paper insulation in order to remove the paper.

Pliers for PiLC Cable	
PINTEL4PI/C157	Cables up to 1" Penetration in circular cut : 157 mils

PINTEL4PI/C157

Pliers For Lead Sheath Cables

Enables user to perform a circular and longitudinal cut on LV or MV lead sheath cables. Pliers guarantee the lead sheath removal without damaging insulation.

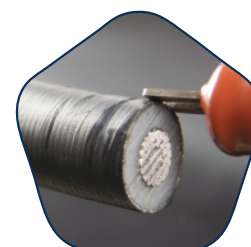| Pliers for Lead Sheath Cables		
Part Number	Description	OD:
AGPB3	Cables from 1"to 2"	1 to 2"
AGPB4	Cables from 1.85" to 3.00"	1.8 to 2.95"

AGPB3

Available in 1000V insulated - ASTM F1505

Semi-Con Lifter

Used to lift scored semi-con without the use of additonal tools.

Semi-Con Lifter	
DSP	Semi-Con lifter

DSP

Multifunction Tool

For outer sheath, peelable semiconductor and thick insulation The MF3/60-SRC tool enables the user to remove the outer sheath (PE-PVC-PR) with a straight and neat cut and score the peelable semiconductor with a chamfer on the edge of the semiconductor cutback (with the SRC scoring stylus delivered with the tool.). Set the length to be removed and remove thicker insulation with a straight and neat cut.

MF3/60-SRC-USA

Multifunction Tool	
MF3/60-SRC-USA	Multifunction tool up to 2.3" dia.
MF3/40-SRC-USA	Multifunction tool up to 1.57" dia.

*Optional Stylus for straight semi-con and Chamfering the insulation available
Call customer service if the metric numbers are required
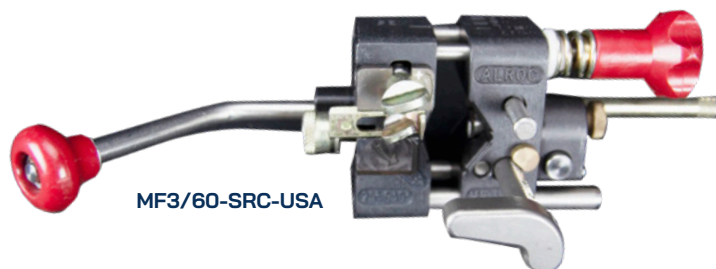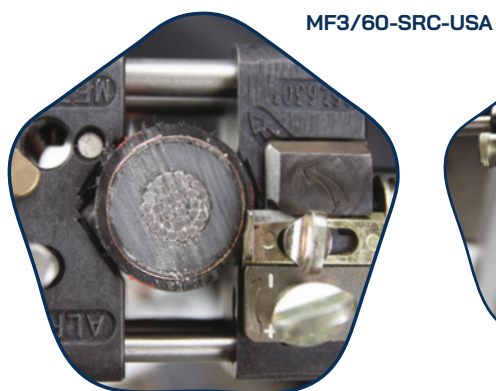
MF3/60-SRC-USA

Scan the QR-Code to watch the how-to video
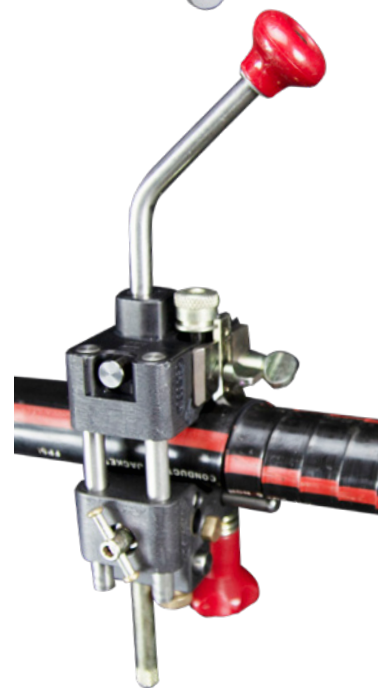
CWE Semi Peelable Conductor Scorer

CWE enables the user to score the peelable semiconductor in order to remove it. CWE performs a chamfer on the semicon cutback and its unique design allows for a circular, longitudinal and helicoldal cuts.

CWE Semi Peelable Conductor Scorer		
Part Number	**Description**	**OD:**
CWE/0_5-2	Semi-peelable Scorer	
MVS	Adjustable Stopper	0.5 to 2"
CWE/0_5-2 -MVS	Kit of MVS and CWE/0_5-2	

MVS

CWE/0_5-2

Scan the QR-Code to watch the how-to video

PENTA
ELECTRICAL SAFETY PRODUCTS

Low Voltage Cable Preparation Tool

The J1R1 tool allows to remove the outer insulation of many LV aerial or industrial cables.

The tool fits the diameter of the cable and the thickness of the layer to be removed without changing settings.

Tool Capacity

Diameter 0.24" – 0.83" (6 - 21mm)
Depth of cut 0.03" to 0.1" (0.8 to 2.5mm)
Stripping length 1" to 3.9" (25 to 100mm)

J1R1

Scan the QR-Code to watch the how-to video

Low Voltage Cable Preparation Tool			
Part Number	Description	Dimensions	Weight (lbs)
J1R1	Automatic low voltage stripping tools	8.8" X 2.5" X 3.2"	1.8 lbs.

Chamfering Tools		
Part Number	Angle	Capacity (in)
LHA	30°	0.55 - 1.732"
LHA/60	30°	0.787 - 2.165"
LHA2	30°	1.496-2.362"

Midspan Stripping Tool	
DPC/10-45	Insulation Removal In Mid Cable, 0.4 to 1.77"

LHA/60

RTT2 and **Roto-TMG** uses the abrades of the outer sheath of cable for proper adhesion of accessories.

Tools for Jacket Abrasion	
Part Number	Capacity (in)
RTT2	0.55 - 1.732"
ROTO-TMG	0.787 - 2.165"

DPC/10-45

RTT2

ROTO-TMG

Scan the QR-Code to watch the RTT2 how-to video

Pliers for Corrugated Shield (LC SHIELD)

The pliers PF3/024 enables the user to make a circular cut on corrugated shield prior to its removal.

The user will remove the LC shield without touching it with his hands. The grooves on the bushing make sure to score the LC shield without touching the semicon under.
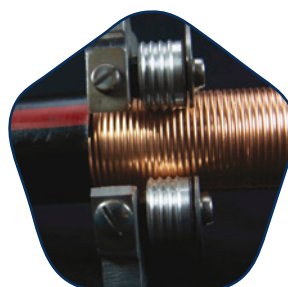
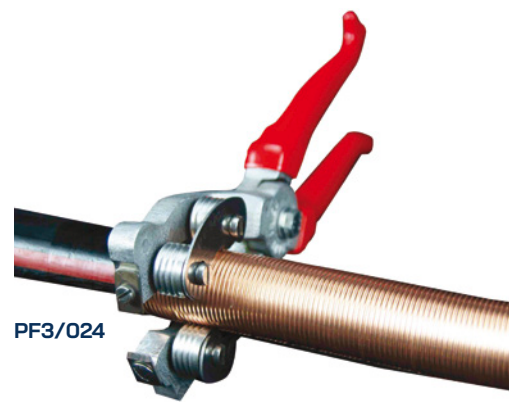| Pliers for Corrugated Shield	
PF3/024	10.5" X 4" X 3.15", 1.2 lbs, Diameter 1.024" to 2.047" (26 to 52mm). Depth of cut 0.024" (0.6mm)

Scan the QR-Code to watch the how-to video

PF3/024

PENTA
ELECTRICAL SAFETY PRODUCTS

Insulated Phillips Screwdriver

Manufactured by injection molding to insulate a unique blade that runs the entire length of the screwdriver. It has a slim tip smart diameter blade that offers screwdriver an additional reach in confined spaces.

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Phillips Screwdrivers	
IC18-N0X3-PTA	Screwdriver, Phillips #0 Shaft 3"
IC18-N0X6-PTA	Screwdriver, Phillips #0 Shaft 6"
IC18-N1X4-PTA	Screwdriver, Phillips #1 Shaft 4"
IC18-N2X5-PTA	Screwdriver, Phillips #2 Shaft 5"
IC18-N3X6-PTA	Screwdriver, Phillips #3 Shaft 6"
IC18-N4X8-PTA	Screwdriver, Phillips #4 Shaft 8"

Insulated Slotted Screwdriver

Manufactured by injection molding to insulate a unique blade running the entire length of the screwdriver. It has a slim tip smart diameter blade that offers screwdriver additional reach in confined spaces.

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

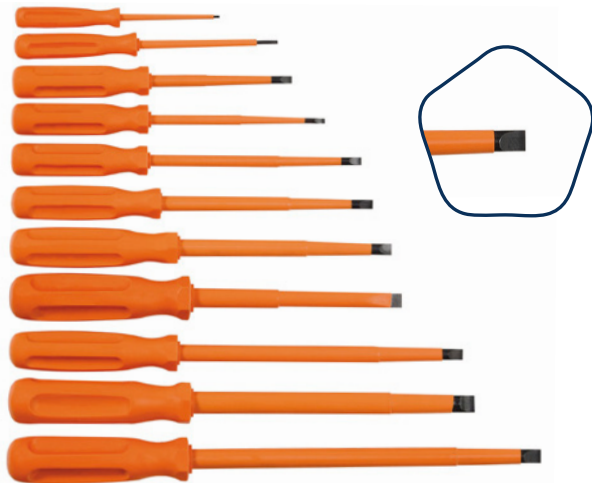*Injection molding process allows Penta ESP to design hand tools that are lightweight, better ergonomically designed and manufactured as a single unit without using adhesives to joint different components of the tool.*

This process allows for slim tip smart diameter blade offering screwdriver additional reach in confined spaces.

The material used in injection molding is considerably stronger than the vinyl material used in dipping process.

Manufactured by injection molding process to insulate a unique blade running the entire length of the Screwdriver.

Create your own KIT

Smart Diameter Blade

Insulated Slotted Screwdrivers	
IS18-1/2X8-PTA	Screwdriver, Slotted 1/2" Shaft 8"
IS18-1/4X6-PTA	Screwdriver, Slotted 1/4" Shaft 6"
IS18-3/8X10-PTA	Screwdriver, Slotted 3/8" Shaft 10"
IS18-3/8X6-PTA	Screwdriver, Slotted 3/8" Shaft 6"
IS18-5/16X6-PTA	Screwdriver, Slotted 5/16" Shaft 6"
IS18-5/16X8-PTA	Screwdriver, Slotted 5/16" Shaft 8"
IS18-5/32X5-PTA	Screwdriver, Slotted 5/32" Shaft 5"
IS18B-1/4X1-1/2-PTA	Screwdriver Stubby, Slotted 1/4" Shaft 1/2"

Insulated Nut Driver

Insulating material is injection molded over a metal shaft reaching from end-to-end. The composite material is an extra-light technology due to a thinner layer of insulation with a higher level of protection a result of its density and shock-resistance.

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Nut Driver	
IS36-1/2-PTA	Nut Driver 1/2" Shaft 6"
IS36-1/4-PTA	Nut Driver 1/4" Shaft 6"
IS36-11/32-PTA	Nut Driver 11/32" Shaft 6"
IS36-3/16-PTA	Nut Driver 3/16" Shaft 6"
IS36-3/8-PTA	Nut Driver 3/8" Shaft 6"
IS36-5/16-PTA	Nut Driver 5/16" Shaft 6"
IS36-5/8-PTA	Nut Driver 5/8" Shaft 6"
IS36-7/16-PTA	Nut Driver 7/16" Shaft 6"
IS36-9/16-PTA	Nut Driver 9/16" Shaft 6"

PENTA
ELECTRICAL SAFETY PRODUCTS

Insulated Rotoline Screwdrivers

Are PENTA ESP's ergonomic Tools' handle provide greater comfort, ease of use and efficiency. Insulating material is injected over a metal shaft that reaches from end-to-end. The composite material is an extra-light technology due to a thinner layer of insulation with a higher level of protection due to its density and shock-resistance.

Each screwdriver has a colored ring on the handle. Allowing for quick identification - handle ring color corresponds to screwdriver blade type .

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Smart Diameter Blade

Insulated Rotoline Phillips Screwdrivers

RL1-PH-N0X3-PTA	Screwdriver 7", Phillips #0 RL
RL1-PH-N0X6-PTA	Screwdriver 10", Phillips #0 RL
RL1-PH-N1X4-PTA	Screwdriver 10", Phillips #1 RL
RL1-PH-N2X5-PTA	Screwdriver 9", Phillips #2 RL
RL1-PH-N3X6-PTA	Screwdriver 9", Phillips #3 RL
RL1-PH-N4X8-PTA	Screwdriver 12", Phillips #4 RL

Insulated Rotoline Slotted Screwdrivers

RL1-PL-1/2X8-PTA	Screwdriver 12", Slotted 1/2" RL
RL1-PL-1/4X6-PTA	Screwdriver 10", Slotted 1/4" RL
RL1-PL-3/8X10-PTA	Screwdriver 10", Slotted 3/8" RL
RL1-PL-3/8X6-PTA	Screwdriver 10", Slotted 3/8" RL
RL1-PL-5/16X6-PTA	Screwdriver 10", Slotted 5/16" RL
RL1-PL-5/16X8-PTA	Screwdriver 8" , Slotted 5/16" RL
RL1-PL-5/32X5-PTA	Screwdriver 8", Slotted 5/32" RL

Insulated Rotoline Nut Drivers

RL1-36-1/2-PTA	Nut Driver 1/2" Shaft 6" RL Turn
RL1-36-1/4-PTA	Nut Driver 1/4" Shaft 6" RL Turn
RL1-36-11/32-PTA	Nut Driver 11/32" Shaft 6" RL Turn
RL1-36-3/16-PTA	Nut Driver 3/16" Shaft 6" RL Turn
RL1-36-3/8-PTA	Nut Driver 3/8" Shaft 6" RL Turn
RL1-36-5/16-PTA	Nut Driver 5/16" Shaft 6" RL Turn
RL1-36-5/8-PTA	Nut Driver 5/8" Shaft 6" RL Turn
RL1-36-7/16-PTA	Nut Driver 7/16" Shaft 6" RL Turn
RL1-36-9/16-PTA	Nut Driver 9/16" Shaft 6" RL Turn

RL1-PL-3/8X6-PTA

RL1-PH-N2X5-PTA

MP18-10-PTA

Insulated Phillips Screwstarter

MP18-3-PTA	Screwstarter OAL 3"
MP18-6-PTA	Screwstarter OAL 6"
MP18-10-PTA	Screwstarter OAL 10"

Insulated Slotted Screwstarter

MU18-3-PTA	Screwstarter OAL 3"
MU18-6-PTA	Screwstarter OAL 6"
MU18-10-PTA	Screwstarter OAL 10"

Insulated Universal Pliers

Manufactured by injection molding technology, or dipped to coat by high-density plastic material.

Various Sizes to fit your tooling needs.

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Manufactured by injection molding technology or dipped to coat by high-density plastic material.

Available in various sizes to fit your tooling needs. All insulated tools comply with ASTM F1505 standard.

Insulated Universal Pliers	
MS4-7-PTA	Universal Pliers, Lineman 7"
MS4-8-PTA	Universal Pliers, Lineman 8"
MS4-9-PTA	Universal Pliers, Lineman 9"
MS4E-9-PTA	Universal Pliers, Lineman 9" w/ Head
MS4CR-10-PTA	Universal Pliers, Lineman 10" w/ Crimper
MS4-10-PTA	Universal Pliers, Lineman 10"
MC11CE-XL-PTA	Pliers, Flat Nose Composite Ceramic Blades OAL 8"
MC13CE-XL-PTA	Pliers, Bent Nose Half-Round Ceramic Blades OAL 8"
MC45I-XL-PTA	Pliers, Cutting Composite OAL 8"
MC4CE-XL-PTA	Pliers, Universal Composite Ceramic Blades OAL 8"
Insulated Cutting Pliers	
MS60-6-PTA	Pliers, Side Cutting OAL 6.5"
MS60-7-PTA	Pliers, Side Cutting OAL 7"
MS45-8-PTA	Pliers, Cable Cutting OAL 7"
MS45-9-PTA	Pliers, Cable Cutting OAL 9"
Insulated Needle Nose Pliers	
MS10-7-PTA	Pliers, Long Nose Half-Round OAL 7"
MS10E-7-PTA	Pliers, Long Nose Half-Round Straight OAL 7" *
MS13-6-PTA	Pliers, Half-Round 45° Bent Nose OAL 6.5"
MS13-8-PTA	Pliers, Half-Round 45° Bent Nose OAL 8"
MS13E-7-PTA	Pliers, Half-Round Bent Nose OAL 7" *
Insulated Slip Joint Pliers	
MS26-10-PTA	Pliers, Slip-Joint Adjustable OAL 10"
MS26-12-PTA	Pliers, Slip-Joint Adjustable OAL 12"
Insulated Adjustable Wrenches	
MS7S-10-PTA	Wrench Adjustable OAL 11" *
MS7S-12-PTA	Wrench Adjustable OAL 12" *
MS7S-8-PTA	Wrench Adjustable OAL 8" *
MS7-10-PTA	Wrench, Adjustable OAL 10"
MS7-12-PTA	Wrench, Adjustable OAL 12"
MS7-15-PTA	Wrench, Adjustable OAL 15"
MS7-4-PTA	Wrench, Adjustable OAL 4"
MS7-6-PTA	Wrench, Adjustable OAL 6"
MS7-8-PTA	Wrench, Adjustable OAL 8"

MS4CR-10-PTA

MC4CE-XL-PTA

MS60-6-PTA

MS4E-9-PTA

MS26-10-PTA

MS7-10-PTA

*Additional Sizes upon Request
*W/Head INS

Insulated Wrench Open-Ended,

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Wrenches Open-Ended	
MS16-1/2-PTA	Wrench, Open-Ended 1/2" OAL 5"
MS16-1/4-PTA	Wrench, Open-Ended 1/4" OAL 4"
MS16-11/16-PTA	Wrench, Open-Ended 11/16" OAL 6"
MS16-11/32-PTA	Wrench, Open-Ended 11/32" OAL 5"
MS16-13/16-PTA	Wrench, Open-Ended 13/16" OAL 6"
MS16-15/16-PTA	Wrench, Open-Ended 15/16" OAL 7"
MS16-1-PTA	Wrench, Open-Ended 1" OAL 8"
MS16-3/16-PTA	Wrench, Open-Ended 3/16" OAL 4"
MS16-3/4-PTA	Wrench, Open-Ended 3/4" OAL 7"
MS16-3/8-PTA	Wrench, Open-Ended 3/8" OAL 5"
MS16-5/16-PTA	Wrench, Open-Ended 5/16" OAL 4"
MS16-5/8-PTA	Wrench, Open-Ended 5/8" OAL 6"
MS16-7/16-PTA	Wrench, Open-Ended 7/16" OAL 5"
MS16-7/8-PTA	Wrench, Open-Ended 7/8" OAL 8"
MS16-9/16-PTA	Wrench, Open-Ended 9/16" OAL 5"

MS16-1/2-PTA

Insulated Box End Wrench

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Wrenches Single Head Cranked Ring	
MS21-11/16-PTA	Wrench, Single Head Cranked Ring 11/16"
MS21-1-1/16-PTA	Wrench, Single Head Cranked Ring 1-1/16"
MS21-1-1/4-PTA	Wrench, Single Head Cranked Ring 1-1/4"
MS21-1-1/8-PTA	Wrench, Single Head Cranked Ring 1-1/8"
MS21-13/16-PTA	Wrench, Single Head Cranked Ring 13/16"
MS21-15/16-PTA	Wrench, Single Head Cranked Ring 15/16"
MS21-1-PTA	Wrench, Single Head Cranked Ring 1"
MS21-3/4-PTA	Wrench, Single Head Cranked Ring 3/4"
MS21-3/8-PTA	Wrench, Single Head Cranked Ring 3/8"
MS21-5/16-PTA	Wrench, Single Head Cranked Ring 5/16"
MS21-5/8-PTA	Wrench, Single Head Cranked Ring 5/8"
MS21-7/16-PTA	Wrench, Single Head Cranked Ring 7/16"
MS21-7/8-PTA	Wrench, Single Head Cranked Ring 7/8"
MS21-9/16-PTA	Wrench, Single Head Cranked Ring 9/16"

MS21-PTA

MS21-PTA

Insulated Ratchet

Push and release are unique features allowing the user to have the highest level of confidence in their tools. Reversing ratchet is accomplished by a simple turn. All imperial and metric sockets, extensions and accessories are compatible with the ratchet and its unique features.

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Torque Wrench

Insulated torque ratchet is reversible by simple turn of the knob. The push and release are unique features that allow users to work with the highest level of confidence in their tools. The mechanism has been developed to perform in exacting and rough applications. All imperial and metric sockets, extensions and accessories are compatible with the ratchet and its unique features. Ratchet also available in 1/2" square drive.

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Ratchets	
MS85PC-PTA	Ratchet Stubby 3/8" SqDr w/ Locking System
MS85P-PTA	Ratchet 3/8" SqDr w/ Locking System
MS65P-PTA	Ratchet 1/2" SqDr w/ Locking System

Insulated Torque Wrenches	
MS100N1VM-3/8-PTA	Torque Wrench 8-35LBF.IN 3/8" Locking System
MS100N0VM-PTA	Torque Wrench 35-180LBF.IN Sqd 3/8" - Locking System

Create Your Own KIT

MS85P-PTA

MS100N0VM-PTA

MS100N0VM-PTA

Insulated Socket - 12 pts

Available in 1/2" Square Drive. All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Socket - 12 pts	
MS86L-1/2-PTA	Socket, 12 Pts Female Long 1/2" - 3/8" SqDr INS
MS86L-11/16-PTA	Socket, 12 Pts Female Long 11/16" - 3/8" SqDr INS
MS86L-13/16-PTA	Socket, 12 Pts Female Long 13/16" - 3/8" SqDr INS
MS86L-3/4-PTA	Socket, 12 Pts Female Long 3/4" - 3/8" SqDr INS
MS86L-3/8-PTA	Socket, 12 Pts Female Long 3/8" - 3/8" SqDr INS
MS86L-5/16-PTA	Socket, 12 Pts Female Long 5/16" - 3/8" SqDr INS
MS86L-5/8-PTA	Socket, 12 Pts Female Long 5/8" - 3/8" SqDr INS
MS86L-7/16-PTA	Socket, 12 Pts Female Long 7/16" - 3/8" SqDr INS
MS86L-7/8-PTA	Socket, 12 Pts Female Long 7/8" - 3/8" SqDr INS
MS86L-9/16-PTA	Socket, 12 Pts Female Long 9/16" - 3/8" SqDr INS

*Additional Sizes upon Request

Insulated Socket- Hex

Available in 1/2" Square Drive. All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated Sockets- Hex	
MS87-1/2-PTA	Socket, Hexagonal Male 1/2" - 3/8" SqDr INS
MS87-1/4-PTA	Socket, Hexagonal Male 1/4" - 3/8" SqDr INS
MS87-1/8-PTA	Socket, Hexagonal Male 1/8" - 3/8" SqDr INS
MS87-3/16-PTA	Socket, Hexagonal Male 3/16" - 3/8" SqDr INS
MS87-3/8-PTA	Socket, Hexagonal Male 3/8" - 3/8" SqDr INS
MS87-5/16-PTA	Socket, Hexagonal Male 5/16" - 3/8" SqDr INS
MS87-5/32-PTA	Socket, Hexagonal Male 5/32"- 3/8" SqDr INS
MS87-7/16-PTA	Socket, Hexagonal Male 7/16" - 3/8" SqDr INS
MS87-7/32-PTA	Socket, Hexagonal Male 7/32" - 3/8" SqDr INS
MS87-9/16-PTA	Socket, Hexagonal Male 9/16" - 3/8" SqDr INS
MS87-9/64-PTA	Socket, Hexagonal Male 9/64" - 3/8" SqDr INS
MS87P-1/2-PTA	Socket, Hexagonal Male 1/2" - 3/8" SqDr INS- Long
MS87P-3/8-PTA	Socket, Hexagonal Male 3/8" - 3/8" SqDr INS- Long
MS87P-5/16-PTA	Socket, Hexagonal Male 5/16" - 3/8" SqDr INS- Long
MS87P-7/16-PTA	Socket, Hexagonal Male 7/16" - 3/8" SqDr INS- Long
MS87P-9/16-PTA	Socket, Hexagonal Male 9/16" - 3/8" SqDr INS- Long

*Additional Sizes upon Request

Electrician Knife

Has a molded handle to fit users hand, Ceramic & Steel blades retain sharpness after many uses. All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Electrician Knives	
IS77-PTA	Knife, Thick Blade 3" OAL 7" INS
IS78-PTA	Knife, Thin Blade OAL 7" INS
IS79-PTA	Knife, Short Curved Blade OAL 8" INS
IS80C-PTA	Knife, Ceramic Blade OAL 8" INS

IS80C-PTA

IS77-PTA

PENTA
ELECTRICAL SAFETY PRODUCTS

Insulated tool KITS

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Add 2 magnets MAG120R-PTA to any kit with Bag 9 Pouches Tri Fold for added convenience when using the insulated tool kit.

Insulated Tool KIT 9 Pieces

KIT-9	IS18-5/32X5-PTA	Screwdriver, Slotted 5/32" - 5" Slim Tip Shaft
	IS18-5/16X6-PTA	Screwdriver, Slotted 5/16" - 6" Slim Tip Shaft
	IS18-1/4X6-PTA	Screwdriver, Slotted 1/4" - 6" Slim Tip Shaft
	IC18-N2X5-PTA	Screwdriver, Phillips #2 - 5" Slim Tip Shaft
	IC18-N1X4-PTA	Screwdriver, Phillips #1 - 4" Slim Tip Shaft
	MS60-7-PTA	Insulated Side Cutting Plier 7"
	MS4-9-PTA	Insulated Combination Plier 9"
	MS10-7-PTA	Insulated Half-Round Straight Long Nose Plier 7"
	TRI12P	Bag 12 Pouches Tri fold
	MS43CR-PTA	1000V Insulated Wire Stripper / Crimper Plier

KIT-9

Insulated Tool RotoLine KIT 9 Pieces

KITRL1-9	RL1-PL-5/32X5-PTA	Rotoline, Screwdriver, Slotted 5/32"
	RL1-PL-5/16X6-PTA	Rotoline, Screwdriver, Slotted 5/16"
	RL1-PL-1/4X6-PTA	Rotoline, Screwdriver, Slotted 1/4"
	RL1-PH-N2X5-PTA	Rotoline, Screwdriver, Phillips #2
	RL1-PH-N1X4-PTA	Rotoline, Screwdriver, Phillips #1
	MS60-7-PTA	Insulated Side Cutting Plier 7"
	MS4-9-PTA	Insulated Combination Plier 9"
	MS10-7-PTA	Insulated Half-Round Straight Long Nose Plier 7"
	TRI12P	Bag 12 Pouches Tri fold
	MS43CR-PTA	1000V Insulated Wire Stripper / Crimper Plier

KITRL1-9

Insulated Tool Composite KIT 9 Pieces

KITC-9	IS18-5/32X5-PTA	Screwdriver, Slotted 5/32" - 5" Slim Tip Shaft
	IS18-5/16X6-PTA	Screwdriver, Slotted 5/16" - 6" Slim Tip Shaft
	IS18-1/4X6-PTA	Screwdriver, Slotted 1/4" - 6" Slim Tip Shaft
	IC18-N2X5-PTA	Screwdriver, Phillips #2 - 5" Slim Tip Shaft
	IC18-N1X4-PTA	Screwdriver, Phillips #1 - 4" Slim Tip Shaft
	MC45I-XL-PTA	Hybrid Composite Cutting Plier Opening 22mm
	MC4CE-XL-PTA	Nsulating Universal Plier With Ceramic Cutters
	MC11CE-XL-PTA	Insulating Long-Nosed Straight Plier With Ceramic Cutters - Xl
	TRI12P	Bag 12 Pouches Tri fold
	MS43CR-PTA	1000V Insulated Wire Stripper / Crimper Plier

KITC-9

Insulated Nut Driver Tool KIT 9 Pieces

KIT-ND9	IS36-5/16-PTA	Nut Driver 5/16" - Shaft 6"
	IS36-11/32-PTA	Nut Driver 11/32" - Shaft 6"
	IS36-1/4-PTA	Nut Driver 1/4" - Shaft 6"
	IS36-3/16-PTA	Nut Driver 3/16" - Shaft 6"
	IS36-3/8-PTA	Nut Driver 3/8" - Shaft 6"
	IS36-7/16-PTA	Nut Driver 7/16" - Shaft 6"
	IS36-1/2-PTA	Nut Driver 1/2" - Shaft 6"
	IS36-9/16-PTA	Nut Driver 9/16" - Shaft 6"
	IS36-5/8-PTA	Nut Driver 5/8" - Shaft 6"
	TRI9P	Bag 9 Pouches Tri fold

KIT-ND9

Insulated Nut Driver Tool KIT 7 Pieces

KIT-ND7	IS36-5/16-PTA	Nut Driver 5/16" - Shaft 6"
	IS36-11/32-PTA	Nut Driver 11/32" - Shaft 6"
	IS36-1/4-PTA	Nut Driver 1/4" - Shaft 6"
	IS36-3/16-PTA	Nut Driver 3/16" - Shaft 6"
	IS36-3/8-PTA	Nut Driver 3/8" - Shaft 6"
	IS36-7/16-PTA	Nut Driver 7/16" - Shaft 6"
	IS36-1/2-PTA	Nut Driver 1/2" - Shaft 6"
	TRI9P	Bag 9 Pouches Tri fold

KIT-ND7

PENTA ELECTRICAL SAFETY PRODUCTS

Insulated tool KITS

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

Insulated RotoLine 1 Nut Driver Tool KIT 9 Pieces

KITRL1-ND9		
	RL1-36-3/8-PTA	Rotoline, Nut Driver 3/8" - Shaft 6"
	RL1-36-7/16-PTA	Rotoline, Nut Driver 7/16" - Shaft 6"
	RL1-36-1/2-PTA	Rotoline, Nut Driver 1/2" - Shaft 6"
	RL1-36-3/16-PTA	Rotoline, Nut Driver 3/16" - Shaft 6"
	RL1-36-1/4-PTA	Rotoline, Nut Driver 1/4" - Shaft 6"
	RL1-36-5/16-PTA	Rotoline, Nut Driver 5/16" - Shaft 6"
	RL1-36-11/32-PTA	Rotoline, Nut Driver 11/32" - Shaft 6"
	RL1-36-9/16-PTA	Rotoline, Nut Driver 9/16" - Shaft 6"
	RL1-36-5/8-PTA	Rotoline, Nut Driver 5/8" - Shaft 6"
	TRI9P	Bag 9 Pouches Tri fold

KITRL1-ND9

Insulated RotoLine 1 Nut Driver Tool KIT 7 Pieces

KITRL1-ND7		
	RL1-36-3/8-PTA	Rotoline, Nut Driver 3/8" - Shaft 6"
	RL1-36-7/16-PTA	Rotoline, Nut Driver 7/16" - Shaft 6"
	RL1-36-1/2-PTA	Rotoline, Nut Driver 1/2" - Shaft 6"
	RL1-36-3/16-PTA	Rotoline, Nut Driver 3/16" - Shaft 6"
	RL1-36-1/4-PTA	Rotoline, Nut Driver 1/4" - Shaft 6"
	RL1-36-5/16-PTA	Rotoline, Nut Driver 5/16" - Shaft 6"
	RL1-36-11/32-PTA	Rotoline, Nut Driver 11/32" - Shaft 6"
	TRI9P	Bag 9 Pouches Tri fold

KITRL1-ND7

Insulated Screwdriver Tool KIT 9 Pieces

KIT-SD9		
	IS18-1/8X4-PTA	Screwdriver, Slotted 1/8" - 5" Slim Tip Shaft
	IS18-5/32X5-PTA	Screwdriver, Slotted 5/32" - 5" Slim Tip Shaft
	IS18-1/4X6-PTA	Screwdriver, Slotted 1/4" - 6" Slim Tip Shaft
	IS18-5/16X6-PTA	Screwdriver, Slotted 5/16" - 6" Slim Tip Shaft
	IS18-5/16X8-PTA	Screwdriver, Slotted 5/16" - 8" Slim Tip Shaft
	IS18-3/8X6-PTA	Screwdriver, Slotted 3/8" - 6" Slim Tip Shaft
	IC18-N1X4-PTA	Screwdriver, Phillips #1 - 4" Slim Tip Shaft
	IC18-N2X5-PTA	Screwdriver, Phillips #2 - 5" Slim Tip Shaft
	IC18-N3X6-PTA	Screwdriver, Phillips #3 - 6" Slim Tip Shaft
	ZP14R	Zipper Rouch Red 14"

KIT-SD9

Insulated Screwdriver Tool KIT 7 Pieces

KIT-SD7		
	IS18-1/8X4-PTA	Screwdriver, Slotted 1/8" - 5" Slim Tip Shaft
	IS18-5/32X5-PTA	Screwdriver, Slotted 5/32" - 5" Slim Tip Shaft
	IS18-1/4X6-PTA	Screwdriver, Slotted 1/4" - 6" Slim Tip Shaft
	IS18-5/16X8-PTA	Screwdriver, Slotted 5/16" - 8" Slim Tip Shaft
	IS18-3/8X6-PTA	Screwdriver, Slotted 3/8" - 6" Slim Tip Shaft
	IC18-N1X4-PTA	Screwdriver, Phillips #1 - 4" Slim Tip Shaft
	IC18-N2X5-PTA	Screwdriver, Phillips #2 - 5" Slim Tip Shaft
	TRI9P	Bag 9 Pouches Tri fold

KIT-SD7

Insulated Screwdriver Tool KIT 6 Pieces

KIT-SD6		
	IS18-1/8X4-PTA	Screwdriver, Slotted 1/8" - 5" Slim Tip Shaft
	IS18-5/32X5-PTA	Screwdriver, Slotted 5/32" - 5" Slim Tip Shaft
	IS18-1/4X6-PTA	Screwdriver, Slotted 1/4" - 6" Slim Tip Shaft
	IS18-5/16X6-PTA	Screwdriver, Slotted 5/16" - 6" Slim Tip Shaft
	IC18-N1X4-PTA	Screwdriver, Phillips #1 - 4" Slim Tip Shaft
	IC18-N2X5-PTA	Screwdriver, Phillips #2 - 5" Slim Tip Shaft
	ZP14R	Zipper Rouch Red 14"

KIT-SD6

Insulated Tool KITS

All insulated tools comply with ASTM F1505 and IEC 60900 standards.

KITRL1-SD9

KITRL1-SD7

KITRL1-SD6

KIT-RA12

KIT-RA12LE

Insulated RotoLine 1 Screwdriver Tool KIT 9 Pieces

KITRL1-SD9	RL1-PL-1/8X4-PTA	Rotoline, Screwdriver, Slotted 1/8"
	RL1-PL-1/4X6-PTA	Rotoline, Screwdriver, Slotted 1/4"
	RL1-PL-5/16X6-PTA	Rotoline, Screwdriver, Slotted 5/16"
	RL1-PL-5/16X8-PTA	Rotoline, Screwdriver, Slotted 5/16"
	RL1-PL-3/8X6-PTA	Rotoline, Screwdriver, Slotted 3/8"
	RL1-PL-3/8X10-PTA	Rotoline, Screwdriver, Slotted 3/8"
	RL1-PH-N1X4-PTA	Rotoline, Screwdriver, Phillips #1
	RL1-PH-N2X5-PTA	Rotoline, Screwdriver, Phillips #2
	RL1-PH-N3X6-PTA	Rotoline, Screwdriver, Phillips #3
	ZP14R	Zipper Rouch Red 14"

Insulated RotoLine 1 Screwdriver Tool KIT 7 Pieces

KITRL1-SD7	RL1-PL-1/8X4-PTA	Rotoline, Screwdriver, Slotted 1/8"
	RL1-PL-5/32X5-PTA	Rotoline, Screwdriver, Slotted 5/32"
	RL1-PL-1/4X6-PTA	Rotoline, Screwdriver, Slotted 1/4"
	RL1-PL-5/16X6-PTA	Rotoline, Screwdriver, Slotted 5/16"
	RL1-PL-5/16X8-PTA	Rotoline, Screwdriver, Slotted 5/16"
	RL1-PL-3/8X6-PTA	Rotoline, Screwdriver, Slotted 3/8"
	RL1-PH-N1X4-PTA	Rotoline, Screwdriver, Phillips #1
	RL1-PH-N2X5-PTA	Rotoline, Screwdriver, Phillips #2
	TRI9P	Bag 9 Pouches Tri fold

Insulated RotoLine 1 Screwdriver Tool KIT 6 Pieces

KITRL1-SD6	RL1-PL-1/8X4-PTA	Rotoline, Screwdriver, Slotted 1/8"
	RL1-PL-5/32X5-PTA	Rotoline, Screwdriver, Slotted 5/32"
	RL1-PL-1/4X6-PTA	Rotoline, Screwdriver, Slotted 1/4"
	RL1-PL-5/16X6-PTA	Rotoline, Screwdriver, Slotted 5/16"
	RL1-PH-N1X4-PTA	Rotoline, Screwdriver, Phillips #1
	RL1-PH-N2X5-PTA	Rotoline, Screwdriver, Phillips #2
	ZP14R	Zipper Rouch Red 14"

Insulated Ratchet w/ Locking Extensions Tool KIT 12 pcs

KIT-RA12	MS85P-PTA	Ratchet 3/8 SqDr, Locking System
	MS87-1/2-PTA	Socket, Short, Male, Hexagonal 1/2"
	MS87-1/4-PTA	Socket, Short, Male, Hexagonal 1/4"
	MS87-1/8-PTA	Socket, Short, Male, Hexagonal 1/8"
	MS87-3/16-PTA	Socket, Short, Male, Hexagonal 3/16"
	MS87-3/8-PTA	Socket, Short, Male, Hexagonal 3/8"
	MS87-5/16-PTA	Socket, Short, Male, Hexagonal 5/16"
	MS87-5/32-PTA	Socket, Short, Male, Hexagonal 5/32"
	MS87-7/16-PTA	Socket, Short, Male, Hexagonal 7/16"
	MS87-9/64-PTA	Socket, Short, Male, Hexagonal 9/64"
	MS84-PTA	5" Extension 3/8 SqDr, Long
	MS84L-PTA	8" Extension 3/8 SqDr, Long
	ZP14R	Zipper Rouch Red 14"

Insulated Ratchet w/ Locking Extensions Tool KIT 12 pcs

KIT-RA12LE	MS85P-PTA	Ratchet 3/8 SqDr, Locking System
	MS87-1/2-PTA	Socket, Short, Male, Hexagonal 1/2"
	MS87-1/4-PTA	Socket, Short, Male, Hexagonal 1/4"
	MS87-1/8-PTA	Socket, Short, Male, Hexagonal 1/8"
	MS87-3/16-PTA	Socket, Short, Male, Hexagonal 3/16"
	MS87-3/8-PTA	Socket, Short, Male, Hexagonal 3/8"
	MS87-5/16-PTA	Socket, Short, Male, Hexagonal 5/16"
	MS87-5/32-PTA	Socket, Short, Male, Hexagonal 5/32"
	MS87-7/16-PTA	Socket, Short, Male, Hexagonal 7/16"
	MS87-9/64-PTA	Socket, Short, Male, Hexagonal 9/64"
	MS84P-PTA	Extension, Short, Locking System OAL 7.5" - 3/8" SqDr INS
	MS84LP-PTA	Extension, Short, Locking System OAL 11.5" - 3/8" SqDr INS
	ZP14R	Zipper Rouch Red 14"

Insulating Platform

The insulating platform, made from one-piece molded polypropylene, comes with anti-slip feet and provides an elevated place for workers and equipment. Used to provide insulation for a technician during 1st category work or operating on manually operated 2nd or 3rd category separating instruments (switchgear...), both indoor and outdoor models are available.

Supports up to 300 lbs.

Technical specifications

TT015M — One-piece moulded plastic stool with anti-slip tray

- Fixed insulating legs in PVC, inclined in order to keep the platform away from contact with vertical wall
- All stools are supplied with anti-slip pads

TT018 — Plastic stool with anti-slip tray

- Insulating PVC legs with insulating skirts, inclined in order to keep the platform away from contact with vertical wall
- All stools are supplied with anti-slip pads
- Screw legs

TT015

TT018

Insulating Platform

Part Number	Indoor use (kV)	Outdoor use (kV)	Dimensions (LxW)	Height under platform	Weigth (lbs)
TT015M24KV-PTA	24 KV	4 KV	20" x 20"	5.90"	7.94
TT015M4KV-OUT-PTA	24 kV	4 kV	20" x 20"	5.90"	7.94
TT015M45KV-PTA	45 kV	10 kV	20" x 20"	9.33"	8.6
TT015M10KV-OUT-PTA	45 kV	10 kV	20" x 20"	9.33"	8.6
TT018 24KV	24 kV	24 kV	20" x 20"	9.64"	9.04
TT018 45KV	45 kV	45 kV	20" x 20"	14.25"	10.14
TT018 63KV	63 kV	63 kV	20" x 20"	16.26"	10.58

Keep platform clean for maximum protection and security.

Magnetic Button

Lightweight and super strong Magnetic Buttons are designed for use in eyelets of insulating blankets when covering energized equipment in hard to cover areas like pad mounts, cubicles and switchboards. Epoxi+Ni Coated Strong Neodymium Cup Magnets. Perfect for use with insulated tools kits, keeping all tools at the workers' eye level and mounted on ferrous cabinets. Can be used with Clapmstick and insulating rubber gloves.

Holding Force – 120 lbs. ea.

MAG120R-PTA

ESP Magnetic Button

MAG120R-PTA	3.85 oz, 2.75" High, 1.5" Diameter

BLANKET PIN for Insulating Sheeting

Use: Used to hold insulating sheeting in position.

TP60P

Plastic Blanket Pin

| TP60P	Plastic spring Clip, 1" Opening, 6.5" Length, 0.7" width, .02" height **WEATHER RESISTANT**

Mechanical Crimping Tool / Pop Tool

The mechanical crimping tool is designed for crimping a wide range of overhead service entrance connections, overhead splices, and overhead taps. Easy to use handles provide solid grip, good leverage and greater durability. A low friction impregnated bushing at pivot joint assures an over-center cam mechanism.

Tool can easily be checked visually for proper adjustment and can be adjusted with Allen wrenches. Die Available (BG-k840).

Mechanical Crimping Tool / Pop Tool	
PT-OD3	O Nose Die & D3 Seat 9,000 lbs 25 3/4" 7 lbs., Accepts "W" Style Dies
PT-BGD3	BG Nose Die & D3 Seat 9,000 lbs 25 3/4" 7 lbs., Accepts "W" Style Dies

PT-BGD3
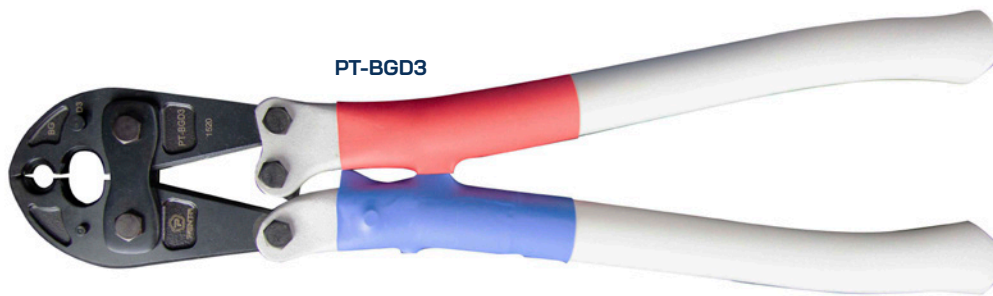
Hydraulic Compression Head - 60 Tons Single action

Specifications:

- Height: 17.5"
- Weight: 47 lbs
- Max. pressure: 700bar/10,000 PSI
- Maximum output: 60 tons US
- Capacity: up to 2.36" O.D. sleeve
- Oil required: 10.4 fluid oz
- Ram stroke: 1.54"
- Accessories: PENTA steel carrying case
- Custom dies are manufactured on request

Features:

- Designed as portable tool for installing compression sleeves and terminals for transmission line maintenance
- Large handle for carrying and solid metal loop at base for hoist work
- Detachable ground stand as standard accessory
- Single-action cylinder with spring return can be used by any single-action 700 bar/10,000 psi-rated hydraulic pump

XPC60T-S

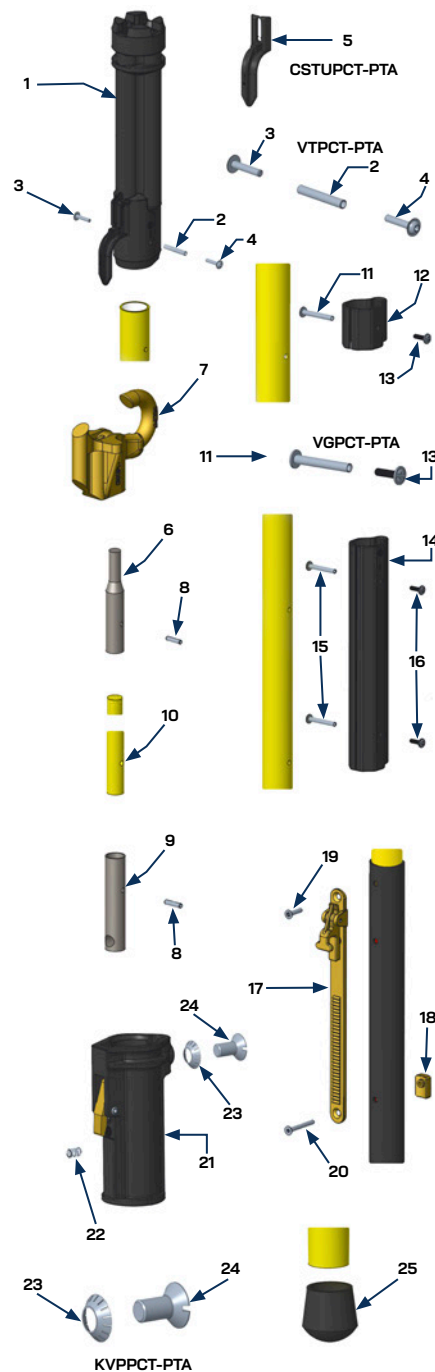| Hydraulic Compression Head	
XPC60T-S	60 Tons Single Action

Repair Kits for Shotgun Hot Sticks

These Kits allow customers to change a part of its shotgun hot stick instead of replacing the whole stick.

These kits can be used on the stick of the PCTxxxSJ) and the Penta range (PCTxxx PTA).

(KTETEPCTCR-PTA) Hook pole head with integrated suspension hook and tube screw		
Contains items	Description	Qty
1	Round tube hook pole head with suspension hook	1
2	Spacer for PCT head	1
3	Socket for handguard and PCT rod guide	1
4	M4x20 steel zinc plated hollow torx flange screw	1

(VTPCT-PCTA) Screw for hook pole head		
2	Spacer for PCT head	1
3	Socket for handguard and PCT rod guide	1
4	M4x20 steel zinc plated hollow torx flange screw	1

(CSTUPCT-PTA) Suspension hook to be inserted into the hook pole head		
5	Suspension hook to be inserted into the hook pole head	1

(KJCPCT***) Hook ring kit		
6	PCT hook ferrule	1
7	Retractable hook for pct	1
8	Elastic pin D3X12 zinc-platedsteel	1
9	PCT ferrule with handle	1
10	Jonc epoxy dia. 10	1

(KGJPCT-PTA) Rod guide for hook pole with tube screw		
11	Socket for handguard and PCT rod guide	1
12	Open rod guide for hook pole	1
13	M4x10 steel zinc plated hollow torx head screw	1

(VGPCT9-PTA) Guide screw and hand guard for clampstick		
11	Socket for handguard and PCT rod guide	1
13	M4x10 steel zinc plated hollow torx head screw	1

(KGMPCT-PTA) Hand guard kit for PCT pole		
14	Socket for handguard and PCT rod guide	1
15	Open rod guide for hook pole	1
16	M4x10 steel zinc plated hollow torx head screw	1

(KCREMPCT-PTA) Lock bar and safety stop with screw for PCT		
17	Handle for assembled plastic hook pole	1
18	Compression spring	1
19	D8 conical fan washer	1
20	Hollow torx countersunk screw M8x16 steel zinc plated	1

CSTUPCT-PTA
VTPCT-PTA
VGPCT-PTA
KVPPCT-PTA

(KPOIPCT-PTA) Clampstick handle with spring and screw		
Contains items	Description	Qty
21	Mounted rack for pct	1
22	Handle stop for pct	1
23	Hollow hexagon countersunk screw M5x20 zinc-plated steel	1
24	Hollow hexagon countersunk screw M5x45 zinc-plated steel	1

(KVPPCT-PTA) Handle screw for clampstick		
23	D8 conical fan washer	1
24	Hollow torx countersunk screw M8x16 steel zinc plated	1

(BE31-PTA) O.D. Rubber crutch tip for insulating Sticks		
Contains item	Description	Qty
25	Rubber crutch tip diameter 31mm for insulating Sticks	1

Repair Kits for Shotgun Hot Sticks

These Kits allow customers to change a part of its shotgun hot stick instead of replacing the whole stick.

These kits can be used on the stick of the PCTxxxSJ) and the Penta range (PCTxxx PTA).

(KTETEPCTCR) Hook pole head with integrated suspension hook and tube screw		
Contains items	**Description**	**Qty**
1	Round tube hook pole head with suspension hook	1
2	Spacer for PCT head	1
3	Socket for handguard and PCT rod guide	1
4	M4x20 steel zinc plated hollow torx flange screw	1

(VTPCT) Screw for hook pole head		
2	Spacer for PCT head	1
3	Socket for handguard and PCT rod guide	1
4	M4x20 steel zinc plated hollow torx flange screw	1

(CSTUPCT) Suspension hook to be inserted into the hook pole head		
5	Suspension hook to be inserted into the hook pole head	1

(KJCPCT***) Hook ring kit		
6	PCT hook ferrule	1
7	Retractable hook for pct	1
8	Elastic pin D3X12 zinc-platedsteel	1
9	PCT ferrule with handle	1
10	Jonc epoxy dia. 10	1

(KGJPCT) Rod guide for hook pole with tube screw		
11	Socket for handguard and PCT rod guide	1
12	Open rod guide for hook pole	1
13	M4x10 steel zinc plated hollow torx head screw	1

(VGPCT) Guide screw and hand guard for clampstick		
11	Socket for handguard and PCT rod guide	1
13	M4x10 steel zinc plated hollow torx head screw	1

(KGMPCT) Hand guard kit for PCT pole		
14	Socket for handguard and PCT rod guide	1
15	Open rod guide for hook pole	1
16	M4x10 steel zinc plated hollow torx head screw	1

| (KCREMPCT) Lock bar and safety stop with screw for PCT		
17	Handle for assembled plastic hook pole	1
18	Compression spring	1
19	D8 conical fan washer	1
20	Hollow torx countersunk screw M8x16 steel zinc plated	1

CSTUPCT

VTPCT

VGPCT

KVPPCT

(KPOIPCT) Clampstick handle with spring and screw		
Contains items	**Description**	**Qty**
21	Mounted rack for pct	1
22	Handle stop for pct	1
23	Hollow hexagon countersunk screw M5x20 zinc-plated steel	1
24	Hollow hexagon countersunk screw M5x45 zinc-plated steel	1

(KVPPCT) Handle screw for clampstick		
23	D8 conical fan washer	1
24	Hollow torx countersunk screw M8x16 steel zinc plated	1
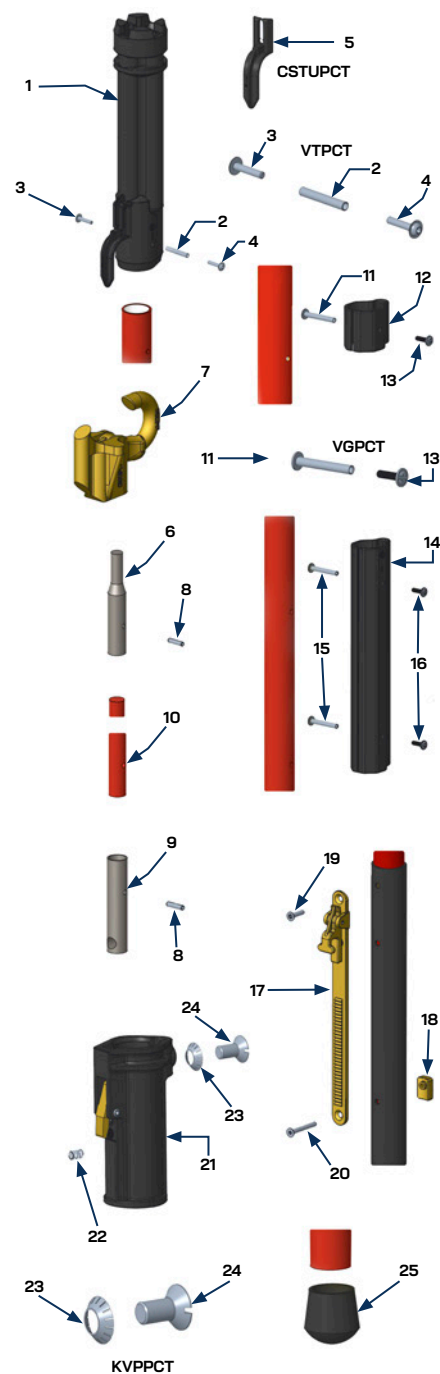
(BE31) O.D. Rubber crutch tip for insulating Sticks		
Contains item	**Description**	**Qty**
25	Rubber crutch tip diameter 31mm for insulating Sticks	1

PentaPole Compact - Replacement Composition

Detailed Composition of Each PentaPole Part Number							
	Number of Element	Part # for Toam Tube	Part Number of Hollow Tubes				Part Number for End cap
PPOLC5/08H-PTA	5	TM1JF046AU	TP2J049AB	TP3J053AB	TP4J059AB	TP5J059SB	C5PTF
PPOLC5/012H-PTA	5	TM1JF076AU	TP2J079AB	TP3J084AB	TP4J090AB	TP5J089SB	C5PTF
Position of Element (from top to bottom)	TOP	1	2	3	4	5	Bottom

Detailed Composition of Each Compact PentaPole Part Number

TP5JxxxSB

TP4JxxxAB

TP3JxxxAB

TP2JxxxAB

TM1JFxxxAU

C5PTF
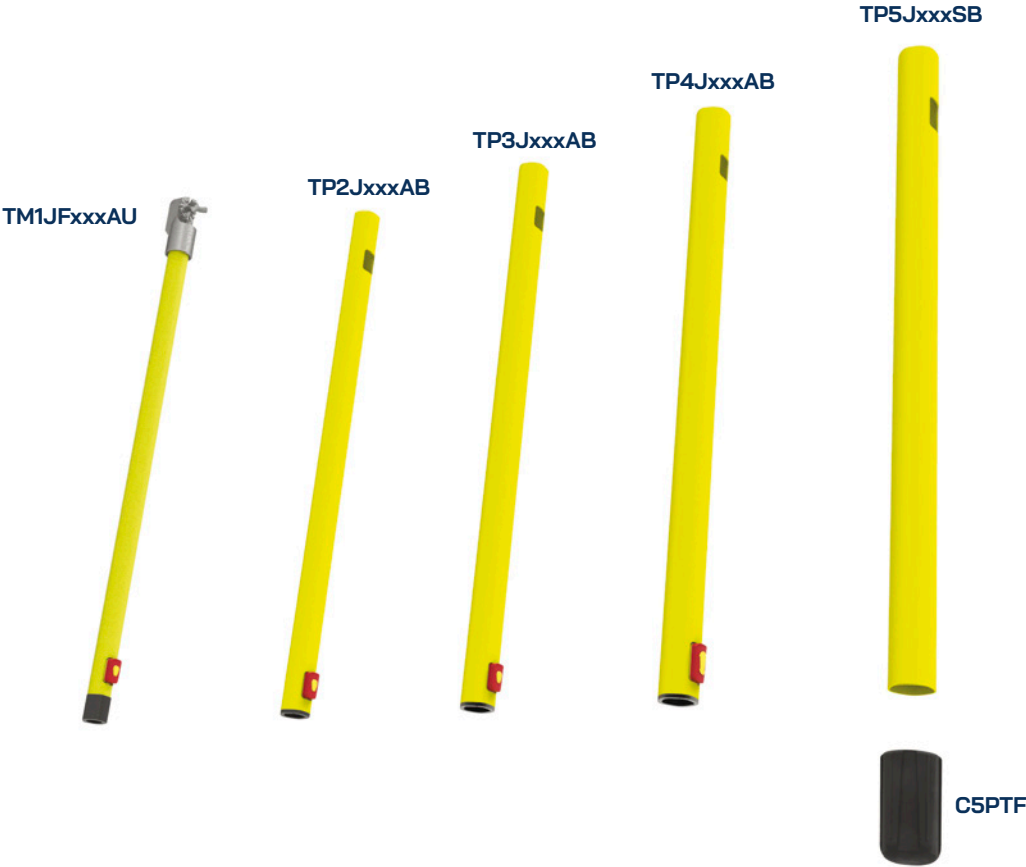
PentaPole - Replacement Composition

Detailed Composition of Each PentaPole Part Number											
	Number of Element	Part # for Foam Tube	Part Number of Hollow Tubes								Part Number for End Cap
PPOL3/12H-PTA	3										C3PTF
PPOL4/16H-PTA	4										C4PTF
PPOL5/20H-PTA	5										C5PTF
PPOL6/25H-PTA	6										C6PTF
PPOL7/30H-PTA	7	TM1JF125AU	TP2J130AB	TP3J135AB*	TP4J140AB*	TP5J145AB*	TP6J150AB*	TP7J155AB*	TP8J160AB*		C7PTF
PPOL8/35H-PTA	8										C8PTF
PPOL9/40H-PTA	9									TP9J165SB*	C9PTF
Position of Element (from top to bottom)	TOP	1	2	3	4	5	6	7	8	9	Bottom

Detailed Composition of Each PentaPole Part Number

TM1JF125AU · TP2J130AB · TP3J135AB* · TP4J140AB* · TP5J145AB* · TP6J150AB* · TP7J155AB* · TP8J160AB* · TP9J165SB*

C2PTF · C3PTF · C4PTF · C5PTF · C6PTF · C7PTF · C8PTF · C9PTFAV

PENTA

ELECTRICAL SAFETY PRODUCTS