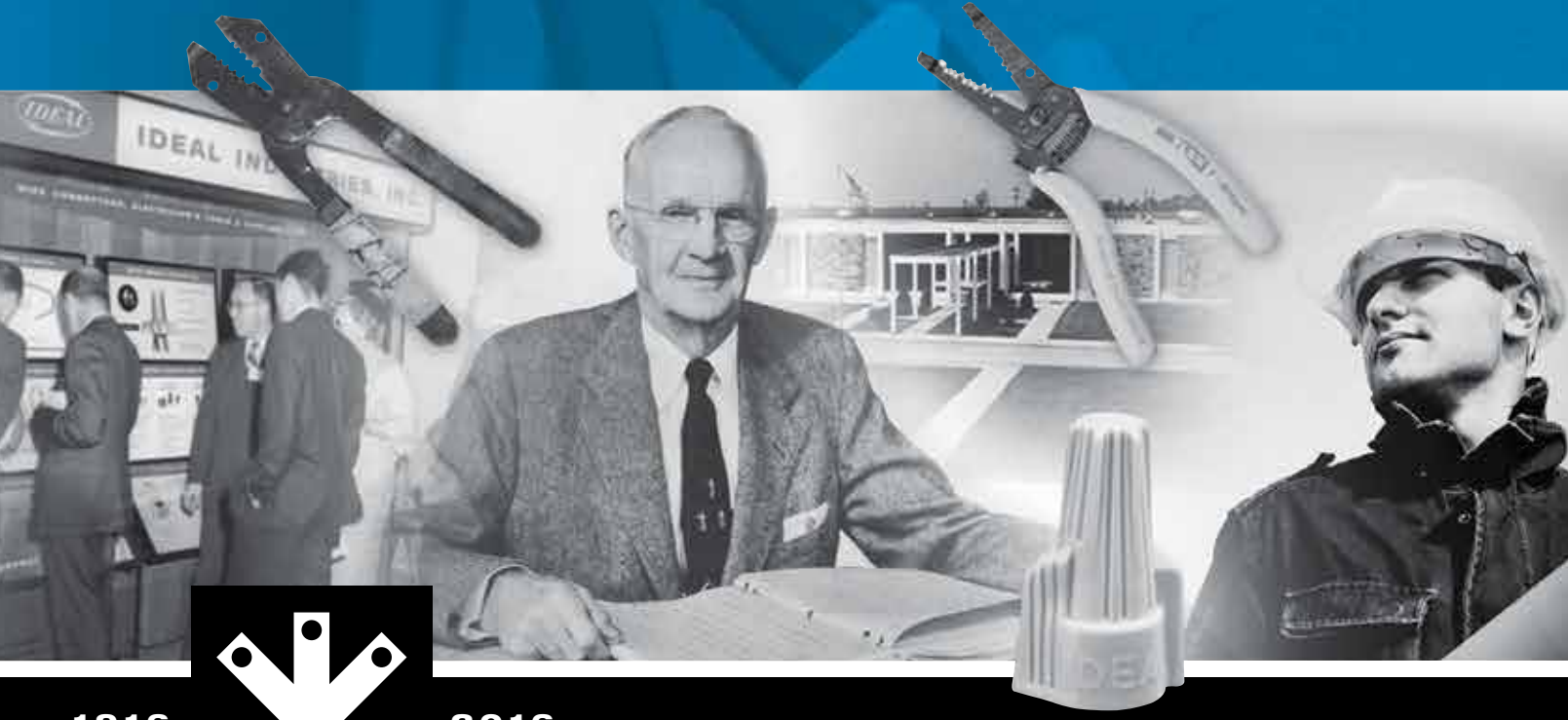
IDEAL®

ELECTRICAL PRODUCTS



1916 2016

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CELEBRATING
THE **IDEAL** CENTURY

FULL-LINE CATALOG

An American Original.

AT HOME IN THE HEART OF AMERICA.

Entrepreneurial in spirit, grounded in the values of American ingenuity, IDEAL was founded on the basis that every product we make will exceed the value of the price paid for it. When it comes to creating value, IDEAL is an American original. Today, we exemplify those values in our vision, our mission and the future of our business. We are investing in the success and revitalization of American innovation and we are committed to manufacturing American Value In Every Tool We Make.

IDEAL IS WITH YOU EVERY STEP OF THE WAY.

We believe in innovative ideas for hardworking professionals — skilled tradesmen like electricians, contractors, mechanics, data communications pros and systems builders. These unsung problem solvers demand smart, tough, high-performance products that work right the first time. They also demand the innovations that keep them a step ahead of the challenges that drive the industries in which they work.

We innovate by listening. While most companies tell customers "Here's what we've got," we're constantly asking, "What do you need?"

Wire Connectors

IDEAL is the leader in wire connectors. For wire termination, IDEAL is the industry standard.

Wire Pulling Lubricants

The environmentally safe lubes from IDEAL provide exceptional lubricity for rapid pulls.

Fish Tapes

IDEAL manufactures a variety of fish tapes for all applications, and our durable impact-resistant cases are the best in the market.

Conduit Benders

IDEAL benders are constructed of exceptionally durable materials and reinforced at stress points for long life.

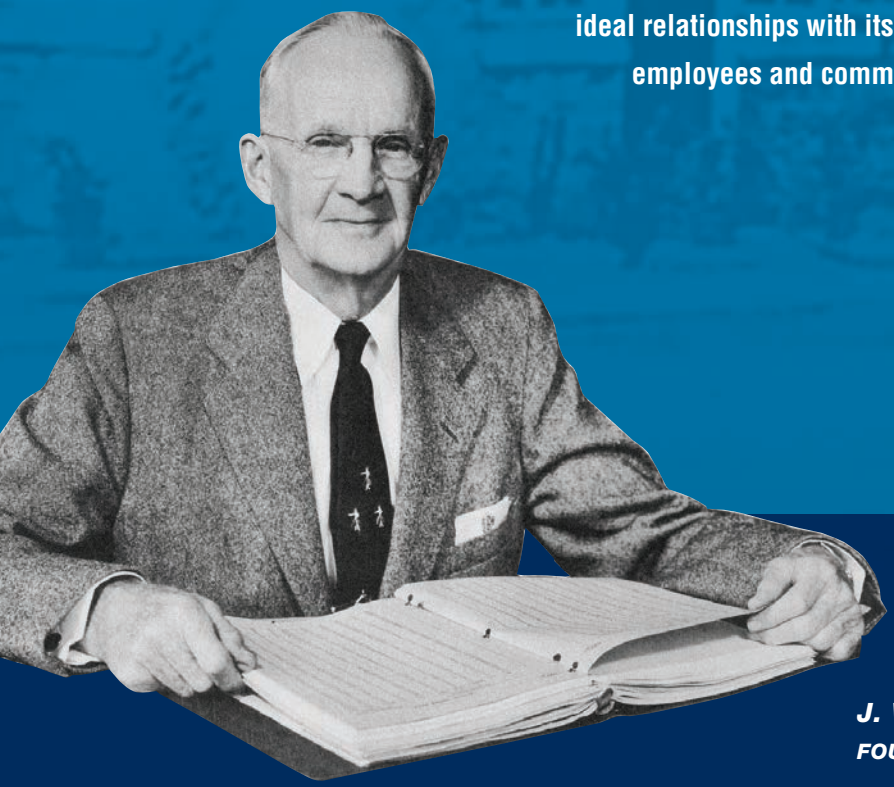
Wire Strippers

Ergonomically designed in a variety of models for every application, IDEAL manufactures the finest wire strippers on the market.

CELEBRATING
THE **IDEAL** CENTURY

Celebrating 100 years of Success with YOU!

We at IDEAL would like to thank all of our channel partners and customers for helping us to achieve this milestone! Since the beginning, this family-run enterprise has been committed to building ideal relationships with its customers, employees and communities.



J. WALTER BECKER
FOUNDER

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Wire Termination

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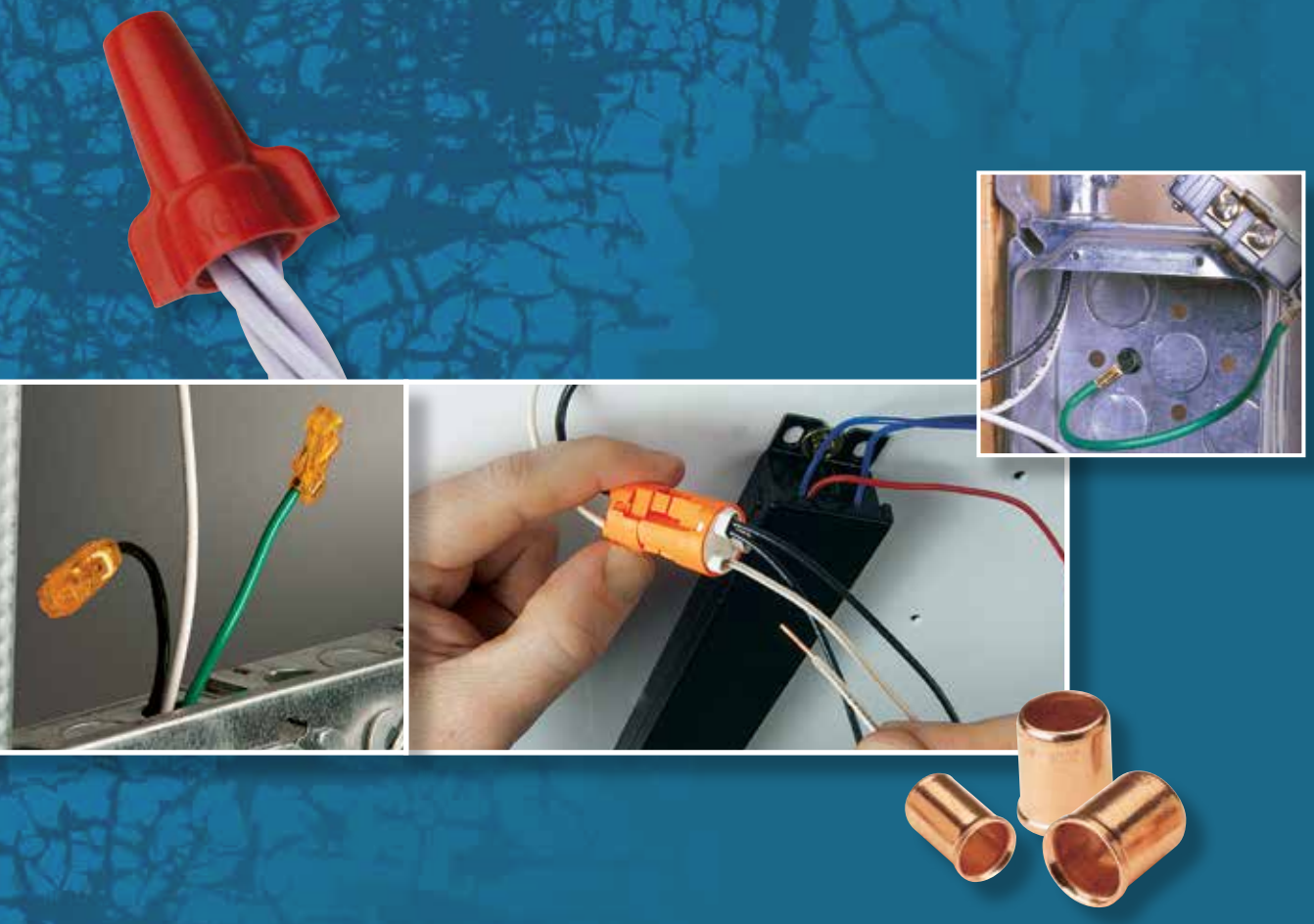
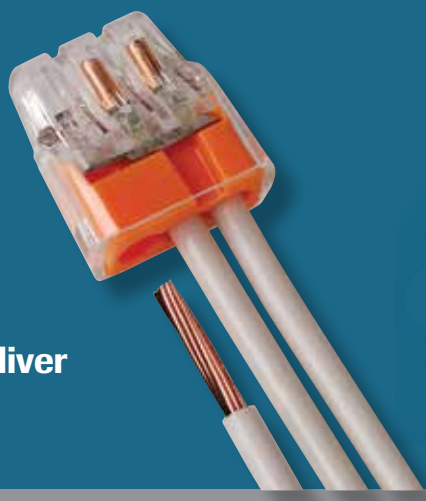




Ingenuity & Performance

From the introduction of our first twist-on wire connector in 1928, IDEAL has been the leading force in wire termination technology. Through ingenuity, proven performance and innovative engineering, IDEAL continues to lead the electrical industry with products that deliver more than the price paid.

Twist-On Wire Connectors... a design for every application.

Wire-Nut® Wire Connectors
This American classic is the original connector that started it all. The Wire-Nut® Wire Connector has five color-coded models that cover a full range of applications from 20 to 6 AWG. The ribbed shell provides a positive grip and the fixed, square-wire spring provides a secure connection.

Wing-Nut® Wire Connectors
For extra leverage and superior torque, the Wing-Nut® Wire Connector provides an easy, secure grip when connecting a wide range of wires. The specially designed contoured wings make for extra torque and quick work on any electrical job. Three models cover from 18 to 6 AWG and include, the Red 452® Wing-Nut® with the widest range of any wing-styled connector in the industry.

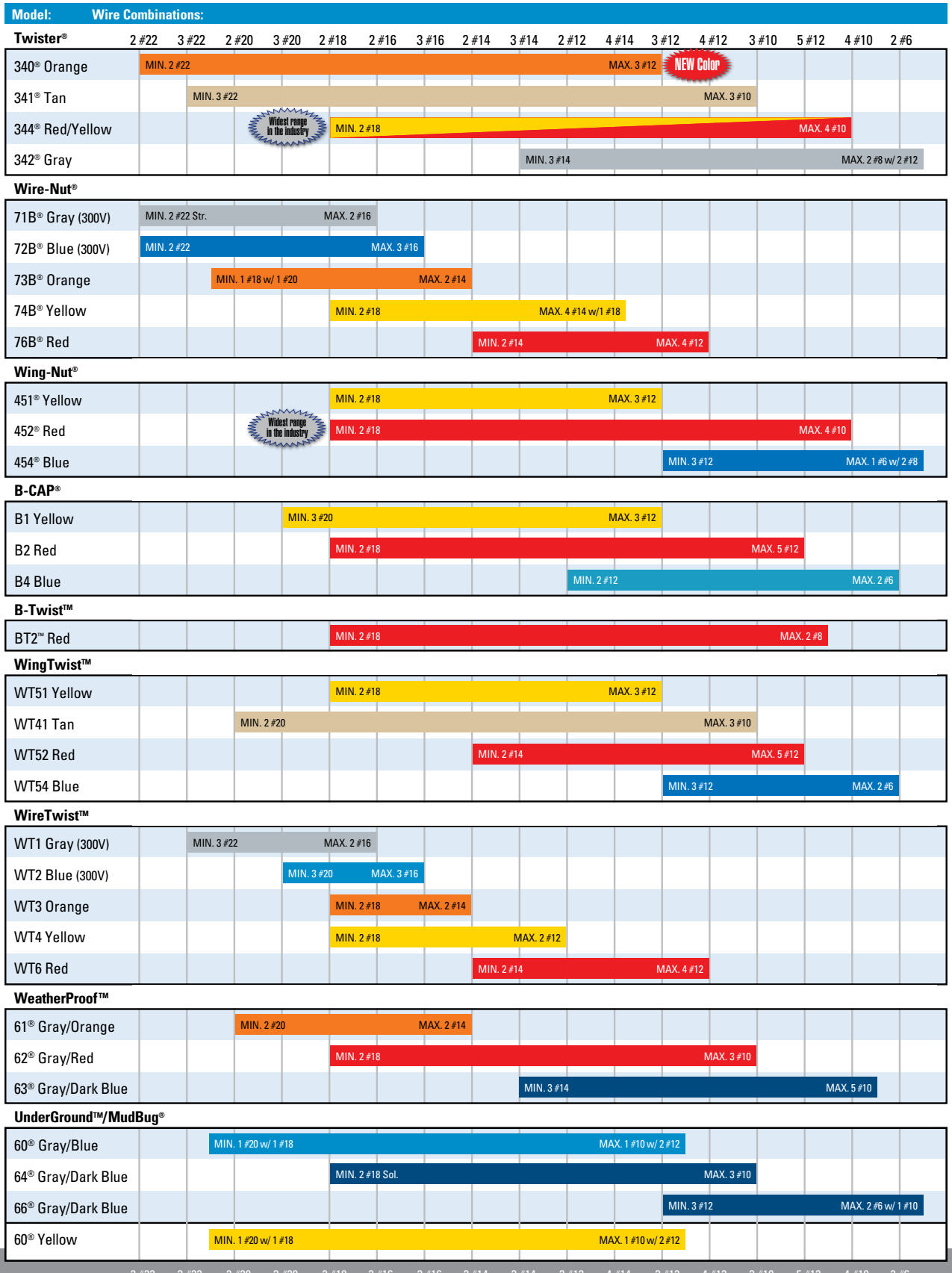
Twister® Wire Connectors
The industry's choice for comfort. With three models, the Twister® Wire Connector easily handles the most common wiring configurations for residential construction projects from 22 to 6 AWG. A patented, expanding square-wire spring helps to ensure a quick, secure connection.

B-CAP® Wire Connectors
The B-CAP® Wire Connector gets you into those hard-to-reach spots comfortably, especially when you're retrofitting or updating. The contoured classic fin design provides a secure grip for extra torque, while the expanding interior spring accepts a wide range of wire sizes and combinations. Three models cover from 22 through 6 AWG.

B-Twist™ Wire Connectors
The All-in-One connector that gets the job done. The B-Twist™ Wire Connector combines all the features of red and yellow wire connectors in one outstanding design. The rounded "dial-top" provides fast, fingertip starts that come to torque quickly and the low-profile design fits easily into electrical boxes. With a super-wide range, the B-Twist™ provides top performance at a great value.

WeatherProof™ / UnderGround™ Wire Connectors
Twist-on connectors for underground and wet location installations. Six models cover a wide range of wire sizes from 22 through 6 AWG. The WeatherProof™ and UnderGround™ Wire Connector line features a 100% non-hardening silicone sealant to provide safe, moisture-free electrical connections. UL Listed and CSA Certified for damp/wet and direct burial applications.

Twister® Al/Cu Wire Connectors
The only twist-on connector for aluminum-to-copper connections. The specially formulated anti-oxidant compound prevents oxidation on aluminum conductors for improved conductivity and cooler connections. UL Listed and CSA Certified for aluminum-to-copper connections.


Model:
Wire Combinations:
2 #22
3 #22
2 #20
3 #20
2 #18
2 #16
3 #16
2 #14
3 #14
2 #12
4 #14
3 #12
4 #12
3 #10
5 #12
4 #10
2 #6
Twister®
340® Orange
MIN. 2 #22
MAX. 3 #12
NEW Color
341® Tan
MIN. 3 #22
MAX. 3 #10
344® Red/Yellow
Widest range in the industry
MIN. 2 #18
MAX. 4 #10
342® Gray
MIN. 3 #14
MAX. 2 #8 w/ 2 #12
Wire-Nut®
71B® Gray (300V)
MIN. 2 #22 Str.
MAX. 2 #16
72B® Blue (300V)
MIN. 2 #22
MAX. 3 #16
73B® Orange
MIN. 1 #18 w/ 1 #20
MAX. 2 #14
74B® Yellow
MIN. 2 #18
MAX. 4 #14 w/1 #18
76B® Red
MIN. 2 #14
MAX. 4 #12
Wing-Nut®
451® Yellow
MIN. 2 #18
MAX. 3 #12
452® Red
Widest range in the industry
MIN. 2 #18
MAX. 4 #10
454® Blue
MIN. 3 #12
MAX. 1 #6 w/ 2 #8
B-CAP®
B1 Yellow
MIN. 3 #20
MAX. 3 #12
B2 Red
MIN. 2 #18
MAX. 5 #12
B4 Blue
MIN. 2 #12
MAX. 2 #6
B-Twist™
BT2™ Red
MIN. 2 #18
MAX. 2 #8
WingTwist™
WT51 Yellow
MIN. 2 #18
MAX. 3 #12
WT41 Tan
MIN. 2 #20
MAX. 3 #10
WT52 Red
MIN. 2 #14
MAX. 5 #12
WT54 Blue
MIN. 3 #12
MAX. 2 #6
WireTwist™
WT1 Gray (300V)
MIN. 3 #22
MAX. 2 #16
WT2 Blue (300V)
MIN. 3 #20
MAX. 3 #16
WT3 Orange
MIN. 2 #18
MAX. 2 #14
WT4 Yellow
MIN. 2 #18
MAX. 2 #12
WT6 Red
MIN. 2 #14
MAX. 4 #12
WeatherProof™
61® Gray/Orange
MIN. 2 #20
MAX. 2 #14
62® Gray/Red
MIN. 2 #18
MAX. 3 #10
63® Gray/Dark Blue
MIN. 3 #14
MAX. 5 #10
UnderGround™/MudBug®
60® Gray/Blue
MIN. 1 #20 w/ 1 #18
MAX. 1 #10 w/ 2 #12
64® Gray/Dark Blue
MIN. 2 #18 Sol.
MAX. 3 #10
66® Gray/Dark Blue
MIN. 3 #12
MAX. 2 #6 w/ 1 #10
60® Yellow
MIN. 1 #20 w/ 1 #18
MAX. 1 #10 w/ 2 #12
2 #22
3 #22
2 #20
3 #20
2 #18
2 #16
3 #16
2 #14
3 #14
2 #12
4 #14
3 #12
4 #12
3 #10
5 #12
4 #10
2 #6

Model	RESIDENTIAL: Light Switches	Receptacles	Ceiling Fans	Can Lights	Thermostat Controls	HVAC	Smoke/CO Detectors	Garage Door Openers	Door Bells	COMMERCIAL: Multi-Gang Switch Boxes	Security Systems	Intercoms	Recessed Lighting Controls	Illuminated Signage	Receptacles	3-Phase Motors	HVAC
Twister®																	
340® Orange	●		●	●			●		●		●	●	●				
341® Tan	●	●				●	●	●			●		●	●			●
344® Red/Yellow	●	●				●		●		●	●			●	●	●	●	●
342® Gray										●				●	●		●	●
Wire-Nut®																		
71B® Gray					●						●	●						
72B® Blue					●	●			●		●	●						
73B® Orange			●	●			●		●		●	●	●					
74B® Yellow	●		●	●			●						●	●				
76B® Red	●	●				●		●		●				●	●	●	●	●
Wing-Nut®																		
451® Yellow	●	●	●	●			●		●				●					
452® Red	●	●				●		●		●				●	●	●	●	●
454® Blue										●				●	●		●	●
B-CAP®																		
B1 Yellow	●		●	●			●		●		●	●	●					
B2 Red	●	●				●		●		●				●	●	●	●	●
B4 Blue										●				●	●		●	●
B-Twist™																		
BT2™ Red	●	●				●		●		●				●	●	●	●	●
WingTwist™																		
WT51 Yellow	●		●	●			●		●		●	●	●					
WT41 Tan	●	●				●	●	●			●		●	●				●
WT52 Red	●	●				●		●		●				●	●	●	●	●
WT54 Blue										●				●	●		●	●
WireTwist™																		
WT1 Gray					●						●	●						
WT2 Blue					●	●			●		●	●						
WT3 Orange			●	●			●		●		●	●	●					
WT4 Yellow	●		●	●			●		●				●	●				
WT6 Red	●	●				●		●		●				●	●	●	●	●

	RESIDENTIAL: Landscape Lighting	Pool Filters/Controls	Outdoor Power Outlets	Patio/Deck Lighting	Bathroom/Spa Vent Fans	Security Systems	Basement/Garage	Lawn-Sprinkler Controls	Sump/Well Pumps	COMMERCIAL: Landscape Lighting	Security Systems	Exterior Lighting	Street/Parking Lot Lighting	Car Washes	Processing Plants	Traffic Signals	Ejection Pumps	HVAC
WeatherProof™																		
61® Gray/Orange					●	●		●			●			●	●	●		●
62® Gray/Red		●	●	●			●		●			●		●	●			●
63® Gray/Dk. Blue		●	●	●			●		●			●	●	●	●			
UnderGround™																		
60® Gray/Blue	●			●	●			●	●	●	●		●			●	●	
64® Gray/Dk. Blue	●				●				●	●			●			●	●	
66® Gray/Dk. Blue													●			●		

Wire-Nut® Wire Connectors

CLASSIC from the IDEAL family of Performance & Reliability

- Fixed square spring for a secure hold
- Refined range to handle all common applications
- Positive grip shell that is perfect to twist-on with fingers
- Excellent for fine stranded wire applications

UL LISTED Wire Connector 774A Cu/Cu Only CSA CE

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
71B® (Suitable for use in Air Handling Spaces)	Gray	300V 22 to 16 AWG Min. 2 #22 – Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Box of 100	**30-071**
				Keg of 25,000	**30-271**
72B®	Blue	300V 22 to 14 AWG Min. 2 #22 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Box of 100	**30-072**
				Keg of 10,000	**30-272**
				Barrel of 85,000	**30-872**
73B®	Orange	600V* 22 to 14 AWG Min. 1 #18 & 1 #20 Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Box of 100	**30-073**
				Jar of 300	**30-073J**
				Bag of 500	**30-273**
				Keg of 10,000	**30-673**
				Barrel of 50,000	**30-873**
74B®	Yellow	600V* 18 to 12 AWG Min. 2 #18 Max. 4 #14 & 1 #18	600V* ,75mm² to 4,0mm² Min. 2-,75mm² Max. 4-2,5mm² w/1-,75mm²	Box of 100	**30-074**
				Jar of 175	**30-074J**
				Bag of 500	**30-274**
				Keg of 5,000	**30-674**
76B®	Red	600V* 18 to 6 AWG Min. 2 #14 Max. 4 #12	600V* ,75mm² to 16,0mm² Min. 2-2,5mm² Max. 2-4,0mm²	Box of 100	**30-076**
				Jar of 150	**30-076J**
				Bag of 250	**30-276**

*1,000V maximum in fixtures and signs

High-Temp Wire-Nut® Wire Connectors

All of the same features as the Wire-Nut® Wire Connector, plus:

- Black, thermoplastic shell designed to withstand extreme heat build-up found in high-wattage light fixtures and signs
- UL Listed to 150°C (302°F)

UL LISTED Wire Connector 774A Cu/Cu Only CSA

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
71B® (Suitable for use in Air Handling Spaces)	Black	300V 22 to 16 AWG Min. 2 #22 Str – Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² – Max. 2-1,5mm²	Box of 100	**30-3627**
				Keg of 25,000	**30-251**
72B®	Black	300V 22 to 14 AWG Min. 2 #22 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² – Max. 3-1,5mm²	Box of 100	**30-3628**
				Keg of 10,000	**30-252**
73B®	Black	600V* 22 to 14 AWG Min. 1 #18 w/1 #20 Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Box of 100	**30-3629**
				Keg of 10,000	**30-253**
				Barrel of 50,000	**30-803**
59B™	Black	600V* 22 to 12 AWG Min. 2 #20 – Max. 3 #14	600V* ,34mm² to 4,0mm² Min. 2-,5mm² – Max. 3-2,5mm²	Box of 100	**30-059**
				Keg of 5,000	**30-259**

*1,000V maximum in fixtures and signs

Wing-Nut® Wire Connectors

POWER from the IDEAL family of Performance & Reliability

- Contoured wing profile provides extra leverage for superior torque
- Expanding, live-action spring expands to accommodate a wide range of wire sizes and combinations
- Co-polymer shell expands for smooth, progressive tightening providing dependable connections
- Removable for repeat usage on same size or larger combinations
- Tough, UL94V-2 flame retardant shell rated at 105°C (221°F)

UL Wire Connector 774A LISTED Cu/Cu Only CSA CE

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
451®	Yellow	600V* 18 to 10 AWG Min. 2 #18 – Max. 3 #12	600V* ,75mm² to 6,0mm² Min. 2-,75mm² – Max. 3-4,0mm²	Box of 100	**30-451**
				Jar of 225	**30-451J**
				Jar of 500	**30-651J**
				Bag of 500	**30-651**
				Barrel of 35,000	**30-851**
452®	Red	600V* 18 to 8 AWG **Min. 2 #18 – Max. 4 #10** **(Widest range in the Industry!)**	600V* ,75mm² to 10,0mm² Min. 2-,75mm² – Max. 4-6,0mm²	Box of 100	**30-452**
				Jar of 300	**30-452J**
				Jar of 500	**30-652J**
				Bag of 500	**30-652**
				Barrel of 25,000	**30-852**
454®	Blue	600V* 14 to 6 AWG Min. 3 #12 – Max. 1 #6 w/2 #8	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² – Max. 2-16,0mm² w/1-4,0mm²	Box of 25	**30-454**
				Bag of 100	**30-654**

*1,000V maximum in fixtures and signs

Greenie® Grounding Wire Connectors

- Designed for making ground connections and bonding non-metallic sheathed cable
- Contoured wings for superior leverage
- Live-action, square-wire spring provides quality grounding connections
- Tough, UL 94V-2 flame-retardant shell

UL Ground Connector 951L LISTED Cu/Cu Only CSA

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
92®	Green	14 to 10 AWG Min. 2 #14 – Max. 4 #12	2,5mm² to 6,0mm² Min. 2-2,5mm² Max. 2-4,0mm² w/1-2,5mm²	Box of 100	**30-092**
				Jar of 150	**30-092J**
				Bag of 500	**30-292**

Greenie® Grounding Connector fully meets the intent of the NEC and specifically aids in compliance with the following:

ARTICLE 250: GROUNDING

250-146 Connecting Receptacle Grounding Terminal to Box

250-148 Continuity and Attachment of Equipment Grounding Conductors to Boxes
(B) Grounding continuity
(D) Nonmetallic boxes

See Page A-19 for more IDEAL Grounding Products.

Preferred Choice for Residential Jobs

COMFORT from the IDEAL family of Performance & Reliability

Twister® Wire Connectors

NEW COLOR, SAME WIDE WIRE RANGE

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA · CE

- Swept wings for more comfort, extra leverage, and less effort on large combinations
- Expanding, live-action spring supports a wide range of common wiring configurations
- Polypropylene shell expands for smooth, progressive tightening providing dependable connections
- Hexagonal shape accommodates standard nutdriver for easy installation
- Quick take-up on even the toughest combinations, including solid-to-stranded

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
340™	Orange	600V* 22 to 10 AWG Min. 2 #22 – Max. 3 #12	600V* ,34mm² to 4,0mm² Min. 2-,34mm² – Max. 3-4,0mm²	Box of 100	**30-340**
				Jar of 500	**30-640J**
341®	Tan	600V* 22 to 8 AWG Min. 3 #22 – Max. 3 #10	600V* ,34mm₂ to 10,0mm² Min. 3-,34mm² – Max. 3-6,0mm²	Box of 100	**30-341**
				Jar of 400	**30-441J**
				Bag of 500	**30-641**
				Jar of 750	**30-341J**
				Barrel of 25,000	**30-841**
342®	Gray	600V* 18 to 6 AWG Min. 3 #14 – Max. 2 #8 w/2 #12	600V* ,75mm² to 10,0mm² Min. 3-2,5mm² – Max. 2-10,0mm² w/2-4,0mm²	Box of 50	**30-342**
				Bag of 250	**30-642**
				Barrel of 15,000	**30-842**

*1,000V maximum in fixtures and signs

Twister® Pro Wire Connectors

Twister PRO

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA

COMFORT from the IDEAL family of Performance & Reliability

- SureGrip™ overmolding provides improved leverage, more torque, and faster connections
- Comfortable swept wings ease hand fatigue
- Expanding square-wire spring provides a secure connection every time
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
344®	Red/Yellow	MAX. 4-10s 600V* 22 to 8 AWG **Min. 2 #18 – Max. 4 #10** **(Widest range in the Industry!)**	600V* ,34mm² to 10,0mm² Min. 2-,75mm² Max. 4,0-6,0mm²	Box of 50	**30-144**
				Jar of 250	**30-244J**
				Jar of 500	**30-644J**
				Barrel of 20,000	**30-944**

*1,000V maximum in fixtures and signs

COMBO PACKS AVAILABLE

WeatherProof™ Wire Connectors

- 100% Silicone-based sealant protects against moisture and corrosion
- UL Listed to 486D for use in damp/wet locations or above-grade applications
- Easy to apply, pre-filled twist-on wire connectors
- Swept wing design is built for comfort and efficiency
- Eliminates the need for heat-shrink or excessive taping
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

LISTED Sealed Wire Connector System 5N35 Cu/Cu Only

UnderGround™ Wire Connectors

- 100% Silicone-based sealant protects against moisture and corrosion
- UL Listed to 486D for use in damp/wet locations or direct burial/below-grade applications
- Easy to apply, pre-filled twist-on wire connectors
- Expanding, live-action square-wire spring for fast, secure and long-lasting connections
- Deep skirt provides superior moisture resistance to protect connections
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

LISTED Sealed Wire Connector System 5N35 Cu/Cu Only

WeatherProof™ Wire Connectors

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
61®	Gray/Orange	600V* 22 to 14 AWG Min. 2 #20 – Max. 2 #14	600V* ,34mm² to 4,0mm² Min. 2-,5mm² – Max. 2-2,5mm²	Card of 25	**30-1161**
				Jar of 150	**30-1261J**
				Carton of 1,000	**30-1361**
62®	Gray/Red	600V* 18 to 8 AWG Min. 2 #16 – Max. 2 #10	600V* ,75mm² to 10,0mm² Min. 2-1,5mm² – Max. 2-6,0mm²	Card of 20	**30-1162**
				Jar of 100	**30-1262J**
				Carton of 1,000	**30-1362**
63®	Gray/Dk. Blue	600V* 16 to 6 AWG Min. 3 #14 – Max. 5 #10	600V* 1,5mm² to 16,0mm² Min. 3-2,5mm² – Max. 5-6,0mm²	Card of 15	**30-1163**
				Jar of 50	**30-1263J**
				Carton of 1,000	**30-1363**

UnderGround™ Wire Connectors

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
60®	Gray/Gray	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 Max. 1 #10 w/2 #12	600V* ,5mm² to 6,0mm² Min. 1-,5mm² w/1,75mm² Max. 1-6,0mm² w/2-4,0mm²	Card of 25	**30-1160**
				Box of 100	**30-1260**
64®	Gray/Dk. Blue	600V* 18 to 8 AWG Min. 2 #18 Sol. – Max. 3 #10	600V* ,75mm² to 10,0mm² Min. 2-,75mm² Sol. - Max. 3-6,0mm²	Box of 50	**30-1264**
66™	Gray/Dk. Blue	600V* 14 to 6 AWG Min. 3 #12 – Max. 2 #6 w/1 #10	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² Sol. – Max. 2-16,0mm² w/1-6,0mm²	Box of 50	**30-1066**

Combination Packages

Model	Color	Quantity	Part No.
61®/62®	Gray/Orange • Gray/Red WeatherProof™ Wire Connectors	Card of 10 (5 ea.)	**30-6162**
60®/64®	Gray/Blue • Gray/Dk. Blue UnderGround™ Wire Connectors	Card of 10 (5 ea.)	**30-6064**

*1,000V maximum in fixtures and signs **WARNING: One time use only. Do not reuse connector.**

MudBug® Utility Wire Connectors

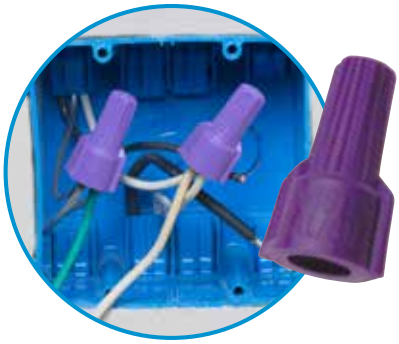
- Connects underground gas tracer lines providing superior protection
- Moisture and corrosion resistant, pre-filled with non-hardening, 100% silicone
- UL Listed to direct burial test standard 486D up to 600V maximum voltage

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
60®	Yellow	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 – Max. 1 #10 w/2 #12	600V* ,5mm² to 6,0mm² Min. 1-,5mm² w/1,75mm² – Max. 1-6,0mm² w/2 - 4,0mm²	Box of 1,000	**30-360Y**

*1,000V maximum in fixtures and signs

UL LISTED Sealed Wire Connector System 5N35 Cu/Cu Only CSA®

Twister® Al/Cu Wire Connectors



- Only aluminum-to-copper twist-on connector specifically designed to provide a secure connection while preventing aluminum corrosion
- Pre-filled antioxidant compound prevents oxidation of aluminum conductors
- Patent swept wings and hexagonal head for easy installation by hand or with standard nutdriver
- Live-action, square-wire spring expands and contracts with aluminum wire
- Entry-cap retains corrosion-resistant compound
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Complies with N.E.C. Section #110-14(b) for aluminum-to-copper connections; UL Listed to 486C and CSA Certified to C22.2 #188

WARNING:
1. **One time use only. Do not reuse connector.**
2. **Do not use on aluminum to aluminum wire combinations.**
3. **Wiring must comply with all applicable electrical codes.**

Model	Color	Wire Combination Ranges		Quantity	Part No.
65	Purple	1 #10 Al solid w/1 or 2 #10 Cu solid 1 #10 Al w/1 or 2 #12 Cu 2 #10 Al solid w/1 #12 Cu 1 #10 Al w/1 or 2 #14 Cu 2 #10 Al solid w/1 #14 Cu 2 #12 Al solid w/1 #10 Cu 1 #12 Al solid w/1 or 2 #10 Cu 1 #12 Al stranded w/1 or 2 #10 Cu solid 1 #12 Al w/1 or 2 #12 Cu 2 #12 Al solid w/1 #12 Cu	1 #12 Al w/1 or 2 #14 Cu 2 #12 Al solid w/1 #14 Cu 1 #10 Al w/1 or 2 #18 Cu 2 #10 Al solid w/1 #18 Cu 1 #12 Al w/1 or 2 #16 Cu 2 #12 Al solid w/1 #16 Cu 1 #10 Al w/1 or 2 #16 Cu 2 #10 Al solid w/1 #16 Cu 1 #12 Al w/1 or 2 #18 Cu 2 #12 Al solid w/1 #18 Cu	Card of 2	**30-065**
				Card of 10	**30-765**
				Card of 25	**30-165**
				Box of 100	**30-265**
				Carton of 1,000	**30-365**

600V maximum building wire; 1,000V signs or light fixtures

UL LISTED Wire Connector 774A — Wire Connector also listed as grounding equipment CSA®

FOR A COMPLETE LISTING OF UL APPROVED WIRE COMBINATIONS, VISIT US AT WWW.IDEALIND.COM

B-CAP® Wire Connectors

COMPACT from the IDEAL family of Performance & Reliability

- Low profile design gets into tight spaces and hard-to-reach spots comfortably
- Slim, classic fins offer a secure grip for extra leverage and easy installation
- Live-action spring expands to accept wire shape and size with no pre-twisting
- Unique, space-saving profile is perfect for “old work” or shallow boxes
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Green-B® designed for making ground connections and bonding non-metallic sheathed cable

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA LR9706 · CE

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
B1	Yellow	600V* 22 to 10 AWG Min. 3 #20 – Max. 3 #12	600V* ,34mm² to 6,0mm² Min. 3-,5mm² – Max. 3-4,0mm²	Box of 100	**B1-1**
				Jar of 250	**B1-250JR**
				Jar of 500	**B1-500JR**
				Bag of 500	**B1-B**
B2	Red	600V* 22 to 8 AWG Min. 2 #18 – Max. 5 #12	600V* ,34mm² to 10,0mm² Min. 2-,75mm² – Max. 5-4,0mm²	Box of 100	**B2-1**
				Jar of 350	**B2-350JR**
				Jar of 500	**B2-500JR**
				Bag of 500	**B2-B**
B4	Blue-Gray	600V* 14 to 6 AWG Min. 2 #12 – Max. 2 #6	600V* 2,5mm² to 16,0mm² Min. 2-4,0mm² – Max. 2-16,0mm²	Box of 25	**B4-1**
				Carton of 250	**B4-B**
BGR	Green	14 to 10 AWG Min. 2 #14 – Max. 5 #12	2,5mm² to 6,0mm² Min. 2-2,5mm² - Max. 5-4,0mm²	Box of 50	**BGR-1**
				Carton of 250	**BGR-B**

*1,000V maximum in fixtures and signs

B-Twist™ Wire Connectors

SPEED from the IDEAL family of Performance & Reliability

- All-in-one connector with wide red/yellow range from 2#18 to 2 #8
- Rounded dial-top with vertical ribs provides fast fingertip starts
- Connection comes to torque quickly to get the job done efficiently
- Long swept-wings improve comfort and torque
- Wide, expanding spring makes for easy starts on even the largest combinations
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

B-TWIST

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA LR9706

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
BT2™	Red	600V* 18 to 8 AWG Min. 2 #18 – Max. 2 #8	600V* ,75mm² to 10mm² Min. 2-,75mm² – Max. 1-8,0mm² w/2-6,0mm²	Box of 100	**BT2-1**
				Jar of 500	**BT2-500JR**
				Barrel of 25,000	**BT2-SK**

*1,000V maximum in fixtures and signs

FOR A COMPLETE LISTING OF UL APPROVED WIRE COMBINATIONS, VISIT US AT WWW.IDEALIND.COM

WireTwist™ Wire Connectors

- Positive grip shell design for fast, easy installation
- Fixed, square-wire spring creates secure connections
- Deep skirt protects against flash-over
- Tough, UL 94V-2 flame-retardant shell (105°C/221°F)

UL LISTED Wire Connector 774A · Cu/Cu Only · CSA LR9706

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
WT1	Gray	300V 22 to 14 AWG Min. 3 #22 – Max. 2 #16	300V ,34mm² to 2,5mm² Min. 3-,34mm² – Max. 2-1,5mm²	Box of 100	**WT1-1**
				Bag of 500	**WT1-B**
WT2	Blue	300V 22 to 14 AWG Min. 3 #20 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 3-,50mm² – Max. 3-1,5mm²	Box of 100	**WT2-1**
				Bag of 500	**WT2-B**
WT3	Orange	600V* 22 to 14 AWG Min. 2 #18 – Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 2-,75mm² – Max. 2-2,5mm²	Box of 100	**WT3-1**
				Bag of 500	**WT3-B**
WT4	Yellow	600V* 22 to 10 AWG Min. 2 #18 – Max. 2 #12	600V* ,75mm² to 6,0mm² Min. 2-,75mm² – Max. 2-4,0mm²	Box of 100	**WT4-1**
				Bag of 500	**WT4-B**
WT6	Red	600V* 20 to 8 AWG Min. 2 #14 – Max. 4 #12	600V* ,50mm² to 10,0mm² Min. 2-2,5mm² – Max. 4-4,0mm²	Box of 100	**WT6-1**
				Bag of 250	**WT6-B**

*1,000V maximum in fixtures and signs

WingTwist™ Wire Connectors

- Contoured wing design provides enhanced torque
- Expanding, square-wire spring creates secure connections
- Wide, deep skirt opening accommodates a variety of wire combinations
- Tough, UL 94V-2 flame retardant shell (105°C/221°F)

UL LISTED Wire Connector 774A · Cu/Cu Only · CSA LR9706

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
WT51	Yellow	600V* 18 to 10 AWG Min. 2 #18 – Max. 3 #12	600V* ,75mm² to 6,0mm² Min. 2-,75mm² – Max. 3-4,0mm²	Box of 100	**WT51-1**
				Bag of 500	**WT51-B**
				Jar of 500	**WT51-500JR**
				Barrel of 25,000	**WT51-SK**
WT41	Tan	600V* 22 to 10 AWG Min. 2 #20 – Max. 3 #10 Solid	600V* ,34mm² to 6,0mm² Min. 2-0,5mm² – Max. 3-6,0mm²	Box of 100	**WT41-1**
				Bag of 500	**WT41-B**
				Jar of 500	**WT41-500JR**
				Barrel of 25,000	**WT41-SK**
WT52	Red	600V* 18 to 10 AWG Min. 2 #14 – Max. 5 #12	600V* ,75mm² to 6,0mm² Min. 2-2,5mm² – Max. 5-4,0mm²	Box of 100	**WT52-1**
				Bag of 500	**WT52-B**
				Jar of 500	**WT52-500JR**
				Barrel of 25,000	**WT52-SK**
WT54	Blue	600V* 14 to 6 AWG Min. 3 #12 – Max. 2 #6	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² – Max. 2-16,0mm²	Box of 50	**WT54-1**
				Bag of 100	**WT54-B**
WGR	Green	14 to 10 AWG Min. 2 #14 – Max. 5 #12	2,5mm² to 6,0mm² Min. 2-2,5mm² – Max. 5-4,0mm²	Box of 50	**WGR-1**
				Bag of 250	**WGR-B**
				Jar of 500	**WGR-500JR**

*1,000V maximum in fixtures and signs

FOR A COMPLETE LISTING OF UL APPROVED WIRE COMBINATIONS, VISIT US AT WWW.IDEALIND.COM

Combination WingTwist™/WireTwist™ Wire Connectors

- Kit Contains:
  - WT1 WireTwist™ Wire Connector, Gray, (Qty. 100)
  - WT2 WireTwist™ Wire Connector, Blue, (Qty. 100)
  - WT3 WireTwist™ Wire Connector, Orange, (Qty. 100)
  - WT4 WireTwist™ Wire Connector, Yellow, (Qty. 100)
  - WT6 WireTwist™ Wire Connector, Red, (Qty. 25)
  - WT41 WingTwis™ Wire Connector, Tan, (Qty. 60)
  - WT51 WingTwist™ Wire Connector, Yellow, (Qty. 100)
  - WT52 WingTwist™ Wire Connector, Red, (Qty. 25)
  - WT54 WingTwist™ Wire Connector, Blue, (Qty. 10)
  - Reusable case

Description	Quantity	Part No.
WireTwist™/WingTwist™ Wire Connector Combination Kit	620 pcs.	**30-2091**

Spin-Twist® Wire Connector Socket

- Speeds installation of IDEAL and Buchanan Wire Connectors
- For use with electric corded or cordless drill drivers
- 1/4 in. chuck fits most drills or drive sockets

Description	Part No.
For Connector Models Wire-Nut®, Wing-Nut®, Twister®, B-CAP®, WireTwist™ & WingTwist™ Wire Connectors	**30-902**

IDEAL Wire connectors are available in:

Barrels
For really big jobs when you can't afford to run out of connectors.

Power Pouch™ Bags
These bags are convenient, re-closeable and stand-up on the job.

Store 'N Pour™ Jars
Easy-pour design keeps connectors clean and your shelf organized.

Boxes
For small jobs at hand, just grab a box.

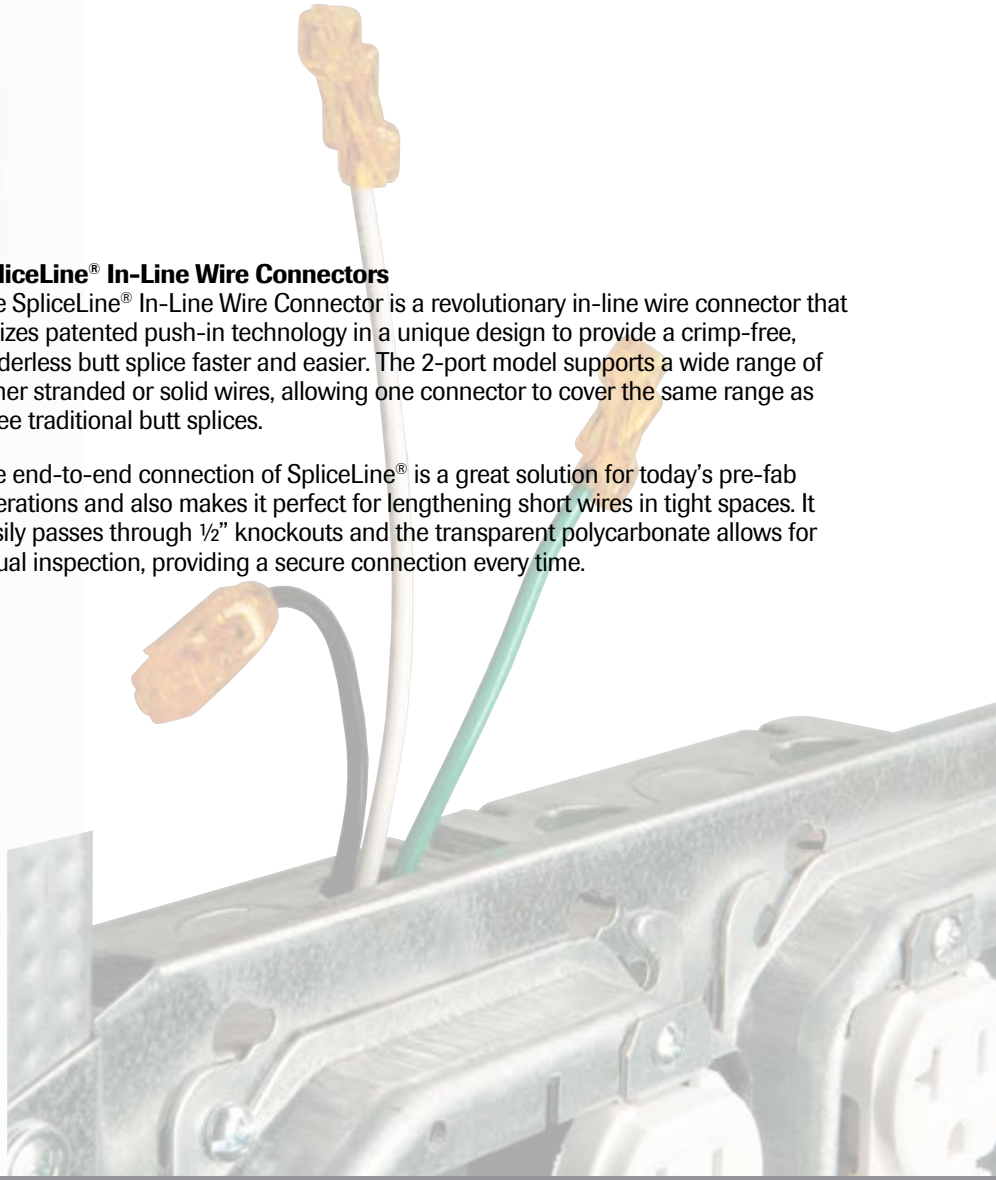
Push-In Wire Connectors

In-Sure® Push-In Wire Connectors
If it's IDEAL, it's a quality connector – and the In-Sure® Push-In Wire Connector is no exception. Color-coded, the clear polycarbonate housing allows for visual verification of every connection. The ergonomic design of the In-Sure® is easier to grip which means more comfortable push-in type connections.

Perfect for OEM lighting manufacturing, prefabricated wiring systems, and any other branch circuit wiring applications where a traditional twist-on wire connector would be used. Simply push the wire in – the low insertion force makes it easy. UL Listed, CSA Certified and rated to 600V and 105°C, the In-Sure™ Push-In Wire Connector saves time and improves productivity while perfecting connections.

SpliceLine® In-Line Wire Connectors
The SpliceLine® In-Line Wire Connector is a revolutionary in-line wire connector that utilizes patented push-in technology in a unique design to provide a crimp-free, solderless butt splice faster and easier. The 2-port model supports a wide range of either stranded or solid wires, allowing one connector to cover the same range as three traditional butt splices.

The end-to-end connection of SpliceLine® is a great solution for today's pre-fab operations and also makes it perfect for lengthening short wires in tight spaces. It easily passes through ½" knockouts and the transparent polycarbonate allows for visual inspection, providing a secure connection every time.



SpliceLine® In-Line Wire Connectors

- Faster alternative to traditional butt splices
- Crimp-free, solderless push-in butt splice
- Slim design fits through 1/2 in. knockout
- Perfect for lengthening wire
- Transparent polycarbonate housing for visual inspection of connection

SpliceLine®

UL LISTED Wire Connector 774A Cu/Cu Only CSA

Model	Color	Rating	Wire Range	Quantity	Part No.
42	Orange	600V/20A 105°C	Solid: 12 – 20 AWG Stranded: 12 – 16 AWG (≤19 str.) Stranded Tin-Bonded: 14 – 18 AWG (≤19 str.)	Bag of 10	**30-1342S**
				Box of 100	**30-1042**
				Jar of 300	**30-1042J**
				Box of 2,500	**30-1642**

In-Sure® Push-In Wire Connectors

- No-twist push-in design reduces repetitive motion fatigue
- Low insertion force for fast and easy connections
- Compact size makes installation easy
- Clear shell gives visual verification of connection
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

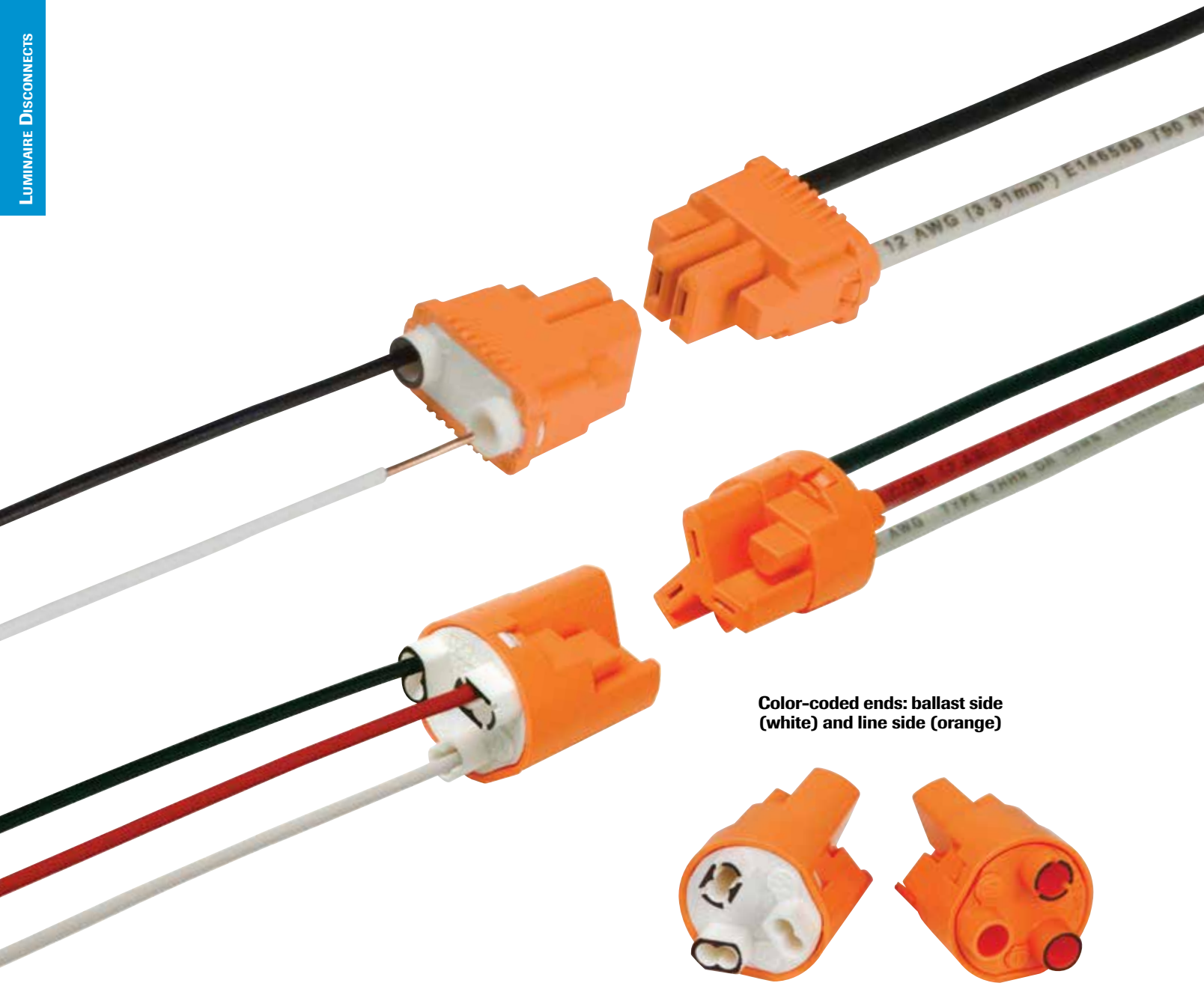
UL LISTED Wire Connector 774A Cu/Cu Only CSA

Model	Color	Ports	Amp Rating	Wire Range	Quantity	Part No.
32	Red	2	20 Amp	Solid: 20 – 12 AWG Stranded: 12 – 16 AWG (≤19 str.) 18 AWG (7 Strand) Stranded (Tin Bonded): 18 – 14 AWG (≤19 str.)	Box of 100	**30-1032**
					Jar of 300	**30-1032J**
					Box of 5,000	**30-1632**
33	Orange	3	20 Amp		Box of 100	**30-1033**
					Jar of 250	**30-1033J**
					Box of 5,000	**30-1633**
34	Yellow	4	20 Amp		Box of 100	**30-1034**
					Jar of 200	**30-1034J**
					Box of 5,000	**30-1634**
87	Gray	5	20 Amp	Solid: 20 – 12 AWG Stranded: 16 – 14 AWG (≤19 str.) 18 AWG (7 Strand) Stranded (Tin Bonded): 18 – 14 AWG (≤19 str.)	Jar of 150	**30-087J**
					Box of 3,000	**30-687**
88	Blue	6 Stacked	20 Amp		Jar of 100	**30-088J**
					Box of 2,500	**30-688**
90	Black	8	20 Amp		Jar of 100	**30-090J**
					Box of 2,000	**30-690**
39	Blue	3	30 Amp	Solid: 14 – 10 AWG Stranded: 12 – 10 AWG (≤19 str.) Stranded (Tin Bonded): 14 – 10 AWG (≤19 str.)	Box of 50	**30-1039**
					Jar of 150	**30-1039J**

COPPER TO COPPER ONLY. Do not use on aluminum. Temperature rating: 105°C (221°F) maximum. 600V maximum building wire, 1000V maximum signs or lighting fixtures

PowerPlug® Luminaire Disconnects

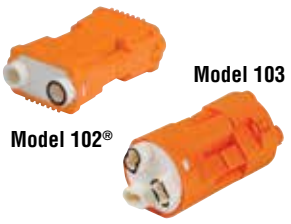
The IDEAL PowerPlug® Luminaire Disconnect fully meets the current National Electric Code and Canadian Electric Code for non-residential fluorescent luminaires. The PowerPlug® helps reduce electrical shock hazard during ballast replacement by safely disconnecting hot and neutral ballast wiring. Both halves of PowerPlug® meet UL and CSA finger-probe safety requirements. Advanced push-in technology provides fast, efficient ballast connections resulting in reduced installation time and improved labor savings. The PowerPlug® is available in 2-pole and 3-pole models with options for new installation or ballast retrofitting.

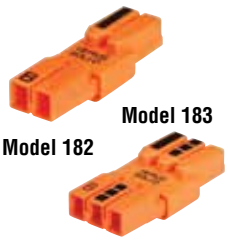


Color-coded ends: ballast side (white) and line side (orange)

PowerPlug® Luminaire Disconnects

- Allows safe disconnect of hot and neutral ballast wiring
- Perfect for new, retrofit or OEM lighting installations
- Push-in technology results in quicker connections, saving time and increasing productivity
- Both halves are "touch-safe"per UL 2459
- Fits through 1/2 in. knockout





LISTED
Luminaire Disconnect
3HME

Selection Chart

Application	New Installations	Retrofits
For 1-ballast fixtures	102	102, 182
For 2-ballast, dimming and switching fixtures	103	103, 183

Model	Color	Electrical Rating	Line Side	Ballast Side	Quantity	Part No.
102® 2-wire	Orange	6 Amps/600 Volts Max.	Solid: #12 - #18 Stranded: #12 – #14 (≤19 str.) Stranded Tin-Bonded: #12 – #14 (≤19 str.) #16 (≤26 str.) #18 (≤16 str.)	Solid: #12 - #18 Stranded: #12 – #14 (≤19 str.) Stranded Tin-Bonded: #12 – #14 (≤19 str.) #16 (≤26 str.) #18 (≤16 str.)	Card of 25	**30-372**
					Jar of 75	**30-382J**
					Jar of 150	**30-352J**
					Box of 1,000	**30-102**
103 3-Wire	Orange	6 Amps/600 Volts Max.	Solid: #12 - #18 Stranded: #12 – #14 (≤19 str.) Stranded Tin-Bonded: #12 – #14 (≤19 str.) #16 (≤26 str.) #18 (≤16 str.)	Solid: #18 Stranded: None Stranded Tin-Bonded: #18 (≤16 str.)	Card of 20	**30-383X**
					Jar of 100	**30-353XJ**
					Box of 1,000	**30-103X**
182 2-Wire	Orange	3 Amps/600 Volts Max.	Solid: #18	Solid: #18	Box of 100	**30-082**
					Box of 2,500	**30-682**
183 3-Wire	Orange	3 Amps/600 Volts Max.	Solid: #18	Solid: #18	Box of 100	**30-083**
					Box of 2,500	**30-683**

1,000V maximum fixtures and signs.

Basic Lighting Maintenance Kit

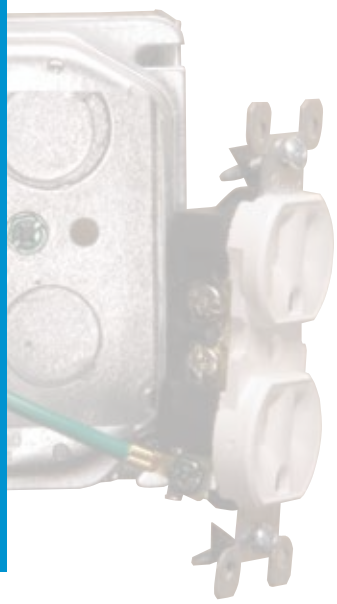
- Kit Contains:
  - Wire-Nut® Wire Connectors (25 Model 72B® Blue, 25 Model 73B® Orange)
  - In-Sure® Push-In Wire Connectors (25 Model 33, Orange)
  - SpliceLine® In-Line Wire Connectors (25 Model 42 Orange)
  - PowerPlug® Luminaire Disconnects (30 Model 102® 2-Port, 15 Model 103 3-Port, 50 Model 182 2-Port)

Description	Part No.
Basic Lighting Maintenance Kit	**30-2255**

Lighting Installation Kit

- Kit Contains:
  - Wire-Nut® Wire Connectors (100 Model 72B® Blue)
  - In-Sure® Push-In Wire Connectors (50 Model 33 Orange)
  - PowerPlug® Luminaire Disconnects (30 Model 102® 2-Port, 50 Model 182 2-Port)
  - 1 Twist-a-Nut™ Screwdriver/Nutdriver (35-908)
  - 1 Reflex™ Super T®-Stripper Wire Stripper (45-615)

Description	Part No.
Lighting Installation Kit	**30-2257**



Grounding Products

We've got grounding covered!
Grounding pigtails are designed for a wide variety of grounding applications. The ultra-flexible lead wire and bonding jumpers make fast and efficient pigtailing.

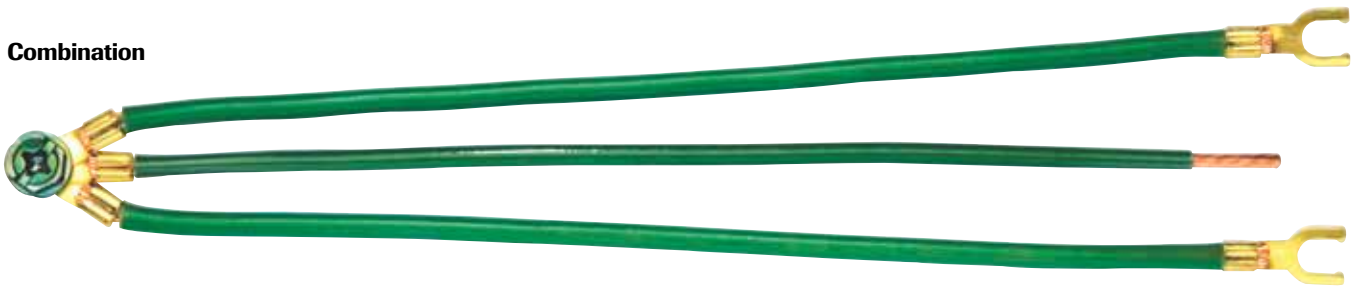
- Convenient for device grounding applications
- Safe, fast and efficient for cost-effective grounding jobs
- Ensures compliance with Article 250 of the National Electrical Code

Stranded

- Heavy-duty fork terminals attach easily to device grounding screw

Solid

Combination



Screws

- Thread-forming, hole-finding ground screw with combination Slotted, Phillips, Hex and #2 Robertson head. Sold individually or factory-assembled on to pigtails.

Solid Wire Grounding Tails

Description	Quantity	Part No.
14 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3390**
12 AWG solid, 6.5 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3404**
12 AWG solid, 6.5 in. tail w/loop & ground screw and stripped end	Bulk Pack of 1,000	**30-3402**
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3392**
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Plastic Box of 100	**30-3399**

Bulk packs are bundled in quantities of 50.

Description	Quantity	Part No.
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Bulk Pack of 1,000	**30-3496**
12 AWG solid, 10 in. tail w/loop & ground screw and stripped end	Bag of 50	**30-3410**
12 AWG solid, 10 in. tail w/loop & ground screw and stripped end	Bulk Pack of 500	**30-3394**
12 AWG solid, 12 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3498**
12 AWG solid, 12 in. tail w/loop & ground screw and stripped end	Bulk Pack of 1,000	**30-3396**

Stranded Wire Grounding Tails

Description	Quantity	Part No.
14 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Bag of 25	**30-3183**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Bag of 25	**30-3184**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Plastic box of 50	**30-3385**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Bulk pack of 1,000	**30-3284**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring (no ground screw)	Bulk pack of 1,000	**30-3285**
12 AWG stranded, 8 in. tail w/#10 fork & stripped end	Bag of 25	**30-3480**

Bulk packs are bundled in quantities of 50.

Description	Quantity	Part No.
12 AWG stranded, 8 in. tail w/#10 fork & stripped end	Bulk pack of 1,000	**30-3580**
12 AWG stranded, 8 in. tail w/#10 ring & ground screw and stripped end	Bulk Pack of 1,000	**30-3201**
12 AWG stranded, 10 in. tail w/#10 fork & #10 ring and ground screw	Box of 50	**30-3310**
12 AWG stranded, 10 in. tail w/#10 fork & #10 ring and ground screw	Bulk pack of 500	**30-3311**
12 AWG stranded, 12 in. tail w/#10 fork & #10 ring and ground screw	Box of 50	**30-3412**
12 AWG stranded, 12 in. tail w/#10 fork & #10 ring and ground screw	Bulk pack of 1,000	**30-3413**

Combo Grounding Tails

Description	Quantity	Part No.
2-wire combo: 12 AWG solid tail, one stripped end, one end w/ground screw; joined to 12 AWG stranded tail at a ring terminal, w/fork terminal on second end	Box of 500	**30-3286**
2-wire combo: 12 AWG stranded w/#10 ring & ground screw, one stripped-end tail and one #10 fork tail	Bag of 25	**30-3287**

Bulk packs are bundled in quantities of 50.

30-3289

Description	Quantity	Part No.
2-wire combo: 12 AWG stranded w/#10 ring and ground screw and two #10 fork tails	Bag of 25	**30-3288**
3-wire combo: 12 AWG stranded w/#10 ring & ground screw, one stripped-end tail and two #10 fork tails	Bag of 25	**30-3289**

Grounding Screws

- Zinc-plated grounding screws offer a thread-forming, hole-finding feature plus combination hex, Phillips, slotted and Robertson head

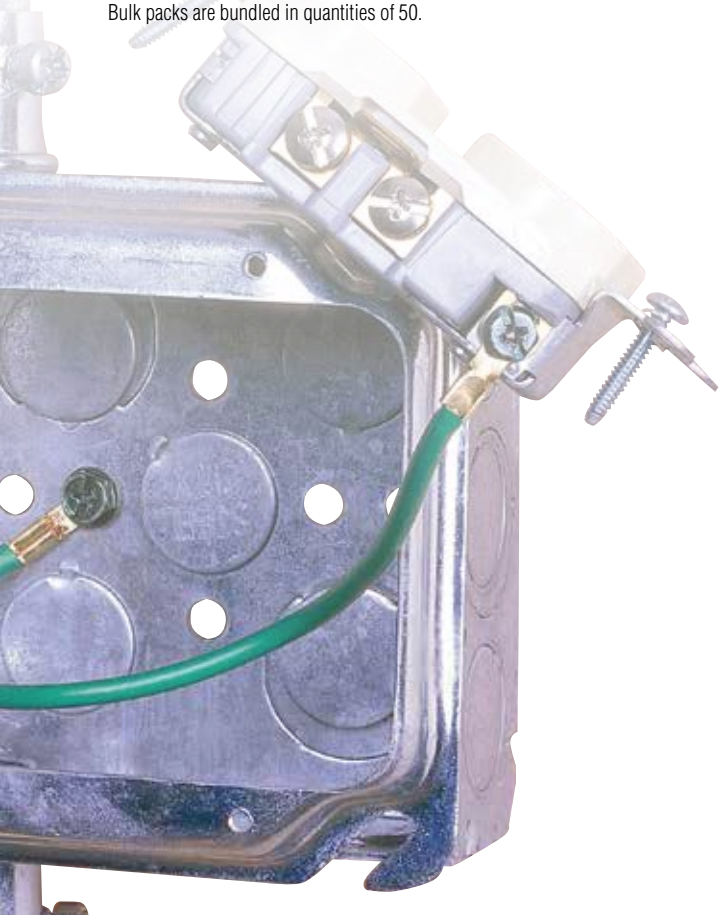
Description	Quantity	Part No.
Thread-forming, hole-finding, combination hex, Phillips, slotted and Robertson head	Jar of 100	**30-3594**
	Pack of 50	**30-3194**

Non-Grounding Stranded Wire Pigtails

- 8 in. 12 AWG Stranded Pigtails – White or Black, #10 Fork and Stripped end

Description	Quantity	Part No.
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, white	Bag of 25	**30-3470**
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, black	Bag of 25	**30-3471**
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, white	Bulk pack of 1,000	**30-3570**
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, black	Bulk pack of 1,000	**30-3571**

Bulk packs are bundled in quantities of 50.



Grounding Recap

Solid (w/loop and Ground Screw)

- **14 AWG**
  - 8 in.
- **12 AWG**
  - 6-1/2 in.
  - 8 in.
  - 10 in.
  - 12 in.

Stranded

- **14 AWG**
  - 8 in. w/#10 Fork and #10 Ring & Ground Screw
- **12 AWG**
  - 8 in. w/#10 Fork & Stripped End
  - 8 in. w/#10 Fork and #10 Ring
  - 8 in. w/ #10 Fork and #10 Ring & Ground Screw
  - 10 in. w/#10 Fork and #10 Ring & Ground Screw
  - 12 in. w/#10 Fork and #10 Ring & Ground Screw

Combo (12 AWG only):

- **2-Wire**
- **3-Wire**

Steel Crimp Connectors

Cu/Cu Only

LISTED
Wire Connector

- Designed for making fast, permanent, pressure-type connections
- Long-zinc-plated steel sleeves maximize contact area with conductors
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E
- Temperature rating: 105°C (221°F)

Model	Wire Combination Range	Quantity	Part No.
410	600V 18 – 10 AWG Min. 1 #14 & 1 #18 – Max. 2 #10 & 2 #14	Bag of 100	**30-410**
		Carton of 1,000	**30-510**
		Keg of 10,000	**30-610**
411	600V 18 – 8 AWG Min. 3 #12 – Max. 4 #10	Box of 50	**30-411**
		Carton of 1,000	**30-511**
412	600V 18 – 4 AWG Min. 1 #14 & 1 #16 – Max. 2 #8 & 1 #6	Box of 50	**30-412**
		Carton of 1,000	**30-512**

IDEAL hand crimp tools UL listed for Models 410, 411, 412: 30-428, 30-429, 30-430.

Wrap-Cap® Insulators

LISTED
Wire Connector

- Provide high dielectric and physical protection for UL Listed, non-insulated pressure-type wire connectors
- Unique design completely covers splice – insulates both around and between wires and eliminates need for tape
- UL Listed to 486C and CSA Certified for 600V maximum building wiring (1,000V maximum for fixtures and signs); temperature rated at 75°C (167°F) maximum.

Model	Description	Quantity	Part No.
415	Insulator for Model 410 Connectors. Can also be used on Buchanan 2006S & 2011S Copper Crimps	Box of 50	**30-445**
		Carton of 1,000	**30-515**
417	Insulator for Model 411 & 412 Connectors. Can also be used on Buchanan 2011S Copper Crimps	Box of 25	**30-447**
		Carton of 1,000	**30-517**

Copper Splice Cap Crimp Connectors

- Designed for making fast, permanent, pressure-type connections
- Solid copper sleeves require less crimping pressure and resist corrosion in harsh environments
- UL 486C Listed and CSA C22.2 #188 Certified; comply with Federal Specification W-S-61D

Description	Wire Combination Range	Quantity	Part No.
Copper Crimp Connector	600V* 18 to 10 AWG Min. 2 #18, Max. 4 #12	Bag of 100	**2006S**
		Bag of 1,000	**2006SB**
	600V* 14 to 4 AWG Min. 2 #10, Max. 2 #6	Bag of 50	**2011S**
		Bag of 500	**2011SB**

*1,000V maximum in fixtures and signs.

IDEAL hand crimp tools UL Listed for models 2006S and 2011S: C24, 30-428, 30-429 and 30-430.

Cu/Cu Only

LISTED
Wire Connector

Splice Cap Insulators

- Convenient, safe and fast installation
- Snap-on nylon construction
- Rated at 105°C (221°F) – 600V (1,000V maximum in fixtures and signs)

Description	Quantity	Part No.
For use on Connector Model 2006S	Box of 100	**2007**
	Bag of 1,000	**2007B**
For use on Connector Model 2011S	Box of 50	**2014**
	Bag of 500	**2014B**

SLK® Disconnect Fuse Kits

- Breakaway fuseholder for use in:
  - Roadway & street lighting
  - Parking lot & area lighting
- UL Listed for submersible installations
- Bright orange color for ease of visibility
- Large selection of configurations
- Set screw or crimp terminations available

SLK® DISCONNECT FUSE KIT

The IDEAL SLK® Disconnect Fuse Kit is a waterproof breakaway safety device that de-energizes roadway lights, streetlights, parking lot lights, and other freestanding electrical fixtures in the event of a knockdown, or when the fixtures need maintenance. This helps protect first responders, bystanders, and service personnel from potentially life-threatening electrical shock hazards.

The SLK® is the first Disconnect Fuse Kit listed to UL's ECIS category for special purpose connectors. This new category contains a set of rigorous tests from a host of UL standards, including UL 486D, the standard for submersibility. This means that the SLK® will stand up to the wet conditions often seen in and around pole bases, junction boxes, and hand holes.

In addition, the bright orange color of the SLK® makes the product easy to locate in dark junction boxes, in hand holes, or in a nighttime knockdown situation when the connector is often buried amongst dirt, mud, and debris.

- Accepts 13/32" x 1-1/2" midget-style fuse (Note: Fuse not included)
- Wire Range: 2-14 AWG (Cu & Al rated)
- Ratings: 30A, 600V, 105°C
- Maximum available short circuit current of 10,000

Neutral configurations come with white fuseholder and dummy fuse

Paired (hot/neutral) configurations are keyed to prevent reverse polarities

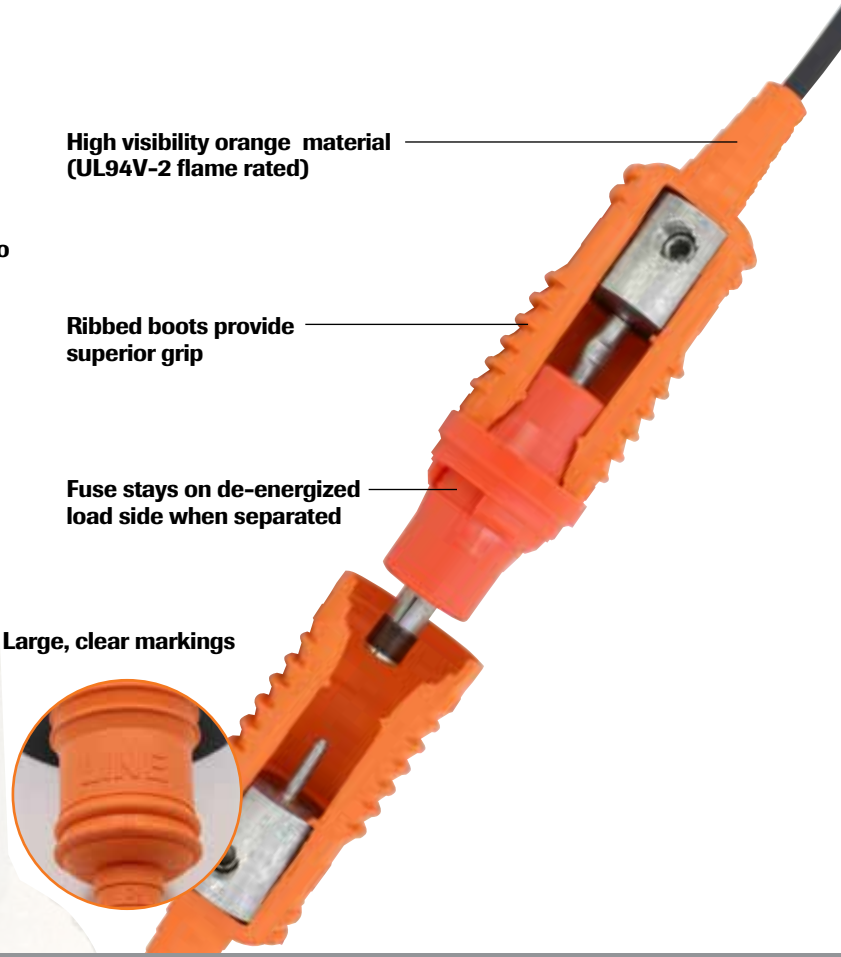
Crimp or set screw terminations

High visibility orange material (UL94V-2 flame rated)

Ribbed boots provide superior grip

Fuse stays on de-energized load side when separated

Large, clear markings



SLK® Ordering Information

To Determine which Kit to Use:

1. Select the base part number, based on crimp termination (TABLE 1) or set screw termination (TABLE 3), number of wires on line/load side, and wire size.
2. If necessary, modify the base part number according to neutral, dual, paired, or tap (i.e., non-breakaway) configurations. Use TABLE 2 for crimp variations and TABLE 4 for set screw variations.
3. See right for examples.

Examples:

1. An in-line fused breakaway kit with crimp terminations, one 10 AWG wire on the line side and one 10 AWG wire on the load side is ordered as a 30-C1616.
2. An in-line non-fused (i.e., neutral) breakaway kit with set screw terminations, one 6 AWG wire on the line side and one 10 AWG wire on the load side is ordered as a 30-S1212N.
3. A Y-tap fused breakaway kit with crimp terminations, two 6 AWG wires on the line side and one 10 AWG wire on the load side is ordered as a 30-C2216.

CRIMP

Table 1: Crimp Base Part numbers

			Load													
			1 Wire							2 Wire						
			2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG	2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG
Line	1 Wire	2 AWG	30-C1212	30-C1212	30-C1216	30-C1216	30-C1216	30-C1216	30-C1216			30-C1222	30-C1222	30-C1226	30-C1226	30-C1226
		4 AWG		30-C1212	30-C1216	30-C1216	30-C1216	30-C1216	30-C1216			30-C1222	30-C1222	30-C1226	30-C1226	30-C1226
		6 AWG			30-C1616	30-C1616	30-C1616	30-C1616	30-C1616			30-C1622	30-C1622	30-C1626	30-C1626	30-C1626
		8 AWG				30-C1616	30-C1616	30-C1616	30-C1616				30-C1622	30-C1626	30-C1626	30-C1626
		10 AWG					30-C1616	30-C1616	30-C1616					30-C1626	30-C1626	30-C1626
		12 AWG						30-C1616	30-C1616						30-C1626	30-C1626
		14 AWG							30-C1616							30-C1626
	2 Wire	2 AWG	30-C2012	30-C2012	30-C2016	30-C2016	30-C2016	30-C2016	30-C2016			30-C2022	30-C2022	30-C2026	30-C2026	30-C2026
		4 AWG		30-C2012	30-C2016	30-C2016	30-C2016	30-C2016	30-C2016			30-C2022	30-C2022	30-C2026	30-C2026	30-C2026
		6 AWG			30-C2216	30-C2216	30-C2216	30-C2216	30-C2216			30-C2222	30-C2222	30-C2226	30-C2226	30-C2226
		8 AWG				30-C2216	30-C2216	30-C2216	30-C2216				30-C2222	30-C2226	30-C2226	30-C2226
		10 AWG					30-C2616	30-C2616	30-C2616					30-C2626	30-C2626	30-C2626
		12 AWG						30-C2616	30-C2616						30-C2626	30-C2626
		14 AWG							30-C2616							30-C2626

One kit will cover large wire range

Note: Crimp connections on larger gauge wire (2 #8, 2 #6, 1 #8, 1 #6 or 1 #4) require IDEAL #88-843 Mechanical Indentor and Crimp Tool.

Table 2: Crimp Variations

Base Part Number (Hot)	Variation (If applicable)			
	Neutral	Dual	Paired	Non-Breakaway
30-C1212	30-C1212N	30-C1212D	30-C1212P	
30-C1216	30-C1216N	30-C1216D	30-C1216P	
30-C1616	30-C1616N	30-C1616D	30-C1616P	
30-C1222	30-C1222N			
30-C1226	30-C1226N			
30-C1622	30-C1622N			
30-C1626	30-C1626N			
30-C2012	30-C2012N			30-C2012T

Base Part Number (Hot)	Variation (If applicable)			
	Neutral	Dual	Paired	Non-Breakaway
30-C2016	30-C2016N			30-C2016T
30-C2216	30-C2216N			30-C2216T
30-C2616	30-C2616N			30-C2616T
30-C2022	30-C2022N			
30-C2026	30-C2026N			
30-C2222	30-C2222N			
30-C2226	30-C2226N			
30-C2626	30-C2626N			

SET SCREW

Table 3: Set Screw Base Part numbers

			Load													
			1 Wire							2 Wire						
			2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG	2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG
Line	1 Wire	2 AWG	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222
		4 AWG		30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212		30-S1222	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222
		6 AWG			30-S1212	30-S1212	30-S1212	30-S1212	30-S1212			30-S1222	30-S1222	30-S1222	30-S1222	30-S1222
		8 AWG				30-S1212	30-S1212	30-S1212	30-S1212				30-S1222	30-S1222	30-S1222	30-S1222
		10 AWG					30-S1212	30-S1212	30-S1212					30-S1222	30-S1222	30-S1222
		12 AWG						30-S1212	30-S1212						30-S1222	30-S1222
		14 AWG							30-S1212							30-S1222
	2 Wire	2 AWG	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222
		4 AWG		30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212		30-S2222	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222
		6 AWG			30-S2212	30-S2212	30-S2212	30-S2212	30-S2212			30-S2222	30-S2222	30-S2222	30-S2222	30-S2222
		8 AWG				30-S2212	30-S2212	30-S2212	30-S2212				30-S2222	30-S2222	30-S2222	30-S2222
		10 AWG					30-S2212	30-S2212	30-S2212					30-S2222	30-S2222	30-S2222
		12 AWG						30-S2212	30-S2212						30-S2222	30-S2222
		14 AWG							30-S2212							30-S2222

One kit will cover large wire range

Table 4: Set Screw Variations

Base Part Number	Variation (If applicable)			
	Neutral	Dual	Paired	Non-Breakaway
30-S1212	30-S1212N	30-S1212D	30-S1212P	
30-S1222	30-S1222N			
30-S2212	30-S2212N			30-S2212T
30-S2222	30-S2222N	30-S2222D	30-S2222P	

Note: For combination 2 wire line (2-14 AWG Set Screw) and 1 wire load (6-14 AWG Crimp), use 30-B2216.

In-Line Fused

Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S1212**
In-Line Breakaway, crimp; fused (Hot)	2-4 AWG	2-4 AWG	**30-C1212**
In-Line Breakaway, crimp; fused (Hot)	2-4 AWG	6-14 AWG	**30-C1216**
In-Line Breakaway, crimp; fused (Hot)	6-14 AWG	6-14 AWG	**30-C1616**

Y-Tap Fused

Description	2 Line Side	1 Load Side	Part No.
Y-Tap Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S2212**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	2-4 AWG	**30-C2012**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	6-14 AWG	**30-C2016**
Y-Tap Breakaway, crimp; fused (Hot)	6-8 AWG	6-14 AWG	**30-C2216**
Y-Tap Breakaway, crimp; fused (Hot)	10-14 AWG	6-14 AWG	**30-C2616**
Combination Y-Tap Breakaway, fused (Hot)	2-14 AWG set screw	6-14 AWG crimp	**30-B2216**

Non-Breakaway Fused

Description	2 Line Side	1 Load Side	Part No.
Y-Tap Non-Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S2212T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	2-4 AWG	2-4 AWG	**30-C2012T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	2-4 AWG	6-14 AWG	**30-C2016T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	6-8 AWG	6-14 AWG	**30-C2216T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	10-14 AWG	6-14 AWG	**30-C2616T**

Single-Pole In-Line Paired

Description	1 Line Side	1 Load Side	Part No.
Paired In-Line Breakaway, set screw; one fused (Hot); one non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S1212P**
Paired In-Line Breakaway, crimp; one fused (Hot); one non-fused (Neutral)	6-14 AWG	6-14 AWG	**30-C1212P**
Paired In-Line Breakaway, crimp; one fused (Hot); one non-fused (Neutral)	2-4 AWG	6-14 AWG	**30-C1216P**
Paired In-Line Breakaway, crimp; one fused (Hot); one non-fused (Neutral)	2-4 AWG	2-4 AWG	**30-C1616P**

In-Line Non-Fused

Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S1212N**
In-Line Breakaway, crimp; non-fused (Neutral)	2-4 AWG	2-4 AWG	**30-C1212N**
In-Line Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-14 AWG	**30-C1216N**
In-Line Breakaway, crimp; non-fused (Neutral)	6-14 AWG	6-14 AWG	**30-C1616N**

Y-Tap Non-Fused

Description	2 Line Side	1 Load Side	Part No.
Y-Tap Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S2212N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	2-4 AWG	**30-C2012N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-14 AWG	**30-C2016N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	6-8 AWG	6-14 AWG	**30-C2216N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	10-14 AWG	6-14 AWG	**30-C2616N**

Dual In-Line Fused

Description	1 Line Side	1 Load Side	Part No.
Dual In-Line Breakaway, set screw; fused (both Hot)	2-14 AWG	2-14 AWG	**30-S1212D**
Dual In-Line Breakaway, crimp; fused (both Hot)	2-4 AWG	2-4 AWG	**30-C1212D**
Dual In-Line Breakaway, crimp; fused (both Hot)	2-4 AWG	6-14 AWG	**30-C1216D**
Dual In-Line Breakaway, crimp; fused (both Hot)	6-14 AWG	6-14 AWG	**30-C1616D**

SLK® DISCONNECT FUSE KIT

SLK accepts solid or stranded and copper or aluminum conductors.

One Wire Line/ 2 Wires Load Fused

Description	1 Line Side	2 Load Side	Part No.
Y-Tap Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S1222**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	6-8 AWG	**30-C1222**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	10-14 AWG	**30-C1226**
Y-Tap Breakaway, crimp; fused (Hot)	6-14 AWG	6-8 AWG	**30-C1622**
Y-Tap Breakaway; crimp; fused (Hot)	6-14 AWG	10-14 AWG	**30-C1626**

2 Wires Line/2 Wires Load Fused

Description	2 Line Side	2 Load Side	Part No.
2-Pole Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S2222**
2-Pole Breakaway, crimp; fused (Hot)	2-4 AWG	6-8 AWG	**30-C2022**
2-Pole Breakaway, crimp; fused (Hot)	2-4 AWG	10-14 AWG	**30-C2026**
2-Pole Breakaway, crimp; fused (Hot)	6-8 AWG	6-8 AWG	**30-C2222**
2-Pole Breakaway, crimp; fused (Hot)	6-8 AWG	10-14 AWG	**30-C2226**
2-Pole Breakaway, crimp; fused (Hot)	10-14 AWG	10-14 AWG	**30-C2626**

2-Pole Dual Fused

Description	2 Line Side	2 Load Side	Part No.
Dual 2-Pole Breakaway, set screw; fused (both Hot)	2-14 AWG	2-14 AWG	**30-S2222D**

Y-Tap Dual Fused

Description	2 Line Side	1 Load Side	Part No.
Dual, Y-Tap Breakaway, set screw; fused (both Hot)	2-14 AWG	2-14 AWG	**30-S2212D**

SLK accepts solid or stranded and copper or aluminum conductors.

One Wire Line/2 Wires Load Non-Fused

Description	1 Line Side	2 Load Side	Part No.
Y-Tap Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S1222N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-8 AWG	**30-C1222N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	10-14 AWG	**30-C1226N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	6-14 AWG	6-8 AWG	**30-C1622N**
Y-Tap Breakaway; crimp; non-fused (Neutral)	6-14 AWG	10-14 AWG	**30-C1626N**

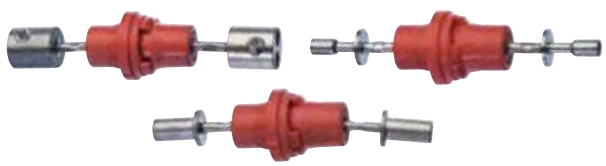
2 Wires Line/2 Wires Load Non-Fused

Description	2 Line Side	2 Load Side	Part No.
2-Pole Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S2222N**
2-Pole Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-8 AWG	**30-C2022N**
2-Pole Breakaway, crimp; non-fused (Neutral)	2-4 AWG	10-14 AWG	**30-C2026N**
2-Pole Breakaway, crimp; non-fused (Neutral)	6-8 AWG	6-8 AWG	**30-C2222N**
2-Pole Breakaway, crimp; non-fused (Neutral)	6-8 AWG	10-14 AWG	**30-C2226N**
2-Pole Breakaway, crimp; non-fused (Neutral)	10-14 AWG	10-14 AWG	**30-C2626N**

2-Pole Paired

Description	2 Line Side	2 Load Side	Part No.
Paired 2-Pole Breakaway, set screw; one fused (Hot); one non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S2222P**

Fuseholders (No Boot Included)



Description	1 Line Side	1 Load Side	Part No.
Fuseholder only, non-breakaway, set screw, fused	2-14 AWG	2-14 AWG	**30-HS2**
Fuseholder only, non-breakaway, crimp, fused	2-4 AWG	2-4 AWG	**30-HC2**
Fuseholder only, non-breakaway, crimp, fused	6-14 AWG	6-14 AWG	**30-HC6**

Breakaway Streetlight Connector & Splice Insulating Kits

- Safe and easy installation in five minutes or less
- No special equipment necessary – requires only a knife, wire stripper, and a hex tool or crimp tool
- Built-in break-away design eliminates de-energization of complete circuits
- Safely separates upon impact without breaking wires – eliminates potential danger and electrical shock
- Spring-loaded contacts compensate for thermal expansion to maintain integrity of connection (breakaway models)

Application Guide

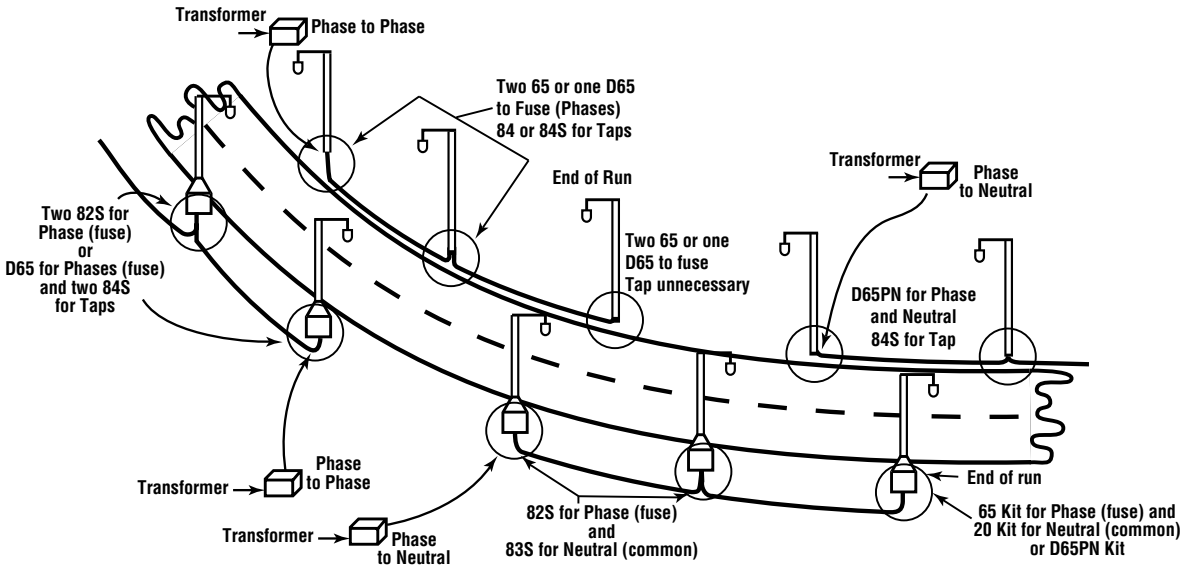
(Examples of Several Configurations)

For Poles with Transformer Bases, Standard Bases and Junction Boxes

Underground Feed Phase to Phase	
Configurations	**Comments**
D65 dual-in-line for phases and two 84S kits for taps	Recommended configuration
Two 82S Y-Tap Kits for phases and taps	Cost effective
Underground Feed Phase to Neutral	
DP65PN dual-in-line for phase and neutral and two 84S kits for tap	Recommended configuration
One 82S Y-Tap Kit for phase and tap and one 83S Y-Tap Kit for neutral and tap	Cost effective

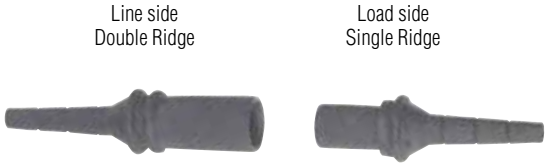
For Lights Mounted to Utility Poles, etc.

Overhead Feed	
Configurations	**Comments**
Two B-Tap® Insulation Piercing Connectors for phase and/or tap (for insulated conductors only)	Recommended configuration, see B-Tap® Insulation Piercing Connectors on page A-37.



Note: Fused kits require a 13/32" x 1-1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.** Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**

In-Line Fused (Hot)

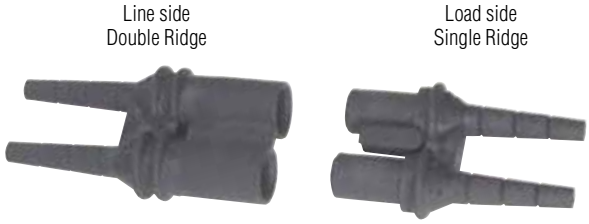


Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, crimp, fused	12-6 AWG Cu	12-6 AWG Cu	**65U**
In-Line Breakaway, crimp, fused	4-2 AWG Cu	12-6 AWG Cu	**65LC-U**
In-Line Breakaway, crimp, fused	4-2 AWG Cu	4-2 AWG Cu	**65-LC**

In-Line Non-Fused (Neutral)

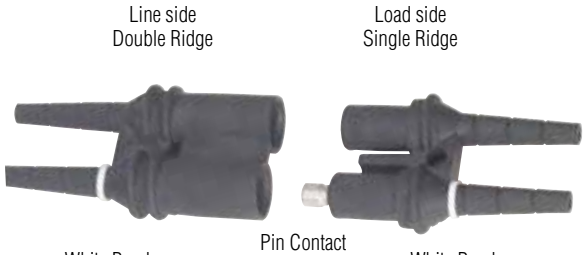
Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, crimp, non-fused	12-6 AWG Cu	12-6 AWG Cu	**20U**
In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	12-6 AWG Cu	**20-LC-U**
In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	4-2 AWG Cu	**20-LC**

Dual In-Line Fused (Both Hot)



Description	1 Line Side	1 Load Side	Part No.
Dual In-Line Breakaway, crimp, fused	12-6 AWG Cu	12-6 AWG Cu	**D65U**
Dual In-Line Breakaway, crimp, fused	4-2 AWG Cu	12-6 AWG Cu	**D65-LC-U**
Dual In-Line Breakaway, crimp, fused	4-2 AWG Cu	4-2 AWG Cu	**D65-LC**

Paired In-line Non-Fused (One Hot, One Neutral)

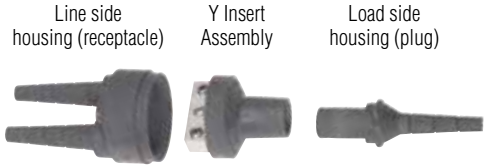


Description	1 Line Side	1 Load Side	Part No.
Paired In-Line Breakaway, crimp, non-fused	12-6 AWG Cu	12-6 AWG Cu	**D65PN-U**
Paired In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	12-6 AWG Cu	**D65PN-LC-U**
Paired In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	4-2 AWG Cu	**D65PN-LC**

Stated wire range for crimping stranded conductors. For crimping solid wire: 14-4 AWG, use codes. U, 2 AWG use code LC.
Note: Fused Kits require a 13/32" x 1-1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.** Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**
Insulation O.D. range is .120"-.430".

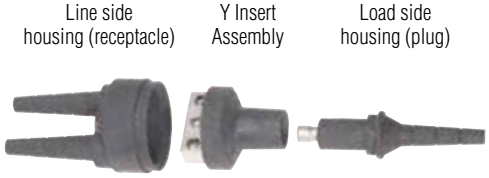
LR32565

Y-Tap Fused (Hot)



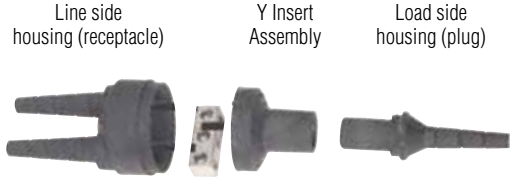
Description	2 Line Side Set Screw	1 Load Side Crimp	Part No.
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	12-6 AWG Cu	**82S-ADB1-C**
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	4-2 AWG Cu	**82S-ADB1-LC**
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	12-6 AWG Cu	**82S-EAFB1-C**
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	4-2 AWG Cu	**82S-EAFB1-LC**

Y-Tap Non-Fused (Neutral)



Description	2 Line Side Set Screw	1 Load Side Crimp	Part No.
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	12-6 AWG Cu	**83S-ADB1-C**
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	4-2 AWG Cu	**83S-ADB1-LC**
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	12-6 AWG Cu	**83S-EAFB1-C**
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	4-2 AWG Cu	**83S-EAFB1-LC**

Y-Splice Kits (Non-Breakaway/No Fuse)



Description	2 Line Side Set Screw	1 Load Side Set Screw	Part No.
Y-Splice Set Screw Tap & Run	10-2 AWG Cu/Al	10-2 AWG Cu/Al	**84S-ADB1**
Y-Splice Set Screw Tap & Run	10-2 AWG Cu/Al	10-2 AWG Cu/Al	**84S-EAFB1**

For Insulation O.D. range .120"-.430" use ADB1. For Insulation O.D. range .420"-.785" use EAFB1

Example:
A Y-Tap Kit with set screws for a 2 AWG phase line side conductor with a diameter of .472" and a 10 AWG copper load side conductor is ordered as an 82S-EAFB1-C

Stated wire range for crimping stranded conductors. For crimping solid wire: 14-4 AWG, use codes. U, 2 AWG use code LC.
Note: Fused Kits require a 13/32" x 1-1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.** Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**

LR32565

Electrical Crimp Terminals

The complete line of IDEAL crimp terminals, disconnects and splices offer the right product for any electrical system that might be encountered. From rings and spades to insulated disconnects, there's a product for any wire range. All insulated terminals are color-coded for easy identification and come in durable plastic packaging for easy storage.

- Butted seam-construction prevents splitting under maximum pressure
- Internal barrel serrations grip wires tightly to resist pull-out and reduce electrical resistance
- Tin-plated brass construction for corrosion resistance
- Shouldered barrel insulation quickly positions terminal for proper crimping
- Expanded insulation entry accommodates a wide variety of insulation diameters and provides additional insulation support

Rings & Forks

Disconnects

Splices

Durable plastic package for easy storage.

Ring Terminals

Vinyl Insulated

Wire Range	Stud Size in.	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.157 (4,0mm)	25	**83-2121**	—	—
	8 (4,3mm)		25	**83-2131**	—	—
	10 (5,3mm)		25	**83-2141**	—	—
	1/4 (6,4mm)		25	**83-2151**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	0.177 (4,5mm)	25	**83-2221**	—	—
	8 (4,3mm)		25	**83-2231**	—	—
	10 (5,3mm)		25	**83-2241**	1,000	**84-2241**
	1/4 (6,4mm)		25	**83-2251**	—	—
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	0.248 (6,3mm)	25	**83-2331**	—	—
	10 (5,3mm)		25	**83-2341**	1,000	**84-2341**
	1/4 (6,4mm)		25	**83-2351**	—	—
	5/16 (8,4mm)		25	**83-2361**	—	—
	3/8 (10,5mm)		25	**83-2371**	—	—

75° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Non-Insulated

Wire Range	Stud Size	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	8 (4,3mm)	25	**83-0131**	—	—
	10 (5,3mm)	25	**83-0141**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	25	**83-0221**	—	—
	8 (4,3mm)	25	**83-0231**	—	—
	10 (5,3mm)	25	**83-0241**	1,000	**84-0241**
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	25	**83-0331**	—	—
	10 (5,3mm)	25	**83-0341**	1,000	**84-0341**
	1/4 (6,4mm)	25	**83-0351**	—	—
8 AWG (8,0mm²)	10 (5,3mm)	25	**83-0421**	500	**84-0421**
	1/4 (6,4mm)	25	**83-0431**	—	—
	5/16 (8,4mm)	25	**83-0441**	—	—
	3/8 (10,5mm)	25	**83-0451**	—	—
6 AWG (14,0mm²)	10 (5,3mm)	20	**83-0511**	—	—
	1/4 (6,4mm)	20	**83-0521**	—	—
	5/16 (8,4mm)	20	**83-0531**	—	—
	3/8 (10,5mm)	20	**83-0541**	—	—
4 AWG (22,0mm²)	1/4 (6,4mm)	20	**83-0611**	—	—
	5/16 (8,4mm)	20	**83-0621**	—	—
	3/8 (10,5mm)	20	**83-0631**	—	—

105°C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Spade Terminals

Vinyl Insulated

Wire Range	Stud Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.157 (4,0mm)	25	**83-7111**	1,000	**84-7111**
	8 (4,3mm)		25	**83-7121**	—	—
	10 (5,3mm)		25	**83-7131**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	0.177 (4,5mm)	25	**83-7151**	—	—
	8 (4,3mm)		25	**83-7161**	1,000	**84-7161**
	10 (5,3mm)		25	**83-7171**	1,000	**84-7171**
12 – 10 AWG (4,0 – 6,0mm²)	6 (3,7mm)	0.248 (6,3mm)	25	**83-7201**	—	—
	8 (4,3mm)		25	**83-7211**	—	—
	10 (5,3mm)		25	**83-7221**	500	**84-7221**
	1/4 (6,4mm)		25	**83-7231**	—	—

75° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Vinyl Insulated Snap

Wire Range AWG	Stud Size In.	Max. Wire Ins. Dia. In.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.134 (4,0mm)	25	**83-7011**
	8 (4,3mm)		25	**83-7021**
	10 (5,3mm)		25	**83-7031**
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	0.161 (4,5mm)	25	**83-7051**
	8 (4,3mm)		25	**83-7061**
	10 (5,3mm)		25	**83-7071**
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	0.248 (6,0mm)	25	**83-7081**
	10 (5,3mm)		25	**83-7091**
	1/4 (6,4mm)		25	**83-7101**

75° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Non-Insulated

Wire Range	Stud Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.157 (4,0mm)	25	**83-6111**	—	—
	8 (4,3mm)		25	**83-6121**	—	—
	10 (5,3mm)		25	**83-6131**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	8 (4,3mm)	0.177 (4,5mm)	25	**83-6161**	—	—
	10 (5,3mm)		25	**83-6171**	1,000	**84-6171**
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	0.248 (6,3mm)	25	**83-6211**	—	—
	10 (5,3mm)		25	**83-6221**	—	—
	1/4 (6,4mm)		25	**83-6231**	—	—

105° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Disconnects

Vinyl Insulated Female

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.110 x .020 (2,8mm x 0,5mm)	0.150 (3,8mm)	25	**83-9511**	—	—
	.187 x .020 (4,75mm x 0,5mm)		25	**83-9541**	—	—
	.250 x .032 (6,35mm x 0.8mm)		25	**83-9571**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	.110 x .020 (2,8mm x 0,5mm)	0.185 (4,7mm)	25	**83-9521**	—	—
	.187 x .020 (4,75mm x 0,5mm)		25	**83-9551**	—	—
	.250 x .032 (6,35mm x 0.8mm)		25	**83-9581**	500	**84-9581**
14 – 12 AWG (2,5mm – 4,0mm²)	.250 x .032 (6,35mm x 0.8mm)	0.244 (6,2mm)	25	**83-9591**	—	—
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0.8mm)	0.244 (6,2mm)	25	**83-9601**	500	**84-9601**

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Insulated Male

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.150 (3,8mm)	25	**83-9971**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9981**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9991**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Female

Wire Range	Tab Size	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.110 x .020 (2,8mm x 0,5mm)	25	**83-9411**
16 – 14 AWG (1,5 – 2,5mm²)	.110 x .020 (2,8mm x 0,5mm)	25	**83-9421**
22 – 18 AWG (0,5 – 1,0mm²)	.187 x .020 (4,75mm x 0,5mm)	25	**83-9441**
16 – 14 AWG (1,5 – 2,5mm²)	.187 x .020 (4,75mm x 0,5mm)	25	**83-9451**
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	25	**83-9471**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	25	**83-9481**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	25	**83-9501**

105° C/300 Volts max. Not UL Listed.

Nylon Fully-Insulated Female

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.150 (3,8mm)	25	**83-9771**	1,000	**84-9771**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9781**	1,000	**84-9781**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9791**	500	**84-9791**

105° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Nylon Fully-Insulated Male

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.150 (3,8mm)	25	**83-9911**	500	**84-9911**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9921**	500	**84-9921**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9931**	500	**84-9931**

105° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Insulated Bullet

Wire Range	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (0,5mm – 1,0mm²)	0.150 (3,8mm)	25	**83-8001**
16 – 14 AWG (1,5 – 2,5mm²)	0.185 (4,7mm)	25	**83-8011**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Fully-Insulated Receptacles

Wire Range	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (0,5mm – 1,0mm²)	0.150 (3,8mm)	25	**83-8101**
16 – 14 AWG (1,5 – 2,5mm²)	0.185 (4,7mm)	25	**83-8111**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Disconnects

Vinyl Insulated Multi-Stack

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (5,0 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.15 (3,8mm)	25	**83-9611**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9621**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9631**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Flag Female

Wire Range	Tab Size	Qty.	Part No.	Qty.	Part No.
16 – 14 AWG (1,5 –2,5mm²)	0.250 x .032 (6,35mm x 0,8mm)	25	**83-9401**	500	**84-9401**

105° C/300 Volts max. Not UL Listed.

Wire Connector 774A LISTED Cu only c UL

Adapter - Male to Female (2-1)*

Tab Size	Qty.	Part No.
0.250 x .032 (6,35mm x 0,8mm)	25	**83-9801**

105° C/300 Volts max. Not UL Listed.

Wire Connector 774A LISTED Cu only c UL

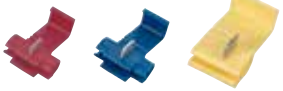
Splices

Vinyl Insulated Butt

Wire Range	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	0.157 (4,0mm)	25	**83-9281**	1,000	**84-9281**
16 – 14 AWG (1,5 – 2,5mm²)	0.177 (4,5mm)	25	**83-9291**	1,000	**84-9291**
12 – 10 AWG (4,0 – 6,0mm²)	0.248 (6,3mm)	25	**83-9301**	500	**84-9301**

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL



Tap

Wire Range	Color	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	Red	25	**83-3261**	250	**84-3261**
16 – 14 AWG (1,5 – 2,5mm²)	Blue	25	**83-3271**	—	—
12 – 10 AWG (4,0 – 6,0mm²)	Yellow	25	**83-3281**	—	—

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Insulated Parallel

Wire Range	Max. Wire Ins. Dia.	Quantity	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	0.157 (4,0mm)	1,000	**83-9351**
16 – 14 AWG (1,5 – 2,5mm²)	0.177 (4,5mm)	1,000	**83-9361**
12 – 10 AWG (4,0 – 6,0mm²)	0.248 (6,3mm)	500	**83-9371**

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Butt

Wire Range	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	25	**83-9001**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	25	**83-9011**	1,000	**84-9011**
12 – 10 AWG (4,0 – 6,0mm²)	25	**83-9021**	500	**84-9021**
8 AWG (8,0mm²)	25	**83-9031**	250	**84-9031**
6 AWG (14,0mm²)	20	**83-9041**	—	—
4 AWG (22,0mm²)	20	**83-9051**	—	—

105° C/600 Volts max. Not UL Listed.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Parallel

Wire Range	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	25	**83-9071**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	25	**83-9081**	1,000	**84-9081**
12 – 10 AWG (4,0 – 6,0mm²)	25	**83-9091**	1,000	**84-9091**

105° C/600 Volts max. Not UL Listed.

Pre-Insulated Crimp Connectors

LISTED Wire Connector Cu/Cu Only

- Compact design fits easily into tight locations
- Flared skirt protects against turned-back strands
- Beveled opening eases wire entry
- Tough UL 94V-2 flame-retardant shell rated at 105°C (221°F)

Model	Wire Combination Range	Quantity	Part No.
48	600V* Min. 2 #22 Max. 1 #14 w/2 #18	Carton of 1,000	**30-245**
		Keg of 10,000	**30-645**
49	600V* Min. 1 #22 w/1 #18 Max. 1 #12 w/1 #16	Carton of 1,000	**30-249**
		Keg of 10,000	**30-649**
NC-8	600V* Min. 4 #16 Max. 1 #12 w/4 #14	Carton of 1,000	**30-148**
		Keg of 5,000	**30-648**
NC-2212**	600V* Min. 2 #22 Max. 5 #18	Carton of 1,000	**30-146**
		Key of 10,000	**30-646**

*1,000V maximum in fixtures and signs. Note: Connectors are transparent.
**Stranded wires only.

Set Screw Wire Connectors

- Eliminates need for re-stripping wire each time connection is disturbed
- Solid brass sleeves
- Set-screw easily and securely applies maximum compression to conductors to ensure a vibration-resistant splice
- Permits fast visual inspection of splice
- Tough, flame-retardant shell rated at 150°C (302°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E

LISTED Wire Connector Cu/Cu Only

Model	Wire Combination Range	Quantity*	Part No.
10	300V 22 thru 10 AWG Min. 1 #20 w/1 #22 – Max. 2 #14 w/1 #16	Box of 100	**30-210**
		Carton of 1,000	**30-310**
11	600V 22 thru 10 AWG Min. 1 #14 w/1 #20 – Max. 3 #14 w/2 #18	Box of 100	**30-211***
		Carton of 1,000	**30-311***
22	600V 20 thru 10 AWG Min. 1 #16 w/3 #18 – Max. 2 #10 w/1 #12	Box of 100	**30-222***
		Carton of 1,000	**30-322***

*Package includes (1) K-2422 Set Screw Holder.

Set Screw Holder

- Convenient tool for holding and tightening set-screw connectors
- Accepts IDEAL Models 11 and 22 set-screw connectors

Description	Part No.
For Connector Models 11 & 22	**K-2422**

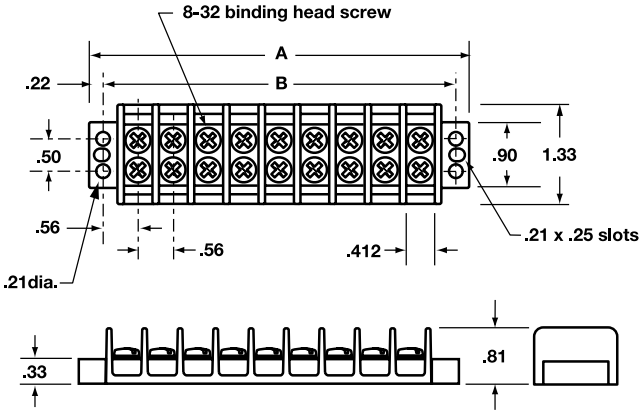
Terminal Strips & Accessories

IDEAL Terminal and Barrier Strips are designed and manufactured to be rugged, reliable and easy to use. A thermoplastic base and corrosion-resistant screws and hardware provide extended service life. Optional accessories provide convenient, versatile application. Available in a wide variety of circuit configurations, electrical ratings and center-spacing, there is an IDEAL terminal strip for virtually every job.

- Heavy-duty, corrosion-resistant screws, surface plates and optional hardware
- Accessory hardware provides a variety of termination options
- Rugged polyester thermoplastic base (UL Rated 94V-0)
- Operating temperature rated from 130°C (260°F) to -40°C (-40°F)
- UL Recognized (E82048) and CSA Certified (LR15364)

89-200 Series Terminal Strips

- .562" (14.28mm) center spacing
- Accepts wire sizes from 10 through 22 AWG Cu
- #8-32 Philslot, zinc-plated steel terminal screws
- Recommended torque: 16 in. - lb.

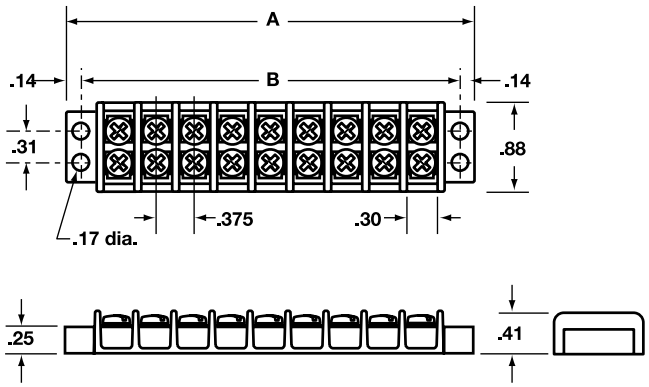


No. of Poles	Dimensions (Inches)		Part No.
	A	B	
2	2.13	1.69	**89-202**
3	2.69	2.25	**89-203**
4	3.25	2.81	**89-204**
6	4.37	3.94	**89-206**
8	5.50	5.06	**89-208**
10	6.62	6.19	**89-210**
12	7.75	7.31	**89-212**

Ratings: 30A/600V UL Listed, CSA Certified (30A/250V when used with optional quick connects).

89-300 Series Terminal Strips

- .375" (9.52mm) center spacing
- Accepts wire sizes from 14 through 22 AWG Cu
- #6-32 Philslot, zinc-plated steel terminal screws
- Recommended torque: 9 in. - lb.

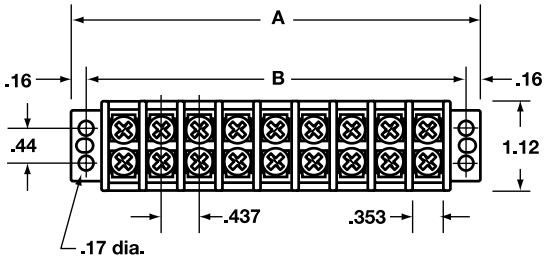


No. of Poles	Dimensions (Inches)		Part No.
	A	B	
2	1.40	1.12	**89-302**
4	2.16	1.88	**89-304**
6	2.90	2.62	**89-306**
8	3.66	3.38	**89-308**
10	4.40	4.12	**89-310**
12	5.16	4.88	**89-312**

Ratings: 30A/300V UL Listed, 20A/150V CSA Certified (15A/125V when used with optional quick connects).

89-400 Series Terminal Strips

- .437" (11.10mm) center spacing
- Accepts wire sizes from 12 through 22 AWG Cu
- #6-32 Philslot, zinc-plated steel terminal screws
- Recommended torque: 9 in. - lb.



No. of Poles	Dimensions (Inches)		Part No.
	A	B	
2	1.63	1.31	**89-402**
4	2.51	2.18	**89-404**
6	3.38	3.06	**89-406**
8	4.25	3.93	**89-408**
10	5.13	4.81	**89-410**
12	6.00	5.68	**89-412**

Ratings: 30A/300V UL Listed, CSA Certified.

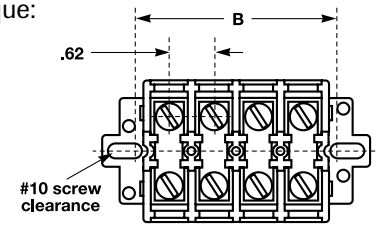
Quick Connects

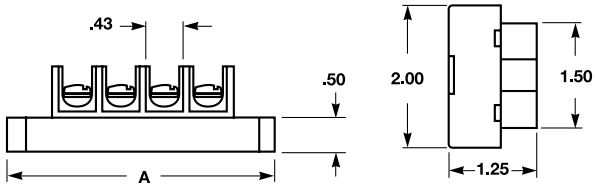
- Allows fast, flexible circuit changes

For use with Terminal Strip Series:	Tab size (in.)	Quantity	Flat-None Part No.	Flat-Flat Part No.
89-300	.187 x .020	10	**89-314**	**89-317**
89-200 & 89-400	.250 x .031	10	**89-414**	**89-417**

89-500 Series Terminal Strips

- Available in standard or shorting block styles
- .625" (15.88mm) center spacing
- Accepts wire sizes from 6 through 22 AWG Cu
- #10-32 Philslot, nickel-plated brass terminal screws
- Recommended torque: 20 in. - lb.





No. of Poles	Dimensions (Inches)		Standard Block Part No.	Shorting Block Part No.
	A	B		
4	3.75	2.87	**89-504**	**89-505**
6	5.00	4.12	**89-506**	**89-507**
8	6.25	5.37	**89-508**	**89-509**
12	8.75	7.87	**89-512**	**89-513**

Ratings: 60A/600V UL Listed, CSA Certified (Max. rating achieved with #6 AWG Cu wire crimped to ring terminals)

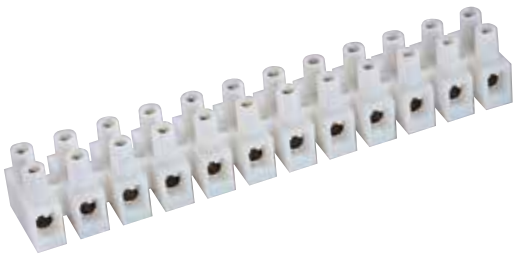
Jumpers

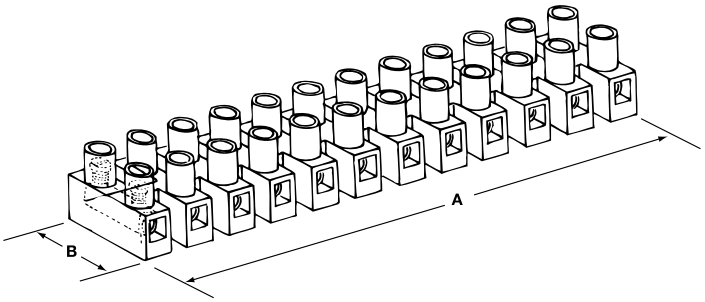
- Provides easy connection of multiple circuits

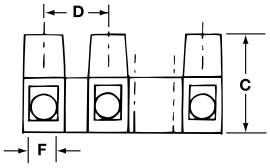
For use with Terminal Strip Series	Center Spacing (in.)	Quantity	Flat Slip-on Part No.	Over Barrier Slip-on Part No.	Flat 12-Circuit Part No.
89-200	.562	10	**89-229**	**89-224**	—
		100	**89-230**	—	—
89-300	.375	10	**89-323**	**89-324**	—
		100	**89-330**	—	—
89-400	.437	10	**89-423**	**89-424**	—
		100	**89-430**	—	—
89-500	.625	2	—	—	**89-525**

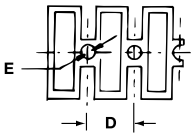
Barrier Strips

- Recessed screws and tubular contacts provide added safety and help prevent short circuits
- Tubular contacts connect stripped, un-terminated solid or stranded wire directly to each contact
- Integrated wire protectors prevent twisting and breakage of stranded wire during connection
- Modular 12-circuit design can be cut into smaller sections, or stacked end-to-end
- Rugged nylon construction, UL 94V2
- Operating temperature rated to 105°C (221°F)









Electrical Ratings	Wire Range	No. of Circuits	Torque in.- lb.	Dimensions (Inches)						Part No.
				A	B	C	D	E	F*	
20A/300V UL 20A/600V CSA	22 - 12 AWG 20 - 18 AWG	12	3.5	3.787	0.669	0.570	0.315	0.114	0.110	**89-608**
30A/300V UL 30A/600V CSA	22 - 10 AWG 18 - 14 AWG	12	4.4	4.626	0.795	0.670	0.394	0.142	0.134	**89-610**
35A/300V UL/CUL	22 - 10 AWG	12	7.0	5.540	0.937	0.748	0.472	0.154	0.154	**89-612**
50A/300V UL/CUL	20 - 8 AWG	12	12.0	6.220	1.008	0.992	0.531	0.173	0.189	**89-614**

*Plus or minus .004 in.

B-TAP® Insulation-Piercing Tap Connectors

B-TAP® Insulation Piercing Connectors

Safe, dependable and easy. The Buchanan B-TAP® Insulation Piercing Connector offers a breakaway torque nut that guarantees a perfect connection every time, no more guesswork. It simply snaps off when UL torque requirements are met. The grease-filled rubber end caps provide superior water and corrosion resistance, while the insulation-piercing design eliminates downtime and power interruptions.

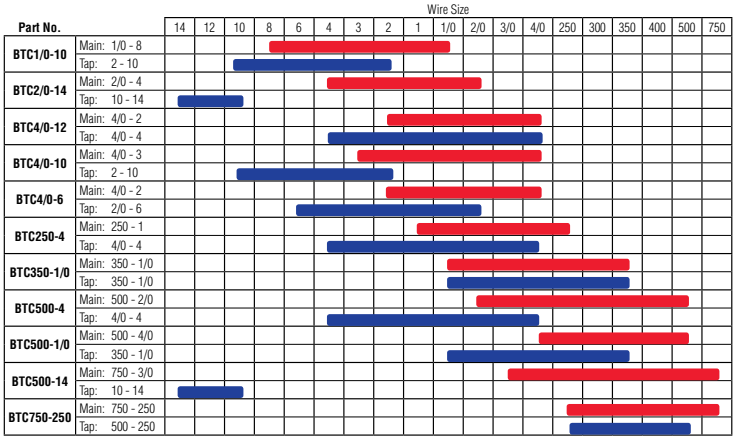
That translates into a 60% installed cost savings compared to split bolts. Installation is easy; all you need is a standard socket or wrench. B-TAP® Connectors can be safely installed on energized systems, eliminating power interruptions and downtime.

B-TAP® Connectors...EASY AS 1, 2, 3.

1. Select proper B-TAP® connector.
2. Position cables. No need to turn off power.
3. Tighten breakaway torque nut with a standard socket or wrench.

To determine the most appropriate B-TAP® connector for a specific main and tap combination, see chart.

Wire Range Chart



Full-line is 600V dual-rated, 194°F (90°C)

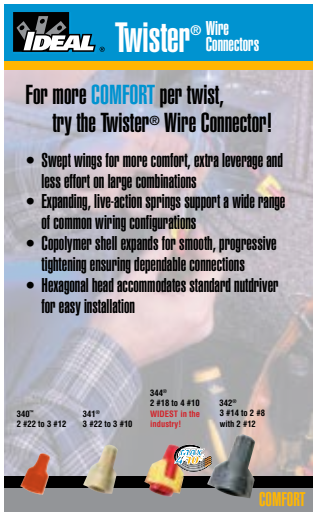
Conductor Range		Voltage Rating	Socket Size (Inches)	Torque (In. Lbs.)	No. of Bolts	Part No.
Run	Tap					
1/0-8	2-10[1]	600V	1/2	80	1	**BTC1/0-10**
2/0-4	10-14[2]	600V	1/2	80	1	**BTC2/0-14**
4/0-2	4/0-4	600V	1/2	160	1	**BTC4/0-2**
4/0-3	2-10[3]	600V	1/2	125	1	**BTC4/0-10**
4/0-2	2/0-6	600V	1/2	160	1	**BTC4/0-6**
250-1	4/0-4	600V	1/2	160	1	**BTC250-4**
350-1/0	350-1/0	600V	5/8	330	2	**BTC350-1/0**
500-2/0	4/0-4	600V	5/8	330	2	**BTC500-4**
500-4/0	350-1/0	600V	5/8	330	2	**BTC500-1/0**
750-3/0	10-14[4]	600V	1/2	80	1	**BTC500-14**
750-250	500-250	600V	5/8	330	2	**BTC750-250**

[1] Tap #2 - #10 Cu solid/stranded; #2 - #10 Al stranded
[2] Tap #10 - #14 Cu solid/stranded; #10 - #14 Al stranded
[3] Tap #2 - #10 Cu solid/stranded; #2 - #8 Al stranded
[4] Tap #10 - #14 Cu solid/stranded; #10 - #12 Al stranded

UL LISTED

IDEAL Connector Sample Packs

P-5305



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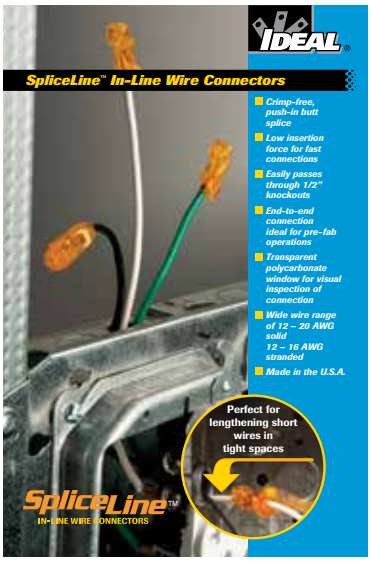
P-5307



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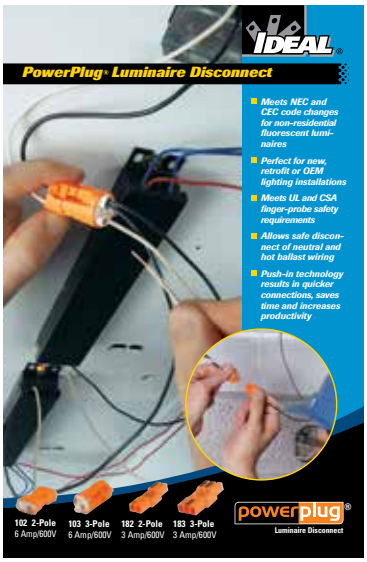

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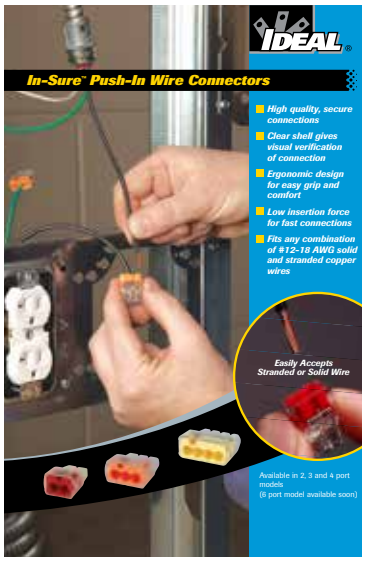

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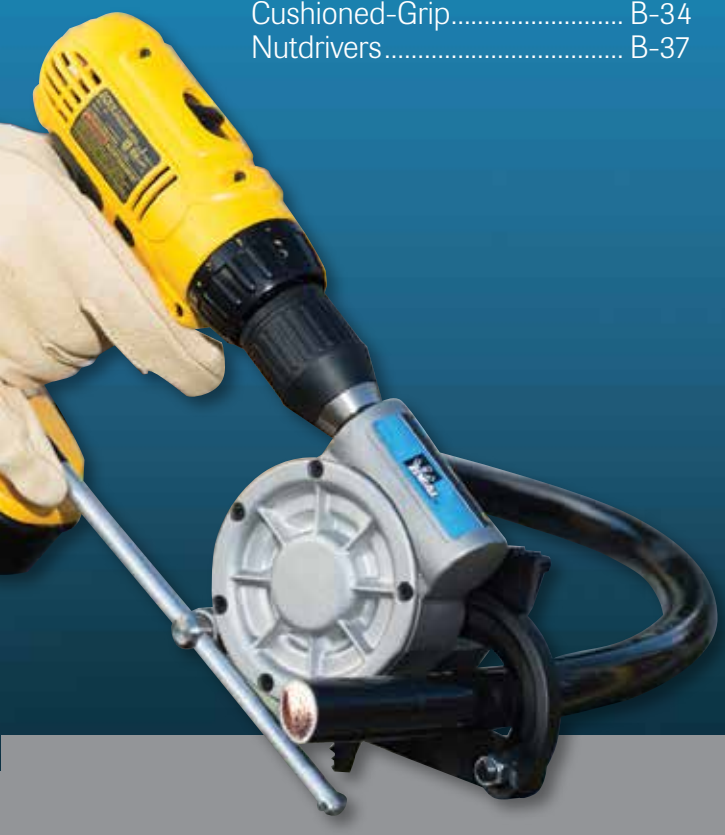


PROFESSIONAL QUALITY, INNOVATIVE SOLUTIONS

When it comes to quality, performance and durability, IDEAL is the professional choice for tools, cutting tools, fish tapes, benders and lubes. The community of professionals know what it takes to succeed in today's electrical world and IDEAL fills those needs with high-quality innovative solutions. The expansion of the IDEAL U.S. manufacturing and engineering supported by strategic international facilities has been providing professional electricians with quality tools since 1916.

Wire Fishing

Type

Blued Steel™

- Laser etched in 12 in. increments to provide instant conduit length
- Stiffer for long runs
- Highest grade carbon steel
- Tensile strength 1,600 lbs.

Gold-Fish®

- Brass-plated coiled steel
- Kink proof
- Tensile strength 700 lbs.

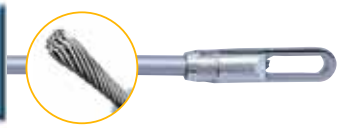
Stainless Steel

- Laser etched in 12 in. increments to provide instant conduit length
- Tensile strength 1,600 lbs.

S-Class®

- Non-conductive fiberglass tape for use around live circuits
- Omni-directional pushing
- 3 tip choices - leader, metal eyelet and non-conductive eyelet
- Pulling strength 500 lbs.

Zoom™



- 19 strands of stainless steel
- Ultra hard nylon jacket adds slipperiness, protects cables and user's hands
- Pulling strength 1,000 lbs.

Volt-Guard

- Non-conductive tape for use around live circuits
- Pulling strength 350 lbs.

Cases

Tuff-Grip™ Pro

- Durable case takes up to 20 ft. drop without breaking
- Full-perimeter handle band helps keep dirt and moisture out
- Superior pull-out and rewind characteristics

Rapid-Pak®

- Inner rotating reel with winding knob for increased labor savings
- Funneled tape opening reduces kinking and tape breakage
- Reversible, hinged knob for right or left handed rewinds

Thumb Winder™

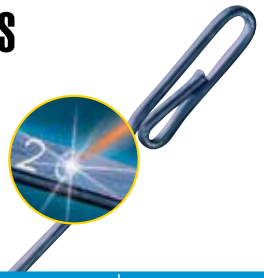
- Convenient 7 in. size for easy tool bag storage
- Durable impact resistant ABS case
- Easy-to-use thumb-operated rewind

⚠ WARNING

Always use approved safety glasses when using this product. Do not use near energized equipment. Electrical shock may occur. Make sure all power is off. Do not use pliers or other tools that may kink, damage, or weaken any round fish tapes such as S-Class®, Nylon or Zoom™. Use only a fish tape puller designed for this purpose. While fish tapes made of fiberglass, nylon or other composite materials are non-conductive, they may have a metal eyelet that is conductive and could be grounded against conduit. Do not use on live electrical circuits. Do not attempt to use fish tape that is fractured or has multiple ends. Keep the fish tape wound in the reel to prevent damage to the tape. Use this product in a safe work position to prevent loss of balance. Never remove the screws from case while fish tape is coiled inside the reel. Failure to follow instructions may result in severe bodily harm or damage to property.

Blued-Steel™ Fish Tapes

- Laser etched in 12 in. increments to provide instant conduit length
- High column strength for longer runs
- Non-oily finish resists rust



Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Thumb-Winder™	Replacement Tapes (No Case)
25	1/8 in. x .045 in.	7 in.	Formed hook	–	**31-012**	–
50	1/8 in. x .045 in.	7 in.	Formed hook	–	**31-010**	–
50	1/8 in. x .060 in.	9 in.	Formed hook	**31-033**	–	**31-004**
60	1/8 in. x .060 in.	12 in.	Formed hook	**31-055**	–	**31-035**
120	1/8 in. x .060 in.	12 in.	Formed hook	**31-056**	–	**31-036**
240	1/8 in. x .060 in.	12 in.	Formed hook	**31-057**	–	**31-038**
50	1/4 in. x .060 in.	12 in.	Formed hook	**31-059**	–	**31-051**
100	1/4 in. x .060 in.	12 in.	Formed hook	**31-058**	–	**31-050**
200	1/4 in. x .060 in.	None	Formed hook	–	–	**31-052**
400	1/4 in. x .060 in.	None	Formed hook	–	–	**31-2128**
—	1/4 in. x .060 in.	None	Formed hook	–	–	**31-2982***

*Bulk roll 750 lbs. (approximately 12,000 ft.)

Stainless Steel Fish Tapes

- Laser etched in 12”increments to provide instant conduit length
- Tape will not rust or corrode in humid environments
- Stainless steel design provides a smooth pay-out

Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tape (No Case)
120	1/8 in. x .060 in.	12 in.	Formed hook	**31-066**	—
240	1/8 in. x .060 in.	12 in.	Formed hook	**31-067**	**31-074**

Zoom™ Fish Tapes

- Great for hard to navigate conduit with multiple bends
- Nylon jacket protects the stainless steel core while adding to the slipperiness of Zoom™

Length (ft.)	Diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes (No Case)
50	3/16 in.	12 in.	Metal Eyelet	**31-090**	**31-091**
100	3/16 in.	12 in.	Metal Eyelet	**31-092**	**31-093**
200	3/16 in.	16 in.*	Metal Eyelet	**31-096**	—

*Traditional handle

S-Class® Fiberglass Fish Tapes

- Non-conductive tape for use around live circuits
- Structural glass core provides a more durable fiberglass tape
- Fiberglass cone with nylon outer jacket provides durability

Length (ft.)	Diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Rapid-Pak®	Replacement Tapes (No Case)
50	3/16 in.	12 in.	Leader	**31-060**	**31-187**	**31-150**
50	3/16 in.	12 in.	Metal Eyelet	**31-062**	**31-190**	**31-160**
50	3/16 in.	12 in.	Non-Conductive Eyelet	**31-086**	**–**	**31-200**
100	3/16 in.	12 in.	Leader	**31-061**	**31-186**	**31-152**
100	3/16 in.	12 in.	Metal Eyelet	**31-063**	**31-189**	**31-162**
100	3/16 in.	12 in.	Non-Conductive Eyelet	**31-087**	**–**	**31-201**
200	3/16 in.	16 in.*	Leader	**31-064**	**31-207**	**31-155**
200	3/16 in.	16 in.*	Metal Eyelet	**31-065**	**31-208**	**31-165**
200	3/16 in.	16 in. *	Non-Conductive Eyelet	**31-088**	**–**	**31-202**

*Traditional handle

Volt-Guard Fish Tapes

- Light-duty non-conductive tape for use around live circuits
- Elliptical design gives the Volt-Guard greater pushing power
- Repair kit available, order #31-541

Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes (No Case)
60	3/16 in. x .094 in.	12 in.	Non-Conductive Eyelet	**31-542**	**31-552**
120	3/16 in. x .094 in.	12 in.	Non-Conductive Eyelet	**31-544**	**31-554**

Gold-Fish® Fish Tape

- Ultra-flexible tape for hard-to-navigate areas
- Brass-plated coils resist rust
- No “memory” – hangs straight after being coiled for long periods

Length (ft.)	Diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tape (No Case)
50	3/16 in.	12 in.	Metal Eyelet	**31-144**	**31-141**

Fish Tape Leaders

- Guides fish tape around bends in conduit
- Handles up to six 10 AWG bare wires
- Pulls up to 500 lbs.

Description	Part No.
Fish Tape Leader for steel or stainless steel tapes	**31-148**
Fish Tape Leader for S-Class® Fiberglass Fish Tape	**31-159**

Fish Tape Swivel Ball

- Swivels to prevent wires from twisting during pull
- Designed for use on 1/8 in. steel or stainless steel tapes
- Eyelet holds up to four 10 AWG bare wires

Description	Part No.
Fish Tape Swivel Ball	**31-085**

Tuff-Grip™ Pro Accessories

- Replacement includes: Fish Tape Case (2 halves) and Handle (1)

Description	Part No.
Fish Tape Parts Kit	**KB-0173**
Screws (not included, kit requires 4)	**LA-4218**

Screws not included, must be ordered separately.

Fish Tape Non-Conductive Tip Replacement Kits

31-203

31-541

- Easy to apply
- Each kit includes two eyelets & adhesive

Description	Part No.
Volt-Guard Fish Tape Repair Kit	**31-541**
S-Class® Fish Tape Repair Kit	**31-203**

Fish Tape Field Application Repair Kits

- For use on S-Class® & Zoom™ Fish Tapes
- Crimps on new eyelet or leader in minutes
- Dies can be used with Crimpmaster™ Crimp Tool
- Connection guaranteed to withstand 500 lbs.

31-158

31-166

31-156

Description	Part No.
Field Application Kit includes: Crimpmaster™ Crimp Tool frame, die set, S-Class® eyelets (2), S-Class® leaders (2), Zoom™ eyelets (2) & instant adhesive	**31-156**
Die Set Kit includes: eyelets (2), leaders (2) & instant adhesive (for those who already have a Crimpmaster™ Crimp Tool)	**31-164**
Replacement eyelets (4) for S-Class® Fish Tapes & adhesive	**31-158**
Replacement leaders (4) for S-Class® Fish Tapes & adhesive	**31-159**
Replacement eyelets (2) for Zoom™ Fish Tapes	**31-094**
Die Set Only (for those who already have a Crimpmaster™ Crimp Tool)	**31-166**

Tuff-Rod™ Regular Flex Fishing Poles

- Strong, lightweight, flexible extendable fiberglass rod kits
- Use to reach and pull wires over suspended ceilings, in cable trays or through interior walls
- Packaged in clear tubes for protection and long-term storage
- 1/4 in. white fiberglass
- Extra stiffness for added control when maneuvering wires

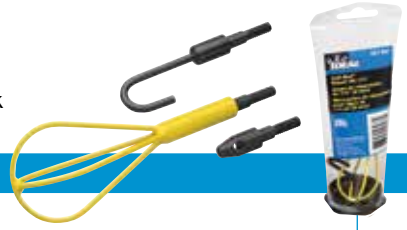
Description	Length	Diameter	Sections	Part No.
Fixed bullet nose and threaded J hook	12 ft. total	1/4 in.	3 ea. 4 ft.	**31-611**
Fixed bullet nose and threaded J hook	24 ft. total	1/4 in.	4 ea. 6 ft.	**31-612**
Replacement Rods	4 ft. x 12	1/4 in.	12 ea. 4 ft.	**31-643**
Replacement Rods	6 ft. x 12	1/4 in.	12 ea. 6 ft.	**31-644**

Tuff-Rod™ Extra Flex Glow Fishing Poles

- Strong, lightweight, flexible extendable fiberglass rod kits
- Use to reach and pull wires over suspended ceilings, in cable trays or through interior walls
- Packaged in clear tubes for protection and long-term storage
- 3/16 in. pale green luminescent fiberglass
- Glow-in-the-dark material for easy use in attics, basements and other dimly lit areas

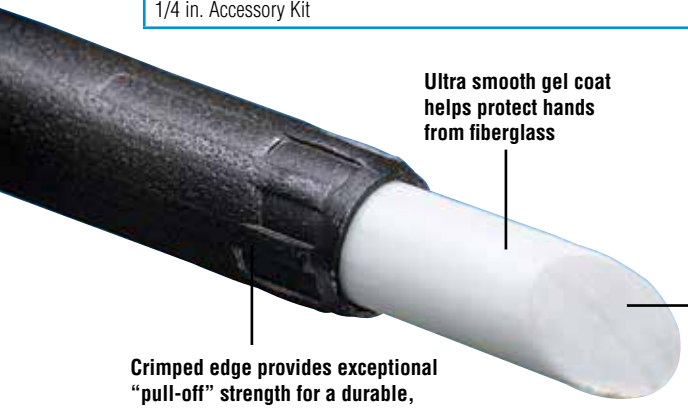
Description	Length	Diameter	Sections	Part No.
Fixed bullet nose and threaded J hook	12 ft. total	3/16 in.	3 ea. 4 ft.	**31-631**
Fixed bullet nose and threaded J hook	30 ft. total	3/16 in.	5 ea. 6 ft.	**31-633**
Replacement Rods	4 ft. x 12	3/16 in.	12 ea. 4 ft.	**31-647**
Replacement Rods	6 ft. x 12	3/16 in.	12 ea. 6 ft.	**31-648**

Tuff-Rod™ Accessory Kits



- Includes replacement heads: one threaded bullet nose, one threaded J hook and one threaded whisk

Description	Part No.
3/16 in. Accessory Kit	**31-651**
1/4 in. Accessory Kit	**31-652**



Wire Lubricants & Accessories

Commercial Wire Pulling

Application Location	Finished Construction	New Construction
	Indoors/Outdoors	
Temperature Range	40°F - 120°F 4°C - 49°C	
Length of Run	Up to 75 ft.	Up to 1,200 ft.
Installation Time	8 hrs.	24 hrs.
Best Choice	Use: ClearGlide®	Use: Yellow 77® and Yellow 77® Plus

Utility Wire Pulling

Indoors or Outdoors	Outdoors Only	Outdoors	Indoors or Outdoors
40°F - 120°F 4°C - 49°C	-28°F - 40°F -33°C - 4°C	40°F - 120°F 4°C - 38°C	40°F - 140°F 4°C - 82°C
Up to 250 ft. 24 hrs.	Up to 250 ft. 72 hrs.	Up to 250 ft. 24 hrs.	Up to 250 ft. 24 hrs.
Use: Aqua-Gel® II	Use: Aqua-Gel® CW	Use: Aqua-Gel® IIP	Use: Velocity™

Selection Guide

	ClearGlide® Wire Pulling Lubricant	Yellow 77® Wire Pulling Lubricant	Yellow 77® Plus Wire Pulling Lubricant	Aqua-Gel® II Wire Pulling Lubricant	Aqua-Gel® IIP Wire Pulling Lubricant	Aqua-Gel® CW Wire Pulling Lubricant	Velocity™ Wire Pulling Lubricant
Color	Clear	Yellow	Yellow	Blue	Blue	Pink	Cream
Base	Polymer	Wax	Wax	Polymer	Polymer	Polymer	Polymer
Average Coefficient of Friction*	.23	.17	.16	.19	.19	.19	.16
Stability Range	32°F – 180°F (0°C – 82°C)	32°F – 130°F (0°C – 54°C)	32°F – 190°F (0°C – 88°C)	32°F – 180°F (0°C – 82°C)	32°F – 180°F (0°C – 82°C)	-28°F – 190°F (-33°C – 82°C)	40°F – 140°F (4°C – 82°C)
Application Temperature Range	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	-28°F – 40°F (-33°C – 4°C)	25°F – 140°F (-3.9°C – 60°C)
Compatibility (Cable Types):							
Rubber	•	•	•	•	•	•	•
Neoprene	•	•	•	•	•	•	•
Nylon	•	•	•	•	•	•	•
PVC	•	•	•	•	•	•	•
High-density or cross-linked polyethylene	•	•	•	•	•	•	•
Low-density polyethylene	•		•	•	•	•	•
Semiconducting jacket	•		•	•	•	•	•
Hypalon	•	•	•	•	•	•	•

*Results from NEETRAC, an independent testing laboratory affiliated with The Georgia Institute of Technology.

Recommended Qty. of Lubricant Formula

Q = .0015 x L X D
Q = Quantity of recommended lube in gallons
L = Length of pull in feet
D = Nominal ID of conduit in inches

This formula is used as a guideline on estimating the quantity of lube needed for various jobs. Many factors go into a cable pull, however, this formula is just based on length of the pull and diameter of the conduit. Increase quantities for the following troubles:

- Stiff, heavy cable
- Rough, old or dirty conduits
- High percent conduit fill
- Pulls with several bends
- High temperatures
- Not food grade

Yellow 77® Plus Wire Pulling Lubricant

- Rapid Glide™ polytetrafluoroethylene additive provides greater lubricity than other wax-based lubricants – great for tough pulls
- Safe to use with all cable types
- Clings to cable throughout long runs, even where moisture is present
- Remains stable in high temperatures – usable from 32°F to 190°F (-1°C to 88°C)
- Dries slowly to a thin, non-conductive film that won't harden in conduit
- Creamy texture applies easily and uniformly by hand or brush
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-398**
1-gal. Bucket	**31-391**
5-gal. Bucket	**31-395**

Yellow 77® Wire Pulling Lubricant

- The #1 brand of wire pulling lubricant since 1959 – the perfect general purpose lube
- Wax-based formula provides superior lubricity
- Safe to use with most cable types except low-density polyethylene and semi-conducting jackets
- Clings to cable throughout long pulls, even where moisture is present
- Won't break down or separate after repeated exposure to freezing temperatures
- Dries to a thin, non-conductive film
- Creamy texture applies easily and uniformly by hand or brush
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-358**
1-gal. Bucket	**31-351**
5-gal. Bucket	**31-355**
55-gal. Drum	**31-365**

ClearGlide® Wire Pulling Lubricant

- Clear and colorless for quick and easy clean-up – great for indoor and retrofit pulls
- Exceptional lubricity for super-fast pulls
- Polymer-based formula is perfect for all electrical and datacomm applications
- Safe to use with all cable types
- Controlled evaporation rate is ideal for shorter runs
- Remains stable over wide temperature ranges – usable from 32°F to 180°F (-1°C to 82°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-388**
1-gal. Bucket	**31-381**
5-gal. Bucket	**31-385**
55-gal. Drum	**31-2143**

Aqua-Gel® II Cable Pulling Lubricant

- Polymer-based formula provides maximum tension reduction in high-stress electrical and communication cable-pulling operations
- Compatible with most cable types except composite rubber
- Cleans up easily with soap and water
- Clings to cable throughout long pulls
- Remains stable over wide temperature range — usable from 28°F to 180°F (-2°C to 88°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive
- For outdoor use only

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-378**
1-gal. Bucket	**31-371**
5-gal. Bucket	**31-375**
55-gal. Drum	**31-3855**

Aqua-Gel® IIP Cable Pulling Lubricant

- Features the same excellent qualities as Aqua-Gel® II Cable Pulling Lubricant with a lower viscosity for easy pouring and pumping
- Pourable formula clings to cable – eliminates hand application for a clean and safe job
- Compatible with most cable types, except composite rubber
- Cleans up easily with soap and water
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-gal. Jug	**31-421**
5-gal. Bucket	**31-425**
55-gal. Drum	**31-435**

Aqua-Gel® CW Cable Pulling Lubricant

- Features the same excellent qualities as Aqua-Gel® II Cable Pulling Lubricant with a lower temperature range for use outdoors in cold weather
- Polymer-based, cold-weather formula remains stable in storage from -28°F to 190°F (-33°C to 82°C)
- Formulated for exterior use in cold weather conditions
- Cleans up easily with soap and water
- Clings to cable throughout long pulls
- Well-suited for hand or poured applications
- Environmentally safe — non-toxic, non-flammable and non-corrosive
- Not recommended for indoor use

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-298**
1-gal. Jug	**31-291**
5-gal. Bucket	**31-295**

Velocity™ Wire Pulling Lubricant

- High cling factor
- Maximum friction reduction
- Specification grade
- Compatible with all popular cable types
- Temperature stable
- Non-combustible residue
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-276**
1-gal. Bucket	**31-277**
5-gal. Bucket	**31-278**

Duct Seal

- Seals around junction boxes, flashings and service entrances
- Permanently soft, non-toxic compound can be painted immediately after application
- Won't adversely affect other plastic materials or corrode metals

UL LISTED

Description	Quantity	Part No.
1 lb. Block	Carton of 10	**31-601**
5 lb. Block	Carton of 10	**31-605**

For a Safety Data Sheet on Noalox® and other products visit us at www.idealind.com

Noalox® Anti-Oxidant

- Anti-oxidant compound improves efficiency and service life of aluminum electrical applications
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inner-strand and inner-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to minimize further oxidation
- For use with pressure-type wire connectors including lugs, taps, service entrances and split-bolts
- Reduces galling and seizing when applied on aluminum conduit joints promoting good ground continuity

UL LISTED

Description	Part No.
1/2-oz. Tube	**30-024**
4-oz. Squeeze Bottle	**30-026**
8-oz. Squeeze Bottle	**30-030**
8-oz. Brush Cap	**30-031**
1-gal. Bucket	**30-032**
5-gal. Bucket	**30-040**
55-gal. Drum	**30-1216**

Powr-Fish® Pull Line

- White with blue tracer for easy identification
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use

Description	Tensile Strength	Length	Part No.
Powr-Fish® Pull-Line	210 lbs.	6,500 ft./ Bucket	**31-340**
Powr-Fish® Pull-Line	210 lbs.	500 ft./ Canister	**31-348**

Valu-Line™ Pull Line

- White with gray tracer for easy identification
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use

Description	Tensile Strength	Length	Part No.
Valu-Line™ Pull-Line	190 lbs.	6,500 ft./ Bucket	**31-338**

Conduit Measuring Tape

- Provides quick and accurate measurement of conduit runs
- Easy-to-read markings in sequential one-foot increments
- 160 lb. tensile strength
- Pulls rope through raceways without stretching
- Will not rot or mildew

Description	Tape Width	Length	Part No.
Conduit Measuring Tape	.188 in.	3,000 ft.	**31-347**

Powr-Fish® Pull Line

- White with red tracer for easy identification
- 500 lb. tensile, our highest tensile-rated pull-line
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use

Description	Tensile Strength	Length	Part No.
Powr-Fish® Pull-Line	500 lbs.	2,200 ft./ Bucket	**31-344**

3-in-1 Premise MULETAPE®

- Reduces installation time and saves money on premise jobs
- Blow, measure and pull with single product
- Imprinted with sequential footage or meter markings
- Fewer installation steps, significant material and labor savings

Description	Pulling Strength	Tape Width	Length/ Bucket	Part No.
3-in-1 Premise MULETAPE®	400 lb.	1/4 in.	4,500 ft.	**31-314**
	1,800 lb.	1/2 in.	1,300 ft.	**31-315**

MULETAPE® is a registered trademark of NEPTCO, INC.

Foam Carriers

- Attach to a suitable line to serve as a piston – clears out water or debris as they travel through conduit
- Durable foam construction for repeated use and long life
- For use with any type of blower or vacuum system

Description	Quantity	Part No.
1/2 in. Foam Carrier	5/bag	**31-466**
3/4 in. Foam Carrier	5/bag	**31-467**
1 in. Foam Carrier	5/bag	**31-468**
1-1/4 in. Foam Carrier	3/bag	**31-469**
1-1/2 in. Foam Carrier	2/bag	**31-470**
2 in. Foam Carrier	1/bag	**31-471**
2-1/2 in. Foam Carrier	1/bag	**31-322**
3 in. Foam Carrier	1/bag	**31-323**
3-1/2 in. Foam Carrier	1/bag	**31-324**
4 in. Foam Carrier	1/bag	**31-325**
5 in. Foam Carrier	1/bag	**31-326**
6 in. Foam Carrier	1/bag	**31-327**

Pro-Pull™ Rope

- Low-friction polypropylene rope slides easily through conduit
- Both rope ends looped
- Non-sliver surface can be handled without gloves
- Will not rot or mildew
- Rugged, lightweight construction

Description	Tensile Strength	Length	Part No.
1/4 in.	1,125 lbs.	250 ft./Reel	**31-839**
1/4 in.	1,125 lbs.	600 ft./Reel	**31-840**
1/4 in.	1,125 lbs.	1,000 ft./Reel	**31-841**
3/8 in.†	2,430 lbs.	250 ft./Reel	**31-844**
3/8 in.†	2,430 lbs.	600 ft./Reel	**31-845**
3/8 in.†	2,430 lbs.	1,200 ft./Reel	**31-846**
1/2 in.†	3,780 lbs.	250 ft./Reel	**31-849**
1/2 in.†	3,780 lbs.	600 ft./Reel	**31-850**
1/2 in.†	3,780 lbs.	1,200 ft./Reel	**31-851**
5/8 in.†	5,580 lbs.	600 ft./Reel	**31-853**
5/8 in.†	5,580 lbs.	1,200 ft./Reel	**31-854**
3/4 in.†	7,650 lbs.	300 ft./Reel	**31-855**
3/4 in.†	7,650 lbs.	600 ft./Reel	**31-856**
3/4 in.†	7,650 lbs.	1,200 ft./Reel	**31-857**

† Eye splice on working end.

Line Packages

- One-piece pull line and foam tip unwind as they move through conduit
- One-piece construction for fast, easy use with no knots or foam carriers to retrieve
- Line tensile strength of 17 lbs.
- For use with any type of blower or vacuum system

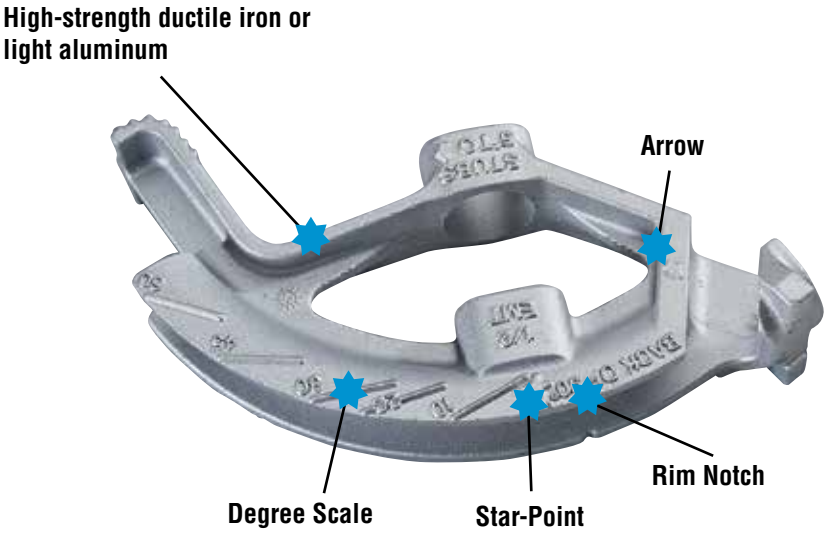
Description	Color	Quantity	Part No.
Line Package, 1/2 in. x 75 ft.	Red	10/bag	**31-472**
Line Package, 1/2 in. x 150 ft.	Red	10/bag	**31-473**
Line Package, 3/4 in. x 200 ft.	Yellow	5/bag	**31-475**
Line Package, 3/4 in. x 300 ft.	Yellow	5/bag	**31-476**
Line Package, 3/4 in. x 450 ft.	Yellow	5/bag	**31-477**
Line Package, 1 in. x 200 ft.	White	5/bag	**31-479**
Line Package, 1 in. x 300 ft.	White	5/bag	**31-480**
Line Package, 1 in. x 450 ft.	White	5/bag	**31-481**

Benders

- Available in ductile iron and aluminum heads
- Exceptional, durable, materials for extra strength
- Reinforced at stress points to provide longer life
- Markings are raised and cast into the bender body on both sides for easy visibility
- Deeply serrated step helps prevent slippage when applying force
- Grooved internal hook surface helps prevent conduit from slipping
- Flat hook surface provides stable starting point
- Desirable bending system

Handles

- Rugged, steel construction for long-term durability
- Baked-on blue enamel finish resists corrosion and enhances visibility
- Convenient bending guide for offset bends



Ductile Iron Benders

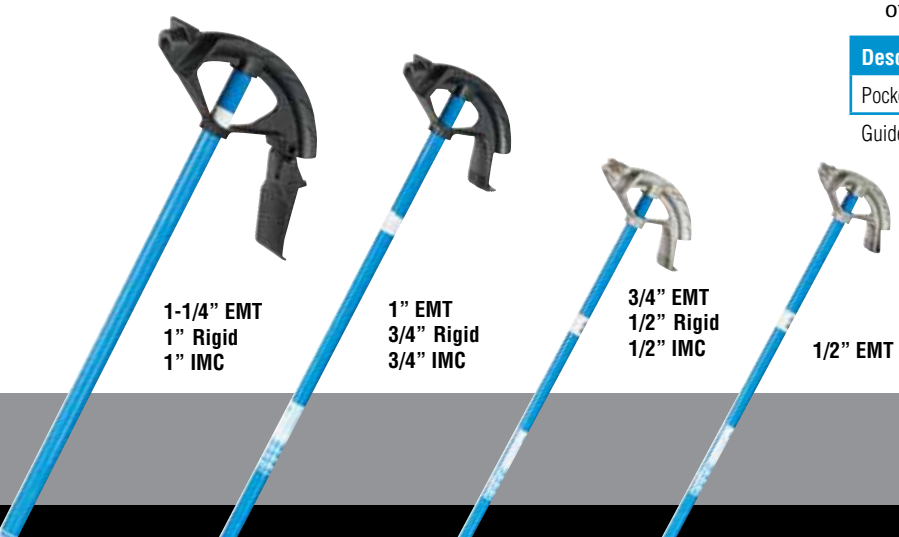
- Withstands a lifetime of heavy use
- Ductile iron material is stronger than malleable iron or aluminum

Conduit Type and Size	Part No. (head only)	Part No. (handle only)	Part No. (head and handle)
1/2 in. EMT	**74-001**	**74-019**	**74-026**
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	**74-002**	**74-019**	**74-027**
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	**74-003**	**74-020**	**74-028**
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	**74-006**	**74-021**	**74-034**

Aluminum Benders

- Lightweight aluminum for easy handling
- Strong enough for every day use

Conduit Type and Size	Part No. (head only)	Part No. (handle only)	Part No. (head and handle)
1/2 in. EMT	**74-031**	**74-019**	**74-046**
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	**74-032**	**74-019**	**74-047**



The BenderBoot™ patented foot provides stability and leverage while its grooved rubber foot pad helps prevent slippage.

BenderBoot™

- Grooved patented foot provides stability and leverage
- Santoprene® tread and hand grip provides support for saddle and offset bends
- Easy push-on assembly to 1/2 in. and 3/4 in. bender handles

Description	Part No.
BenderBoot™	**74-037**

Santoprene® is a registered trademark of Exxon Mobil Corporation.

Pocket Bender Guide

- Convenient pocket-sized reference guide
- Includes simple, concise bending techniques for precision stubs, back-to-back, offset and saddle bends

Description	Part No.
Pocket Bender Guide	**P-100**

Guide can be downloaded from our website at www.idealind.com.

Wire Strippers

Invented and manufactured at our Sycamore, Illinois facility, the T®-Stripper Wire Stripper line is the leading brand name in the world.

Made in U.S.A.

Kinetic® Reflex™ T®-Stripper Wire Stripper

Ergonomic handles with Santoprene® thermoplastic grip and Thumb Valley™ make this the premier wire stripper in the market.

- *Thumb Valley™ Protection*
- *Pocket Locket Locking Hasp*
- *Shear Cut Bolt Cutters*
- *Santoprene® Thermoplastic Grips*
- *Ergo Handles*

Kinetic® Super Wire Stripper

The ergonomic design and patented Santoprene® thermoplastic grip wicks away perspiration and reduces muscle fatigue. The Thumb Valley™ makes stripping easy and accurate.

- *Thumb Valley™ Protection*
- *Pocket Locket Locking Hasp*
- *Shear Cut Bolt Cutters*
- *Santoprene® Thermoplastic Grips*
- *Curved Handles*

Reflex™ Super T®-Stripper Wire Stripper

The ergonomic design with curved handles reduces wrist fatigue. Features 6/32 and 8/32 self-chasing, bolt cutting holes and a locking pawl for safe storage.

- *Locking Pawl*
- *Bolt Cutting*
- *Extended Textured Comfort*
- *Ergo Handles*

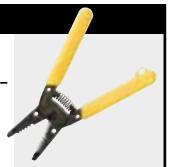
Reflex™ Premium T®-Stripper Wire Stripper

Designed for total-comfort and wire stripping. Ergonomic handles fit an electrician's natural grip and reduces hand fatigue. Textured, slip-resistant sleeves cushion thumb and fingers.

- *Extended Textured*
- *Ergo Handles*

T®-Stripper Wire Stripper

The industry standard for decades. Compact, lightweight and easy to use. Features precision-ground, knife-type blades, built-in looping holes, wire cutters and a convenient plier nose.



- *Straight Handles*

T®-Stripper Wire Stripper Selection Guide

Hole Size		#45-100's	#45-400's	#45-600's	#45-700's	#45-900's
6 10 12 14 16 18 20 22 24 26 28 30	Solid	45-125	45-417	—	—	—
8 10 12 14 16 18 20 22 24 26 28 30 32	Stranded					
14 16 18 20 22 24	Solid	45-121	45-416	—	45-716	—
16 18 20 22 24 26	Stranded					
10 12 14 16 18	Solid	45-120	45-415	—	45-715	45-915
12 14 16 18 20	Stranded					
8 10 12 14 16	Solid	—	—	45-615	—	—
10 12 14 16 18	Stranded					
6 8 10 12 14	Solid	45-124	45-418	45-618	45-718	45-918
8 10 12 14 16	Stranded					
	T®-Cutter	45-123	—	—	—	—

Santoprene® is a registered trademark of Exxon Mobil Corporation.

T®-Stripper Wire Strippers

- Form-ground, knife-type blades for accurate, easy stripping without nicking conductor
- Laser-etched wire gauge for easy-to-read visibility
- Spring-loaded automatic opening
- Corrosion-resistant, black oxide finish
- Tough steel construction

Description	Solid	Stranded	Part No.
T®-5 T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	**45-120**
T®-6 T®-Stripper Wire Stripper	14-24 AWG	16-26 AWG	**45-121**
T®-7 T®-Stripper Wire Stripper	22-30 AWG	24-32 AWG	**45-125**
T®-8 T®-Stripper Wire Stripper	6-14 AWG	8-16 AWG	**45-124**
T®-Stripper Wire Stripper – Metric	0,75-6mm²		**45-120-341**
T®-Stripper Wire Stripper – Metric	0,5-4mm²		**45-125-341**

Kinetic® Super Wire Strippers

- Non-slip textured grips and thumb rest
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easy and accurate

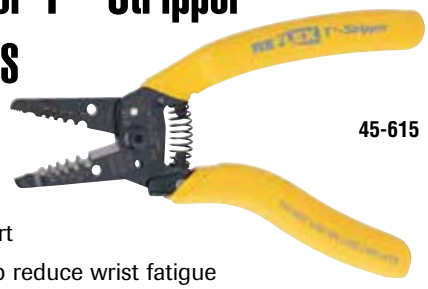
Description	Solid	Stranded	Part No.
Kinetic® Super Wire Stripper	10-18 AWG	12-20 AWG	**45-715**
	14-24 AWG	16-26 AWG	**45-716**
	6-14 AWG	8-16 AWG	**45-718**

Kinetic® Reflex™ T®-Stripper Wire Strippers

- Non-slip textured grips and thumb rest
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easy and accurate

Description	Solid	Stranded	Part No.
Kinetic® Reflex™ T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	**45-915**
	6-14 AWG	8-16 AWG	**45-918**

Reflex™ Super T®-Stripper Wire Strippers



- 6/32 and 8/32 self-chasing screw-cutting holes
- Ergonomic design for maximum comfort
- Curved handles help reduce wrist fatigue
- Textured sleeves with extra cushioning for added comfort

Description	Solid	Stranded	Part No.
Reflex™ Super T®-Stripper Wire Stripper	8-16 AWG	10-18 AWG	**45-615**
	8-14 AWG	8-16 AWG	**45-618**
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	12-2 and 14-2 AWG	—	**45-621**

Reflex™ Premium T®-Stripper Wire Strippers

- Ergonomic design for maximum comfort
- Curved handles help reduce wrist fatigue
- Textured sleeves with extra cushioning for added comfort

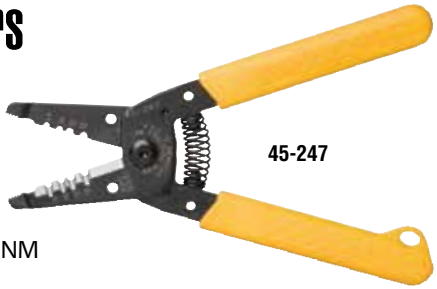
Description	Solid	Stranded	Part No.
Reflex™ Premium T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	**45-415**
	14-24 AWG	16-26 AWG	**45-416**
	22-30 AWG	24-32 AWG	**45-417**
	6-14 AWG	8-16 AWG	**45-418**
Reflex™ Premium T®-Stripper – Metric	0,5mm²-4,0mm²		**45-425-341**

T-90™ Wire Stripper

- Patented bent nose design for easy, long reach into confined spaces
- Quickly removes jacket with precision cut and straight pull
- Less fatigue with straight pull versus the side twist wrist motion
- Corrosion-resistant, black oxide finish
- Tough steel construction with sheer-type blades

Description	Solid	Stranded	Part No.
T-90™ Bent Nose 12-2 NM Wire Stripper	12 - 2 AWG	18 AWG	**45-649**

NM Cable Dual-Hole T®-Stripper Wire Strippers



- Stripping holes for stripping two 12 AWG or two 14 AWG wires simultaneously
- Ability to strip both conductor wires of NM cable at one time

Description	Solid	Part No.
Premium T®-14 T®-Stripper Wire Stripper	12 or 14 AWG	**45-247**
14/2 NM Cable T®-Stripper Wire Stripper		**45-248**
12/2 NM Cable T®-Stripper Wire Stripper		**45-249**

1000V Insulated Wire Stripper

- UL Classified
- High visibility, double insulated handles provide safety, comfort and control

Description	Part No.
1000V Insulated Wire Stripper	**45-9120**

7-in-1 Stripper

- Versatile, seven-function tool features precision-ground stripping blades, cushioned grips and plier nose
- Crimps bare and insulated terminals for 10–22 AWG wire, RG-59 coax connectors and 7 to 8mm auto ignition connectors
- Cuts unhardened wire, bolts and screws (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads
- Cuts stranded, solid, NM wire and U.F. wire to 8 AWG

Description	Solid	Stranded	Part No.
7-in-1 Stripper	8 - 16 AWG	10 - 18 AWG	**45-777**

V-Notch Stripper

- Cuts copper or aluminum wire, solid or stranded
- Rotating cam wheel adjusts to strip 10-24 AWG wire
- Looping holes for solid wire

Description	Part No.
V-Notch Stripper	**45-101**

Lil' Ripper Stripper™

- Rips outer jacket of NM cable cleanly and quickly
- Clips outer sheathing to remove excess wire jacket
- V-Notch strips inner wires
- Looping holes loop wire for screw-on connections

Description	Part No.
Lil' Ripper Stripper™	**45-025**

Underground Feeder (UF) Cable Stripper

- Self-adjusting stripping blades automatically select proper position
- Strips 12/2 AWG solid to 14/2 AWG Underground Feeder (UF) Cable
- Strips Twin and Earth cable
- Open-throat construction allows unlimited strip length
- Neatly removes outer cable sheath and inner wire sheathing to desired lengths
- Lightweight, ergonomic design helps reduce user fatigue

Description	Part No.
Underground Feeder Cable Stripper	**45-235**

Cable Ripper

- Slits NM cable wire sheathing before stripping wires
- Quick, clean and easy end or mid-run removal of jacket
- Convenient built-in wire gauge

Description	Part No.
Side Entry Cable Ripper	**45-118SRS**

T®-Cutter Wire Cutter

- Hardened steel, sheer-type blades
- Spring-loaded automatic opening
- Convenient plier nose for extra gripping strength
- Corrosion-resistant, black oxide finish
- Tough steel construction

Description	Part No.
T®-Cutter Wire Cutter	**45-123**

Data T®-Cutter Wire Cutter

- Cuts round communication cable and maintains cable geometry for better cable performance
- Cuts multi-pair cable up to .500 in. (12.7mm) and coaxial cable up to RG-9/U
- Suitable for soft cables (not ACSR)
- Steel reinforced center conductors can be trimmed with bolt cutting holes
- Cushioned comfort grip handles
- Locking latch keeps tool closed in pouch

Description	Part No.
Data T®-Cutter	**45-074**

Combo Tool

- Convenient, four-function tool features precision-ground stripping holes and knife-to-anvil cutting blades
- Crimps bare and insulated terminals
- Cuts unhardened bolts (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads

Description	Solid	Stranded	Part No.
Combo Tool	8-20 AWG	10-22 AWG	**30-428**

Multi-Crimp Strip Tool

- Cuts wire
- Crimps insulated and non-insulated wires
- Cuts bolts
- Strips 10-22 AWG wire

Description	Part No.
Multi-Crimp Strip Tool	**45-778**

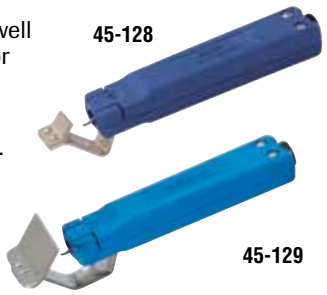
Coax Strip and Crimp Tool

- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals

Description	Part No.
Coax Strip & Crimp Tool	**30-433**

Round Cable Slitting and Ringing Tools

- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 1.50 in. O.D.
- Blade adjusts for jacket thicknesses up to .125 in.
- Spare blade in handle base



Description	Replacement Blades	Part No.
Cable Stripper for 1/4 in. to 3/4 in. O.D.	L-7486*	**45-128**
Cable Stripper for 3/4 in. to 1-1/2 in. O.D.		**45-129**

*Two Blades/package

Made in the U.S.A.

At a time when some companies are taking manufacturing jobs overseas, our commitment to American-made quality and homegrown manufacturing has never been stronger. At IDEAL, we are committed to American quality and the American electrician.

With forging facilities in Colorado Springs, Colorado and our efficient manufacturing and distribution center in Sycamore, Illinois, IDEAL Electrical pliers are crafted with American steel right here in the U.S.A. for quality and performance you can trust.

IDEAL Electrical is proud to be part of IDEAL INDUSTRIES INC., a family-owned, blue-collar American company that believes in serving the hardest working tradesmen in the world.

Colorado Springs, CO

Sycamore, IL

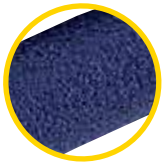
Pottstown, PA

Pliers

- Custom alloyed, premium quality tool steel provides excellent cutting performance and commercial use durability
- Precision ground knife-to-knife cutting blades for accurate, quick wire cutting
- Hardened and tempered body and cutting edges for optimum performance
- High leverage pivot design provides great cutting and gripping power

Made in U.S.A.

Grips



Heavy-Duty Dipped Grip

Smart-Grip™ Dual Durometer Molded

1000V Grip

Color-coding and **FastFinder™** letter markers on SmartGrip™ handles provide quick tool identification, even by touch!

LIMITED LIFETIME IDEAL WARRANTY

Lineman's

Long Nose

Tongue & Groove

Cable Cutter

Diagonal

Crimper

Slip-Joint

Lineman's Pliers

- Knife-to-knife blades provide excellent cutting performance
- Cuts hardened wire, bolts and stainless steel wire

Description (Smart-Grip™ Handles)	Part No.
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
Description (Dipped-Grip Handles)	**Part No.**
9-1/2 in. Lineman's Plier w/New England nose, crimping die and fish tape puller	**30-430**

Long-Nose Pliers

- Narrow profile head designed for working in tight areas
- Serrated jaws provide secure gripping surface
- Drop-forged, high-carbon steel construction
- Blades provide excellent cutting performance
- Laser-hardened blades cut hardened wire, bolts and stainless steel wire

Description (Smart-Grip™ Handles)	Part No.
8-1/2 in. Long-Nose Pliers w/Cutter	**35-3038**
Description (Dipped-Grip Handles)	**Part No.**
6 in. Long-Nose Pliers w/Cutter	**35-036**
8-1/2 in. Long-Nose Pliers w/Cutter	**35-038**

Diagonal-Cutting Pliers

- Knife-to-knife blades provide excellent cutting performance
- High-leverage design provides more cutting power
- Models 35-029 and 35-3029 feature a convenient angled head for hard-to-reach areas and rocking out nails

Description (Smart-Grip™ Handles)	Part No.
8 in. Diagonal-Cutting Pliers	**35-3028**
8 in. Diagonal-Cutting Pliers w/angled head	**35-3029**
Description (Dipped-Grip Handles)	**Part No.**
8 in. Diagonal-Cutting Pliers	**35-028**
8 in. Diagonal-Cutting Pliers w/angled head	**35-029**

Tongue & Groove Pliers

- Reinforced flange protects against breakage
- Drop-forged, high-carbon steel construction

Description (Smart-Grip™ Handles)	Jaw Opening	Part No.
9-1/2 in. Tongue & Groove Pliers	2 in.	**35-3420**
Description (Dipped-Grip Handles)	**Jaw Opening**	**Part No.**
9-1/2 in. Tongue & Groove Pliers	2 in.	**35-420**
7 in. Tongue & Groove Pliers	1 in.	**35-426**
10-1/2 in. Tongue & Groove Pliers w/V-Jaw	2 in.	**35-430**
12 in. Tongue & Groove Pliers	2-1/4 in.	**35-440**

Cable Cutters

- Drop-forged, high-carbon steel construction
- Precision-ground, hardened cutting edges provide accurate cuts without cable distortion
- Cuts 2/0 copper and 4/0 aluminum (not for use on ACSR)

Description (Smart-Grip™ Handles)	Part No.
9-1/2 in. Cable Cutter	**35-3052**
Description (Dipped-Grip Handles)	**Part No.**
9-1/2 in. Cable Cutter	**35-052**

Multi-Crimp Tools

- Crimps bare or insulated terminals and splices on 10–22 AWG wire
- Knife-to-anvil blades provide long-lasting cutting performance
- High leverage for easy crimping and cutting
- Drop-forged, high-carbon steel construction

Description (Smart-Grip™ Handles)	Part No.
9-3/4 in. Multi-Crimp Tool	**30-3429**
Description (Dipped-Grip Handles)	**Part No.**
9-3/4 in. Multi-Crimp Tool	**30-429**

Slip-Joint Pliers

- Two position slip joints fit large and small jobs
- Dipped comfort-grip handles for a secure grip
- Flush rivet

35-100

Description	Part No.
6 in. Slip Joint Pliers	**35-100**
8 in. Slip Joint Pliers	**35-102**

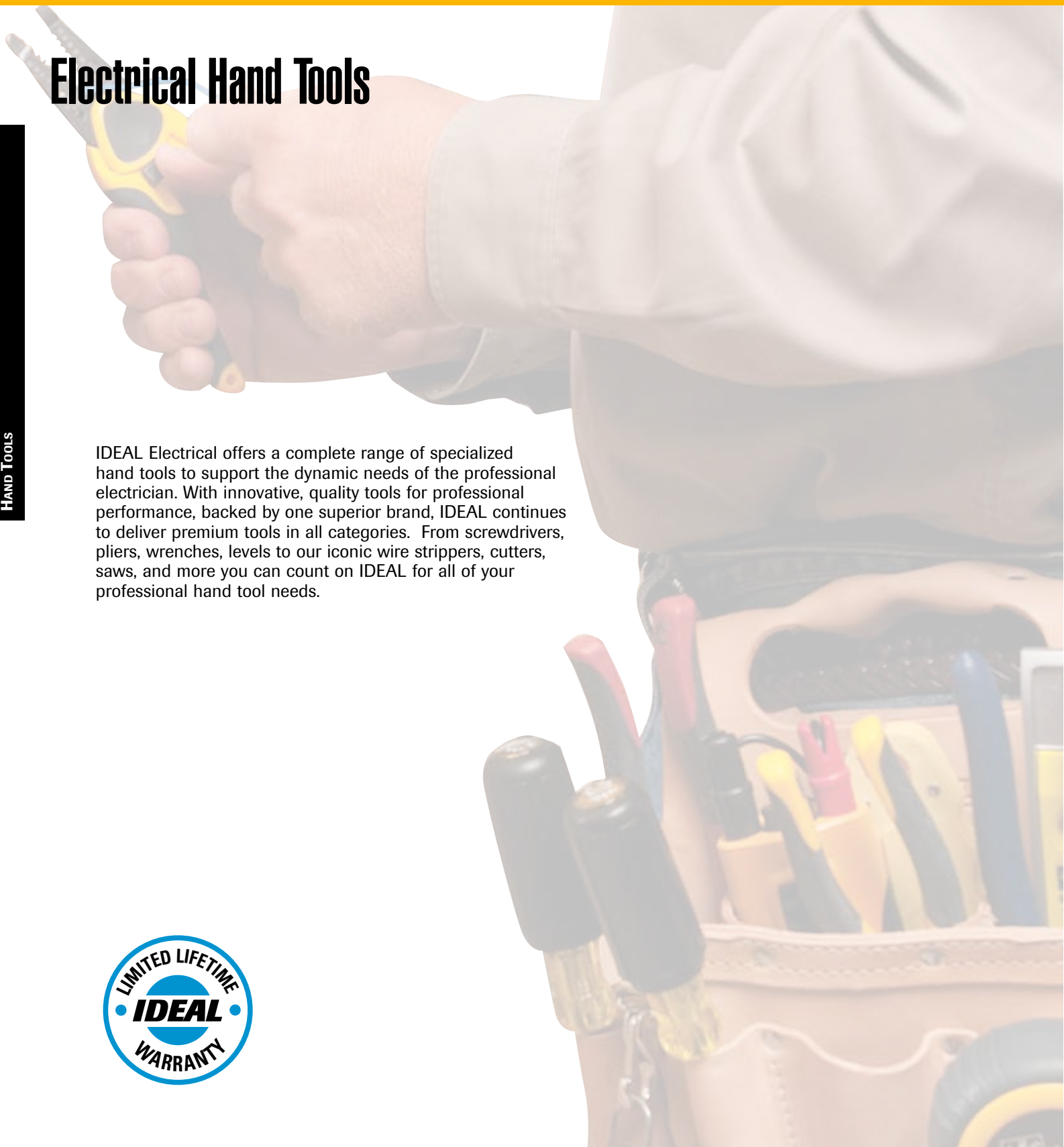
Tenite® Grips

- Not insulated from electrical shock
- Boil in water to soften for easy installation onto handles

Description	Part No.
Replacement grips for 8 in. or 9 in. pliers (one pair)	**35-008**

Tenite® is a registered trademark of Eastman Chemical Company.

Electrical Hand Tools



IDEAL Electrical offers a complete range of specialized hand tools to support the dynamic needs of the professional electrician. With innovative, quality tools for professional performance, backed by one superior brand, IDEAL continues to deliver premium tools in all categories. From screwdrivers, pliers, wrenches, levels to our iconic wire strippers, cutters, saws, and more you can count on IDEAL for all of your professional hand tool needs.

LIMITED LIFETIME IDEAL WARRANTY

SirNickless™ Cutter

- Handles all common BX, MCAP®, MC and Flex cables
- Blade cuts armor without damage to internal conductors
- Splices cleanly through casings with only a few turns
- Handle knob stores up to six replacement blades
- Cutter comes with one blade installed

Description	Quantity	Part No.
Rotary Armored Cable Cutter	—	**35-782**
Replacement Blades	5/pack	**35-781**
	1/pack	**35-781-1**

MCAP® is a registered trademark of Southwire Company.

Mechanical Indentor and Crimp Tool

- Use with aluminum (6 AWG to 4/0) and copper (8 AWG to 250 KCMIL) wires
- Adjustable crimping nests with clearly marked gauges
- Lightweight and easy to operate
- Rugged cast steel construction for long-term durability

Description	Part No.
Mechanical Indentor & Crimp Tool	**88-843**

Ratchet Crimp Tool

- Crimps insulated or bare terminals and splices on 10–22 AWG wire
- Ratchet action prevents release prior to crimp connection – helps ensure uniform crimps
- Vinyl-coated handles provide a solid, comfortable grip

Description	Part No.
Ratchet Crimp Tool	**83-001**

Four-Way Crimp Tool

- Design ensures even compression and reliable connections
- Spring-loaded, cam-actuated plungers
- Fingertip adjustment for two connector sizes

Description	Part No.
Four-Way Crimp Tool for use with Buchanan 2006S and 2011S Crimp Connectors	**C-24**

IDEAL Wipes Multi-Purpose Towels

- Durable pre-moistened fabric scrubs without tearing
- Cleans dirt, grease, lube and grime from most surfaces
- Infused with natural hand moisturizers and Vitamin E, orange citrus scent
- Meets California C.A.R.B. standards
- Available bracket for easy access storage

Description	Part No.
IDEAL Wipes, 12 in. x 9 in. (82/can)	**38-500**
IDEAL Wipes Canister Bracket	**38-500BR**

Aviation Tin Snips

- Labor-saving design cuts straight, left and right, with one tool
- Chrome-molybdenum steel forged blades for strength and durability
- Serrated edges provide a stable hold when cutting

Description	Part No.
Aviation Tin Snips	**35-001**

Drop-Forged Hammer

- One-piece drop-forged, tempered-steel polished head and handle
- Long, straight claws simplify removal of electrical fixtures
- Comfortable, perforated anti-vibe grips

Description	Part No.
18 oz. x 12-1/2 in. Drop-Forged Handled Hammer	**35-210**

Torpedo Level

- 9 in. aluminum frame with magnetic and V-grooved edges
- Windows provide easy reading of plumb level and 45° angle
- Three rare earth magnets for strong cling to conduit

Description	Part No.
9 in. Torpedo Level	**35-205**

Adjustable Wrenches

35-021

- Forged steel construction with narrow profile head reaches into tight spaces
- Tight tolerance on thumbscrew will not loosen or wobble with use
- Extra wide jaw capacity with standard and metric markings

Description	Jaw Capacity	Part No.
6 in. Adjustable Wrench	7/8 in.	**35-019**
8 in. Adjustable Wrench	1-1/8 in.	**35-020**
10 in. Adjustable Wrench	1-5/16 in.	**35-021**

Center Punch

- Accurately start drilling holes on steel surfaces
- One-piece construction
- Hardened and tempered for long life

Description	Part No.
Center Punch	**35-192**

Chisels

35-187

35-189

- Hardened and tempered for long life
- Use Wood Chisel by hand or mallet

Description	Part No.
Cold Chisel (for cutting cold metals)	**35-187**
Wood Chisel	**35-189**

Measuring Tapes

35-242

35-238

Magnetic-tipped end hook

- Measurement marks on both sides of tape
- Blade automatically stays out when extended
- Push button for smooth blade retraction
- Comfortable, shock-resistant rubber grip

Description	Tape Width	Part No.
Auto-Lock Tape Measure - 25 ft.	1 in.	**35-242**
Automatic Blade Lock w/Magnetic-Tip - 30 ft.	1 in.	**35-238**

Electric Engraving Tool

- Engraves metal, glass, stone, ceramics, plastics, hard rubber, wood and many other hard materials
- Unique design reduces bouncing and provides smooth, easy writing; operating at 7,200 strokes per minute
- Stroke adjusts to vary depth of mark
- Includes carbide-tipped point for normal markings
- Diamond point available for engraving extra-hard materials (50 to 64 Rockwell, scale C)

Description	Part No.
Engraver w/carbide-tipped point & 3-conductor grounded cord (7 ft.) & plug — 120V, 60 Hz	**11-113**
Carbide-Tipped replacement point	**11-200**
Diamond replacement point	**11-201**

Hex-Key Sets

- High-quality steel construction
- Dual-durometer, slip-resistant grip

Description	Part No.
4 in. handle w/nine 3-in. keys (5/64 in., 3/32 in., 7/64 in., 1/8 in., 9/64 in., 5/32 in., 3/6 in., 7/32 in. & 1/4 in.)	**35-146**
5-1/4 in. handle w/five 5-in. keys (3/16 in., 7/32 in., 1/4 in., 5/16 in. & 3/8 in.)	**35-147**

Folding Saw

- Light-weight, heavy-duty die cast construction
- Ergonomic rubber comfort grip
- Blade safely and conveniently folds down in handle
- Accepts most standard 6 in. recip blades

Description	Part No.
Folding Saw	**35-274**

Utility Knife

- Quick-change retractable blade system – no disassembly required
- Built in pull-line cutter
- Includes three blades in storage compartment

Description	Replacement Blades	Part No.
Utility Knife	**35-301***	**35-300**

*Five universal blades per package.

Jab Saw

- Ergonomic, textured non-slip grip w/plunge-tip design
- Wallboard blade
- Weighted head provides superior balance

Description	Part No.
Jab Saw	**35-275**

Pocket Knives

- 2-1/4 in. blade locks in position
- High-carbon stainless steel blade construction for extra strength and durability
- Durable non-slip handle
- Brass liners

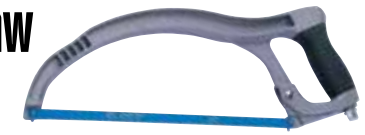
Description	Blade Type	Part No.
Electrician's Knife	Spear point and Screwdriver	**35-285**
Hawkbill Knife	Curved	**35-286**
Lineman's Jack Knife	Sheepfoot	**35-287**

Heavy-Duty Hacksaw

- Cushioned ergonomic grip for performance and comfort
- Rugged frame provides lightweight rigidity and exceptional control
- Includes 12 in. x 24T bi-metal blade, stores up to nine extra blades
- Blades can be adjusted to 55° angle for flush cutting and tensioned to 30,000 psi

Description	Part No.
Heavy-Duty Hacksaw	**35-260**

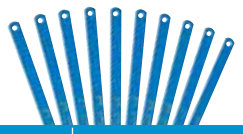
Ergonomic Hacksaw



- Angled handle for easier cutting
- Blade can easily be adjusted for flush cutting
- Easy tensioning wing-nut keeps blades tight for straighter cuts
- Cushioned ergonomic grip for performance and comfort

Description	Part No.
Ergonomic Hacksaw with 12 in. x 24T bi-metal blade	**35-261**

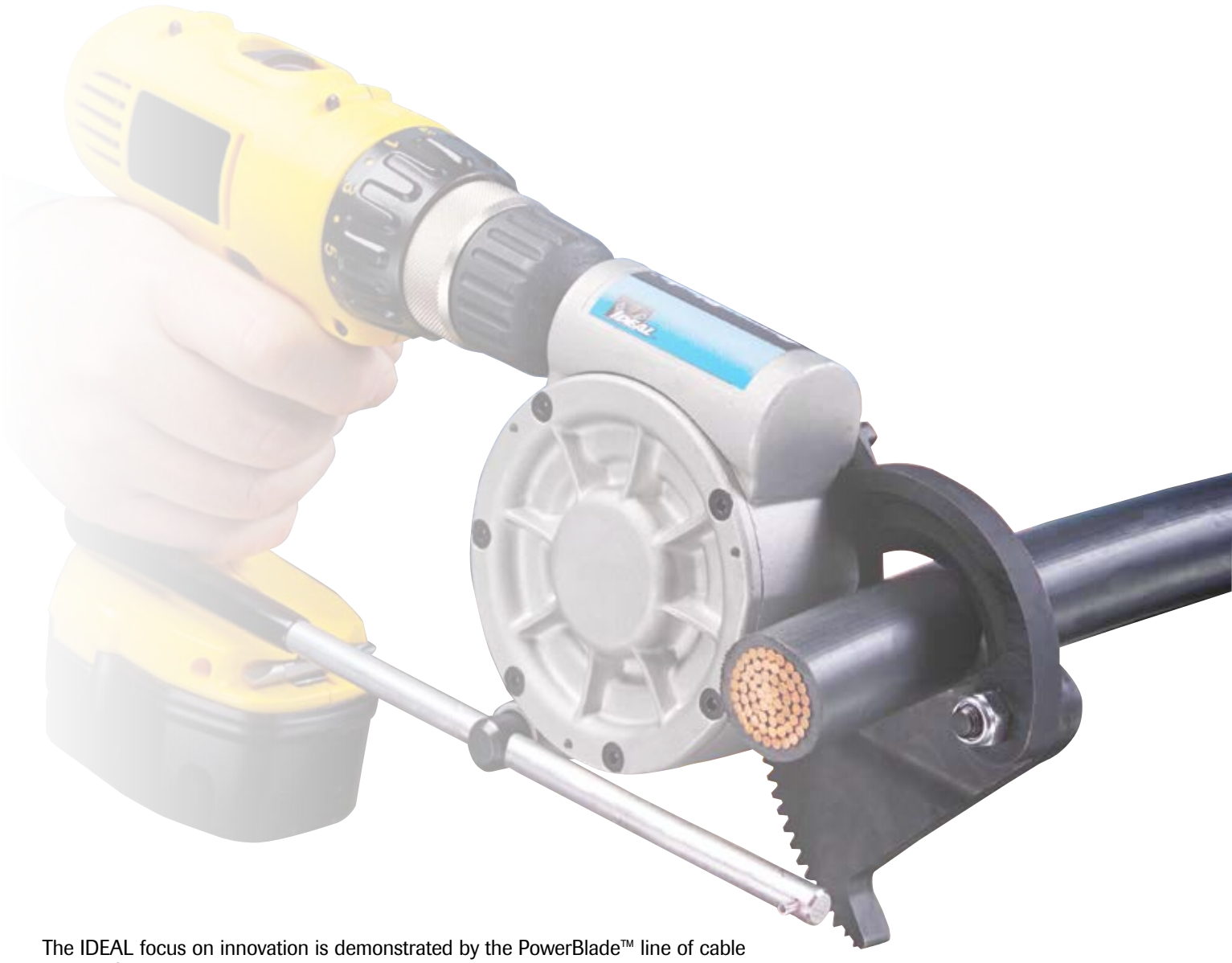
Hacksaw Blades



- Bi-metal blades provide strength, flexibility and long life

Description	Quantity	Part No.
12 in. x 18T Blades	10	**35-271**
12 in. x 24T Blades	10	**35-272**
12 in. x 32T Blades	10	**35-273**
12 in. x 18T Blades	100	**35-262**
12 in. x 32T Blades	100	**35-264**

Cable Cutters



The IDEAL focus on innovation is demonstrated by the PowerBlade™ line of cable cutters. Chucked into virtually any drill these robust cutters save time and money for utilities and commercial electricians.

*Drill not included.

Big Kahuna™ Cable Cutter

- Fits most standard power drills
- Jaw opening of 3-1/2 in.
- Cuts copper cable up to 1250 MCM and aluminum cable up to 1250 MCM
- Specially hardened, rounded blades minimize cable distortion for professional quality

Description	Replacement Blade*	Part No.
Big Kahuna™ Cable Cutter	**KB-0276R**	**35-076**

*Two blades per package, 1 upper blade and 1 lower blade.

(Drill not included)

PowerBlade™ 750 Cable Cutter

- Fits most standard power drills
- Jaw opening of 1-1/2 in.
- Cuts copper cable up to 750 MCM and aluminum cable up to 1000 MCM
- Specially hardened, rounded blades minimize cable distortion for professional quality

Description	Replacement Blade*	Part No.
PowerBlade™ 750 Cable Cutter	**K-8906R**	**35-078**

*Two blades per package, 1 upper blade and 1 lower blade.

(Drill not included)

Merlin™ ACSR Cable Cutter

- Fits most standard power drills
- Jaw opening of 3/4 in. for precision and accuracy
- Especially designed for reinforced aluminum cable
- Cuts up to Merlin ACSR cable size or 250 MCM Copper or Aluminum

Description	Replacement Blade*	Part No.
Merlin™ ACSR Cable Cutter	**KB-0278R**	**35-077**

*Two blades per package, 1 upper blade and 1 lower blade.

(Drill not included)

PowerBlade™ Cable Cutter Replacement Parts

Replacement Parts	Part No.
Gearbox Assembly	**H-3400**

Replacement Parts	Part No.
PowerBlade™ Replacement Folding Assembly	**H-3507**
PowerBlade™ Replacement Torque Arm Assembly	**K-8909**

CHECK OUT OUR POWERBLADE VIDEOS AT WWW.IDEALIND.COM

Ratcheting Cable Cutter

- Cuts hard drawn copper up to 400 KCMIL (MCM) and soft copper, aluminum and multiple conductor cable up to 600 KCMIL (MCM)
- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage

Description	Part No.
400 KCMIL (MCM) Ratcheting Cable Cutter*	**35-056**
Replacement blade (movable side only)	**35-085**

*Max. Jaw Opening - 2 in. Not for cutting steel or ACSR.

Long-Arm Cable Cutters

- High strength forged blades for ultimate durability
- Precision-ground jaws make clean cuts with minimal cable distortion
- Replaceable blades
- For copper and aluminum only.
  Not designed for steel or ACSR.

Description	Length	Replacement Head	Part No.
250 MCM Long-Arm Cable Cutter	14 in.	**35-031B**	**35-031**
500 MCM Long-Arm Cable Cutter	22 in.	**35-032B**	**35-032**
1000 MCM Long-Arm Cable Cutter	32 in.	**35-033B**	**35-033**

CAUTION: Comfort-grip handles are not designed for protection against electrical shock. Do not use on live circuits.

BigFoot™ Ratcheting Cable Cutter

- Designed to cut 750 KCMIL (MCM) and smaller hard-drawn copper and aluminum cables
- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage
- Molded-in foot provides stability and leverage when making multiple cuts

Molded foot for stability and leverage.

Description	Part No.
750 KCMIL (MCM) Ratcheting Cable Cutter*	**35-053**
Replacement blade (movable side only)	**35-057**

*Max. Jaw Opening - 2 in. Not for cutting steel or ACSR.

Screwdriver Types

Specialty
- Top quality screwdrivers designed especially for the professional electrician
- Multi-functional for all your fastening needs

Cushioned-Grip
- Cushioned-grip provides comfort and maximum torque
- Blasted tip helps prevent plate chipping
- Nickel chrome steel shank for maximum strength and durability
- Mini cushioned-grip tightens small fasteners easily and accurately

Nutdrivers
- Hollow shanks handle longer bolts
- Available in long lengths to accommodate extra long bolts
- Cushioned-gripped for comfort and maximum torque

Screwdriver Advanced Features

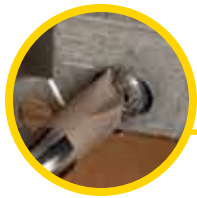
Specialty

Patented Wire Connector Wrench in handle

Accu-Loop™ Wire Looping Holes make perfect loops!

Cushioned-Grip

FastFinder™ icon shows tip type on handle end



Combo Head™ tip ensures full fastener engagement

21-in-1 Twist-a-Nut™ Ratcheting Screwdriver

- Patented Wire Connector Wrench accepts a wide variety of connectors and reduces finger fatigue
- Pro-quality, 28 tooth, all metal ratchet can handle 225 lbs. of torque without failure
- Ergonomic, slip-free textured grip provides excellent torque and is impervious to perspiration, gas, oil and chemicals
- Multiple bit storage unit in handle
- Bits included: #1 Phillips, #2 Phillips, #3 Phillips, 3/16" Slotted, 1/4" Slotted, 5/16" Slotted, #1 Square, #2 Square, #15 Star, #20 Star, #25 Star, #30 Star, 3/32" Hex, 1/8" Hex, 3/16" Hex, 5/32" Hex, 1/4" Nut, 5/16" Nut and 7/16" Nut

Description	Part No.
21-in-1 Twist-a-Nut™ Screwdriver	**35-688**

9-in-1 Ratch-a-Nut™ Screwdriver

- Patented Wire Connector Wrench accepts a wide variety of connectors and reduces finger fatigue
- Pro-quality, 28 tooth, all metal ratchet can handle 225 lbs. of torque without failure
- Ergonomic, slip-free textured grip provides excellent torque and is impervious to perspiration, gas, oil and chemicals
- Accepts Twist-a-Nut™ replacement bits
- Bits included: 1/4 in. Slotted, 3/16 in. Slotted, #1 Phillips, #2 Phillips, 1/4 in. Nutdriver, 5/16 in. Nutdriver, and 7/16 in. Nutdriver

Description	Part No.
9-in-1 Ratch-a-Nut™ Screwdriver	**35-988**

7-in-1 Twist-a-Nut™ Screwdriver

- Patented Wire Connector Wrench accepts a wide variety of connectors and reduces finger fatigue
- Ergonomic, slip-free textured grip provides excellent torque and is impervious to perspiration, gas, oil and chemicals
- Handle is interchangeable with conduit deburrer head (#35-096) and 6-in-1 Tap Tool (#35-922)
- Bits included: 1/4 in. Slotted, 3/16 in. Slotted, #1 Phillips, #2 Phillips, 1/4 in. Nutdriver and 5/16 in. Nutdriver

Description	Part No.
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	**35-908**
Replacement Handle	**K-8964**

6-in-1 Twist-a-Nut™ Tap Tool

- Forms new threads, re-forms burred threads and cleans out obstructions
- Reversible, high-carbon tap with three clearly marked thread sizes on each end
- Handle is interchangeable with 7-in-1 Screwdriver (#35-908) and Conduit Deburrer (#35-083)
- Includes: 6-32, 8-32 & 10-32 on one tapping side and 10-24, 12-24 & 1/4-20 on other side

Description	Part No.
6-in-1 Twist-a-Nut™ Tapping Tool	**35-922**
Replacement collar and six taps	**35-923**

Replacement Tips (for 7-in-1 Twist-a-Nut™ and 9-in-1 Ratch-a-Nut™ Screwdrivers)

Description	Part No.
1/4 in. Slotted – #2 Phillips	**35-911**
3/16 in. Slotted – #1 Phillips	**35-912**
1/4 in. Slotted – #2 Square	**35-913**
3/16 in. Slotted – #1 Square	**35-914**
#15 & #10 Star	**35-915**

Twist-a-Nut™ Conduit Deburring Tools

- Deburrs inside and outside edges of 1/2 in., 3/4 in. and 1 in. thin wall conduit
- Hooded tip tightens EMT fitting set screws without slipping
- Square tip "seats" much more quickly on fitting screws than slotted version
- Head removes and is interchangeable with IDEAL 7-in-1 Twist-a-Nut™ Screwdriver shaft (#35-908)
- Head can be used at low speed setting in drill or cordless screwdriver

Description	Tip Type	Part No.
Conduit Deburring Tool	Slotted	**35-083**
Conduit Deburring Tool	#2 Square	**35-075**
Conduit Deburring Tool (head only)	Slotted	**35-096**
Conduit Deburring Replacement Blade		**35-097**
Conduit Deburring Tool (head only)	#2 Square	**35-098**

Twist-a-Nut™ Conduit Wiring Kit

- Includes:
  - Twist-a-Nut™ Screwdriver (35-908)
  - Twist-a-Nut™ Deburring Head - Square Tip (35-098)
  - Twist-a-Nut™ Tap Tool Shaft (35-923)
  - Three Spare Bits – 1/4 in. Slotted & #2 Square, 3/16 in. Slotted & #1 Square, #10 & #15 Star
  - 8-Pocket Carrying Pouch (35-927)
- Nylon carrying pouch with metal belt clip holds all three Twist-a-Nut™ tools plus room for four replacement bits or taps

Description	Part No.
Twist-a-Nut™ Conduit Wiring Kit	**35-926**
Twist-a-Nut™ Carrying Pouch only	**35-927**

Twist-a-Nut™ Pro Electrician's Screwdrivers

- Vapor-blasted tip improves screw grip
- Tough, chrome vanadium steel shank

Description	Part No.
#2 x 6 in. Square Twist-a-Nut™ Pro Electrician's Screwdriver	**30-330**
1/4 in. x 4 in. Slotted Twist-a-Nut™ Pro Electrician's Screwdriver	**30-331**
1/4 in. x 6 in. Slotted Cabinet Tip Twist-a-Nut™ Pro Electrician's Screwdriver	**30-333**

11-in-1 Screwdriver/Nutdriver

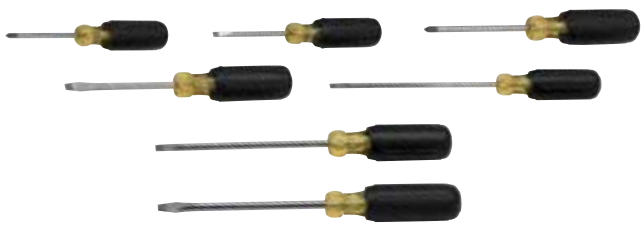
- Includes: 1/4 in. Slotted, 3/16 in. Slotted, #2 Phillips, #1 Phillips, #1 Square, #2 Square, #15 Star, #10 Star, 5/16 in. Nutdriver & 1/4 in. Nutdriver
- Cushioned grip for comfort and performance
- Accu-Loop™ Wire looping holes

Description	Part No.
11-in-1 Screwdriver/Nutdriver	**35-910**
Replacement Bits	**Part No.**
1/4 in. Slotted - #2 Phillips (2/pack)	**35-940**
3/16 in. Slotted - #1 Phillips (2/pack)	**35-941**
#1 & #2 Square (2/pack)	**35-942**
#15 & #10 Star (2/pack)	**35-943**

8-Piece Cushioned-Grip Screwdriver Set

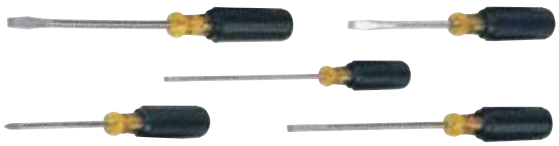
Description	Part No.
8-Piece Screwdriver Set	**35-298**
Set Includes:	
#1 Phillips	**35-193**
3/16 in. Slotted	**35-183**
#2 Phillips	**35-194**
1/4 in. Heavy-Duty Round Keystone	**35-164**
1/4 in. Heavy-Duty Square Keystone	**35-154**
3/16 in. Cabinet	**35-186**
1/4 in. Heavy-Duty Cabinet	**35-151**
5/16 in. Heavy-Duty Keystone	**35-166**

7-Piece Cushioned-Grip Screwdriver Set



Description	Part No.
7-Piece Screwdriver Set	**35-1298**
Set Includes:	
#1 Phillips	**35-193**
1/4 in. Heavy-Duty Cabinet	**35-150**
#2 Phillips	**35-194**
1/4 in. Heavy-Duty Square Keystone	**35-154**
3/16 in. Cabinet	**35-183**
1/4 in. Heavy-Duty Cabinet	**35-156**
3/16 in. Heavy-Duty Keystone	**35-186**

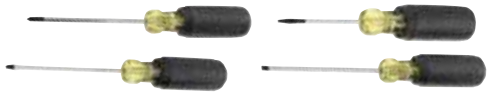
5-Piece Cushioned-Grip Screwdriver Set



Description	Part No.
5-Piece Screwdriver Set	**35-297**
Set Includes:	
#2 Phillips	**35-194**
1/4 in. Heavy-Duty Square Keystone	**35-154**
3/16 in. Cabinet	**35-186**
1/4 in. Heavy-Duty Cabinet	**35-151**
5/16 in. Heavy-Duty Keystone	**35-166**

4-Piece Mini Cushioned-Grip Screwdriver Set

- Set Includes: #0 Phillips, 1/16 in. Keystone, 3/32 in. Cabinet and 1/8 in. Cabinet



Description		Part No.
4-Piece Screwdriver Set	**SOLD ONLY AS A SET**	**35-1301**

2-Piece Stubby Cushioned-Grip Screwdriver Set

- Set Includes: #2 Phillips and Keystone

Description		Part No.
2-Piece Stubby Screwdriver Set	**SOLD ONLY AS A SET**	**35-1300**

Phillips Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
#1 Phillips	3 in.	3-3/4 in.	6-3/4 in.	**35-193**
#2 Phillips	1-1/2 in.	1-15/16 in.	3-7/16 in.	**35-191**
#2 Phillips	4 in.	4-5/16 in.	8-5/16 in.	**35-194**
#2 Phillips	6 in.	4-5/16 in.	10-5/16 in.	**35-195**
#3 Phillips	6 in.	5-23/64 in.	11-23/64 in.	**35-196**

Square Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
#0 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-690**
#1 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-691**
#1 Square	8 in.	4-5/16 in.	12-5/16 in.	**35-692**
#2 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-693**
#2 Square	8 in.	4-5/16 in.	12-5/16 in.	**35-694**
#3 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-695**

Cabinet Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
3/16 in. shank and tip	3 in.	3-3/4 in.	6-3/4 in.	**35-183**
3/16 in. shank and tip	4 in.	3-3/4 in.	7-3/4 in.	**35-184**
3/16 in. shank and tip	6 in.	3-3/4 in.	9-3/4 in.	**35-186**
3/16 in. shank and tip	8 in.	3-3/4 in.	11-3/4 in.	**35-188**
3/16 in. shank and tip	10 in.	3-3/4 in.	13-3/4 in.	**35-190**

Heavy-Duty Cabinet Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
1/4 in. shank and tip	4 in.	4-5/16 in.	8-3/8 in.	**35-150**
1/4 in. shank and tip	6 in.	4-5/16 in.	10-3/8 in.	**35-151**
1/4 in. shank and tip	8 in.	4-5/16 in.	12-3/8 in.	**35-152**

Heavy-Duty Round Shaft Keystone Cushioned-Grip Screwdrivers

Round Shank	Blade Length	Handle Length	Overall Length	Part No.
1/4 in. shank and tip	1-1/2 in.	1-15/16 in.	3-7/16 in.	**35-161**
1/4 in. shank and tip	4 in.	4-5/16 in.	8-5/16 in.	**35-164**
5/16 in. shank and tip	6 in.	5-11/32 in.	11-11/32 in.	**35-166**
3/8 in. shank and tip	8 in.	5-11/32 in.	13-11/32 in.	**35-168**

Heavy-Duty Square Shaft Keystone Cushioned-Grip Screwdrivers

Square Shank	Blade Length	Handle Length	Overall Length	Part No.
1/4 in. shank and tip	4 in.	4-5/16 in.	8-5/16 in.	**35-154**
5/16 in. shank and tip	6 in.	5-11/32 in.	11-11/32 in.	**35-156**
3/8 in. shank and tip	8 in.	5-11/32 in.	13-11/32 in.	**35-158**

Combo Head™ Cushioned-Grip Screwdriver

Patented Combo Head™ tip ensures full fastener engagement

- Designed to accurately and securely fit most fasteners
- Patented design

Description	Blade Length	Handle Length	Overall Length	Part No.
Combo Head™ Cushioned-Grip Screwdriver	4 in.	4-5/16 in.	8-5/16 in.	**35-204**

Quick Rotating Screwdriver

- Ideal for threading screws in switches, fixtures and anchors
- Quick and easy crank action

Description	Blade Length	Handle Length	Overall Length	Part No.
Cabinet Quick Rotating Screwdriver	5-9/16 in.	3-3/4 in.	9-3/8 in.	**35-200**
Phillips Quick Rotating Screwdriver	5-5/8 in.	4-5/16 in.	9-15/16 in.	**35-203**

Awl

- Heavy-duty construction for piercing, punching and scribing

Description	Blade Length	Handle Length	Overall Length	Part No.
Awl	3 in.	3-3/4 in.	6-3/4 in.	**35-202**

Grip-n-Screw™ Screwdriver

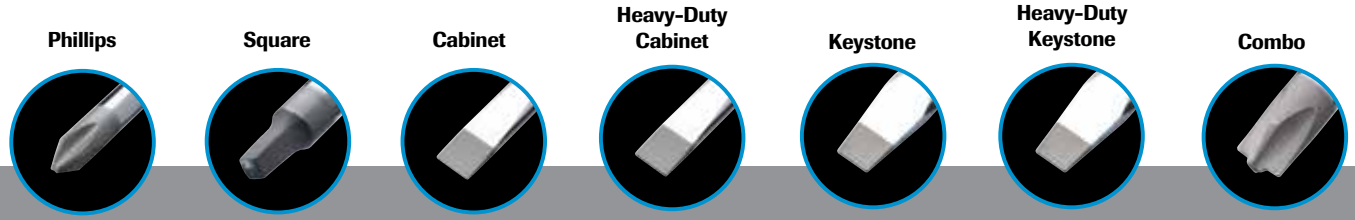
- Holds screw when collar is extended
- Non-magnetic screw-holding screwdriver

Description	Blade Length	Handle Length	Overall Length	Part No.
3/16 Slotted Grip-n-Screw™ Screwdriver	5-7/8 in.	3-3/4 in.	9-5/8 in.	**35-406**
#2 Phillips Grip-n-Screw™ Screwdriver	6-7/8 in.	4-15/16 in.	11-1/4 in.	**35-404**

Off-Set Screwdriver Set

- 1/4 in. x 1/4 in. Slotted tips and #1 Phillips x #2 Phillips tips
- Designed to tighten fasteners in hard to reach places

Description	Overall Length	Part No.
Off-Set Screwdriver Set	4 in.	**35-219**

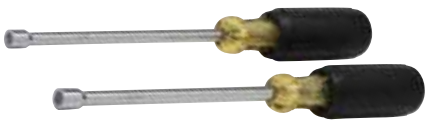


Quick-Change Screwdriver

- Patented Sure-Loc™ Quick Change chuck securely holds bits
- Built-in bit storage container in handle holds up to five extra insert bits
- Bits fit most standard multi-bit screwdrivers
- E-Z Spin™ high torque rotating flip cap

Description	Blade Length	Handle Length	Overall Length	Part No.
Quick Change Screwdriver (Driver only)	3-1/16 in.	4-3/16 in.	7-1/4 in.	**35-932**
33-Piece Quick Change Screwdriver Set - Quick Change Screwdriver and 32-Piece Tamper-Proof Bit Block	3-1/16 in.	4-3/16 in.	7-1/4 in.	**35-933**
33-Piece Quick Change Screwdriver Set - Quick Change Screwdriver and 32-Piece Standard Bit Block	3-1/16 in.	4-3/16 in.	7-1/4 in.	**35-934**
32-Piece Tamper-Proof Bit Block				**35-933TP**
32-Piece Standard Bit Block				**35-933STD**

2-Piece Hollow-Shaft Nutdriver Set



- Includes: 1/4 in. Nutdriver & 5/16 in. Nutdriver
- Long shanks useful in deep electrical boxes

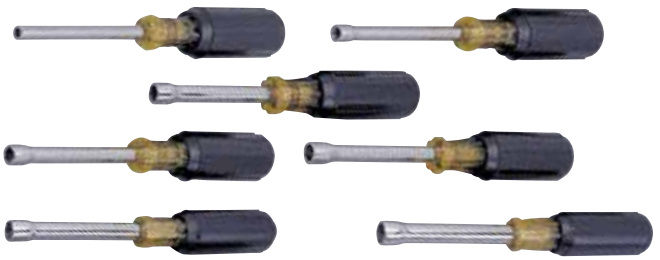
Description	Shank Length	Handle Length	Overall Length	Part No.
2-Piece Nutdriver Set	5-15/16 in.	4-5/16 in.	10-1/4 in.	**35-1302**

2-Piece Stubby Nutdriver Set

- Includes: 1/4 in. Nutdriver & 5/16 in. Nutdriver
- For use in tight spaces

Description	Blade Length	Handle Length	Overall Length	Part No.
2-Piece Nutdriver Stubby Set	1-1/2 in.	2-1/8 in.	3-5/8 in.	**35-1299**

7-Piece Nutdriver Set



- Set Includes: 3/16 in. 35-290, 1/4 in. 35-291, 5/16 in. 35-292, 11/32 in. 35-293, 3/8 in. 35-294, 7/16 in. 35-295 and 1/2 in. 35-296

Description	Part No.
7-Piece Nutdriver Set	**35-299**

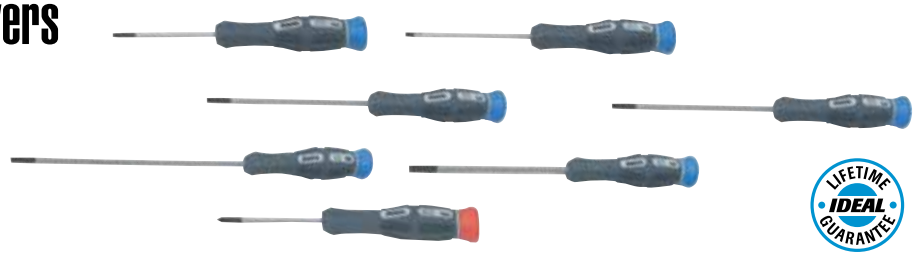
Nutmaster® Nutdrivers

- Model 35-292 fits tan Twister® Wire Connector and 35-295 fits gray Twister® Wire Connectors

Description	Shank Length	Handle Length	Overall Length	Part No.
3/16 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-290**
1/4 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-291**
5/16 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-292**
11/32 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-293**
3/8 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-294**
7/16 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-295**
1/2 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-296**

Slim Electronics Screwdrivers

- Designed for maximum handling comfort when working in tight areas
- Tough, chrome vanadium steel shank
- Phosphate tip for long life
- Color-coded cap for easy identification



Description	Blade Length	Handle Length	Overall Length	Part No.
Cabinet, 3/32 in.	2-1/2 in.	3-9/16 in.	6-1/16 in.	**36-240**
Cabinet, 3/32 in.	3 in.	3-9/16 in.	6-9/16 in.	**36-241**
Cabinet, 1/8 in.	4 in.	3-9/16 in.	7-9/16 in.	**36-242**
Cabinet, 1/8 in.	6 in.	3-9/16 in.	9-9/16 in.	**36-243**
Cabinet, 5/32 in.	4 in.	3-9/16 in.	7-9/16 in.	**36-244**
Cabinet, 5/32 in.	6 in.	3-9/16 in.	9-9/16 in.	**36-245**
Phillips, #0	2-1/2 in.	3-9/16 in.	6-1/16 in.	**36-246**
7-Piece Set includes one each of 36-240 thru 36-246				**36-248**
4-Piece Set includes one each of 36-240, -241, -242, & -246				**36-249**

Western Forge's American-made hand tools include pliers, screwdrivers, adjustable wrenches, torque wrenches, screwdrivers, punches and chisels.

Its manufacturing plants in Colorado Springs are an American standard of premier metal craftsmanship, offering the latest in forging, heat treatment, handle extrusion, machining and plating operations.

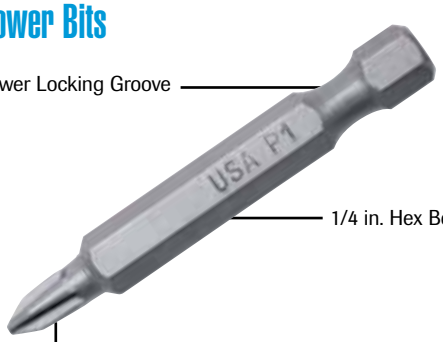
Industrial Screwdriver Bits & Accessories

- S2M tool steel, custom heat treated for strength and durability
- All tips are manufactured to tight tolerances to ensure accurate fit and full fastener engagement
- Insert bits have a retaining ring notch
- Power bits have a power locking groove
- 1/4 in. hex body
- Fit most standard multi-bit screwdrivers

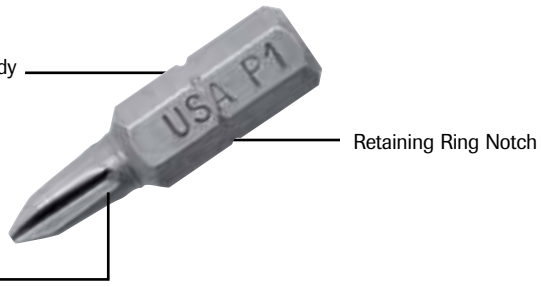
Made in U.S.A.

Designed for precision fit and lasting performance.

Power Bits



Insert Bits



Torx® is a registered trademark of Acument Intellectual Properties, LLC.

Combo Head™ Bits

- Patented design tip fits most Phillips screws

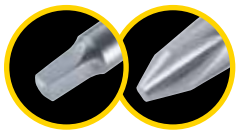
Description	Part No. (Carded)	Part No. (Bulk)
Combo Drive #2, 1 in. Insert Bit	**78-0105**	**78-0105-25**
Combo Drive #2, 2 in. Power Bit	**78-0106**	**78-0106-25**

Slotted Bits

- Insert bits have a retaining ring notch, power bits have a power-locking groove

Description	Part No. (Carded)	Part No. (Bulk)
Slotted 1/4 in., 1 in. Insert Bit	**78-0209**	—
Slotted 1/4 in., 2 in. Power Bit	**78-0210**	—
Slotted 1/8 in., 1 in. Insert Bit	**78-0211**	—
Slotted 1/8 in., 2 in. Power Bit	**78-0212**	—
Slotted 3/16 in., 1 in. Insert Bit	**78-0213**	**78-0213-25**
Slotted 3/16 in., 2 in. Power Bit	**78-0214**	**78-0214-25**
Slotted 7/32 in., 1 in. Insert Bit	—	**78-0215-25**
Slotted 7/32 in., 2 in. Power Bit	—	**78-0216-25**

Double-Ended Bits



Description	Part No. (Carded)	Part No. (Bulk)
DE Slotted 1/4 in. x #2 Phillips	**78-0102**	**78-0102-25**
DE Slotted 1/4 in. x #2 Square	**78-0103**	—
DE Square #2 Square x #2 Phillips	—	**78-0104-25**

Torx® Bits

- Manufactured to tight tolerances to ensure accurate fit and full fastener engagement

Description	Part No. (Carded)	Part No. (Bulk)
Torx® 20, 1 in. Insert Bit	**78-0226**	—
Torx® 25, 1 in. Insert Bit	**78-0227**	—
Torx® 27, 1 in. Insert Bit	**78-0228**	—
Torx® 30, 1 in. Insert Bit	**78-0229**	—
7 pc. Torx® Bit Set in Holder	**78-0100**	—

Torx® is a registered trademark of Acument Intellectual Properties, LLC.

Tamper-Proof Torx® Bits

Description	Part No. (Carded)	Part No. (Bulk)
TP Torx® T20, 1 in. Insert Bit	**78-0230**	—
TP Torx® T25, 1 in. Insert Bit	**78-0231**	—
TP Torx® T27, 1 in. Insert Bit	**78-0232**	—
TP Torx® T30, 1 in. Insert Bit	**78-0233**	—
7 pc. Tamper-Proof Torx® Bit Set in Holder	**78-0101**	—

Torx® is a registered trademark of Acument Intellectual Properties, LLC.

Phillips Bits

Description	Part No. (Carded)	Part No. (Bulk)
Phillips #1, 1 in. Insert Bit	**78-0200**	**78-0200-25**
Phillips #1, 2 in. Power Bit	**78-0201**	**78-0201-25**
Phillips #2, 1 in. Insert Bit	**78-0202**	**78-0202-25**
Phillips #2, 2 in. Power Bit	**78-0203**	**78-0203-25**
Phillips #2, 6 in. Power Bit	**78-0204**	—
Phillips #3, 1 in. Insert Bit	**78-0205**	**78-0205-25**
Phillips #3, 2 in. Power Bit	**78-0206**	**78-0206-25**

Square Bits

- All bits and accessories fit most standard multi-bit screwdrivers and power drills

Description	Part No. (Carded)	Part No. (Bulk)
Square #1, 1 in. Insert Bit	**78-0219**	**78-0219-25**
Square #1, 2 in. Power Bit	**78-0220**	**78-0220-25**
Square #2, 1 in. Insert Bit	**78-0221**	**78-0221-25**
Square #2, 2 in. Power Bit	**78-0222**	**78-0222-25**
Square #2, 6 in. Power Bit	**78-0223**	—
Square #3, 1 in. Insert Bit	**78-0224**	**78-0224-25**
Square #3, 2 in. Power Bit	**78-0225**	**78-0225-25**

Magnetic Nut Setter

- Variety of sizes for multiple applications

Description	Part No. (Carded)	Part No. (Bulk)
Magnetic Nut Setter, 1/4 in.	**78-0111**	**78-0111-10**
Magnetic Nut Setter, 3/8 in.	**78-0113**	**78-0113-10**
Magnetic Nut Setter, 5/16 in.	**78-0114**	**78-0114-10**
Magnetic Nut Setter 3 pk. 1/4 in., 3/8 in., 5/16 in.	**78-0112**	—

Quick Change Chuck

- Patented Sure-Loc™ tip clicks bit in place without pulling back collar

Description	Part No. (Carded)	Part No. (Bulk)
Quick Change Chuck, 3-3/4 in.	**78-0207**	—
Quick Change Chuck, 6 in. (5)	—	**78-0208-5**

Magnetic Bit Holder

- Slender extension with powerful magnet to grasp and hold bits

Description	Part No. (Carded)
Magnetic Bit Holder, 4 in.	**78-0107**
Magnetic Bit Holder, 6 in.	**78-0108**

Socket Adapter

Description	Part No. (Carded)	Part No. (Bulk)
Socket Adapter, 1 in. Insert Bit	**78-0217**	**78-0217-25**
Socket Adapter, 2 in. Power Bit	**78-0218**	—

2 ft. Wall Panel

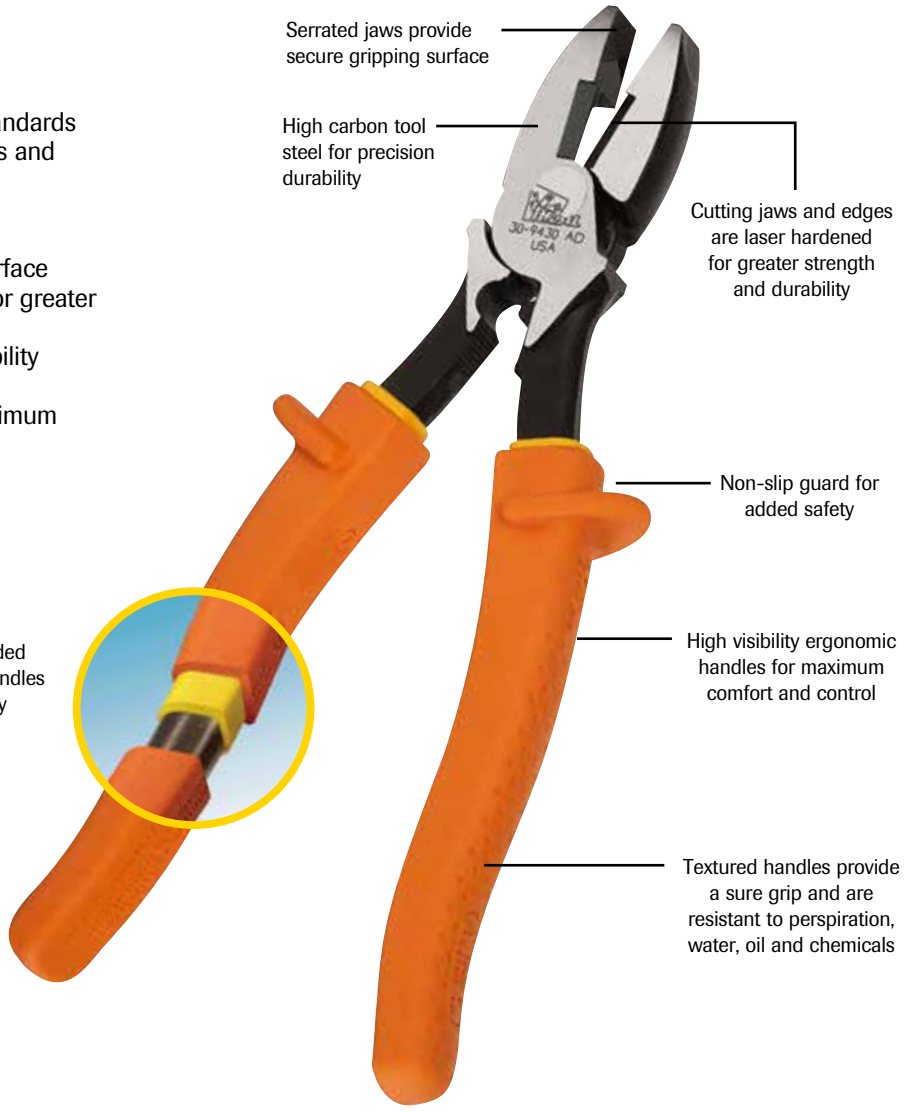
Grandstand Display

Fish Bowl Display

Insulated Tools

- Double insulated, 1,000V certified
- Meets ASTM F1505-01 and IEC 60900 standards
- Complies with OSHA 1910.335 regulations and NFPA 70E standards
- UL and VDE classified and certified (Pliers and Wire Strippers)
- Serrated jaws provide secure gripping surface
- Cutting jaws and edges laser hardened for greater strength and durability
- High carbon tool steel for precision durability
- Non-slip guard for added safety
- High visibility ergonomic handles for maximum comfort and control
- Textured handles provide a sure grip and are resistant to perspiration, water, oil and chemicals

CLASSIFIED UL
Pliers only



CLASSIFIED UL Our tools are the first to have successfully passed UL classification requirements. Recognized as the undisputed leader in product safety and certification, UL has developed rigorous safety standards for 1000V insulated tools. In order to carry the UL classified mark, tools must be tested by UL to met these standards.

Warning Whenever possible, always de-energize lines and equipment prior to working on or around them. 1000V insulated tools are designed only to reduce the chance of injury where the tool may make contact with an energized source. Work around energized circuits should only be done when absolutely necessary and only by qualified technicians. Property damage, personal injury or death may result if the following warnings are not heeded:

- Do not use any insulated tool if the insulation cracks, breaks or becomes damaged in any way. Destroy all dual-layer tools if the inner yellow layer shows through the orange outer layer.
- Do not touch the uninsulated portion of an insulated tool or any conductive object when either might contact an energized source.
- Tools must be kept clean and dry for proper insulating properties.
- Always inspect insulated tools before use.
- Use additional protection by wearing protective clothing and approved eye protection.
- Always use tools that are specifically designed for the task.
- These tools meet UL 22PP, ASTM F1505-01 and IEC 60900 standards for insulated tools.
- Always follow OSHA 1910 S and NFPA 70E safety requirements when doing electrical work.

Insulated Screwdrivers & Nutdrivers

IDEAL insulated screwdrivers and nutdrivers are VDE certified to 1000V AC. Each one is designed to meet ASTM F1505-01, EN, DIN and IEC 60 900 test standards.

- Tempered blades are finished with black oxide and super hardened for maximum quality
- Precision ground tips provide secure fit for less spin-out
- Meets OSHA requirements for insulated tools (29 CFR 1910)

Precision-ground tips provide secure fit for less spin-out

Molded-on insulation provides permanent bonding

Tempered chrome vanadium tool steel blades are super hardened for maximum quality

Cutting Jaws
Induction hardened cutting edges for precise cuts and long life.

Impact-Resistant
Designed for the most rugged job site conditions.

Safety Finger Guard
Reduces chance of accidental contact with exposed metal tool parts.

9-Piece Insulated Tool Kit

Description	Part No.
9-Piece Insulated Tool Kit (Case Included)	**35-9108**
Kit Includes:	
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
Insulated T®-Stripper Wire Stripper	**35-9120**
Slotted 7/32 in. x 5 in. Insulated Screwdriver	**35-9147**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**

Basic Insulated Tool Kit

Description	Part No.
Basic Insulated Tool Kit (Case Included)	**35-9100**
Kit Includes:	
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
Safe-T-Grip® Fuse Puller, Medium	**34-002**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
9-1/2 in. Insulated Cable Cutter	**35-9052**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Safety Lockout Padlock, Red	**44-916**
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**
Insulated T®-Stripper Wire Stripper	**45-9120**

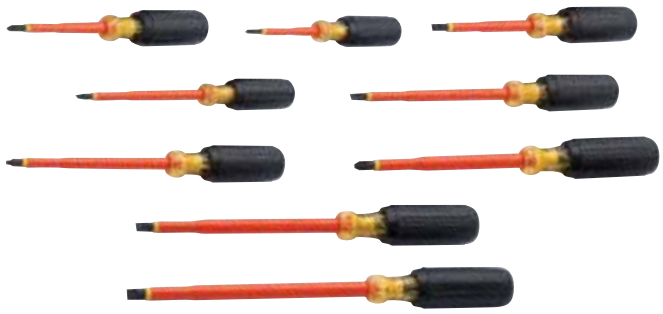
Standard Insulated Tool Kit

Description	Part No.
Standard Insulated Tool Kit (Case Included)	**35-9101**
Kit Includes:	
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
Safe-T-Grip® Fuse Puller, Medium	**34-002**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
9-1/2 in. Insulated Cable Cutter	**35-9052**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips#1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Insulated Skinning Knife	**35-9340**
10 in. Insulated Tongue & Groove Pliers	**35-9430**
Safety Lockout Padlock, Red	**44-916**
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**
Insulated T®-Stripper Wire Stripper	**45-9120**
VoltSensor™ Non-Contact Voltage Tester	**61-063**

Journeyman Insulated Tool Kit

Description	Part No.
Journeyman Insulated Tool Kit (Case Included)	**35-9102**
Kit Includes:	
9-3/4 in. Insulated Multi-Crimp Tool	**30-9429**
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
Safe-T-Grip® Fuse Puller, Medium	**34-002**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
9-1/2 in. Insulated Cable Cutter	**35-9052**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9196**
3/16 in. x 5 in. Insulated Nutdriver	**35-9290**
1/4 in. x 5 in. Insulated Nutdriver	**35-9291**
5/16 in. x 5 in. Insulated Nutdriver	**35-9292**
3/8 in. x 5 in. Insulated Nutdriver	**35-9294**
7/16 in. x 5 in. Insulated Nutdriver	**35-9295**
1/2 in. x 5 in. Insulated Nutdriver	**35-9296**
Insulated Skinning Knife	**35-9340**
10 in. Insulated Tongue & Groove Pliers	**35-9430**
Safety Lockout Padlock, Red	**44-916**
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**
Insulated T®-Stripper Wire Stripper	**45-9120**
VoltSensor™ Non-Contact Voltage Tester	**61-063**

9-Piece Insulated Screwdriver Set

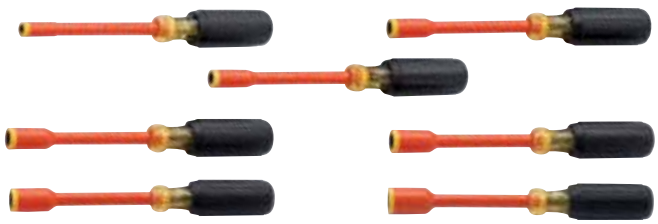


Description	Part No.
9-Piece Insulated Screwdriver Set (hard case included)	**35-9103**
Set Includes:	
Slotted 7/32 in. x 5 in. Insulated Screwdriver	**35-9147**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9196**
Square #0 x 4 in. Insulated Screwdriver	**35-9690**

2-Piece Insulated Screwdriver Set

Description	Part No.
2-Piece Insulated Set	**35-9305**
Set Includes:	
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**

7-Piece Insulated Nutdriver Set



Description	Part No.
7-Piece Insulated Nutdriver Set (hard case included)	**35-9104**
Set Includes:	
3/16 in. x 5 in. Insulated Nutdriver	**35-9290**
1/4 in. x 5 in. Insulated Nutdriver	**35-9291**
5/16 in. x 5 in. Insulated Nutdriver	**35-9292**
3/8 in. x 5 in. Insulated Nutdriver	**35-9294**
7/16 in. x 5 in. Insulated Nutdriver	**35-9295**
1/2 in. x 5 in. Insulated Nutdriver	**35-9296**
9/16 in. x 5 in. Insulated Nutdriver	**35-9297**

Insulated Tool Kit Cases

Description	Part No.
Soft Zipper Case for Basic Kit (35-9100 & 35-9108)	**35-9350**
Soft Zipper Case for Standard Kit (35-9101)	**35-9351**
Soft Zipper Case for Journeyman Kit (35-9102)	**35-9352**

Insulated Screwdrivers

Description	Part No.
Slotted 7/32 in. x 5 in. Insulated Screwdriver	**35-9147**
Slotted 3/23 in. x 3 in. Insulated Screwdriver	**35-9148**
Slotted 1/8 in. x 4 in. Insulated Screwdriver	**35-9149**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips #0 x 2-3/8 in. Insulated Screwdriver	**35-9169**
Phillips #1 x 3-1/8 in. Insulated Screwdriver	**35-9170**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9172**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9196**
Square #0 x 4 in. Insulated Screwdriver	**35-9690**
Square #1 x 6 in. Insulated Screwdriver	**35-9691**
Square #2 x 6 in. Insulated Screwdriver	**35-9693**
Square #3 x 6 in. Insulated Screwdriver	**35-9695**

Insulated Nutdrivers

Description	Part No.
3/16 in. x 5 in. Insulated Nutdriver	**35-9290**
1/4 in. x 5 in. Insulated Nutdriver	**35-9291**
5/16 in. x 5 in. Insulated Nutdriver	**35-9292**
11/32 in. x 5 in. Insulated Nutdriver	**35-9293**
3/8 in. x 5 in. Insulated Nutdriver	**35-9294**
7/16 in. x 5 in. Insulated Nutdriver	**35-9295**
1/2 in. x 5 in. Insulated Nutdriver	**35-9296**
9/16 in. x 5 in. Insulated Nutdriver	**35-9297**

Insulated Multi-Crimp Tool

Description	Part No.
9-3/4 in. Insulated Multi-Crimp Tool	30-9429

Insulated Cable Cutter

Description	Part No.
9-1/2 in. Insulated Cable Cutter	35-9052

Insulated Lineman's Pliers

Description	Part No.
9-1/4 in. Insulated Lineman's Pliers	30-9430

Insulated Tongue and Groove Pliers

Description	Part No.
10 in. Insulated Tongue and Groove Pliers	35-9430

Insulated Diagonal-Cutting Pliers

Description	Part No.
8 in. Insulated Diagonal Cutting Pliers w/angled head	35-9029

Insulated T®-Stripper Wire Stripper

Description	Part No.
Insulated T®-Stripper Wire Stripper	45-9120

Insulated Long-Nose Pliers

Description	Part No.
8-1/2 in. Insulated Long-Nose Pliers	35-9038

Insulated Skinning Knife

Description	Part No.
Insulated Electrician's Skinning Knife	35-9340

Safe-T-Grip® Fuse Pullers

34-001

34-002

34-003

- Maximum efficiency and convenience for removing or replacing cartridge-type fuses
- Three sizes handle fuses ranging from 0 to 600A
- Fully insulated, high-dielectric, glass-filled polypropylene construction
- Notched handles provide safe, no-slip grip
- Clearly marked amperage ranges
- Exceed MIL specifications

Description	Overall Length	Part No.
Small Puller for 250V, 9/32 in. to 1/2 in. dia. fuses	5 in.	**34-001**
Medium Puller for 0 to 100A/250V & 600V, 1/2 in. to 1 in. dia. fuses	7-1/2 in.	**34-002**
Large Puller for 31 to 600A/250V & 31 to 400A/600V, 3/4 in. to 2-1/2 in. dia. fuses	11-3/4 in.	**34-003**

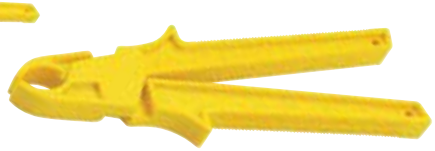
Fuse Puller & Test Light

- Convenient pocket-sized tool safely pulls cartridge fuses and checks electrical connections
- Test prods fit parallel and tandem slot receptacles
- Built-in resistors limit current flow to eliminate false indication
- For 9/16 in. to 1 in. fuses, 100A/250V and 60A/600V
- Test capacity from 100V to 600V AC/DC

Description	Part No.
Fuse Puller & Test Light	**34-012**

Fuse Pullers

34-015



34-016

- Molded of tough, high-impact nylon for strength
- No-slip gripping surface and protective finger stops for added safety

Description	Overall Length	Part No.
Small Puller for 0 to 30A/250V, 1/4 in. to 1/2 in. dia. fuses	5 in.	**34-015**
Large Puller for 0 to 100A/250V & 0 to 60A/600V, 9/16 in. to 1 in. dia. fuses	7-1/4 in.	**34-016**

Fuse Puller Cross Reference

Fuse Size	Current	Voltage	IDEAL	Bussmann	Littlefuse
Ferrule Type	**Amps**	**Volt a.c.**			
1/4 x 1-1/4	1/500 to 30	250	**34-015**	FP-A3	97023
13/32 x 1-1/2	1/10 to 30	250	**34-001, 34-015**	FP-2	MFP
9/16 x 2	1/10 to 30	250	**34-002, 34-012, 34-016**	FP-2	LPFP
13/16 x 3	35 to 60	250	**34-016, 34-003, 34-012**	FP-2	LPFP
Knife Blade	**Amps**	**Volt a.c.**			
1 x 5-7/8	70 to 100	250	**34-012, 34-002, 34-016**	FP-3	LPFP
1-1/2 x 7-1/8	110 to 200	250	**34-003**	FP-3	LPFP
2 x 8-5/8	225 to 400	250	**34-003**	FP-4	GFP
2-1/2 x 10-3/8	450 to 600	250	**34-003**	FP-4	GFP
Ferrule Type	**Amps**	**Volt a.c.**			
13/32 x 1-1/2	1/10 to 30	600	**34-001, 34-012, 34-016**	FP-2	MFP
3/4 x 5	1/10 to 30	600	**34-002**	FP-2	MFP
1 x 5-1/2	35 to 60	600	**34-012, 34-002, 34-016**	FP-3	MFP
Knife Blade	**Amps**	**Volt a.c.**			
1-1/4 x 7-1/8	70 to 100	600	**34-003**	FP-3	LPFP
1-3/4 x 9-5/8	110 to 200	600	**34-003**	FP-4	LPFP
2-1/2 x 11-5/8	225 to 400	600	**34-003**	FP-4	LPFP
3 x 13-3/8	450 to 600	600	**NONE**	NONE	NONE

Please visit our website at www.idealind.com for more safety products from IDEAL!

- **Insulated Tools**
- **Lockout/Tagout**
- **Fish Tapes**
- **Streetlight Kits**
- **Testers**

Tool Carriers/Pouches

Premium Leather Line
Top of the line tool carriers are handcrafted from top-grain cowhide and slow tanned in natural oils to enhance the leather's inherent strength. Each bag is hand waxed for lasting protection against stains and moisture and is warranted for life. Available in natural or black leather.

Standard Leather Line
Leather that stands up to the job like no other material, these tool carriers are constructed of top-grain, natural cowhide and tanned for added strength and durability. Color ages to a deep tan over the years.

Fabric Line
Durable, lightweight, portable tool totes in rugged nylon polyester provide the perfect tool storage. Convenient pockets mean easy access; inner compartments keep tools organized and safe when not in use.

Tuff-Tote® Ultimate Tool Carriers

35-975

35-975BLK

35-325

- 8 in. square tool carrier features 2 divided inside compartments with 6 screwdriver loops, 1 large center compartment, 4 outside pockets and 8 outside tool loops
- Exclusive leather-wrapped grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Unique stand-alone design keeps tools standing upright for easy identification and access
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Oil and moisture-resistant reinforced bottom

Description	Part No.
Premium Leather Carrier w/shoulder strap	**35-975**
Premium Black Leather Carrier w/shoulder strap	**35-975BLK**
Standard Leather Carrier w/shoulder strap	**35-325**

Tuff-Tote® Tool Carrier

- Convenient 6 in. x 8 in. tool carrier with 4 center screwdriver slots, 2 interior compartments, 2 divided outside pockets outside tool loops
- Exclusive leather grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Unique stand-alone design keeps tool standing upright for easy identification and access
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Oil and moisture-resistant reinforced bottom

Description	Part No.
Premium Leather Carrier w/shoulder strap	**35-969**

Tuff-Tote® Tool Pouches

35-950

35-950BLK

35-311

- 8-pocket, belt-mounted pouch features large utility compartment with 2 dividers and 6 screwdriver loops, 7 outside pockets, release snaps and tape chain
- Exclusive leather grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Tunnel belt loop accommodates belts up to 2-1/4 in. wide

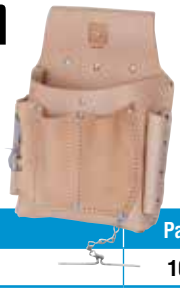
Description	Part No.
Premium Leather Pouch w/shoulder strap	**35-950**
Premium Black Pouch w/shoulder strap	**35-950BLK**
Standard Leather Pouch w/shoulder strap	**35-311**

Ergo Tool Pouch

- Compact ergonomic design for versatility and superior comfort
- Large tool holding capacity
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability

Description	Part No.
Standard Natural Leather Ergo Tool Pouch	**35-312**

Electrician's Tool Pouch



- Seven-pocket tool pouch
- Full length belt tunnel
- Chain tape lanyard

Description	Part No.
Standard Leather Electrician's Tool Pouch	**10-466**

Hip Holster Tool Pouch

- Compact, six-pocket holster
- Heavy-duty leather construction
- Riveted corners for long life
- Tape measure holder

Description	Part No.
Premium Hip Holster Tool Pouch	35-784BLK

Shoulder Straps

35-965

35-338

35-965BLK

- Nickel-plated hardware for long-term durability and corrosion resistance
- 2-in. wide shoulder pad for added comfort

Description	Part No.
Premium Leather Strap	35-965
Standard Leather Strap	35-338
Premium Black Leather Strap	35-965BLK

Belts

35-995

35-316

10-398

- Nickel-plated hardware for long-term durability and corrosion resistance

Description	Part No.
Leather Belt - 2 in. x 48 in.	35-995
Leather Belt - 1-3/4 in. x 46 in.	35-316
Web Belt	10-398

Supplies Apron

- Two pockets for connectors and fasteners, each 8 in. x 15 in.
- Natural duck construction

Description	Part No.
Supplies Apron	35-474

Pocket Pal® Tool Holster

- Protects pocket from sharp tools
- Doubles tool carrying capacity
- Can be worn in pocket or on belt

Description	Part No.
Pocket Pal® Tool Holster	35-505

Large Mouth Bags

- Top opens completely for easy access to large tools – reinforced to hold itself open
- Measures 9 in. wide x 12 in. deep with outside and inside pockets for convenient hand tool storage
- Rugged zipper closure helps prevent tool loss
- Removable shoulder strap
- Durable multi-ply construction

Description	Part No.
Large Mouth Bag - 13 in. long	35-410
Large Mouth Bag - 16 in. long	35-418
Large Mouth Bag - 18 in. long	35-427

Journeyman Electrician's Tote™ Tool Bag

- Compact and versatile design
- Carry as a hand-tote, shoulder-tote or tool-belt
- Includes removable shoulder strap and belt
- Durable multi-ply construction

Description	Part No.
Journeyman Electrician's Tote™ Tool Bag	35-462

Master Electrician's Tote™

- Spacious and durable design
- Organizes and displays tools for fast access
- Includes removable shoulder strap
- Durable multi-ply construction

Description	Part No.
Master Electrician's Tote™	**35-441**

Mechanic's Tool Bag

- Eight narrow inside pockets designed to hold small tools
- Two side pockets with closeable snaps for large tools or loose items
- Double inside liner and rigid bottom prevent bag distortion
- Durable nylon polyester construction

Description	Part No.
Mechanic's Tool Bag	**35-535**

Zipper Pouches

- Durable, water resistant material
- Heavy duty, self-repairing zippers

Description	Part No.
10-1/2 in. Zipper Pouch	**35-402**
12-1/2 in. Zipper Pouch	**35-403**

Divider Pouch™ Small Parts Bag

- Designed to provide perfect small parts storage – keeps parts separate and organized
- Six internally divided 5-in. deep pockets
- Convenient drawstring protects contents from spillage
- Convenient handle loop
- Sized to stack in 5-gallon buckets
- Durable nylon polyester construction

Note: Wire connectors sold separately.

Description	Part No.
Divider Pouch™ Small Parts Bag	**35-655**

17-Piece Master Electrician's Kit w/Tool Carrier

Description	Part No.
17-Piece Master Electrician's Kit	**35-809**
Kit Includes	
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
8-1/2 in. Long-Nose Pliers w/cutter	**35-3038**
9-1/2 in. Tongue & Groove Pliers	**35-3420**
9-1/2 in. Cable Cutter	**35-3052**
Kinetic™ Reflex™ T®-Stripper Wire Stripper	**45-915**
7-in-1 Twist-a-Nut™ Screwdriver	**35-908**
Phillips #1 x 3 in. Cushioned-Grip Screwdriver	**35-193**
Phillips #2 x 4 in. Cushioned-Grip Screwdriver	**35-194**
3/16 in. x 6 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 6 in. Cushioned-Grip Screw holding Slotted Screwdriver	**35-406**
Hawkbill Knife	**35-286**
Electrician's Hammer	**35-210**
25' Auto-Lock Tape Measure	**35-242**
Torpedo Level	**35-205**
Vol-Con® Voltage/Continuity Tester	**61-076**
Tuff-Tote® Premium Leather Tool Carrier	**35-975**

16-Piece Master Electrician's Kit w/Pouch

Description	Part No.
16-Piece Master Electrician's Kit	**35-800**
Kit Includes	
9-1/4 in. Lineman's Plier w/fish tape puller	**30-430**
8 in. Diagonal-Cutting Pliers w/angled head	**35-029**
8-1/2 in. Long-Nose Plier	**35-038**
9-1/2 in. Cable Cutter	**35-052**
3/16 in. x 6 in. Cushioned-Grip Screw holding Slotted Screwdriver	**35-083**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Electrician's Hammer	**35-210**
25' Auto-Lock Tape Measure	**35-242**
Electrician's Knife	**35-285**
Standard Leather Pouch w/shoulder strap	**35-311**
10-1/2 in. Tongue and Groove Plier	**35-430**
7-in-1 Twist-a-Nut™ Screwdriver	**35-908**
T®-Stripper Wire Stripper	**45-120**
Vol-Con® Voltage/Continuity Tester	**61-076**
Replacement Battery	**61-201**

16-Piece Master Electrician's Kit w/Large Mouth Bag

Description	Part No.
16-Piece Master Electrician's Kit	**35-808**
Kit Includes	
Combo Crimp/Strip Tool	**30-428**
Pocket Fuse Puller	**34-002**
9-1/2 in. Lineman's Plier w/New England nose, crimping die and fish tape puller	**30-430**
8-1/2 in. Long-Nose Pliers w/cutter	**35-038**
9-1/2 in. Cable Cutter	**35-052**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 6 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
#1 x 3 in. Cushioned-Grip Phillips Screwdriver	**35-193**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Electrician's Hammer	**35-210**
25' Auto-Lock Tape Measure	**35-242**
Ergonomic Hacksaw	**35-261**
Hawkbill Knife	**35-286**
10-1/2 in. Tongue and Groove Plier	**35-430**
Reflex™ T®-5 T®-Stripper Wire Stripper	**45-415**
18 in. Large Mouth Bag	**35-427**

13-Piece Journeyman Electrician's Kit w/Electrician's Tote

Description	Part No.
13-Piece Journeyman Electrician's Kit	**35-790**
Kit Includes	
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
Fuse Puller, Medium	**34-002**
8-1/2 in. Long-Nose Pliers w/cutter	**35-3038**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 4 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
#1 x 3 in. Cushioned-Grip Phillips Screwdriver	**35-193**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Torpedo Level	**35-205**
25' Auto-Lock Tape Measure	**35-242**
Hawkbill Knife	**35-286**
9-1/2 in. Tongue & Groove Plier	**35-3420**
Kinetic™ Reflex™ T®-Stripper Wire Stripper	**45-915**
Journeyman Electrician's Tote®	**35-462**

12-Piece Journeyman Electrician's Kit w/Tool Pouch

Description	Part No.
12-Piece Journeyman Electrician's Kit	**35-5805**
Kit Includes	
Web Belt	**10-398**
Electrician's Leather Tool Pouch	**10-466**
9-1/2 in. Lineman's Plier w/New England nose, crimping die and fish tape puller	**30-430**
8 in. Diagonal-Cutting Pliers	**35-028**
8-1/2 in. Long-Nose Plier	**35-038**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 4 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-184**
#1 x 3 in. Cushioned-Grip Phillips Screwdriver	**35-193**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
25' Auto-Lock Tape Measure	**35-242**
8-1/2 in. Tongue & Groove Pliers	**35-420**
Premium T®-5 T®-Stripper Wire Stripper	**45-120**

6-Piece Electrician's Holster Kit

Description	Part No.
6-Piece Electrician's Holster Kit	**35-794**
Kit Includes	
9-1/4 in. Lineman's Plier w/fish tape puller	**30-430**
25' Auto-Lock Tape Measure	**35-242**
Utility Knife	**35-300**
Pocket Pal® Tool Holster	**35-505**
7-in-1 Twist-a-Nut™ Screwdriver	**35-908**
T®-5 T®-Stripper Wire Stripper	**45-120**

4-Piece Electrician's Holster Kit

Description	Part No.
4-Piece Electrician's Holster Kit	**35-5799**
Kit Includes	
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
Pocket Pal® Tool Holster	**35-505**
11-in-1 Screwdriver/Nutdriver	**35-910**
Premium T®-5 T®-Stripper Wire Stripper	**45-120**

5-Piece Electrician's Holster Kit

Description	Part No.
5-Piece Electrician's Holster Kit	**35-5792**
Kit Includes	
9-1/4 in. Lineman's Plier w/fish tape puller	**30-430**
3/16 in. x 6 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Pocket Pal® Tool Holster	**35-505**
Premium T®-5 T®-Stripper Wire Stripper	**45-120**

Cutting Supplies

Understanding an industry takes years of dedication and focus. At IDEAL Electrical, we are committed to delivering high quality, innovative products to professional electricians. Our power tool accessories are specifically designed with the professional electrician in mind. Experience less down time on the work site and get a superior cost-per-cut advantage with IDEAL.

Carbide-Tipped Hole Cutters
Sheet Metal
Stainless steel

Step Drills
Brass
Carbon Steel
Cast Iron
Stainless Steel

Bi-Metal Hole Saws
Metal
Plastics
Wood

Multi-Purpose Hole Saws
Composite Enclosures
Ceiling Tile
Cement Board
Wood

Auger Bits
Wood

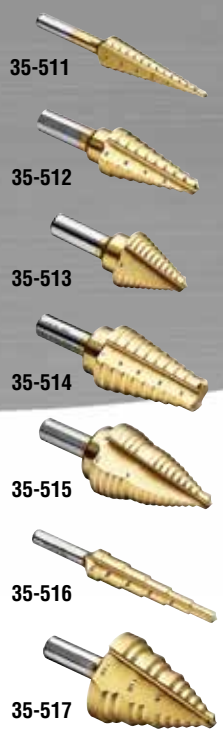
Wood Boring Bits
Wood

Reciprocating Blades
Metal
Ceramic Tile
Drywall
Fiberglass
General Purpose
Wood
Steel

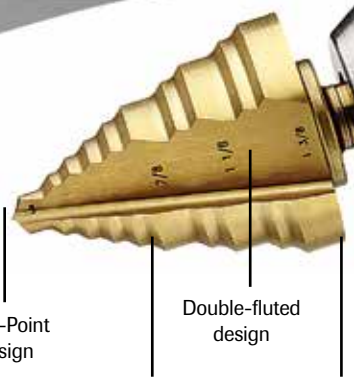
Flexible Drill Bits
Steel
Wood

Step Drill Bits

Cuts 1/4 in. thick Steel



Trust IDEAL step drill bits for precise, repetitive drilling through the toughest materials including brass, carbon steel, cast iron, stainless steel, and more. These tough and reliable tools are constructed with a rugged titanium nitrite exterior coating. Each step is gradually blended to ease stepping through hole sizes; reducing the need to keep changing drill bits, which speeds up the fabrication process. Improved Split-Point tip design eliminates the need for a starter hole or punch and delivers three times faster starts, saving valuable time. The double-fluted design provides balanced cuts and cooler operation.



BEST

GOOD

Drill Diameter Sizes (In.)	No. of Hole Sizes	Step Increments (In.)	Step Thickness (In.)	Shank Dia. (In.)	Part No.
1/8 to 1/2	13	1/32	1/8	5/16	**35-511**
1/4 to 3/4	9	1/16	1/8	3/8	**35-512**
1/4 to 7/8	11	1/16	1/16	3/8	**35-513**
1/2 to 1	8	1/16	1/8	3/8	**35-514***
1/4 to 1-1/8	16	1/16	1/16	3/8	**35-515**
3/16 to 1/2	6	1/16	3/8	5/16	**35-516**
1/4 to 1-3/8	10	1/32	1/16 to 1/4	3/8	**35-517**

*Requires pilot holes.

Electrician's Step Bit Kit

- Durable blow-molded case securely holds and protects bits
- Kit Includes: 1/8 to 1/2 in. 35-511, 1/4 to 7/8 in. 35-513, 1/4 to 1-1/8 in. 35-515 and 1/4 to 1-3/8 in. 35-517 Step Bits
- Kit provides a solution for every electrical hole size between 1/8 in. and 1-3/8 in.

Description	Part No.
Electrician's Step Bit Kit	**35-520**

Quick Change Step Bits

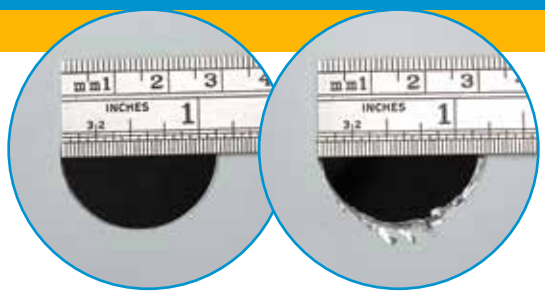
- Split-Point tip lasts longer and starts faster than competition
- High speed tool steel, double-tempered for superior tip life
- Double fluted and blended radius steps for smooth drilling
- 1/4" Quick change shank

Quick Change!

Drill Diameter Sizes (In.)	No. of Hole Sizes	Step Increments (In.)	Step Thickness (In.)	Shank Dia. (In.)	Part No.
1/8 to 1/2	13	1/16	1/8	1/4	**35-521**
1/4 to 7/8	11		1/16		**35-522**
1/4 to 1-1/8	16				**35-523**
3-Piece Quick-Change Step Bit Kit (35-521, 35-522, 35-523)					**35-524**

TKO™ Carbide-Tipped Hole Cutters

TKO™ Hole Cutters offer the most efficient and clean cutter replacement for traditional knockouts, by making smooth holes in a fraction of the time at a fraction of the cost. Specifically designed to cut sheet metal, TKO cutters will even cut stainless steel with fine grained, carbide tips. The innovative design includes the exclusive SmoothStart™ replaceable pilot drill, which guides the cutter to the surface, avoiding cutter damage and providing smoother holes. An integral overdrill flange prevents cutter penetration beyond the sheet metal. When it comes to quality, performance and durability, IDEAL is the professional's choice for carbide tipped hole cutters.



IDEAL TKO™ **Competitor**

IDEAL provides smooth, precise holes (holes cut with 1-1/8 in. cutters)

Hole Size	Conduit & Pipe Size	Part No.
3/4 in. (19mm)	—	**36-300**
7/8 in. (22mm)	1/2 in. (22mm) - push button	**36-301**
1 in. (25mm)	—	**36-302**
1-1/8 in. (29mm)	3/4 in. (19mm)	**36-303**
1-1/4 in. (32mm)	—	**36-304**
1-3/8 in. (35 mm)	1 in. (25mm)	**36-305**
1-7/32 in. (30mm)	1-7/32 in. (30mm) - push button	**36-313**
1-7/16 in. (37mm)	—	**36-306**
1-1/2 in. (38mm)	—	**36-307**
1-3/4 in. (44mm)	1-1/4 in. (32mm)	**36-308**
2 in. (51mm)	1-1/2 in. (38mm)	**36-309**
2-1/2 in. (64mm)	2 in. (50mm)	**36-310**
2-7/8 in. (73mm)	2-1/2 in. (64mm)	**36-315**
3-1/2 (89mm)	3 in. (76mm)	**36-316**
4 in. (102mm)	3-1/2 in. (89mm)	**36-317**
4-1/2 in. (114mm)	4 in. (102mm)	**36-318**

3/8 in. Shank on all hole cutters. Max. material thickness is 1/8 in.

SmoothStart™ Replacement Pilot Drill

- Guides cutter to surface providing smoother holes and cutter damage

Description	Diameter	Drill Depth	Overall Length	Part No.
SmoothStart™ Replacement Pilot Drill	1/4 in.	3/4 in.	2 in.	**36-312**

4-Piece TKO™ Carbide-Tipped Hole Cutter Kit

Description	Part No.
4-Piece Carbide Hole Cutter Kit	**36-311**
Kit Includes	**Part No.**
7/8 In. Hole Cutter	**36-301**
1-1/8 in. Hole Cutter	**36-303**
1-3/8 in. Hole Cutter	**36-305**
SmoothStart™ Pilot Bit	**36-312**
Carrying Case	—

Hex key size is 3mm.

8-Piece TKO™ Carbide-Tipped Hole Cutter Electrician's Kit

Description	Part No.
8-Piece Carbide Hole Cutter Kit	**36-314**
Kit Includes	**Part No.**
7/8 In. Hole Cutter	**36-301**
1-1/8 in. Hole Cutter	**36-303**
1-3/8 in. Hole Cutter	**36-305**
1-3/4 in. Hole Cutter	**36-308**
2-1/2 in. Hole Cutter	**36-309**
2-1/2 in. Hole Cutter	**36-310**
SmoothStart™ Pilot Bit	**36-312**
Carrying Case	—

Hex key size is 3mm.

BEST CHOICE FOR LONGER LIFE

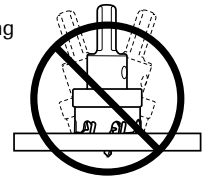
TKO™ Carbide-Tipped Hole Cutters

Carbide tips cut up to 1/8 in. thick steel and outperforms HSS cutters and bi-metal hole saws in sheet steel

Integrated arbor provides smooth, accurate holes

Integrated overdrill flange prevents penetration beyond the sheet metal

Ejection spring effortlessly ejects slug



DO NOT ROCK

Exclusive SmoothStart™ pilot drill guides cutter

Low RPM recommended for longer life.

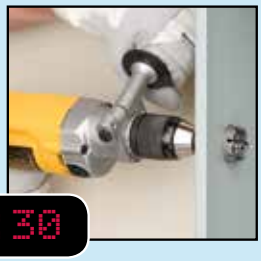
See how IDEAL TKO can save time...

Total time using the IDEAL TKO™

30 Seconds

Chuck Cutter

Drill hole & store

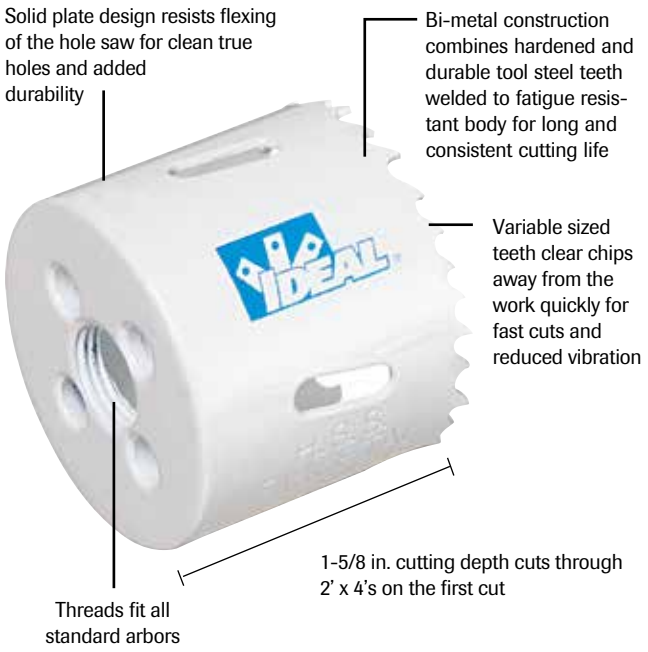


Total time using the competitors' knockout tool

More than 6 Minutes

IRONMAN™ Bi-Metal Hole Saws

- Thicker, flex-free backing plate for clean true holes and long tool life
- Variable pitch tooth geometry for fast cutting and reduced vibration
- Cuts all types of machinable metal including stainless steel, wood, nail embedded wood, plastic and fiberboard



Saw Diameter (In.)	Pipe Tap Size* (In.)	Pipe Entrance Size* (In.)	Use with Arbor No.	Part No.
9/16	–	–	35-391, 35-392 or 35-393	35-340
5/8	–	–		35-341
11/16	–	–		35-342
3/4	1/2	3/8		35-343
25/32	–	–		35-399
13/16	–	–		35-344
7/8	3/4	1/2		35-345
15/16	–	–		35-346
1	–	–		35-347
1-1/16	–	–		35-348
1-1/8	1	3/4		35-349
1-3/16	–	–		35-350
1-1/4	–	–	35-394, 35-536 or 35-537	35-351
1-5/16	–	–		35-352
1-3/8	–	1		35-353
1-7/16	–	–		35-354
1-1/2	1-1/4	–		35-355
1-9/16	–	–		35-356
1-5/8	–	–		35-357
1-1/16	–	–		35-358
1-3/4	1-1/2	1-1/4		35-359
1-13/16	–	–		35-360
1-7/8	–	–		35-361
2	–	1-1/2		35-362
2-1/16	–	–		35-363
2-1/8	–	–		35-364
2-1/4	2	–		35-365
2-5/16	–	–		35-366
2-3/8	–	–		35-367
2-1/2	–	2		35-368
2-9/16	–	–		35-369
2-5/8	2-1/2	–		35-370
2-3/4	–	–		35-371
2-7/8	–	–		35-372
3	–	2-1/2	35-394, 35-536, 35-537 or 35-538	35-373
3-1/8	–	–		35-374
3-1/4	3	–		35-375
3-3/8	–	–		35-376
3-1/2	–	–		35-377
3-5/8	–	3		35-378
3-3/4	3-1/2	–		35-379
3-7/8	–	–		35-380
4	–	–		35-381
4-1/8	–	3-1/2		35-382
4-1/4	4	–		35-383
4-3/8	–	–		35-384
4-1/2	–	4		35-385
4-3/4	4-1/2	–		35-386
5	–	–		35-387
5-1/2	–	–		35-388
5-3/4	–	–		35-389
6	–	–		35-390

*All pipe sizes listed in the Pipe Tap Size and Pipe Entrance Size columns are standard industry sizes. All pipes are sized by the nominal inside diameter.

IRONMAN™ Bi-Metal Hole Saw Kits

35-400
8-Pc. Electrician's Hole Saw Kit

35-401
14-Pc. Electrician's Hole Saw Kit

35-518
19-Pc. Electrician's Hole Saw Kit

Part No.	Hole Saws Included in Kits																		
	Hole Saws (in.)														Hole Saw Arbors				
	3/4 35-343	7/8 35-345	1 35-347	1-1/8 35-349	1-3/8 35-353	1-1/2 35-355	1-3/4 35-359	2 35-362	2-1/4 35-365	2-1/2 35-368	3 35-373	3-5/8 35-378	4-1/8 35-382	4-1/2 35-385	35-391	35-393	35-394	35-396 (Ext.)	Repl. Pilot Drill 35-397
35-400		•		•	•		•	•		•						•	•		
35-401		•		•	•		•	•		•	•	•	•	•	•	•	•	•	
35-518	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•

Replacement Pilot Drills for Hole Saw Arbors

- Split point pilot drills start on contact for faster penetration and less walking

Description	Part No.
4 in. x 1/4 in. – Fits 35-391, 35-393, 35-394 & 35-538 arbors	**35-397**
3-1/4 in. x 1/4 in. – Fits 35-392, 35-536 & 35-537 arbors	**35-398**

Arbor Extension

- Easily connects to IDEAL Hole Saw Arbors
- Extension adds up to 18 in.

Description	Part No.
12 in. Extension for 7/16 in. Arbors	**35-396**

Not for use with TKO™ Hole Cutters, Step Drills or Augers.

Hole Saw Arbors

Best Arbor for Tri-Bore Hole Saws!

35-391 35-392 35-393 35-394 35-536 35-537 35-538

- Durable steel construction for long-lasting performance
- Set-screw in body for easy replacement of the pilot drill
- Versatile design saves valuable time, no tools needed to change hole saws

Shank Size	Thread Size	Fits Hole Saw Sizes	Part No.
1/4 in. Round	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-391**
3/8 in. Hex	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-292**
7/16 in. Hex	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-393**
7/16 in. Hex	5/8 - 18 in.	1-1/4 - 6 in.	**35-394**
7/16 in. Hex	5/8 - 18 in.	1-1/4 - 6 in.	**35-536**
3/8 in. Hex	5/8 - 18 in.	1-1/4 - 6 in.	**35-537**
7/16 in. Hex	5/8 - 18 in.	1 - 6 in.	**35-538**

TRI-BORE™ Multi-Purpose Hole Saw

- Massive carbide tips designed to cut wood with nails, cement board, composite enclosures, ceiling tile and more!
- Faster than self-feed bits in wood and carbide grit in abrasive materials

Hole Size (in.)	Application	Part No.
1-3/8		**36-350**
2-1/8	1-1/2" Pipe and lock installation	**36-351**
2-1/4	1-1/2" Pipe with couplings	**36-352**
2-9/16	2" Pipe	**36-353**
3	2" Pipe with couplings	**36-354**
3-3/8		**36-355**
3-5/8	3" Pipe	**36-356**
4		**36-357**
4-1/4	3" Pipe with couplings, 4" dryer vent	**36-358**
4-1/8		**36-359**
4-3/8	Capri®, Halo®, Marco, Mini Juno	**36-360**
4-5/8	4" pipe	**36-361**
5-3/8	Capri®, Juno®, Lightolier, Prescolite, Progress	**36-362**
6-1/4	6" Duct	**36-363**
6-3/8	Capri®, Halo®	**36-364**
6-5/8	Juno® and Progress	**36-365**
6-7/8	Capri®, Lightolier, Lithonia, Prescolite, Progress	**36-366**

Hole Saw Arbor

- Tri-Bore™ pilot bits must be ordered separately.
- 35-393 for use with 1-3/8 in. Hole Saw (36-350)
- 35-394 for use with remaining sizes

35-393 **35-394**

Shank Size	Thread Size	Shank Size	Part No.
7/16 in. Hex	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-393***
7/16 in. Hex	5/8 - 18 in.	1/2 in.	**35-394***

*Arbors include pilot bits for bi-metal hole saws. Tri-Bore™ pilot bits must be ordered separately.

Spade & Carbide Pilot Bits for Tri-Bore™ Hole Saws

- Deep-cup design on Tri-Bore™ Hole Saws require the use of a longer pilot bit.

Hole Size (in.)	Application	Part No.
Spade Bit	Wood boring	**36-367***
Carbide Pilot	Abrasive material boring	**36-368***

*For use with Tri-Bore™ Hole Saw Arbors 35-393 & 35-394

Adjustable Can Light Hole Saw

- Cuts drywall and ceiling tile
- Self-sharpening carbide-coated cutting blades
- Includes two dust shields to minimize clean up

Description	Part No.
Adjustable Can Light Hole Saw – 10 sizes from 2-1/2 in. to 7 in. in increments of 3/8 in.	**35-598**
Adjustable Can Light Hole Saw – 13 sizes from 6-1/4 in. to 10-3/8 in. in increments of 3/8 in.	**35-599**

Screw Point Flexible Drill Bits, Type B

- Fast and aggressive, self-starting bit
- Ultra-sharp ground threads provide increased pulling power through obstructions
- Designed for easy to tough wood drilling

Description	Shank (in.)	Part No.
3/8 in. x 54 in. Screw Point Flexible Bit	3/16	**90-082**
1/2 in. x 54 in. Screw Point Flexible Bit	3/16	**90-085**
9/16 in. x 54 in. Screw Point Flexible Bit	3/16	**90-088**
3/4 in. x 54 in. Screw Point Flexible Bit	1/4	**90-091**

Serrated Combination Flexible Drill Bits, Type C

- Fast and aggressive, self-starting bit
- Ultra-sharp ground threads provide increased pulling power through obstructions
- Designed for easy to tough wood and light metal drilling

Description	Shank (in.)	Part No.
1/4 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-063**
3/8 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-067**
1/2 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-070**
9/16 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-073**

Flexible Bit Extensions

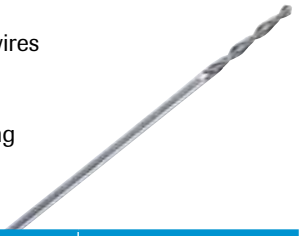
- Connect to chuck end of shaft to increase the length of the bit

Description	Shank (in.)	Part No.
3/16 in. x 36 in. Flexible Bit Extension	3/16	**90-170**
1/4 in. x 36 in. Flexible Bit Extension	1/4	**90-173**

Flexible Bit Placement Tool

Description	Part No.
Flexible Bit Placement Tool	**90-176**

Installer Bits



- Hole in fluted head for pulling wires through walls, ceiling and floors
- Flutes designed for quick chip removal – no clogging or binding
- Premium quality, extra-hard 52-100 carbon bearing steel

Description	Length	Part No.
Installer Bit - 1/4 in.	18 in.	**35-870**
Installer Bit - 3/8 in.	18 in.	**35-871**
Installer Bit - 1/2 in.	18 in.	**35-872**

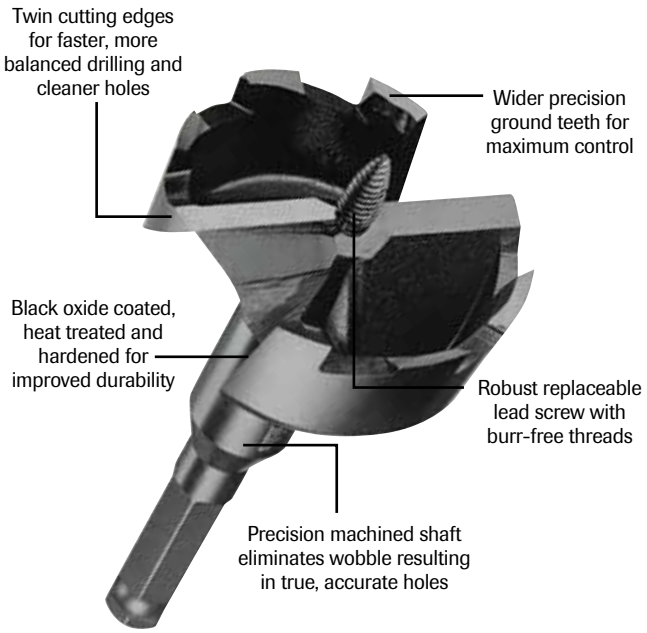
Power Spade Bits

- The most innovative and fastest spade bit
- Smooth and effortless drilling
- Max. operating speed 1500 RPM
- Available in a variety of sizes
- Offers less vibration than other bits

Description	Part No.
1/2 in.	**36-413**
5/8 in.	**36-415**
3/4 in.	**36-417**
7/8 in.	**36-419**
1 in.	**36-421**
1-1/8 in.	**36-422**
1-1/4 in.	**36-423**
4-Piece Kit with Pouch (5/8 in., 3/4 in., 7/8 in., 1 in.)	**36-432**

BUL-O-EYE™ Self Feed Wood Boring Bits

- Twin cutting edges for superior cutting speed and ultra clean holes
- Precision ground teeth provide clean and balanced cuts for maximum control with wider cutting surface
- Robust replaceable lead screw with burr-free threads that feed the bit through the wood at a consistent rate
- Precision machined shaft for bit concentricity to eliminate wobble and deliver a truer hole
- Black oxide coated, heat treated and hardened for added durability
- Quick-change shank for fast, secure change out



Description	Diameter	Entrance Size for Pipe & EMT	Part No.
1 in. Self-Feed Wood Boring Bit	1 in.	1/2 in.	**36-250**
1-1/8 in. Self-Feed Wood Boring Bit	1-1/8 in.	—	**36-251**
1-1/4 in. Self-Feed Wood Boring Bit	1-1/4 in.	3/4 in.	**36-252**
1-3/8 in. Self-Feed Wood Boring Bit	1-3/8 in.	1 in.	**36-253**
1-1/2 in. Self-Feed Wood Boring Bit	1-1/2 in.	—	**36-254**
1-3/4 in. Self-Feed Wood Boring Bit	1-3/4 in.	1-1/4 in.	**36-255**
2 in. Self-Feed Wood Boring Bit	2 in.	1-1/2 in.	**36-256**
2-1/8 in. Self-Feed Wood Boring Bit	2-1/8 in.	—	**36-257**
2-1/4 in. Self-Feed Wood Boring Bit	2-1/4 in.	—	**36-258**
2-9/16 in. Self-Feed Wood Boring Bit	2-9/16 in.	2 in.	**36-259**
3 in. Self-Feed Wood Boring Bit	3 in.	2-1/2 in.	**36-260**
3-5/8 in. Self-Feed Wood Boring Bit	3-5/8 in.	3 in.	**36-261**
4-5/8 in. Self-Feed Wood Boring Bit	4-5/8 in.	4 in.	**36-262**

Replacement Lead Screws

- Keeps self-feed bits running fast and true
- Easily replaced with hex wrench providing extended drill life and optimum cost-per-hole value

Description	Qty.	Part No.
Small replacement lead screws, fits bit sizes 1 in. - 2-9/16 in.	3/pack	**36-271**
Small replacement lead screws, fits bit sizes 3 in. - 4-5/8 in.	3/pack	**36-270**

Extension Bars

- Fits into hard-to-reach areas
- Compatible with IDEAL Auger Bits

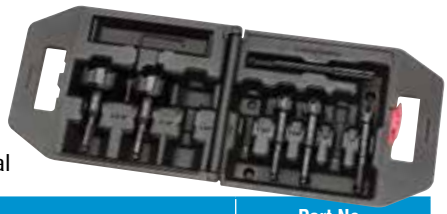
Description	Part No.
5-1/2 in. Extension Bar (includes Allen wrench)	**36-273**
18 in. Extension Bar (includes Allen wrench)	**35-819**

Sharpening File

- Keeps durable bits working like new
- High-grade sharpener hones dulled edges quickly and efficiently

Description	Part No.
Sharpening File	**36-272**

6-Piece BULZ-EYE™ Self Feed Wood Boring Bit Kit



- For the professional needing to drill multiple hole sizes in any wood material

Description	Part No.
6-Piece BULZ-EYE™ Self-Feed Wood Boring Bit Kit	**36-266**
Kit Includes	**Part No.**
1 in. Bit	**36-250**
1-1/4 in. Bit	**36-252**
1-3/8 in. Bit	**36-253**
2 in. Bit	**36-256**
2-9/16 in. Bit	**36-259**
5-1/2 in. Extension Bar	**36-273**
Carrying Case	—

9-Piece BULZ-EYE™ Self Feed Wood Boring Bit Kit

- For the professional needing to drill multiple hole sizes in any wood material

Description	Part No.
9-Piece BULZ-EYE™ Self-Feed Wood Boring Bit Kit	**36-269**
Kit Includes	**Part No.**
1 in. Bit	**36-250**
1-1/8 in. Bit	**36-251**
1-1/4 in. Bit	**36-252**
1-3/8 in. Bit	**36-253**
1-1/2 in. Bit	**36-254**
1-3/4 in. Bit	**36-255**
2-1/8 in. Bit	**36-257**
2-9/16 in. Bit	**36-259**
5-1/2 in. Extension Bar	**36-273**
Carrying Case	—

Mini™ Utility Bit Augers

- Designed to fit between wall studs when used with common drills
- Eliminates the need for expensive right angle drills

Bit Length = 4-3/4", Twist = 2-1/2", Shank = 7/16"	Hole Diameter	Part No.
5/8 in. Mini™ Auger	5/8 in.	**35-862**
3/4 in. Mini™ Auger	3/4 in.	**35-864**
7/8 in. Mini™ Auger	7/8 in.	**35-866**
1 in. Power Ship Auger	1 in.	**35-868**

Auger Bit Extension

- Dual locking screws
- Allen wrench included
- Compatible with Nailbiter™ and RESI-MASTER™ Ship Augers

Auger Bit Extensions, 18"; Six flats to fit drill chuck Description	Part No.
Auger Bit Extension for 7/16 in. shank	**35-819**

7-1/2" Nailbiter™ Premium Ship Auger Bits

- Dual-Helix construction with twin cutting edges for fast and smooth drilling action, even through nail-embedded timbers
- Full body, dual induction heat treatment ensures durability, minimizes warping and delivers long lasting performance
- Heavy-duty lead screw designed for quick gripping power, superior penetration and extra-long life
- Re-sharpenable for extended tool life
- 7/16 in. Shank

Description	Hole Diameter	Overall Length	Twist Length	Part No.
5/8 in. Power Ship Auger	5/8 in.	7-1/2 in.	5 in.	**35-810**
11/16 in. Power Ship Auger	11/16 in.	7-1/2 in.	5 in.	**35-811**
3/4 in. Power Ship Auger	3/4 in.	7-1/2 in.	5 in.	**35-812**
13/16 in. Power Ship Auger	13/16 in.	7-1/2 in.	5 in.	**35-813**
7/8 in. Power Ship Auger	7/8 in.	7-1/2 in.	5 in.	**35-814**
1 in. Power Ship Auger	1 in.	7-1/2 in.	5 in.	**35-815**
1-1/8 in. Power Ship Auger	1-1/8 in.	7-1/2 in.	5 in.	**35-816**
1-1/4 in. Power Ship Auger	1-1/4 in.	7-1/2 in.	5 in.	**35-817**

18" Nailbiter™ Premium Ship Auger Bits

Description	Hole Diameter	Overall Length	Twist Length	Part No.
1/2 in. Power Ship Auger	1/2 in.	18 in.	15 in.	**35-820**
5/8 in. Power Ship Auger	5/8 in.	18 in.	15 in.	**35-821**
11/16 in. Power Ship Auger	11/16 in.	18 in.	15 in.	**35-822**
3/4 in. Power Ship Auger	3/4 in.	18 in.	15 in.	**35-823**
13/16 in. Power Ship Auger	13/16 in.	18 in.	15 in.	**35-824**
7/8 in. Power Ship Auger	7/8 in.	18 in.	15 in.	**35-825**
15/16 in. Power Ship Auger	15/16 in.	18 in.	15 in.	**35-826**
1 in. Power Ship Auger	1 in.	18 in.	15 in.	**35-827**
1-1/8 in. Power Ship Auger	1-1/8 in.	18 in.	15 in.	**35-828**
1-1/4 in. Power Ship Auger	1-1/4 in.	18 in.	15 in.	**35-829**

7-1/2" RESI-MASTER™ Heavy-Duty Ship Augers

- 62° cutting angle reinforces the cutting edge and provides durability
- Hardened lead screw and cutting edge provide increased wear resistance and extended life
- Secondary relief angle evacuates wood chips quickly and prevents auger from jamming
- Oversized cutting head makes hole larger than body of bit for easy ejection from work piece
- 7/16 in. Shank

Description	Hole Diameter	Overall Length	Twist Length	Part No.
5/8 in. RESI-MASTER™ Auger	5/8 in.	7-1/2 in.	5 in.	**35-892**
11/16 in. RESI-MASTER™ Auger	11/16 in.	7-1/2 in.	5 in.	**35-730**
3/4 in. RESI-MASTER™ Auger	3/4 in.	7-1/2 in.	5 in.	**35-893**
13/16 in. RESI-MASTER™ Auger	13/16 in.	7-1/2 in.	5 in.	**35-731**
7/8 in. RESI-MASTER™Auger	7/8 in.	7-1/2 in.	5 in.	**35-896**
15/16 in. RESI-MASTER™ Auger	15/16 in.	7-1/2 in.	5 in.	**35-897**
1 in. RESI-MASTER™ Auger	1 in.	7-1/2 in.	5 in.	**35-898**
1-1/8 in. RESI-MASTER™ Auger	1-1/8 in.	7-1/2 in.	5 in.	**35-899**
1-1/4 in. RESI-MASTER™ Auger	1-1/4 in.	7-1/2 in.	5 in.	**35-732**

18" RESI-MASTER™ Heavy-Duty Ship Augers

Description	Hole Diameter	Overall Length	Twist Length	Part No.
1/2 in. RESI-MASTER™ Auger	1/2 in.	18 in.	15 in.	**35-726**
5/8 in. RESI-MASTER™ Auger	5/8 in.	18 in.	15 in.	**35-971**
11/16 in. RESI-MASTER™ Auger	11/16 in.	18 in.	15 in.	**35-727**
3/4 in. RESI-MASTER™ Auger	3/4 in.	18 in.	15 in.	**35-972**
13/16 in. RESI-MASTER™ Auger	13/16 in.	18 in.	15 in.	**35-728**
7/8 in. RESI-MASTER™ Auger	7/8 in.	18 in.	15 in.	**35-976**
15/16 in. RESI-MASTER™ Auger	15/16 in.	18 in.	15 in.	**35-977**
1 in. RESI-MASTER™ Auger	1 in.	18 in.	15 in.	**35-978**
1-1/8 in. RESI-MASTER™ Auger	1-1/8 in.	18 in.	15 in.	**35-979**
1-1/4 in. RESI-MASTER™ Auger	1-1/4 in.	18 in.	15 in.	**35-729**

Reciprocating Blades

- Bi-metal blades last up to ten times longer than carbon steel blades
- Flexible spring-back provides long blade life
- Super-hard, high speed steel teeth for a sharp, long-lasting cutting edge
- Shatterproof for tough applications
- Fits all reciprocating saws using 1/2 in. universal shank

L/W/TH (In.)	TPI	Material	Blade Back	Qty.	Application	Part No.
Metal Cutting						
6 x 3/4 x .035	14	Bi-metal	Straight	5	Pipe, structural steel, stainless steel: 3/32" - 1/4", Non-ferrous metal: 3/32" - 3/8"	**36-059**
4 x 3/4 x .035	18	Bi-metal	Straight	5	Structural steel, pipe, conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	**36-055**
6 x 3/4 x .035	18	Bi-metal	Straight	5	Structural steel, pipe, conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	**36-057**
8 x 3/4 x .035	18	Bi-metal	Straight	5	Structural steel, pipe, conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	**36-060**
6 x 3/4 x .035	24	Bi-metal	Straight	5	All metal less than 1/8" thick: Tubing conduit, trim	**36-058**
Heavy-Duty Metal Cutting						
6 x 3/4 x .050	18	Bi-metal	Straight	2	Heavy-duty blade for cutting structural steel, pipe, conduit, stainless steel: 1/16" to 3/16" thick	**36-085**
8 x 3/4 x .050	10/14	Bi-metal	Straight	2	Heavy-duty blade for cutting structural steel, pipe, conduit, stainless steel: 1/8" to 1/2" thick	**36-086**
12 x 3/4 x .050	10/14	Bi-metal	Taper	5	Heavy-duty blade for cutting structural steel, pipe, conduit, stainless steel: 1/8" to 1/2" thick	**36-087**
Wood w/Nails						
6 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	**36-065**
9 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	**36-066**
12 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	**36-067**
Demolition						
9 x 7/8 x .062	6	Bi-metal	Taper	2	Demolition work in nail-embedded wood, remodeling	**36-095**
9 x 7/8 x .062	10	Bi-metal	Taper	2	Demolition work in wood, metal, pipe and fire and rescue	**36-096**
General Purpose						
6 x 3/4 x .035	10	Bi-metal	Straight	5	Nail embedded wood, metal and non-ferrous metal composition materials & plastics 1/8" - 1/2"	**36-075**
Specialty Cutting						
8 x 3/4 x .050	Grit	Tung. Grit	Straight	2	Iron pipe, fiberglass, reinforced plastics, ceramic tile, stone, slate and brick.	**36-090**
3 x 5/16 x .035	18	Bi-metal	Scroll	5	Scroll cutting wood, cast aluminum and non-ferrous metals	**36-054**
Plaster/Drywall						
6 x 3/4 x .050	6	Bi-metal	Taper	2	For plaster, drywall, plaster board & lath. Bi-directional cutting	**36-088**

Long-Life Metal Cutting Reciprocating Blades

- Engineered to be the longest lasting, metal cutting blades available
- Long-life blades perform up to three times as many cuts as similar metal cutting blades
- 8% cobalt cutting edge for extreme durability
- Shatterproof bi-metal design
- Longer life for greater value

L/W/TH (In.)	TPI	Material	Blade Back	Qty.	Application	Part No.
6 x 3/4 x .035	18	Bi-metal	Straight	5	Long-Life blade for cutting structural steel, pipe, conduit, stainless steel, sheet metal: 1/6" - 3/16" thick	**36-043**
8 x 3/4 x .035	18	Bi-metal	Straight	5	Long-Life blade for cutting structural steel, pipe, conduit, stainless steel, sheet metal: 1/6" - 3/16" thick	**36-044**
6 x 1 x .042	14	Bi-metal	Straight	5	Long-Life blade for cutting rebar, barstock, angle iron and other heavy gauge metals: 1/8" and thicker	**36-046**
12 x 1 x .050	14	Bi-metal	Straight	5	Long-Life blade for cutting rebar, barstock, angle iron and other heavy gauge metals: 1/8" and thicker	**36-048**

Progressive Tooth Reciprocating Blades

- Specially designed for all purpose cutting
- Cut multiple materials without changing blades
- Tough bi-metal and HCS construction for long life.

L/W/TH (In.)	Material	Qty.	Application	Part No.
6 x 3/4 x .035	Bi-Metal	5	All metal, non-ferrous metal, sheet metal, pipe and other metal materials	**36-056**

Portable Band Saw Blades

- Bi-metal construction
- Fit all standard portable band saw machines
- For pipe, tubing and solids
- Cut any machinable metal, including conduit, angle iron, structural, rebar and stainless steel tubing

L/W/TH (In.)	TPI	Quantity	Part No.
44-7/8 x 1/2 x .020	10	3	**36-070**
44-7/8 x 1/2 x .020	14	3	**36-071**
44-7/8 x 1/2 x .020	18	3	**36-072**
44-7/8 x 1/2 x .020	24	3	**36-073**

Wire Management

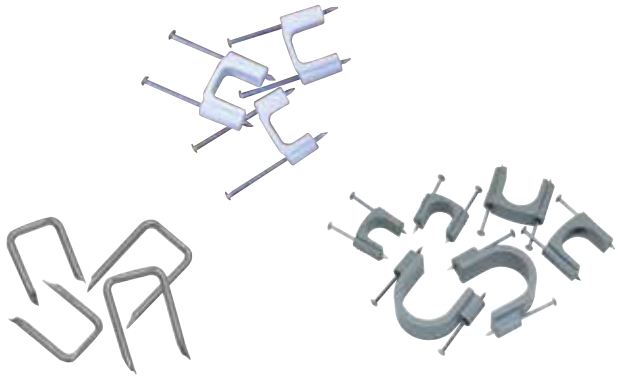
Cable Ties
- Tools
- Identification Ties
- Plenum, Powr-Tie™, Multi-Purpose
- Miniature, Standard, Heavy Duty
- Mounting Pads
- Screw Mounting Bases

Supplies
- Grommets
- Bushings
- Spacer Shims
- Anchor Kits

Staples
- Plastic Insulated
- Carbon Steel

Wire Markers
- Booklets
- Cards
- Dispenser

Switches
- Toggle
- Rocker
- Lever/Pull Chain
- Push-Button
- Rotary
- Door
- Indicator Lights



Cable Tie Numbering System

IT - 2 - S - MH - C - 0

IT	2	S	MH	CC	0
IT = IDEAL Powr-Tie™ Cable Ties	Size Approximate Bundle Diameter for ties	Tensile Strength M = Miniature (18 lbs.) I = Intermediate (40 lbs.) S = Standard (50 lbs.) LH = Light-Heavy Duty (120 lbs.) H = Heavy Duty (175 lbs.) EH = Extra Heavy-Duty (250 lbs.)	Style _ = Standard Tie MH = Mounting ID = Identification MB = Mounting Base LPMB = Low Profile Mounting Base MP = Mounting Pad CCL = Cable Clamp	Qty. Per Package L = 50 C = 100 D = 500 M = 1000	Color _ = Natural 0 = UV Black 8 = Gray 30 = Heat Stabilized Black 35 = Maroon 702 = Halar

Cable Tie Installation Tool

- Consistent, positive tension
- Flush cut-off leaves no projections to damage nearby wires or components
- Lightweight economy model for smaller jobs
- Heavy-duty model features rugged construction with comfortable, cushioned grips

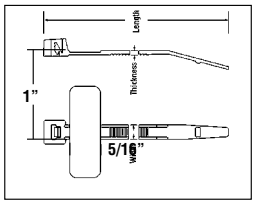
IT1MID-C

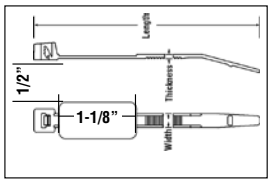
IT2SID-C & IT4SID-C

Description	Part No.
Economy – use w/standard & heavy-duty ties	**41-990**
Heavy-Duty – use w/standard & heavy-duty ties	**41-995**
Replacement Cutter Blade	**L-9148**
Replacement Cutter Bar	**K-5405**

Identification Ties

- Write-on surface
- Bundle and identify at the same time





Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Pad Size (H X L)	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	4.0 in./102mm	.100 in./2.54mm	.044 in./1.12mm	1/16 - 7/8 in.	18 lbs.	5/16 in. x 1 in.	21	AH-2	100	**IT1MID-C**
Natural Nylon	7.8 in./200mm	.181 in./4.59mm	.055 in./1.40mm	1/16 - 1-7/8 in.	50 lbs.	1-1/8 in. x 1/2 in.			100	**IT2SID-C**

Clamps

- Use to secure wires, cables, pipes, tubing and fiber optics
- Ultraviolet black nylon clamps available for internal and external use
- Use with #10 mounting screw

Description	Closed Diameter	Center to Center	Width	Thickness	Mounting Hole	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	.125 in./3.18mm	.343 in./8.71mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm	21	AH-2	100	**IT125CCL-C**
Natural Nylon	.250 in./6.35mm	.421 in./10.69mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm			100	**IT250CCL-C**
UV Black Nylon								100	**IT250CCL-C0**
Natural Nylon	.375 in./9.52mm	.500 in./12.70mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT375CCL2-C**
UV Black Nylon								100	**IT375CCL2-C0**
Natural Nylon	.500 in./12.70mm	.553 in./14.05mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT500CCL2-C**
Natural Nylon	.625 in./15.88mm	.625 in./15.88mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT625CCL2-C**
Natural Nylon	.750 in./19.05mm	.699 in./17.75mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT750CCL2-C**
Natural Nylon	1.000 in./25.40mm	.825 in./20.96mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT1000CCL2-C**

Plenum Cable Ties

- UL Listed nylon 6/6 cable ties are suitable for use in Air Handling Spaces (Plenum) in accordance with Section 300-22(C) & (D) of the National Electrical Code and Rules 12-010 (3), (4) and (5) and 12-020 of the Canadian Electrical Code, Part 1

Standard Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Burgundy Nylon	7.5 in./190mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 1-7/8 in.	50 lbs.	—	21	AH-2	100	**IT2S-C35**
Natural Nylon						MS3367-1-9			100	**IT2S-C**
Natural Nylon									1000	**IT2S-M**
UV Black Nylon						MS3367-1-0			100	**IT2S-C0**
UV Black Nylon									1000	**IT2S-M0**
Burgundy Nylon	11.2 in./284mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 3-1/16 in.	50 lbs.	—			100	**IT3S-C35**
Natural Nylon						MS3367-7-9			100	**IT3S-C**
Natural Nylon									500	**IT3S-D**
UV Black Nylon						MS3367-7-0			100	**IT3S-C0**
UV Black Nylon									500	**IT3S-D0**
Natural Nylon	14.5 in./368mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 4-1/8 in.	50 lbs.	MS3367-2-9			100	**IT4S-C**
Natural Nylon									500	**IT4S-D**
UV Black Nylon						MS3367-2-0			100	**IT4S-C0**
UV Black Nylon									500	**IT4S-D0**

Mounting Ties

Description	Length	Width	Strap Thickness	Max. Bundle	Tensile Strength	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	8.1 in./206mm	.178 in./4.52mm	.053 in./1.35mm	1/16 - 1-3/4 in.	50 lbs.	No. 10	21	AH-2	100	**IT2SMH-C**
Natural Nylon									1000	**IT2SMH-M**
UV Black Nylon									100	**IT2SMH-C0**

Powr-Tie™ Cable Ties

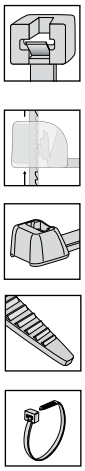
Quality Construction
- One-piece design for added strength
- Superior locking mechanism
- Exceeds industry tensile strength ratings

Low Insertion Force
- Tapered thin tip reduces initial friction
- Lowest insertion force with high tensile strength
- Reduces installation fatigue

No Burrs or Sharp Edges
- Smooth corners provide added safety
- Rounded edges eliminate insulation damage

Stepped Tail Grip for easier grabbing and tightening once engaged

Angled Tail
- Provides quicker initial insertion
- Lowers installation costs



Material Selection
- **RoHS Compliant**
- **Natural General Purpose 6/6 Nylon**
  - Suitable for most applications
  - Meets UL 94V-2 flammability ratings
  - 85°C/185°F working temperature
- **UV Black Nylon 6/6**
  - Suitable for most applications with continuous or extended exposure to outdoor elements
  - Weather-resistant grade, able to endure ultraviolet (UV) light
  - Meets UL 94V-2 flammability ratings
  - 85°C/185°F working temperature
- **Heat Stabilized Black Nylon 6/6**
  - Suitable for most applications with continuous or extended exposure to high temperatures
  - Meets UL standards for electrical applications
  - Meets UL 94V-2 flammability ratings
  - 125°C/257°F working temperature

Miniature (18 lb.) Natural & UV Black Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	4.0 in./102mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 7/8 in.	18 lbs.	MS3367-4-9	21	AH-2	100	**IT1M-C**
Natural Nylon									1000	**IT1M-M**
UV Black Nylon						MS3367-4-0			100	**IT1M-C0**
Natural Nylon	6.1 in./154mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 3-1/2 in.	18 lbs.	—			100	**IT1_5M-C**
UV Black Nylon									100	**IT1_5M-C0**
Natural Nylon	8.1 in./206mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 2-3/16 in.	18 lbs.	—			100	**IT2M-C**
Natural Nylon									1000	**IT2M-M**
UV Black Nylon									100	**IT2M-C0**

*IM, 1_5M & 2M Series

Intermediate (40 lb.) Natural & UV Black Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	5.7 in./145mm	.140 in./3.56mm	.049 in./1.24mm	1/16 - 1-7/16 in.	40 lbs.	MS3367-5-9	21	AH-2	100	**IT1_5I-C**
Natural Nylon									1000	**IT1_5I-M**
UV Black Nylon						MS3367-5-0			100	**IT1_5I-C0**
UV Black Nylon									1000	**IT1_5I-M0**
Natural Nylon	8.8 in./224mm	.140 in./3.56mm	.049 in./1.24mm	1/16 - 2-3/8 in.	40 lbs.	MS53367-5-9			100	**IT2I-C**
Natural Nylon									1000	**IT2I-M**
UV Black Nylon						MS53367-5-0			100	**IT2I-C0**
UV Black Nylon									1000	**IT2I-M0**
Natural Nylon	11.5 in./292mm	.142 in./3.60mm	.055 in./1.40mm	1/16 - 3-3/8 in.	40 lbs.	—			100	**IT3I-C**
UV Black Nylon									100	**IT3I-C0**
Natural Nylon	14.5 in./368mm	.142 in./3.60mm	.055 in./1.40mm	1/16 - 4 in.	40 lbs.	—			100	**IT4I-C**
UV Black Nylon									100	**IT4I-C0**

*IM, 1_5 & 2I Series

Standard (50 lb.) Natural & UV Black & Heat Stabilized Black Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	7.5 in./190mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 1-7/8 in.	50 lbs.	MS3367-1-9	21	AH-2	100	**IT2S-C**
Natural Nylon									1000	**IT2S-M**
UV Black Nylon						MS3367-1-0			100	**IT2S-C0**
UV Black Nylon									1000	**IT2S-M0**
Natural Nylon	11.2 in./284mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 3-1/16 in.	50 lbs.	MS3367-7-9			100	**IT3S-C**
Natural Nylon									500	**IT3S-D**
UV Black Nylon						MS3367-7-0			100	**IT3S-C0**
UV Black Nylon									500	**IT3S-D0**
Natural Nylon	14.5 in./368mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 4-1/8 in.	50 lbs.	MS3367-2-9			100	**IT4S-C**
Natural Nylon									500	**IT4S-D**
UV Black Nylon						MS3367-2-0			100	**IT4S-C0**
UV Black Nylon									500	**IT4S-D0**
Natural Nylon	17.0 in./432mm	.190 in./4.82mm	.053 in./1.34mm	1/16 - 4-3/4 in.	50 lbs.	—			100	**IT5S-C**
UV Black Nylon									100	**IT5S-C0**

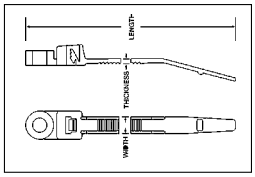
*2S, 3S & 4S Series
UL Listed Nylon 6/6 cable ties are suitable for use in Air Handling Spaces (Plenum) in accordance with Section 300-22(C) & (D) of the National Electrical Code and Rules 12-010 (3), (4) & (5) and 12-020 of the Canadian Electrical Code, Part 1.

Light Heavy-Duty, Heavy-Duty and Extra Heavy-Duty Natural, UV Black and Heat Stabilized Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	8.7/220.9mm	.300 in./7.62mm	.076 in./1.93mm	2-1/16 in.	120 lbs.	—	21	AH-2	100	**IT2LH-C**
UV Black Nylon									100	**IT2LH-C0**
Natural Nylon	15.1 in./384mm	.300 in./7.62mm	.075 in./1.90mm	3/16-4-1/16 in.	120 lbs.	MS3367-3-9			50	**IT4LH-L**
UV Black Nylon						MS3367-3-0			50	**IT4LH-L0**
Natural Nylon	17.8 in./451mm	.300 in./7.62mm	.075 in./1.90mm	3/16-5-1/4 in.	120 lbs.	—			50	**IT5LH-L**
UV Black Nylon									50	**IT5LH-L0**
Natural Nylon	24.2 in./614mm	.300 in./7.62mm	.075 in./1.90mm	3/16-7 in.	120 lbs.	—			50	**IT7LH-L**
UV Black Nylon									50	**IT7LH-L0**
Natural Nylon	25.3 in./642mm	.340 in./8.64mm	.090 in./2.29mm	3/16-7-3/16 in.	175 lbs.	MS3367-10-9			50	**IT7H-L**
UV Black Nylon						MS3367-10-0			50	**IT7H-L0**
Natural Nylon	37.1 in./942mm	.340 in./8.64mm	.090 in./2.29mm	3/16-11 in.	175 lbs.	MS3367-13-9			50	**IT11H-L**
UV Black Nylon						MS3367-13-0			50	**IT11H-L0**
Natural Nylon	47.8 in./ 1214mm	.340 in./8.64mm	.090 in./2.29mm	3/8-14-1/2 in.	175 lbs.	MS3367-16-9			50	**IT14H-L**
UV Black Nylon						MS3367-16-0			50	**IT14H-L0**
UV Black Nylon	22.8 in./579mm	.50 in./12.7mm	.080 in./2.03mm	3/16-6 in.	250 lbs.	—			100	**IT6EH-C0**

*4LH, 7H, 11H, 14H Series

Mounting Head, Natural & UV Black Cable Ties

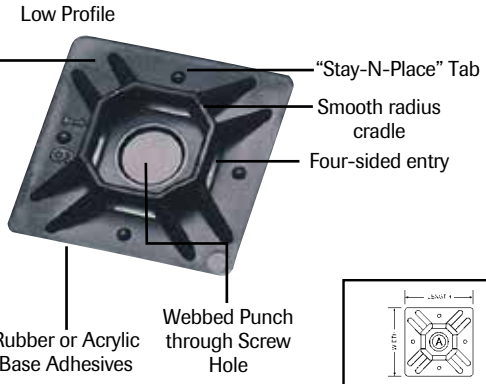


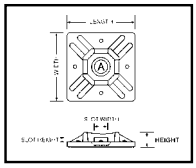
- Secures and positions wire bundles, cables, hoses, etc. to panels or other surfaces with one fastener to reduce time and cost
- Allows bundling before and after mounting

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	6.0 in./152mm	.140 in./3.55mm	.048 in./1.21mm	1/16 - 1-1/4 in.	30 lbs.	No. 8	21	AH-2	100	IT1_5IMH-C
UV Black Nylon									100	IT1_5IMH-C0
Natural Nylon	8.1 in./206mm	.178 in./4.52mm	.053 in./1.35mm	1/16 - 1-3/4 in.	50 lbs.	No. 10			100	IT2SMH-C
Natural Nylon									1000	IT2SMH-M
UV Black Nylon									100	IT2SMH-C0
Natural Nylon	11.8 in./300mm	.189 in./4.80mm	.050 in./1.27mm	1/16 - 3 in.	50 lbs.	No. 10			100	IT3SMH-C
UV Black Nylon									100	IT3SMH-C0
Natural Nylon	14.5 in./370mm	.189 in./4.80mm	.060 in./1.52mm	1/16 - 4 in.	50 lbs.	No. 10			100	IT4SMH-C
Natural Nylon	15.7 in./398mm	.300 in./7.62mm	.075 in./1.90mm	3/16 - 4-1/16 in.	120 lbs.	1/4 in.			100	IT4LHMH-C
UV Black Nylon									100	IT4LHMH-C0

*4LH Series; **2S Series
UL Listed Nylon 6/6 cable ties are suitable for use in air handling spaces in accordance with Section 300-22(C) & (D) of the National Electrical Code.

Mounting Pads

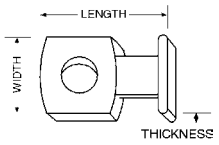




- Lead-N-Feature allows easy insertion for hard to reach applications
- Four-sided entry slots save time during placement orientation
- Smooth radius cradle eliminates possible damage to cable while providing stable support
- Webbed punch through screw hole allows maximum adhesive surface area, along with easy insertion of mechanical fasteners
- Low Profile is essential in confined spaces
- UL recognized, rubber adhesive positioning device

Description	Width	Height	Slot Height	Slot Width	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	.74 in./19mm	.19 in./4.8mm	.05 in./1.2mm	.20 in./5.1mm	No. 4	21	AH-2	100	IT750MP-C
UV Black Nylon								100	IT750MP-C0
Natural Nylon	.99 in./25mm	.20 in./5.0mm	.06 in./1.5mm	.20 in./5.1mm	No. 6			100	IT1000MP-C
UV Black Nylon								100	IT1000MP-C0

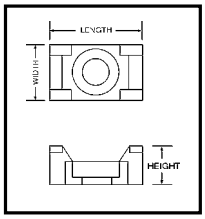
Screw Mounting Bases — Low Profile



- Perfect for confined space, control panels or other areas where space is limited

Description	Length	Width	Height	Slot Height	Slot Width	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Low Profile Mount	.750 in./19mm	.500 in./12.70mm	.120 in./3.04mm	.062 in./1.57mm	.180 in./4.57mm	No. 8	21	AH-2	100	IT1LPMB-C

Screw Mounting Bases – Standard



- Deep cradle design provides support for larger bundles and tubing
- Recessed screw hole allows cable ties to easily pass over screw head

Description	Length	Width	Height	Slot Height	Slot Width	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	.590 in./15mm	.370 in./9.40mm	.270 in./6.86mm	.062 in./1.59mm	.190 in./4.83mm	No. 6	21	AH-2	100	**IT1SMB-C**
UV Black Nylon									100	**IT1SMB-C0**
Natural Nylon	.870 in./22mm	.640 in./16.26mm	.380 in./9.65mm	.125 in./3.18mm	.300 in./7.62mm	1/4 in.			100	**IT2SMB-C**
UV Black Nylon									100	**IT2SMB-C0**

Multi-Purpose Cable Ties

CONSTRUCTION PRODUCTS BUCHANAN

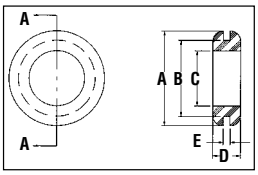
- General purpose cable tie for building and cable management
- UL recognized and Plenum rated

Size		Thickness x Width	Color	Tensile Strength (lbs.)	UL Type	Plenum Approval	Qty.	Part No.
Miniature	4 in.	.039 x .095	Natural	18	21	AH-2	100	B-4-18-9-C
			UL Black				100	B-4-18-0-C
Intermediate	6 in.	.047 x .142	Natural	40	—	—	100	B-6-40-9-C
			Natural		—	—	1,000	B-6-40-9-M
			UV Black		21	AH-2	100	B-6-40-0-C
	8 in.	.053 x .178	Burgundy	50	—	—	100	B-8-50-35-C
	11 in.				21	AH-2	100	B-11-50-35-C
Standard	8 in.	.057 x .181	Natural	50	—	—	100	B-8-50-9-C
			Natural		—	—	1,000	B-8-50-9-M
			UV Black		—	—	100	B-8-50-0-C
			UV Black		—	—	1,000	B-8-50-0-M
	11 in.		Natural		21	AH-2	100	B-11-50-9-C
			Natural		21	AH-2	500	B-11-50-9-D
			UV Black		21	AH-2	100	B-11-50-0-C
			UV Black		21	AH-2	500	B-11-50-0-D
	14 in.		Natural		21	AH-2	100	B-14-50-9-C
			Natural		21	AH-2	500	B-14-50-9-D
			UV Black		21	AH-2	100	B-14-50-0-C
			UV Black		21	AH-2	500	B-14-50-0-D
Heavy-Duty	14 in.	.066 x .299	Natural	120	21	AH-2	100	B-14-120-9-C
			UV Black				50	B-14-120-0-L
	24 in.		Natural	175			50	B-24-175-9-L
			UV Black				50	B-24-175-0-L
	36 in.		Natural				50	B-36-175-9-L
	48 in.		Natural				50	B-48-175-9-L
Mounting Ties	8 in.	.057 x .189	Natural	50	—	—	100	B-8-50MT-9-C
			UV Black		—	—	100	B-8-50MT-0-C
	14 in.	.053 x .178	Natural		21	AH-2	100	B-14-50MT-9-C
Mounting Pads	3/4 in. x 3/4 in.	.142 Max. Tie Width	Natural	N/A	—	—	100	BMP-750-9-C
	1 in. x 1 in.	.189 Max Tie Width	Natural	N/A	—	—	100	BMP-1000-9-C

Grommets

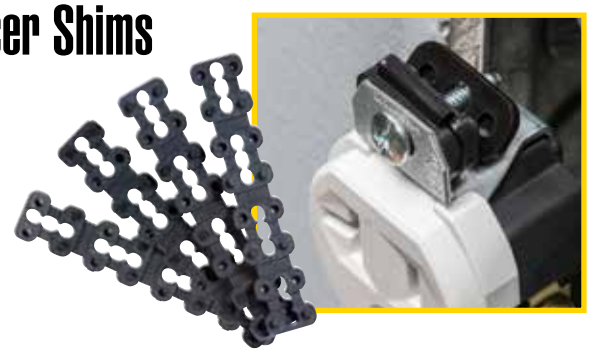
BUCHANAN CONSTRUCTION PRODUCTS

- Installs instantly! Flexible PVC grommets side slotted 1/16 in. for quick installation
- Snap into holes in electrical boxes, sheet metal, auto firewalls and more
- Prevents steel and other sharp edge chafing of wire insulation or cording
- Black, PVC, flexible, 60 durometer



Description	A	B	C	D	E	Qty.	Part No.
1/2" Grommets	55/64	.69	1/2	.25	1/16	25	**774113**
3/4" Grommets	15/64	1.0	3/4	.31	1/16	25	**774136**

Spacer Shims

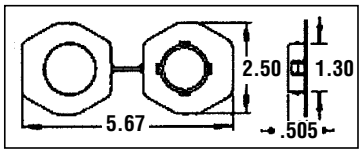


- Eliminates the need to cut plate screws for "GFCI" decorator devices when installing on tile, marble, etc.
- Supports loose outlets
- Prevents broken face plates
- Snaps over #6, #8, #10 screws

Description	Quantity	Part No.
Caterpillar	5	**772453**
Caterpillar	25	**172451L**
Caterpillar	500	**772451**

Universal Metal Stud Bushings

- Non-metallic stud bushing fits all HOLE configurations you are likely to encounter in pre-punched steel studs
- Long pulls of cable slide smoothly through the bushing, make a difficult job easier
- Protects wire without falling out of the hole



Description	Quantity	Part No.
Stud Bushing	25	**772271**

Flange-Type Plastic Anchor Kits

- Kit includes: Flange-type anchors, Slotted/Phillips head screws and masonry bit
- Convenient plastic storage container

Contents		Part No.
	100 #6-8-10 x 7/8 in. Flange-type anchors (yellow), 100 #8 x 1 in. combo-combo-head, sheet-metal screws & 1-3/16 in. masonry bit (carbide-tipped)	**90-051**
	100 #10-12 x 1 in. Flange-type anchors (red), 100 #10 x 1-1/4 in. combo-combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	**90-052**
	100 #10-12 x 1 in. Flange-type anchors (red), 100 #12 x 1 in. combo-combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	**90-053**
	40 #14-16 x 1-1/2 in. Flange-type anchors (white), 40 #14 x 1-1/2 in. combo-combo-head, sheet-metal screws & 1-5/4=16 in. masonry bit (carbide-tipped)	**90-054**

Plastic Insulated Staples

- Use with wider cable such as NM
- Plastic material is UV resistant
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

Description	Quantity	Part No.
1/2 in. Insulated Staple	50/Bag	**BPS2-50**
	100/Bag	**BPS2-1**
	225/Jar	**BPS2-JRL**
	400/Jar	**BPS2B-JR**
	500/Bag	**BPS2-5**
	5,000/Bucket	**BPS2-5M**
3/4 in. Insulated Staple	100/Bag	**BPS3-1**
	200/Jar	**BPS3-JRL**
	250/Bag	**BPS3-2**

Carbon Steel Staples

- Use with wider cable such as NM
- High-grade carbon steel construction
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion

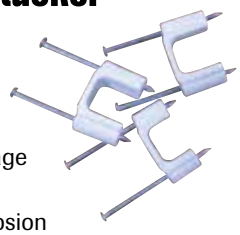
Description	Quantity	Part No.
1/2 in. x 1 in. Carbon Steel Staples	100/Box	**BCS1-1**
	500/Jar	**BCS1-JR**
	500/Box	**BCS1-5**
	5,000/Bucket	**BCS1-5M**
9/16 in. x 1-1/4 in. Carbon Steel Staples	100/Box	**BCS2-1**
	400/Jar	**BCS2-JR**
	500/Box	**BCS2-5**
	5,000/Bucket	**BCS2-5M**

Cable Stacker

- Perfect for centering multiple cables on 2 x 4 framing members in compliance with NEC 300.4.(2)
- Use with cable such as NM
- Plastic material is UV resistant

Description	Quantity	Part No.
Cable Stacker	15	**BPSTCKR-15**

Plastic Insulated Cable Stacker



- Use with wider cable such as NM
- Plastic material is UV resistant
- High-grade carbon steel construction
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

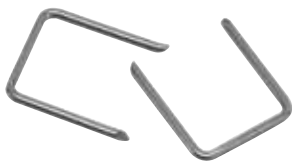
Description	Quantity	Part No.
1/2 in. 2 Cable Stacker	25/Bag	**BPS2/2-25**
	50/Bag	**BPS2/2-50**

Plastic Insulated Service Entrance Straps

- Use with service entrance cable and conduit
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

Description	Quantity	Part No.
#6 SER & 1/2 in. EMT Plastic Insulated Service Entrance Strap	50/Bag	**BSER6-50**
#6 & #8 SEU Plastic Insulated Service Entrance Strap	50/Bag	**BSEU6-50**
#2 SER & 3/4 in. EMT Plastic Insulated Service Entrance Strap	25/Bag	**BSER2-25**
#2 SEU Plastic Insulated Service Entrance Strap	25/Bag	**BSEU2-25**
4/0 SER Plastic Insulated Service Entrance Strap	5/Bag	**BSER4/0-5**
4/0 SEU Plastic Insulated Service Entrance Strap	5/Bag	**BSEU4/0-5**

Carbon Steel Service Entrance Staples



- Use with service entrance cable and conduit
- High-grade carbon steel construction
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion

Contents	Quantity	Part No.
1-5/16 in. x 3/4 in.	100/Box	**BMSE150-1**
1-1/2 in. x 1-1/6 in.	100/Box	**BMSE175-1**

Wire Marker Booklets

- Convenient pocket-size booklets
- Plastic, cloth construction for long-lasting durability
- Resists abrasion, moisture, dirt and oil
- Perforated 1/4 in. x 1-1/2 in. markers can be separated into half-length sizes
- Non-smear black legend ensures high visibility
- Self-sticking on wire and cable
- For applications above or below ground
- Specifications: Temperature Range: -40°F to 180°F (-40°C to 82°C)
  Adhesion: 45 oz./in. width ultimate

Legend Assortments	Quantity	Buchanan Part No.	IDEAL Part No.
0-9	45 Markers each	**775101**	**44-101**
A-Z, 0-15, +, –, /	10 Markers each	**775102**	**44-102**
1-48	10 Markers each	**775103**	**44-103**
46-90	10 Markers each	**775104**	**44-104**
1, 2, 3	150 Markers each	—	**44-105**
A, B, C	150 Markers each	—	**44-106**
A-Z	45 Markers each	—	**44-148****
T1, T2, T3	150 Markers each	—	**44-107**
L1, L2, L3	150 Markers each	—	**44-108**
1-15 16-90 A-Z +, –, /, 0	6 Markers each 4 Markers each 2 Markers each 2 Markers each	—	**44-109**
1, 2, 3 A, B, C T1, T2, T3 L1, L2, L3	45 Markers each 45 Markers each 30 Markers each 30 Markers each	—	**44-110**
+, –, AC, DC POS, NEG, GND NEUT SPARE, BLANK	45 Markers each 33 Markers each 27 Markers each 21 Markers each	—	**44-111***

Ten pages per booklet with each page bearing the legend assortment indicated. All booklets (except 44-111 & 45-148) contain 450 wire markers and 450 terminal markers.
*Booklet 44-111 includes 348 wire markers and 348 terminal markers.
**Booklet 44-148 contains 26 pages, one page of 45 markers per letter, 1170 total markers.

Wire Marker Dispenser

- Convenient pocket-size case holds ten wire marker rolls
- Dispenser tab holds tapes firmly in place – allows removal of proper tape length without waste
- Flip top for easy access and refill
- Built-in hook for hanging from belt or tool pouch
- High-quality adhesive and 3 mil. thickness provide long-lasting, low-profile application
- Each plastic reel holds Tyvek® tape
- Specifications: Temperature Range: -40°F to 180°F (-40°C to 82°C)
  Adhesion: 45 oz./in. width ultimate

Description	Part No.
Dispenser with 0-9 legend rolls	**42-301**
Refill pack with one each of 0-9 legend rolls	**42-399**

Tyvek® is a registered trademark of E. I. du Pont de Nemours and Company.

Write-On Marker Cards

- Use for developing personal identification systems
- Cloth write-on surface
- Accepts most writing instruments

Marker Size	Quantity	Part No.
5/8 in. x 1-1/2 in.	14/card	**44-753**

Write-On Marker Booklets

- Use for developing personal identification systems
- Surface accepts pen, pencil or rubber stamp
- Specification: Adhesion – .25 oz./in. ultimate width

Marker Size* (In.)	Markers per page	Pages per book	Part No.
1 x 2-1/2	6	10	**44-151**
1 x 5	3	10	**44-152**

*Write-on area for 2-1/2 in. markers is 3/4 in. x 1 in. Write-on area for 5 in. markers is 1 in. x 1 in.

Marking Pen

- Fast-drying, permanent ink will not smear
- Use on write-on marker cards and write-on cable-tie marker plates

Description	Part No.
Marking Pen with black ink	**41-697**

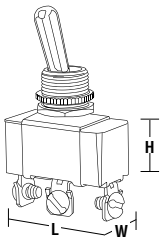
Load Center

- Contains common household legends – bedroom, living room, dryer, water heater, security system, etc.

Description	Part No.
Load Center Wire Marker Booklet	**44-154**

Standard & Heavy-Duty Toggle Switches

- Great for power tool and motor control switch applications
- Rugged long-wearing solid brass/nickel-plated bushings
- 1/2 in. diameter mounting hole
- Dielectric Strength: 1500V
- Mechanical Life: 100,000 cycles
- Operating Temperature: 32°F to 185°F (0°C to 85°C)
- DC Rating: Factory tested 100,000 cycles to 21 Amp 14.8 VDC

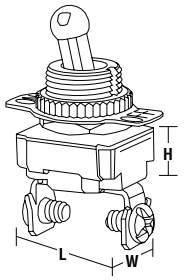


Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating: Amps 125 VAC	Rating: Amps 227 Vac	Rating: HP 125-250 VAC	Dimensions (L" x W" x H")	Part No.
	Toggle switch with On-Off Face-plate	SPST	On-Off	Screw	2	20	10	3/4	1.13 x .57 x .61	**774011**
				Spade						**774008**
				O-Ring/Screw						**774010**
	Toggle Switch		(On)-Off	Spade						**774093**
	Toggle Switch	SPDT	On-Off-On	Screw	3	20	10	3/4	1.13 x .57 x .61	**774013**
			On-Off-On	Spade						**774027**
			(On)-Off-(On)	Screw						**774009**
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	20	10	1-1/2	1.30 x .76 x .80	**774014**
			On-Off	Spade						**774005**
	Heavy-Duty Toggle Switch	DPDT	On-On	Screw	6	20	10	1-1/2	1.30 x .76 x .80	**774015**
										774015BK†
			On-Off-On	Screw						**774016**
			On-Off-On	Spade						**774003**
			(On)-Off-(On)	Screw						**774000**

( ) denotes momentary action †Bulk Package of 100 Note: All spade terminals are 1/4" (.250).

Medium & Light-Duty Toggle Switches

- Great for household appliances and equipment
- Bat toggle switch, 774007, is ideal for battery-powered equipment including trimmers and lawn mowers
- Wire leads are #18 AWG, 6 in. stripped wire
- 1/2 in. diameter mounting hole

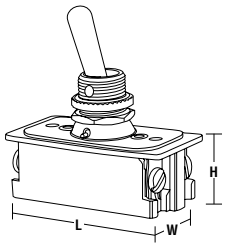


Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating	Dimensions (L" x W" x H")	Part No.
	Bat Toggle with On-Off Faceplate	SPST	On-Off	Screw	2	6 Amps 120 VAC, 3 Amps 240 VAC	.69 × .55 × .34	**774017**
			On-Off	Wire Leads	2	4 Amps 250VAC/DC, 8 Amps 125VAC/DC, 10 Amps 125 VAC, 1/3 HP 125 VAC	.98 × .64 × .62	**774018**
	Bat Toggle*		On-Term Ground	Spade	1	21 Amps 14 VDC	.69 × .55 × .34	**774007**
	Short Ball Toggle Switch	SPST	On-Off	Wire Leads	2	6 Amps 125 VAC, 3 Amps 250 VAC	.89 × .47 × .55	**774002**

*DC rating not CSA or RU listed.

Extra Heavy-Duty AC/DC Toggle Switches

- The switch that can handle your heavy-duty requirements
- Quick-make/quick-break type switches are ideal for DC voltage applications
- Perfect for industrial motor control, with its sturdy metal construction and stiff actuation force, withstands the abuses of virtually any application



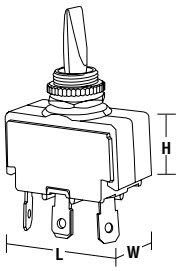
Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" x W" x H")	Part No.
						Amps 125 VAC	Amps 227 VAC	HP 125-250 VAC		
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	16	8	1	1.75 x .84 x .76	**774096**
						20	10	1-1/2	2.09 x 1.00 x .90	**774097**

Toggle Switch Accessories

- Neoprene covers great for outdoor and other environmentally tough conditions
- Covers screw onto toggle switches to protect from moisture, dust and dirt

Product	Description	Mounting	Dimensions	Quantity	Part No.
	Toggle Switch Cover	15/32 - 32 NS-2B	.93 Height x .62 Base Dia.	2	**774020**

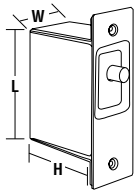
Double Insulated Plastic Toggle Switches



- Great for outdoor, marine/recreational equipment, automotive and weather resistant applications
- Double-insulated with an internal "O" ring design for moisture and dust resistance
- 1/2 in. diameter mounting hole

Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating		Dimensions (L" x W" x H")	Part No.
						Amps 125 VAC	Amps 250 VAC		
	Double Insulated, Plastic Toggle Switch	SPST	On-Off	Screw	2	20	10	1.37 × .76 × .94	**774019**

Door Switch



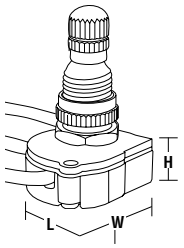
- Standard slide switch fits 9/16 in. x 7/8 in. opening
- Door switches are great for closets, turning the light on when the door is open and off when it is closed
- Door switch kit comes with metal box, cover plate and mounting hardware

Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Part No.
	AC/DC Door Switch Kit	White Button	SPST	Normally On-(Off)	Wire Leads	10 Amp 1/3 HP 125/250VAC	1.25 x 2.75 x 2.0	**774026K**

( ) Denotes momentary action

Rotary Switches

- Rotary switches are perfect for household appliances, ceiling fixtures and lamps
- Single or three-position switches available
- #18 AWG, 6 in. stripped wire leads

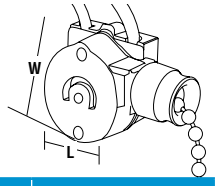


Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Part No.
	Rotary Switch	Brass Plated	SPST	On-Off	Wire Leads	6 Amp 125VAC, 3 Amp 250VAC	.97 x .80 x .39	**774061**
	3-Way Rotary Switch	Brass Plated	SPTT	Off-On(A)-On(B)-On(A+B)	Wire Leads	6 Amp 125VAC, 3 Amp 250VAC	.86 x 1.03 x .34	**774062**

( ) Denotes momentary action

Lever & Pull Chain Switches

- Use for ceiling fixtures, lamps and fans
- Wire leads are #18 AWG, 6 in. stripped wire
- Push in connectors for #18 AWG wire
- 13/32 in. diameter mounting hole



Product	Description	Pull-Chain Color	Poles	Circuitry	Termination Type	Circuit	Rating			Dimensions (L" x W" x H")	Part No.
							Amps 125 VAC	Amps 250 VAC	Amps 125 V		
	All-Angle Lever Switch*	Nickel	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	—	1.50 x 1.28 x .50	**774035**
	Pull Chain	Nickel	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	3	.92 x .88 x .67	**774031**
	Pull Chain	Brass	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	3	.92 x .88 x .67	**774032**
	3-Speed Pull Chain*	Brass	SPTT	Off-On-On-On	Push-In	4 Pos - 4 Wire	6	3	—	1.43 x 1.25 x .73	**774034**
	3-Speed Pull Chain	Brass	SPTT	Off-On(A)-On(B)-On(A+B)	Wire Leads	4 Pos - 3 Wire	6	3	—	.87 x 1.05 x .65	**774037**

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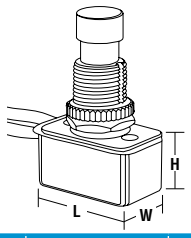
Push-Button Switches



- Great for household appliances, lamps and motor controls
- Available in normally open, normally closed and standard On-Off circuitry
- Wire leads are #18 AWG, 6 in. stripped wire
- 1/2 in. diameter mounting hole

Product	Description	Actuator	Poles	Circuitry	Termination Style	No. of Terminals	Ratings	Dimensions (L" x W" x H")	Part No.
	Momentary Contact Push-Button Switch	Black Plastic	SPST NO	(On)-Off	Screw	2	6 Amp 120 VAC, 3 Amp 240 VAC	.88 x .54 x .35	**774022**
	Maintained Contact Push-Button Switch	Black Plastic	SPST	On-Off	Wire Leads	2	8 Amp 125 VAC/DC, 4 Amp 250 VAC/DC, 10 Amp 125 VAC, 1/3 HP 125	.98 x .64 x .62	**774021**
	Momentary Contact Push-Button Switch**	Nickel Plated	SPST NO	(On)-Off	Screw	2	15 Amp 125 VAC, 10 Amp 250 VAC	1.38 x .58 x .60	**774085**

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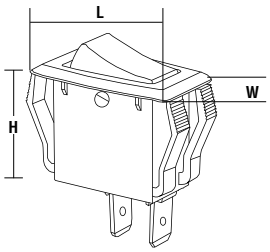
Appliance Rocker Switches



- Great for home appliances, computer equipment, automotive and industrial controls
- Appliance Rockers fit standard .55 in. × 1.12 in. panel cut outs
- Plain and lighted versions available
- Operating temperature: 32°F to 185°F (0°C to 85°C)

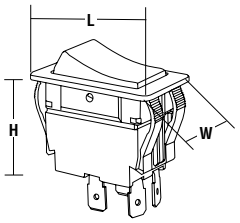
Product	Description	Rocker	Poles	Circuitry	Termination Style	No. of Terminals	Ratings	Dimensions (L" x W" x H")	Part No.
	Appliance Rocker Switch	Black	SPST	On-Off	Spade	2	16 Amp 1/3 HP 125 VAC, 10 Amp 1/2 HP 250 VAC	1.24 x .68 x .77	**774038**
	Appliance Rocker Switch	Red Lighted	SPST	On-Off	Spade	3*	16 Amp 1/3 HP 125 VAC, 10 Amp 1/2 HP 250 VAC	1.24 x .68 x .77	**774039**

*3rd terminal to power lighted rocker

c US

Full-Size Rocker Switches

- For commercial appliances, industrial controls, automotive and marine applications
- Moisture- and dust-resistant
- Suitable for low-voltage DC applications
- Recommended .830 in. x 1.450 in. mounting hole, .125 in. panel thickness
- Operating temperature: 32°F to 185°F (0°C to 85°C)



Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" x W" x H")	Part No.
						Amps 125 VAC	Amps 227 VAC	HP 110-250 VAC		
	Black Rocker Switch	SPST	On-Off	Spade	2	20	15	2	1.70 x .97 x 1.09	**774045**
	Black Rocker Switch	DPDT	On-Off-On	Spade	6	20	15	2	1.70 x .97 x 1.09	**774040BK†**
	Red Lighted Rocker Switch***	DPST	On-Off	Spade	4	15	10*	3/4**	1.70 x .97 x 1.09	**774056**

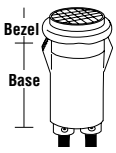
*Amps 250 VAC **HP 125-250VAC †Bulk package of 25

Indicator Light Part No. System

Series	Voltage	Color	Mounting Diameter Lens Style	Terminators
77	5 - 14V	1 - Red	1 - 1/2 in. Raised	1 - 6 in. Wire Leads
	6 - 28V	2 - Green	2 - 1/2 in. Flush	2 - .187 in. Spade
	7 - 125V	3 - Amber	3 - 5/16 in. Flush	—
	8 - 250V	4 - Blue	—	—
	—	5 - Clear	—	—

Flush Indicator Lights

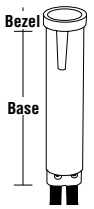
- Nylon body with flush transparent polycarbonate lens and stainless steel bezel, 94V-2 flammability rating
- 6 in. wire leads, 1/2 in. mounting diameter
- Lamp voltage is AC/DC
- Operating Temperature: Nylon Body: 140°C
  Polycarbonate lens: 135°C
  Low Temperature: -40°



Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs.)	Lamp Type	Termination Style	Height (Base" x Bezel")	Part No.
	Flush Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10	**777121***
	Flush Indicator Light	Green	125V	1/3	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10	**777221**
	Flush Indicator Light	Amber	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10	**777321**

*VDE Certified

Miniature Indicator Lights

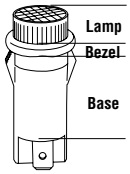


- Nylon body with flush transparent polycarbonate lens
- 6 in. wire leads
- 5/16 in. mounting diameter
- Lamp voltage is AC/DC

Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs.)	Lamp Type	Termination Style	Height (Base" x Bezel")	Part No.
	Miniature Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6 in. Wire Leads	1.43 × .13	**777131**
		Green	125V	1/3	2mA Max.	15,000	Neon	6 in. Wire Leads	1.43 × .13	**777231**
		Amber	125V	1/3	2mA Max.	25,000	Neon	6 in. Wire Leads	1.43 × .13	**777331**
										777331BK†

†Bulk Package of 100

Raised Indicator Lights



- Nylon body with raised transparent polycarbonate lens and stainless steel bezel, 94V-2 flammability rating
- 1/2 in. mounting diameter
- Lamp voltage is AC/DC
- Operating Temperature: Nylon Body: 140°C Low Temp -40°C
  Polycarbonate lens: 135°C

Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs.)	Lamp Type	Termination Style	Height (Base" x Bezel")	Part No.
	Raised Indicator Light	Red	14V	1.2	.08	50,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**775111***
		Red	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**776111***
		Green	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**776211***
		Amber	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**776311***
		Red	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	**777111***
		Green	125V	1/3	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10 x .20	**777211***
		Amber	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	**777311***
		Red	250V	1/2	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	**778111***
		Green	250V	1/2	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10 x .20	**778211***
	Raised Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	.187" Spade	1.09 x .10 x .20	**777112**
										777112BK†
		Green	125V	1/3	2mA Max.	15,000	Neon	.187" Spade	1.09 x .10 x .20	**777212**
										777212BK†

*VDE certified †Bulk Package of 100

Heat Shrink & Splice Kits

- Easy to install underground splice kits to help save time and money
- Protects cable during storage with watertight seal provided by IDEAL End Caps

Thermo-Shrink® UF Splice Kits

- Direct burial rated, UV resistant
- 14/3 with and without ground through 8/3 without ground, UF cable range
- Stretcher kit repairs a 7 in. to 10 in. section damaged or destroyed by a trencher
- 600V Maximum, 105°C rating
- Meets the requirements of the 2002 NEC Code 110-14(b) and UL486D
- One wire per fitting

E123896

Description	Part No.
UF Splice Kit - 14-8 AWG, Tubing 1.1 in. x 8 in.	**46-400**
UF Stretcher Kit* - 14-8 AWG, Tubing 1.1 in. x 18 in.	**46-410**

*Stretcher kit connector is 11.5 in.

Thermo-Shrink® Al/Cu Splice Kits

- Direct burial rated, underground splice kits
- Heavy-wall heat shrink tubing with adhesive liner provides complete insulation and protection
- Connector can be used for aluminum and/or copper cable
- Meets the requirements of the 2005 NEC Code 110-14(B)
- 600V maximum, 105°C rating
- UV resistant

Description	Part No.
Underground Splice Kit – 8 to 4 AWG, Tubing 3/4 in. x 6 in.	**46-401**
Underground Splice Kit – 4 AWG to 1/0, Tubing 1.1 in. x 8 in.	**46-402**
Underground Splice Kit – 1/0 to 250 KCMIL, Tubing 1-1/2 in. x 12 in.	**46-403**

Thermo-Shrink® Self-Sealing UF Splice Kit

- Fully waterproof, submersible and re-enterable to make future changes or repairs
- Meets the requirements of the 2002 NEC Code 110-14 (b) and UL486D
- Accommodates 14 to 10 AWG wire range
- 600V Maximum, 105°C rating

Description	Part No.
Self Sealing UF Splice Kit	**46-411**

Thermo-Shrink® Copper Butt Splice Kits

- UL Listed
- UV resistant
- Provides a fully-insulated butt splice
- 600V Maximum, 105°C rating
- Not rated for direct burial

Description	Part No.
Butt Splice Kit – Copper 14-8 AWG	**46-404**
Butt Splice Kit – Copper 8-2 AWG	**46-405**

Thermo-Shrink® Heat Shrink Kit

Description	Part No.
Thermo-Shrink® Heat Shrink Kit	**46-007**
Kit Includes	**Part No.**
HEAT ELITE PRO™ Heat Gun	**46-203**
3/64 in. Heat Shrinkable Tubing (4 ft. disk)	**46-600**
1/16 in. Heat Shrinkable Tubing (4 ft. disk)	**46-601**
3/32 in. Heat Shrinkable Tubing (4 ft. disk)	**46-602**
1/8 in. Heat Shrinkable Tubing (4 ft. disk)	**46-603**
3/16 in. Heat Shrinkable Tubing (4 ft. disk)	**46-604**
1/4 in. Heat Shrinkable Tubing (4 ft. disk)	**46-605**
5/16 in. Heat Shrinkable Tubing (4 ft. disk)	**46-606**
3/8 in. Heat Shrinkable Tubing (4 ft. disk)	**46-607**
1/2 in. Heat Shrinkable Tubing (4 ft. disk)	**46-608**
3/4 in. Heat Shrinkable Tubing (4 ft. disk)	**46-609**
1 in. Heat Shrinkable Tubing (4 ft. disk)	**46-610**
Small Deflector, 1-1/4 in. diameter	**46-941**
Premium T®-Cutter Wire Cutter	**45-123**

Thermo-Shrink® Thin-Wall Heat Shrinkable Tubing

- Polyolefin material electrically insulates and protects in-line components, disconnect terminals and splices with its high strength and excellent resilience
- Use to bundle wires for very flexible light-duty harnesses
- Highly flame-retardant and flexible; resistant to common fluids and solvents
- Meets UL 486D 125°C VW-1 600V; Material: No PBB's, PBBE's, conforms to ROHS
- 2:1 shrink ratio; Minimum shrink temperature: 70°C; Operating temperature: -55°C to +125°C
- RoHS compliant
- UV resistant

Normal Size (in.)	Expanded I.D. (Min.)	Nominal Recovered I.D. (Max.)	Recovered Wall Thickness +/- 10%	Cable Range AWG*	Length (Pkg.)	Part No.
3/64	0.063"/1.6mm	0.024"/0.6mm	0.013"/0.33mm	22-18	4 ft. (Disk)	**46-600**
1/16	0.079"/2.0mm	0.031"/0.8mm	0.014"/0.36mm	16	4 ft. (Disk)	**46-601**
3/32	0.122"/3.1mm	0.047"/1.2mm	0.017"/0.44mm	14-12	4 ft. (Disk)	**46-602**
1/8	0.146"/3.7mm	0.063"/1.6mm	0.017"/0.44mm	24-20	6 in. (Bag)	**46-310**
					4 ft. (Disk)	**46-603**
					1,000 ft. (Spool)	**46-312**
3/16	0.205"/5.2mm	0.094"/2.4mm	0.020"/0.50mm	20-14	6 in. (Bag)	**46-313**
					4 ft. (Disk)	**46-604**
					1,000 ft. (Spool)	**46-315**
1/4	0.268"/6.8mm	0.126"/3.2mm	0.022"/0.56mm	14-8	6 in. (Bag)	**46-316**
					4 ft. (Disk)	**46-605**
					500 ft. (Spool)	**46-318**
5/16	0.346"/8.8mm	0.157"/4.0mm	0.022"/0.56mm	10-6	4 ft. (Disk)	**46-606**
3/8	0.421"/10.7mm	0.185"/4.7mm	0.022"/0.56mm	8-4	6 in. (Bag)	**46-319**
					4 ft. (Disk)	**46-607**
					200 ft. (Spool)	**46-321**
1/2	0.539"/13.7mm	0.252"/6.4mm	0.026"/0.65mm	4-1	6 in. (Bag)	**46-322**
					4 ft. (Disk)	**46-608**
					200 ft. (Spool)	**46-324**
3/4	0.807"/20.5mm	0.374"/9.5mm	0.027"/0.69mm	2-250 MCM	6 in. (Bag)	**46-325**
					4 ft. (Disk)	**46-609**
					200 ft. (Spool)	**46-327**
1	1.043"/26.5mm	0.500"/12.7mm	0.031"/0.80mm	2/0-500 MCM	6 in. (Bag)	**46-328**
					4 ft. (Disk)	**46-610**
					100 ft. (Spool)	**46-330**

*Reference only - Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

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Specifications

Property	Test Method	Typical Data
Tensile strength	ASTM D 638	14MPa
Elongation at break	ASTM D 638	600%
Elongation after aging at 175°C for 168 hours	UL 224	350%
Flammability	UL 224 VW-1	Pass
Heat shock (250°C/4 hours)	UL 224	No cracking
Cold bend test (-55°C/4 hours)	UL 224	No cracking
Dielectric strength	ASTM D 150	20KV/mm
Volume resistance	ASTM D 876	1014Ωcm
Copper corrosion	UL 224	Pass
Chemical resistance	UL 224	Pass
Longitudinal shrinkage	UL 224	0±5%
Eccentricity	UL 224	30%

Thermo-Shrink® Heavy-Wall Heat Shrinkable Tubing

- TS-46 irradiated cross-linked polyolefin with 3:1 standard shrink ratio
- Adhesive liner provides complete insulation and protection to electrical splices in above-grade, underground or underwater applications
- Maximum flame retardant
- Meets UL 486D, CSA C22.2 No. 198.2, ANSI C119.1, Western Underground Guides Nos. 2.4, 2.5, MIL-DTL-23053/15, IEEE 383 Vertical Flame Test, ANSI C37.20.2, ICEA S-19-8 and NEMA insulation thickness requirements
- Rated for 600V, 90°C continuous use

Model	Expanded I.D. (Min.) (In.)	Recovered I.D. (Max.) (In.)	Nominal Recovered Wall Thickness (In.)	Cable Range*	Length (In.)	Cat. No.
TS-46-400	.400	.130	.070	12-8 AWG	6	**46-343**
					9	**46-344**
					48	**46-346**
TS-46-750	.750	.220	.090	6-2/0 AWG	6	**46-347**
					9	**46-348**
					48	**46-350**
TS-46-1100	1.100	.350	.120	1/0-3/0 AWG	6	**46-351**
					9	**46-352**
					48	**46-354**
TS-46-1500	1.500	.470	.160	2/0 AWG-350 KCMIL	9	**46-356**
					12	**46-357**
					48	**46-358**
TS-46-2000	2.000	.630	.160	250-500 KCMIL	9	**46-369**
					18	**46-371**
					48	**46-372**

*Reference only. Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

UL LISTED CSA®

Specifications

Properties	Heavy Wall
Shrink Temperatures	120°C to 250°C (200°C recommended)
Continuous Operating Temperature	-55°C to 110°C
Tensile Strength (PSI)	2,100 PSI min.
Ultimate Elongation	600% min.
Secant Modulus @ 2% Strain	25,000 PSI max.
Specific Gravity	1.20 max.
Heat Aging, 168 hrs. @ 175°C Tensile Strength Elongation	500%
Heat Shock, 4 hrs. @ 225°C	No cracks, flowing or dripping
Flammability	Self-extinguishing
Low Temperature Brittle Point	-55°C
Volume Resistivity	1013ohm-cm min.
Dielectric Strength	500V/mil (20kV/min.)
Corrosive Effect	Non-corrosive
Solvent Resistance 24 hrs. Immersion per MIL-DTL-23053	Good to excellent
Water Absorption	0.5%
Fungus Resistance	No growth
Longitudinal Change, 3 min.	+1%/-10%

All values are typical performance data and are not to be used as design data.

Thermo-Shrink® Medium-Wall Heat Shrinkable Tubing End Caps

- Creates a watertight seal to protect ends of power and control cords
- Protects against oxidation, ozone, UV radiation, etc.
- Coated with hot melt adhesive to ensure environment seal
- Fits easily over end of cable
- Protect power cables up to 1000V and telecommunication cable
- Recommended for both open air and underground power distribution cables with PVC, lead or XLPE sheaths
- Thermally stabilized cross-linked polylefin, coated with specially designed hot melt adhesive
- UV resistant

Expanded I.D. (Min.)	Recovered I.D. (Max.)	Recovered Wall Thickness +/-10%	Cable Dia. Range*	Length	Part No.
0.55"/14mm	0.18"/4.5mm	0.079"/2.0mm	0.20"/5mm - 0.47"/12mm	1.77"/ 45mm	**46-381**
0.98"/25mm	0.31"/8mm	0.091"/2.3mm	0.39"/10mm - 0.71"/18mm	2.76"/ 70mm	**46-382**
1.38"/35mm	0.59"/15mm	0.118"/3.0mm	0.67"/17mm - 1.18"/30mm	3.35"/ 85mm	**46-383**
2.95"/75mm	1.38"/35mm	0.138"/3.5mm	1.77"/45mm - 2.76"/70mm	5.12"/ 130mm	**46-384**

*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

Specifications

Property	Test Method	Typical Data
Operating Temperature	IEC 216	-55°C to +110°C
Tensile Strength	ASTM D 638	>14 MPa
Elongation at break	ASTM D 638	>400%
Density	ASTM D 792	1.05g/cm3
Elongation of break after again	150°C, 168 hrs.	>300%
Dielectric strength	IEC 243	>15KV/mm
Volume resistance	IEC 93	1014Ωcm

Heat Elite Heat Gun Kit

- Temperature range: 660°-930°F (300°-500°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use

Description	Part No.
Heat Elite Heat Gun Kit, 1200 Watts	**46-202**
Kit Includes	**Part No.**
Heat Elite Heat Gun, 1200 Watts	**46-202**
Small Deflector, 1-1/4 in. diameter	**46-941**
Wide-Slot Adapter	**45-954**

HEAT ELITE PRO™ Heat Gun Kit

- Temperature range: 180°F - 1020°F (80° - 550°C)
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use
- LCD display with memory functions
- Temperature and airflow adjustments
- Stand-by mode to minimize the energy consumption
- Ceramic heating element ensures long-term coil performance

Description	Part No.
HEAT ELITE PRO™ Heat Gun Kit, 1500 Watts	**46-203**
Kit Includes	**Part No.**
HEAT ELITE PRO™ Heat Gun, 1500 Watts	**46-203**
Small Deflector	**46-941**
Reduction Adapter	**46-950**
Wide-Slot Adapter	**46-954**

Heat Elite Plus LCD Heat Gun Kit

- Temperature range: 180° - 1200°F (80° - 650°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use
- Infinite temperature adjustment

Description	Part No.
Heat Elite Plus LCD Heat Gun Kit, 1500 Watts	**46-204**
Kit Includes	**Part No.**
Heat Elite Plus LSD Heat Gun, 1500 Watts	**46-204**
Small Deflector	**46-941**
Welding Adapter	**46-952**
Solder Reflector Adapter	**46-953**
Overlap Adapter	**46-955**
Pressure Roller	**46-956**

Heat Gun Accessories

46-941 **46-950** **46-951** **46-954** **46-956**

46-952 **46-953** **46-955**

Description	For Use With:	Part No.
Small Deflector, 1-1/4 in. diameter	46-202, 46-203, 46-204	**46-941**
Reduction Adapter	46-203, 46-204	**46-950**
Glass Protection Adapter	46-202, 46-203, 46-204	**46-951**
Welding Adapter	46-203, 46-204	**46-952**
Solder Reflector Adapter	46-204	**46-953**
Wide-Slot Adapter	46-202, 46-203, 46-204	**46-954**
Overlap Adapter	46-203, 46-204	**46-955**
Pressure Roller	46-204	**46-956**

Lockout/Tagout

Your Safety is our #1 concern.

A leader in personal safety for professional electricians, IDEAL Safety, Health and Environment products comply with ASTM requirements and OSHA regulations.

Every day we are protecting lives with the products we provide from 1000 volt insulated tools to Lockout/Tagout equipment, Clamp Meters, S-Class® Fish Tapes, specialty connectors and more!

IDEAL continuously works on methods and equipment that provide the maximum in performance to assure your safety and health while delivering better environment solutions that leave a small footprint.

Training...essential in keeping you safe whatever the job.

The proper use of materials and tools can mean the difference to your personal safety and health. IDEAL provides state-of-the-art training to give you the best methods and utilization of this equipment through hands-on demonstrations, peer discussions and on-site applications.

Training consists of several proven methods
- Lockout/Tagout Safety and Procedures
- Arc Flash Safety and 1000V Insulated Tools
- Test and Measurement Equipment and procedures

For more details on available training programs, contact your IDEAL sales representative.

Starter Lockout/Tagout Kit

- A starter selection of the lockout/tagout devices every electrician/maintenance person needs
- Small nylon zipper pouch features belt loops and d-rings for easy attachment to belts, tool pouches, tool carts and more

Description		Part No.
Starter Lockout/Tagout Kit		**44-973**
Kit Includes	**Qty.**	**Part No.**
Universal Multi-Pole Lockout	1	**44-783**
1 in. Safety Lockout Hasp	1	**44-800**
Universal 277V Breaker/Single-Pole Lockout	1	**44-809**
110V Plug Lockout	1	**44-818**
Striped Lockout Tags – Do Not Operate	2	**44-849**
3/4 in. Shackle Red Padlock	1	**44-906**
Zipper Pouch	1	**IA-3240**

Quantities listed in kit description are for individual pieces, not carded packages.

Basic Lockout/Tagout Kit

- A great selection of the most popular lockout/tagout devices
- Small nylon zipper pouch features belt loops and d-rings for easy attachment to belts, tool pouches, tool carts and more

Description		Part No.
Basic Lockout/Tagout Kit		**44-970**
Kit Includes	**Qty.**	**Part No.**
Universal Multi-Pole Breaker Lockout	1	**44-783**
Wall Switch Lockout	1	**44-789**
1 in. Safety Lockout Hasp	1	**44-800**
480/600V Breaker Lockout	1	**44-807**
Universal 277V Breaker Lockout/Single Pole	1	**44-809**
Hinged Single-Pole Breaker Lockouts	2	**44-810**
110V Plug Lockout	1	**44-818**
Striped Lockout Tags – Do Not Operate	5	**44-849**
3/4 in. Red Padlock	1	**44-906**
Zipper Pouch	1	**IA-3240**

Quantities listed in kit description are for individual pieces, not carded packages.

Standard Lockout/Tagout Kit

- Excellent selection of lockout/tagout devices, tags and locks for maintenance workers or contractors
- Small nylon zipper pouch features belt loops and d-rings for easy attachment to belts, tool pouches, tool carts and more

Description		Part No.
Standard Lockout/Tagout Kit		**44-971**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	3	**44-810**
Universal 277V Breaker Lockouts/Single Pole	2	**44-809**
480/600V Breaker Lockout	1	**44-807**
Wall Switch Lockout	1	**44-789**
110V Small Plug Lockout	1	**44-818**
2 in. Shackle Red Padlocks	2	**44-907**
1 in. Safety Lockout Hasps	2	**44-800**
Lockout Tags – Do Not Operate	5	**44-848**
Striped Lockout Tags – Do Not Operate	5	**44-849**
Cleat for 277V Breaker Lockout	1	**44-785**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Universal Multi-Pole Breaker Lockouts	2	**44-783**
Zipper Pouch	1	**IA-3240**

Quantities listed in kit description are for individual pieces, not carded packages.

Job Site Lockout/Tagout Kit

- Perfect kit for individual workers; padlocks keyed-alike for worker convenience
- Excellent selection of lockout/tagout devices, tags and keyed-alike padlocks for most applications

Description		Part No.
Job Site Lockout/Tagout Kit		**44-979**
Kit Includes	**Qty.**	**Part No.**
Circuit Breaker Lockouts - tall and wide toggles	2	**44-956**
Circuit Breaker Lockouts - standard single and double toggles	3	**44-957**
Circuit Breaker Lockout Padlock	1	**—**
Red Lockout Padlocks	3	**44-916****
1 in. Safety Lockout Hasp	1	**44-800**
Red Labeled Lockout	1	**44-791***
Universal Wall Switch Lockout	1	**44-772**
Lockout Tags - Do Not Operate (striped)	12	**44-833***
Tool Box*** (12 in. x 6 in. x 6 in.)	1	**IA-3241**

*Master Lock® equivalent.
**Reference part number is keyed-different, keyed-alike and master-keyed products can be special ordered by contacting IDEAL Customer Service.
***Tool box color may vary.

Master Lock® is a registered trademark of Master Lock Company LLC.

Plant Facility Lockout/Tagout Kit

- Ideal for plant facility personnel to keep all lockout/tagout devices in one convenient place
- Polypropylene plastic tool box resists oil and chemicals

Description		Part No.
Plant Facility Lockout/Tagout Kit		**44-972**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	5	**44-810**
Universal 277V Breaker/Single Pole Lockouts	3	**44-809**
480/600V Breaker Lockout	1	**44-807**
Wall Switch Lockouts	2	**44-789**
110V Plug Lockout	1	**44-818**
1 in. Safety Lockout Hasps	3	**44-800**
Red Labeled Lockout	1	**44-791**
220/550V Plug Lockout	1	**44-819**
Striped Lockout Tags – Do Not Operate	10	**44-849**
Fuse Blockout	1	**44-815**
Fuse Blockout	1	**K-7349**
Gate Valve Lockout	1	**44-824**
Cleat for 277V Breaker Lockout	1	**44-785**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Universal Multi-Pole Breaker Lockouts	3	**44-783**
Tool Box* (12 in. x 6 in. x 6 in.)	1	**IA-3241**

Quantities listed in kit description are for individual pieces, not carded packages.
*Tool box color may vary.

Industrial Lockout/Tagout Kit

- An industrial selection of lockout/tagout devices
- Polypropylene plastic tool box resists oil and chemicals

Description		Part No.
Industrial Lockout/Tagout Kit		**44-974**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	3	**44-810**
Universal 277V Breaker/Single Pole Lockouts	2	**44-809**
480/600V Breaker Lockout	1	**44-807**
Wall Switch Lockout	1	**44-789**
110V Small Plug Lockout	1	**44-818**
Ball Valve Lockout	1	**44-820**
1 in. Safety Lockout Hasps	2	**44-800**
Red Labeled Lockout	1	**44-791**
220/550V Plug Lockout	1	**44-819**
Striped Lockout Tags – Do Not Operate	10	**44-849**
Fuse Blockout	1	**44-815**
Fuse Blockout	1	**K-7349**
Gate Valve Lockout	1	**44-824**
Cleat for 277V Breaker Lockout	1	**44-785**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Red Lockout Padlocks	4	**44-916**
Universal Multi-Pole Breaker Lockouts	2	**44-783**
Tool Box* (12 in. x 6 in. x 6 in.)	1	**IA-3241**

Quantities listed in kit description are for individual pieces, not carded packages.
*Tool Box color may vary.

Group Lock Box

- Helps ensure maximum security for complex work team situations
- Allows up to 13 individuals to personally lock the closed box
- Heavy-duty steel construction resists unauthorized entry and job-site abuse
- Compact 8-3/4 in. x 3-1/2 in. x 6 in. design

Description	Part No.
Group Lock Box	**44-804**

Personal Lockout/Tagout Pouch Kit

- Easy to carry, zippered pouch holds a worker's personal padlocks and other small devices

Description		Part No.
Personal Lockout/Tagout Pouch Kit		**44-969**
Kit Includes	**Qty.**	**Part No.**
1 in. Safety Lockout Hasp	1	**44-800**
Lockout Tags	12	**44-833***
Red Safety Padlocks - Keyed Alike	3	**44-916****
Personal Lockout Pouch	1	—

*Master Lock® equivalent.

**Keyed alike and master keyed padlocks can be special ordered by contacting IDEAL Customer Service.

Master Lock® is a registered trademark of Master Lock Company LLC.

Industrial Lockout/Tagout Station

- Large Lockout/Tagout Station can be wall mounted or easily transported
- All metal, lockable cabinets come with two adjustable shelves
- Lockout safety tips are conveniently located inside of door for frequent reminders of proper lockout procedures

Description		Part No.
Industrial Lockout/Tagout Station (16" H x 16" W x 6" D)		**44-975**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	2	**44-810**
Universal Single-Pole Breaker Lockouts	2	**44-809**
Cleat for Universal Single-Pole Lockouts	2	**44-785**
Universal Multi-Pole Breaker Lockouts	2	**44-783**
480/600V Breaker Lockout	1	**44-807**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Wall Switch Lockout	1	**44-789**
1 in. Safety Lockout Hasps	3	**44-800**
Red Safety Padlocks	4	**44-916**
100V Small Plug Lockout	1	**44-818**
220/550V Plug Lockout	1	**44-819**
Lockout Tags – Do Not Operate	10	**44-849**
Gate Valve Lockout - 1 in. to 2-1/2 in.	1	**44-824**
Gate Valve Lockout - 2-1/2 in. to 5 in.	1	**44-825**
Ball Valve Lockout	1	**44-820**
Pneumatic Lockout	1	**44-774**
Cabinet	1	**IA-4989**

Quantities listed in kit description are for individual pieces, not carded packages.
*Tool Box color may vary.

Lock Stations

44-778

44-806

- Resilient polycarbonate material provides twice the heat resistance and quadruple the impact strength of typical stations
- Lockable cover prevents loss of valuable safety products and innovative hinge holds cover open for easy product selection

Description		Part No.
Four-Lock Station Kit		**44-778**
Kit Includes	**Qty.**	**Part No.**
Four-Lock Station Board	1	—
Safety Padlocks, Red	4	**44-916**
Heavy-Duty Lockout Tags	12	—
1 in. Safety Lockout Hasps	2	**44-800**

Description		Part No.
Ten-Lock Station Kit		**44-806**
Kit Includes	**Qty.**	**Part No.**
Ten-Lock Station Board	1	**44-805**
Safety Padlocks, Red	10	**44-916**
Heavy-Duty Lockout Tags	24	—
1 in. Safety Lockout Hasps	2	**44-800**

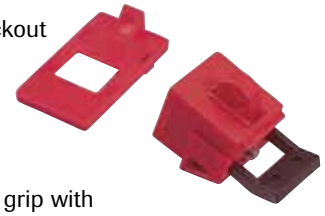
Hinged Single-Pole Breaker Lockouts

- Hinged single-pole lockout with locking post design, locks lever in off position to isolate and prevent breaker use
- Ideal for applications where panel closure is preferred

Description	Quantity	Part No.
Hinged Single-Pole Breaker Lockouts	3	**44-810**
Hinged Single-Pole Breaker Lockouts	100	**44-1810**

Universal 120/277V Breaker Lockouts

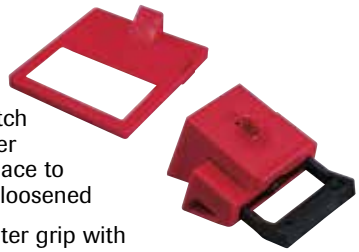
- Use thumbscrew to clamp lockout securely on to switch tongue, then pull cover over thumbscrew and lock in place to prevent clamp from being loosened
- Blade design provides tighter grip with less torque on thumbscrew



Description	Quantity	Part No.
Single-Breaker Lockouts	3	**44-809**
Cleat for Single-Pole Breaker Lockouts	3	**44-785**
Single-Pole Breaker Lockouts	50	**44-1809**

480/600V Single/Multi-Pole Breaker Lockouts

- Use thumbscrew to clamp lockout securely on to switch tongue, then pull cover over thumbscrew and lock in place to prevent clamp from being loosened
- Blade design provides tighter grip with less torque on thumbscrew



Description	Quantity	Part No.
480/600V Single/ Multi-Pole Lockout	1	**44-807**
480/600V Single/Multi-Pole Lockouts	50	**44-1807**
Cleat for 480/600V Single/Multi-Pole Lockout	2	**44-786**

Large Breaker Lockout

- Designed to lockout large 480/600V breaker switches up to 2-1/2 in. wide and 7/8 in. thick
- Easy to install – no tools required

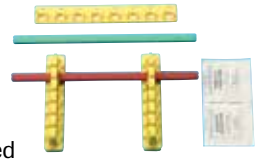
Description	Quantity	Part No.
Large Breaker Lockout	1	**44-823**

Multi-Pole Breaker Lockout

- Works with most major multi-pole breakers with tie-bar type switches including GE, ITE Sylvania, Challenger, Bryant, Westinghouse, Square D (2/3 poles) and General Switch Co.
- Easy to install – thumbscrew secures and locks tie bar in place; no cable ties or tools required

Description	Quantity	Part No.
Multi-Pole Breaker Lockout	1	**44-783**

Oversized Circuit Breaker Lockout System



- Unique Lockout system for over-sized 480/600V Circuit Breakers
- System can be permanently installed into an electrical panel putting all lockout items at the point of need
- Easy installation of adhesive mounting rails – no tools required
- Pegs in mounting rails mate with holes in locking arms for security of arm when lock is in place
- Red arms lock off, green arms lock on

Description	Quantity	Part No.
Oversized Circuit Breaker System	1	**44-822**

Circuit Breaker Lockouts

44-957

44-956

- Attaches securely to breaker with simple thumb turn and clamping handle
- 44-956 is designed for breakers with wide or tall toggles
- 44-957 fits standard height and tie-bar toggles
- The narrow profile permits side-by-side breaker lockout

Description	Part No.
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**

Plug Lockouts

44-819

- Accommodates a variety of electrical plug and cord sizes to prevent accidental connection or disconnection
- Durable plastic body resists wear, chemicals and job-site abuse
- Accommodates cable ties or padlocks (with up to 3/8 in. shackles)

Description	Size (in.)	Part No.
Plug Lockouts - 100V	2 x 2 x 3-1/2	**44-818**
Plug Lockouts - 220/550V	3-1/4 x 3-1/4 x 7	**44-819**

Circuit Breaker Lockout System

- Covers most 120V - 277V breakers
- Works on wide range of breakers, including single- and multi-pole configurations

44-764 Clamp-on

44-768 Snap-on

- Makes use of unique lock rail system, providing the following benefits:
  - Allows panel door to be closed even when lockouts are in place
  - Accommodates multiple locks, facilitating group lockout activity without hasps
  - Keeps weight off the breakers, protecting delicate electrical components from damage
  - Positions locks and tags outside the panel, making sure lockout activity is clearly visible to anyone in the area
- Technical Information
  - Lockout devices constructed of high-impact Isoplast polymers
  - Cables are 2 ft. in length
  - Lock rails made of durable isoplast polymers with acrylic adhesive backing
- **Snap-on** – For use on Square D NQO and other breakers that have a hole in the switch tongue. Just align pins with hole and snap closed. Pins prevent switch from being thrown.
- **Clamp-on** – For use on breakers that do not have a hole in the switch tongue, including multiple breakers with tie bars. Turn thumb-screw to clamp lockout securely onto switch, then snap the cover closed to prevent thumb wheel from being loosened.

Description	Quantity	Part No.
Snap-on lockout for Square D NQO and other breakers with a hole in the switch tongue	1	**44-768**
Clamp-on lockout for breakers without hole in the switch tongue, including multi-pole breakers with tie bars	1	**44-764**
4 in. Lock Rail with seven lock loops	1	**44-769**

Plug Lockouts

- Plug lockout, 44-792 works with high and low voltage plugs up to 3 in. in diameter and 5-1/2 in. in length, up to 1-1/4 in. cord diameter
- Plug lockout, 44-973 works with 110V/220V plugs up to 1-3/4 in. in diameter and 2-1/2 in. in length, up to a 1/2 in. cord diameter

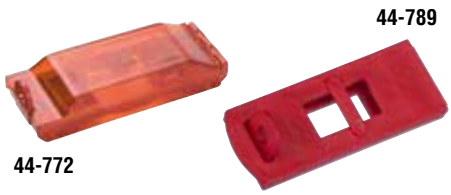
Description	Part No.
Plug Lockout	**44-792**
Plug Lockout	**44-793**

Electric Plug Lockout

- Slides over cord prongs and locks in place to prevent cord from being plugged into an outlet
- Cannot be removed without key
- Works on any 2- or 3-prong plug

Description	Part No.
Electric Plug Lockout	**44-782**

Wall Switch Lockouts

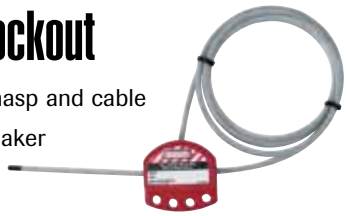


- Universal Wall Switch Lockout locks out both toggle and Decora® wall switches
- Universal design assures switch is locked on or off. Hinges open for unobstructed normal switch operation
- Standard wall switch lockout fits most wall-mounted single or three-way electrical switches

Description	Quantity	Part No.
Universal Wall Switch	1	**44-772**
Standard Wall Switch	1	**44-789**

Decora® is a registered trademark of Leviton Manufacturing Co., Inc.

Adjustable Cable Lockout



- Infinitely adjustable safety hasp and cable
- Ideal for multiple circuit breaker panels and side-by-side gate valve lockouts
- Feed the cable end through the points to be locked out, then back through the lockout body. Cinch it tight to remove any slack with the patented locking feature.
- Tough, flexible multi-stranded 6 ft. 1/4 in. dia. steel cable is insulated with a clear vinyl coating
- Tough, lightweight, dielectric thermoplastic body withstands chemicals; performs effectively in extreme conditions
- Up to four workers can apply their personal safety locks
- Complete with high-visibility, re-usable, write-on safety labels (English, French & Spanish). Identify the responsible person, then erase for the next job.

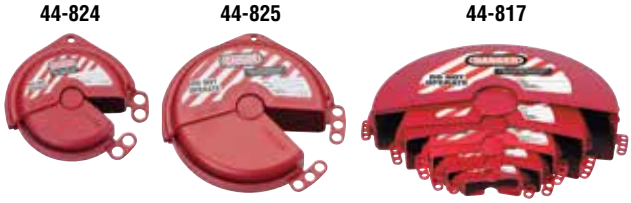
Description	Part No.
Adjustable Cable Lockout	**44-808**

Cable Lockout

- Unique hasp lockout device accepts up to six 9/32 in. padlocks and comes with a 6 ft. plastic-coated steel cable

Description	Part No.
Cable Lockout, 6 ft. cable	**44-829**

Gate Valve Lockouts



- Unique patent pending rotating design allows for easier installation in confined space applications
- Each size rotates into itself and nests within the next larger size to save space in storage
- Up to four workers can apply their personal safety locks
- Complete with high-visibility permanent safety labels (English, French & Spanish) that can be written on to identify the responsible person, then erased for the next job
- Tough, lightweight, dielectric thermoplastic bodies withstand chemicals and perform effectively in extreme conditions, temperature range: -50°F (-46°C) to +350°F (177°C)

Valve Size	Quantity	Part No.
1 in. to 3 in.	1	**44-824**
2 in. to 5 in.	1	**44-825**
Set of five sizes (1 in. to 13 in.)	1	**44-817**

Ball Valve Lockout Devices

- Best available method for locking out ball valves
- Patented design fits most major brand ball valves
- Designed to lock in off position only
- Complies with OSHA lockout standard

44-847

Valve Size	Max. Shackle Length	Material	Part No.
1/2 to 1-1/4 in.	—	Polypropylene	**44-846**
1-1/4 to 3	—	Polypropylene	**44-847**
1/4 to 1 (not shown)	9/32 in.	Nylon	**44-820**
1-1/4 to 3 (not shown)	9/32 in.	Heavy Steel	**44-821**

Steel Padlocks

- Rustproofed, steel case with nickel-plated shackle withstands abuse and environmental hazards
- Includes two keys
- 1-1/2 in. wide lock with 9/32 in. shackle diameter
- Keyed-alike and Master Lock® Keyed locks available by special order

Bumper Color	3/4 In. Shackle Clearance Part No.	2 In. Shackle Clearance Part No.
Blue	**44-900**	**44-901**
Red	**44-906**	**44-907**

Master Lock® is a registered trademark of Master Lock Company LLC.

Safety Lockout Padlocks w/Key Retention

- Dedicated safety lockout device reduces confusion with other locks
- Complies with OSHA's "1-key, 1-lock"
- Non-conductive, lightweight body; four colors for easy identification
- Key retention ensures keys do not get lost while not in use and that padlocks are not left untouched
- 1-1/2 in. shackle clearance; 1-1/2 in. wide lock with 1/4 in. shackle
- Keyed-alike, Master Lock® Keyed locks, 2nd key, additional colors and engraving available by special order

Bumper Color	Part No.
Blue	**44-912**
Black	**44-914**
Red	**44-916**
Yellow	**44-918**

Master Lock® is a registered trademark of Master Lock Company LLC.

Lock Labels

- Easy identification of employees' locks
- Write-on, vinyl labels with peel-off adhesive backing
- Polyester over laminate protects label

Description	Quantity	Part No.
Lock Labels	8 labels	**44-898**

Safety Lockout Hasps

- Allow up to six workers to lock out a single energy source
- Rustproofed, plated and vinyl-coated
- Labeled hasps feature anodized aluminum alloy construction for long-term durability
- Permanent "Do Not Operate" labels accept pens, pencils and permanent markers

Description	Jaw Diameter	Quantity	Part No.
Safety Lockout Hasp	1 in.	3	**44-800**
Safety Lockout Hasp	1-1/2 in.	2	**44-801**
Labeled Safety Lockout Hasp – Do Not Operate, Blue	—	1	**44-790**
Labeled Safety Lockout Hasp – Do Not Operate, Red	—	1	**44-791**
Labeled Safety Lockout Hasp – Do Not Operate, Red	—	50	**44-1791**

Heavy-Duty Lockout Tags

44-833

44-832

44-830

- High-visibility lettering
- Laminated plastic tags have non-fade legends, resist corrosive and harsh environmental conditions grommet
- Vinyl tags are silk screened with a 7/8 in. metal grommet; fastener included
- Exceeds OSHA's 50-lb. pullout requirement
- Matte finish for easy writing surface

Description	Type	Quantity	Part No.
Heavy-Duty Lockout Tag – Do Not Operate	Heavy-Duty Laminated	5/card	**44-830**
	Heavy-Duty Laminated	100/box	**44-1830**
	Economy Vinyl	25/bag	**44-848**
Heavy-Duty Lockout Tag – Do Not Operate - Electricians at Work	Heavy-Duty Laminated	5/card	**44-832**
	Economy Vinyl	25/bag	**44-843**
Heavy-Duty Lockout Tag – Do Not Operate - (red striped background)	Heavy-Duty Laminated	5/card	**44-833**
	Heavy-Duty Laminated	100/box	**44-1833**
	Economy Vinyl	25/bag	**44-849**

Bilingual Lockout Tags

- Spanish/English tags provide extra safety and information in bilingual situations
- High-visibility lettering
- Laminated vinyl tags with non-fade legends resist corrosive and harsh environmental conditions
- Write-on tag with 7/8 in. grommet can be padlocked to device to help prevent unauthorized removal

Description	Quantity	Part No.
Bilingual Lockout Tags – Do Not Operate (striped)	5	**44-841**

Flash Protection Labels and Signs

National Electric Code 110.16 Flash Protection: ***Switchboards, panel boards, industrial control panels and motor control centers,*** in other than dwelling occupancies, that are likely to require examination, adjustment, servicing or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing or maintenance of the equipment.

Description	Type	Size	Quantity	Part No.
NEC Arc Flash, Warning	Self-Sticking Polyester	3-1/2 in. x 5 in.	5	**44-892**
NEC Arc Flash, Warning		3-1/2 in. x 5 in.	100	**44-892BK**
NEC Arc Flash, Warning		5 in. x 7 in.	5	**44-893**
NEC Arc Flash, Warning		5 in. x 7 in.	5	**44-894**
NEC Arc Flash, Danger		4 in. x 6 in.	5	**44-895**
NEC Arc Flash, Warning		7 in. x 10 in.	1	**44-896**

Lockout Signs

- Resistant to both chemicals and abrasion – protected graphics for indoor and outdoor use

Legend	Material	Size (In.)	Part No.
Lockout Sign – OSHA Regulation 36 in. clearance	Self-sticking polyester	3-1/2 x 10	**44-877**
Lockout Sign – OSHA Regulation (Bilingual) 36 in. clearance	Self-sticking polyester	7 x 10	**44-878**
Lockout Sign – Danger-Breakers Locked Out	Magnetic	5 x 7	**44-890**

Safety Signs

- Resistant to both chemicals & abrasion – protected graphics for indoor & outdoor use

Legend	Material	Size (In.)	Part No.
Safety Sign – Danger–High Voltage	Fiberglass	10 x 14	**44-862**
Safety Sign – Danger–High Voltage	Self-Sticking Polyester	7 x 10	**44-863**
Safety Sign – Danger–High Voltage–Keep Out	Fiberglass	10 x 14	**44-880**
Safety Sign – Danger–High Voltage–Keep Out	Self-Sticking Polyester	7 x 10	**44-881**
Safety Sign – Danger–High Voltage–Spanish	Self-Sticking Polyester	7 x 10	**44-865**

Voltage & Conduit Markers

44-289

44-299

44-410

- Identify junction boxes, switches, circuit breakers, raceways, pipe and fuse boxes
- Non-conductive for user safety
- High-adhesion properties with easy removal
- Vinyl-impregnated cloth construction for long-lasting durability
- Resist abrasion, moisture, dirt and oil
- Non-smear, black legend on bright orange background for high visibility
- Specifications: Temperature Range: -40°F to 180°F (-40°C to 82°C)
  Adhesion: 45 oz./in. width ultimate

Description	Large Part No. (2-1/4 in. x 9 in.) 1/card	Medium Part No. (1-1/8 in. x 4-1/2 in.) 4/card	Small Part No. (2-1/4 in. x 1/2 in.) 18/card
120/208V	**44-295**	**44-296**	–
277/480V	**44-298**	**44-299**	–
120V	–	**44-353**	–
208V	–	**44-355**	–
240V	–	**44-358**	–
277V	–	–	**44-410**
480V	**44-314**	**44-364**	–
Danger	**44-289**	–	–
High Voltage	**44-292**	–	–

Detectable Underground Tapes

42-201

42-252

- Solid aluminum foil core tapes for protection, location and identification of underground utility installations
- Meets or exceeds industry standards including the American Public Works Association (APWA) color code
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink

Description	Color	Size	Part No.
Detectable Underground Tape – Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	**42-201**
Detectable Underground Tape – Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	**42-251**
Detectable Underground Tape – Caution Buried Fiber Optic Line Below	Orange	6 in. x 1,000 ft.	**42-252**

Specifications:		
Property	**Method**	**Value**
Thickness	ASTMD2103	5.0 Mils
Elongation	ASTMD882-75B	80%
Composition	IDEAL Specs.	Bottom Layer PE; Top layer PET; Foil industry standard
Tensile Strength	ASTMD882	32 lbs./in. (15,000 PSI)

Non-Detectable Underground Tapes

42-102

42-103

42-104

42-151

- For protection, location and identification of underground utility installations
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink
- Recommended Burial Depth: 3 in. Tape - 4 to 6 in.
  6 in. Tape – less than 12 in.

Description	Color	Size	Part No.
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	**42-101**
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Yellow	3 in. x 1,000 ft.	**42-102**
Non-Detectable Underground Tape – Caution Buried Telephone Line Below	Orange	3 in. x 1,000 ft.	**42-103**
Non-Detectable Underground Tape – Caution Buried Fiber Optic Line Below	Orange	3 in x 1,000 ft.	**42-104**
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	**42-151**
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Yellow	6 in. x 1,000 ft.	**42-152**

Specifications:		
Property	**Method**	**Value**
Thickness	ASTMD2103	4.0 Mils
Elongation	ASTMD882-75B	500%
Composition	IDEAL Specs.	LDPE
Tensile Strength	ASTMD882	2,750 PSI

Barricade Tapes

42-002

42-051

42-003

- High-visibility safety yellow or red polyethylene construction with bold black letters
- Meets OSHA specifications Section 1010.144 for marking physical hazards

Description	Color	Size	Thickness	Part No.
Barricade Tape – Caution	Yellow	3 in. x 1,000 ft.	4.0 Mils	**42-001**
Barricade Tape – Caution Do Not Enter	Yellow	3 in. x 1,000 ft.	4.0 Mils	**42-002**
Barricade Tape – Caution High Voltage	Yellow	3 in. x 1,000 ft.	4.0 Mils	**42-003**
Barricade Tape – Danger High Voltage	Red	3 in. x 1,000 ft.	4.0 Mils	**42-051**
Barricade Tape – Danger High Voltage Keep Out	Red	3 in. x 1,000 ft.	4.0 Mils	**42-052**
Barricade Tape – Caution Do Not Enter	Yellow	3 in. x 1,000 ft.	2.0 Mils	**42-012**

Specifications:		
Property	**Method**	**Value**
Elongation	ASTMD882-75B	≥ 400%
Composition	IDEAL Specs.	LDPE
Tensile Strength	ASTMD882	2,350 PSI TD; 1,893 PSI MD

Python™ Adjustable Locking Cable

Python™ Adjustable Locking Cable secures anything within its grasp. The only locking cable that is right length for your application. This patented product holds flexible steel cable tight at any position

- Infinite Locking Positions – Patented lock holds cable tight from 1 ft. (30cm) to 6 ft. (1.8m)
- Application Flexibility – Interchangeable cables
- Keyed Alike Convenience – Rekeyable cylinder
- Cut Resistance – 3/8 in. (10mm), 100% steel braided cable
- Weather Tough – Rust resistant aluminum lock body
- Scratch Resistant – Vinyl cable sleeve and lock body bumper

Other Applications: Bikes, lawn furniture, lawn mowers, job sites, canoes, boats, skis, snowboards, generators, pickup truck cargo, spare tire locks and much more.

Description	Part No.
Master Lock® Python™ Kit with 6 ft. Cable-keyed different	**44-990**
Master Lock® Python™ Kit with 6 ft. Cable-keyed alike*	**44-991**
12 ft. (3.7m) x 3/8 in. (10mm) Cable for Python™ Lock*	**44-992**

*Special order through Customer Service.

Master Lock® is a registered trademark of Master Lock Company LLC.
Python™ is a trademark of Master Lock Company LLC.

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Airpax		Airpax	1		■	■						
American Switch		C	1		■						■	■
Bryant		BR	1	■	■							■
Challenger		C	1	■	■							■
Challenger	Type C	C	2-3							■		■
Challenger	Same as W DK	CDK					■					
Challenger		LM	1		■							■
Challenger		NEJ	1-2		■	■						■
Crouse Hinds		MP	2							■		
Cutler Hammer		BA	1		■							■
Cutler Hammer		CH	2-3							■		■
Cutler Hammer		CH2	4							■		■
Cutler Hammer		CHB	3							■		■
Cutler Hammer	Quicklag	BAB	1	■	■							■
Cutler Hammer	Quicklag	BAB	2-3							■		
Cutler Hammer	BR	BD	1	■	■							■
Cutler Hammer	BR	BR	1	■	■							■
Cutler Hammer	BR	BR	2-3							■		■
Cutler Hammer	BR	BRH	1	■	■							■
Cutler Hammer	BR	BRH	2-3							■		■
Cutler Hammer	BR	BRHH	2							■		■
Cutler Hammer	CH	CH	1	■	■						■	■
Cutler Hammer	CH	CH	2-3							■		■
Cutler Hammer	CH	CH2	4							■		■
Cutler Hammer	CH	CHB	1	■	■						■	■
Cutler Hammer	CH	CHB	2-3							■		■
Cutler Hammer	K-Frame	CHKD	2-3				■		■			
Cutler Hammer	L-Frame	CHLD	2-4						■			
Cutler Hammer	M-Frame	CHMDL	2-3				■	■				
Cutler Hammer	N-Frame	CHND	2-4	■	■						■	■
Cutler Hammer	CH	CHP	1							■		■
Cutler Hammer	CH	CHP	2-3	■	■						■	■
Cutler Hammer	CH	CHQ	1							■		■
Cutler Hammer	CH	CHQ	2							■		■
Cutler Hammer	CH	CHSW	2-3				■					
Cutler Hammer	K-Frame	CKD	2-3	■	■						■	■
Cutler Hammer	CL	CL	1							■		■
Cutler Hammer	CL	CL	2						■			
Cutler Hammer	L-Frame	CLD	2-4						■			
Cutler Hammer	CL	CLR	1-2						■			
Cutler Hammer	M-Frame	CMDL	2-3				■	■				
Cutler Hammer	N-Frame	CND	2-4				■	■				
Cutler Hammer	N-Frame	CNDC	2-4		■							■
Cutler Hammer	CH	CSR	1				■					
Cutler Hammer	K-Frame	DK	2-3		■							■
Cutler Hammer	E125-Frame	E125B			■							■
Cutler Hammer	E125-Frame	E125E			■							■
Cutler Hammer	E125-Frame	E125H			■							■
Cutler Hammer	E125-Frame	E125S			■							■
Cutler Hammer	F-Frame	ED	2-4		■							■
Cutler Hammer	F-Frame	EDC	2-4		■							■
Cutler Hammer	F-Frame	EDH	2-4		■							■
Cutler Hammer	E125-Frame	EFH	1-4		■							■
Cutler Hammer	E125-Frame	EGB	1-4		■							■
Cutler Hammer	E125-Frame	EGE	1-4		■							■
Cutler Hammer	E125-Frame	EGS	1-4		■							■
Cutler Hammer		EHC			■							■

				IDEAL									
				Standard Breaker Lockouts								EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Cutler Hammer	F-Frame	EHD	1-4		■							■
Cutler Hammer	Tri Pac Cur. Lim	FB	2-3		■	■						■
Cutler Hammer		FC			■							■
Cutler Hammer	F-Frame	FD	1-4		■							■
Cutler Hammer	F-Frame	FDB	2-4		■							■
Cutler-Hammer	F-Frame	FDC	2-4		■							■
Cutler-Hammer	F-Frame	FS	2-3									■
Cutler-Hammer	G-Frame	GB	1-3		■							■
Cutler-Hammer	G-Frame	GC	1-3		■							■
Cutler Hammer		FC			■							■
Cutler Hammer	F-Frame	FD	1-4		■							■
Cutler Hammer	F-Frame	FDB	2-4		■							■
Cutler Hammer	F-Frame	FDC	2-4		■							■
Cutler Hammer	F-Frame	FS	2-3									■
Cutler Hammer	G-Frame	GB	1-3		■							■
Cutler Hammer	G-Frame	GC	1-3		■							■
Cutler Hammer	Tri Pac Cur. Lim	FB	2-3		■	■						■
Cutler Hammer		FC			■							■
Cutler Hammer	F-Frame	FD	1-4		■							■
Cutler Hammer	F-Frame	FDB	2-4		■							■
Cutler Hammer	F-Frame	FDC	2-4		■							■
Cutler Hammer	F-Frame	FS	2-3		■							■
Cutler Hammer	G-Frame	GB	1-3		■							■
Cutler Hammer	G-Frame	GC	1-3		■							■
Cutler Hammer	G-Frame	GD	1-3		■							■
Cutler Hammer	G-Frame	GHB	1-3		■							■
Cutler Hammer	G-Frame	GHBGFEP	1		■							■
Cutler Hammer	G-Frame	GHC	1-3		■							■
Cutler Hammer	G-Frame	GHCGFEP	1		■							■
Cutler Hammer	Quicklag	HBAW	1	■	■							■
Cutler Hammer	Quicklag	HBAW	2-3							■		
Cutler Hammer	Quicklag	HBAX	1	■	■							■
Cutler Hammer	Quicklag	HBAX	2-3							■		
Cutler Hammer		HFD	1-4		■							■
Cutler Hammer	G-Frame	HGHB	1		■							■
Cutler Hammer	G-Frame	HGHC	1		■							■
Cutler Hammer		HJD	2-4				■					
Cutler Hammer	K-Frame	HKD	2-4				■					
Cutler Hammer	L-Frame	HLD	2-4						■			
Cutler Hammer	L-Frame	HMCP	3						■			
Cutler Hammer	J-Frame	HMCP	3				■					
Cutler Hammer	K-Frame	HMCP	3				■					
Cutler Hammer	L-Frame	HMCP	3						■			
Cutler Hammer	F-Frame	HMCP	3-4		■							
Cutler Hammer	M-Frame	HMDL	2-3						■			
Cutler Hammer	M-Frame	HMDLB	2-3						■			
Cutler Hammer	N-Frame	HND	2-4				■	■				
Cutler Hammer	Quicklag Type P	HQP	1	■	■							■
Cutler Hammer	Quicklag Type P	HQP	2							■		
Cutler Hammer	J-Frame	JD	2-4				■					
Cutler Hammer	J-Frame	JDB	2-3				■					
Cutler Hammer	J-Frame	JDC	2-4				■					
Cutler Hammer	K-Frame	KD	2-4				■					
Cutler Hammer	K-Frame	KDB	2-4				■					
Cutler Hammer	K-Frame	KDC	2-4				■					
Cutler Hammer	Tri Pac Cur. Lim	LA	2-3				■					
Cutler Hammer	L-Frame	LD	2-4						■			

				IDEAL									
				Standard Breaker Lockouts								EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Cutler Hammer	L-Frame	LDB	2-3									
Cutler Hammer	L-Frame	LDC	2-4									
Cutler Hammer		LH	3									
Cutler Hammer		LHB	3									
Cutler Hammer	Type CC	LJ										
Cutler Hammer		MA	2-3									
Cutler Hammer		MC	2-3									
Cutler Hammer	M-Frame	MD	2-3									
Cutler Hammer	M-Frame	MDL	2-3									
Cutler Hammer	M-Frame	MDS	2-3									
Cutler Hammer	Tri Pac Cur. Lim	NB	2-3									
Cutler Hammer	N-Frame	ND	2-4									
Cutler Hammer	N-Frame	NDC	2-4									
Cutler Hammer	N-Frame	OPTIM	3									
Cutler Hammer	Tri Pac Cur. Lim	PB	2-3									
Cutler Hammer	Quicklag	QBGF	1									
Cutler Hammer	Quicklag	QBGF	2									
Cutler Hammer	Quicklag	QBGFEP	1									
Cutler Hammer	Quicklag	QBGFEP	2									
Cutler Hammer	Quicklag	QBHGF	1									
Cutler Hammer	Quicklag	QBHGFEP	1									
Cutler Hammer	Quicklag	QBHW	1									
Cutler Hammer	Quicklag	QBHW	2-3									
Cutler Hammer	Quicklag Type P	QC	1									
Cutler Hammer	Quicklag Type P	QC	2-3									
Cutler Hammer	Quicklag Type P	QCD	1									
Cutler Hammer	Quicklag Type P	QCD	2-3									
Cutler Hammer	Quicklag	QCGF	1									
Cutler Hammer	Quicklag	QCGFEP	1									
Cutler Hammer	Quicklag	QCHGF	1									
Cutler Hammer	Quicklag	QCHGFEP	1									
Cutler Hammer	Quicklag	QCHW	1									
Cutler Hammer	Quicklag	QCHW	2-3									
Cutler Hammer	Quicklag	QHCW	1									
Cutler Hammer	Quicklag	QHCW	2-3									
Cutler Hammer	Quicklag	QHCX	1									
Cutler Hammer	Quicklag	QHCX	2-3									
Cutler Hammer	Quicklag	QHPW	1									
Cutler Hammer	Quicklag	QHPW	2-3									
Cutler Hammer	Quicklag	QHPX	1									
Cutler Hammer	Quicklag	QHPX	2-3									
Cutler Hammer	Ground Fault	QPGF	1									
Cutler Hammer		QPGF	2									
Cutler Hammer	Ground Fault	QPGFEP	1									
Cutler Hammer		QPGFEP	2									
Cutler-Hammer	Ground Fault	QPHGF	1									
Cutler-Hammer	Ground Fault	QPHGFEP	1									
Cutler-Hammer	Quicklag	QPHW	1									
Cutler-Hammer	Quicklag	QPHW	2-3									
Fed. Pacific Elec.		BAB	1									
Fed. Pacific Elec.		NA-single	3									
Fed. Pacific Elec.		NA-tie bar	2									
Fed. Pacific Elec.		NB	1									
Fed. Pacific Elec.		NBH GFI	1									
Fed. Pacific Elec.		NE/NEF										
Fed. Pacific Elec.		NEJ										
Fed. Pacific Elec.		NFJ										

				IDEAL									
				Standard Breaker Lockouts								EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Fed. Pacific Elec.		NJJ					■					
Fed. Pacific Elec.		NJL					■					
Fed. Pacific Elec.		NM					■					
Fed. Pacific Elec.		NP-single	1		■							■
Frank Adams	FA Quicklag	P	1		■							■
General Electric	Type C	HQC	3		■							■
General Electric	SE150	SED	2-3		■							■
General Electric	SE150	SEH	2-3		■							■
General Electric	SE150	SEL	2-3		■							■
General Electric	SE150	SEP	2-3		■							■
General Electric	SF250	SFH	2-3		■							■
General Electric	SF250	SFL	2-3		■							■
General Electric	SF250	SFP	2-3		■							■
General Electric	Tri Break	TB1			■	■						■
General Electric	Tri Break	TB4			■	■						■
General Electric	Tri Break	TB6			■	■						■
General Electric	Tri Break	TB8			■	■						■
General Electric	Mag Break	TBC4			■	■						■
General Electric	Mag Break	TBC6			■	■						■
General Electric	Mag Break	TBC8			■	■						■
General Electric	E150	TE	1-3		■	■						■
General Electric	E150	TEB	1-3		■	■						■
General Electric	E150	TED	1-3		■	■						■
General Electric		TEF	1-3		■	■						■
General Electric	E150	TEL	3		■	■						■
General Electric	Mag Break	TEML	3		■	■						■
General Electric	E150	TEY	1-3		■							■
General Electric	E150	TF	1-3		■							■
General Electric	Mag Break	TFC	3		■							■
General Electric	F225	TFJ	2-3				■					
General Electric	F225	TFK	2-3				■					
General Electric	F225	TFL	3				■					
General Electric	Like TED	THED	1-3		■	■						■
General Electric	Like TED	THEF			■	■						■
General Electric	F225	THFK	2-3				■					
General Electric	Q Line	THHQB	2-3							■		■
General Electric	Q Line	THHQB-A	1	■	■							■
General Electric	Q Line	THHQB-S	1		■							■
General Electric	Q Line	THHQC	1-3							■		■
General Electric	Q Line	THHQC-A	1	■	■							■
General Electric	Q Line	THHQC-S	1		■							■
General Electric	Q Line	THHQL	2-3							■		■
General Electric	Q Line	THHQL-A	1	■	■							■
General Electric	Q Line	THHQL-S	1		■							■
General Electric	J600	THJK4	2-3				■	■				
General Electric	J600	THJK6	2-3				■	■				
General Electric	K1200	THKM12	2-3						■			
General Electric	K1200	THKM8	2-3						■			
General Electric	THLC Current Limiting	THLC1	3		■							
General Electric	Q Line	THQB	2-3							■		■
General Electric	Q Line	THQB-A	1	■	■							■
General Electric	Q Line	THQB-S	1		■							■
General Electric	Q Line	THQC	2-3							■		■
General Electric	Q Line	THQC-A	1	■	■							■
General Electric	Q Line	THQC-AL	2-3							■		■
General Electric	Q Line	THQC-S	1		■							■

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
General Electric	Q Line	THQD	2-3		■		■					■
General Electric	Q Line	THQDBL	3									■
General Electric	Q Line	THQL	2-3							■		■
General Electric	Q Line	THQL-A	1	■	■							■
General Electric	Q Line	THQL-S	1		■							■
General Electric		TJ4	3				■					
General Electric	Mag Break	TJC			■		■					■
General Electric	TJD432400WL	TJD	2-3				■	■				
General Electric	J600	TJJ	2-3				■	■				
General Electric	J600	TJK4	2-3				■	■				
General Electric	TJK636F000	TJK6	2-3				■	■				
General Electric	TJS3604S	TJS					■	■				
General Electric	MicroVersaTrip	TK4V	3				■					
General Electric	Mag Break	TKC	3		■	■						■
General Electric	TKM4365000	TKM4							■			
General Electric	K1200	TKM8	2-3						■			
General Electric		TKMA8	3						■			
General Electric	Q Line	TQB	2-3							■		■
General Electric	Q-Line	TQB-A	1	■	■							■
General Electric	Q-Line	TQB-S	1		■							■
General Electric	Q Line	TQC	2-3							■		■
General Electric		TQC-A	1	■	■							■
General Electric		TQC-S	1		■							■
General Electric	Q Line	TQD	2-3		■							
General Electric	Q Line	TQL-A	1	■	■							■
General Electric	Q Line	TQL-S	1		■							■
Heinemann		LB	1		■	■						
Heinemann		LF	1		■	■						
Heinemann		LJ	1		■	■						
Merlin Gerin	400 Amp series	CJ	3				■	■				
Siemens ITE		BL	1	■	■							■
Siemens ITE		BL	2-3							■		■
Siemens ITE		BL	1		■						■	■
Siemens ITE		BL	2-3							■		■
Siemens ITE		BLF-GFI	2							■		■
Siemens ITE		BLH	1	■	■							■
Siemens ITE		BLH	2-3							■		■
Siemens ITE		BQ	1	■	■							■
Siemens ITE		BQ	2-3							■		■
Siemens ITE		BQCH	1-3		■							■
Siemens ITE		BQD	3		■							■
Siemens ITE		BQD	1-3		■							■
Siemens ITE		BQD6	1-3		■							■
Siemens ITE		BQH	1	■	■							■
Siemens ITE		BQH	2-3							■		■
Siemens ITE		CED6	2-3		■							■
Siemens ITE		CFD6	2-3				■	■				
Siemens ITE		CFD6-ETI	2-3				■	■				
Siemens ITE		CJ3					■					
Siemens ITE		CJD6	2-3				■					
Siemens ITE		CJD6-ETI	2-3				■					
Siemens ITE		CLF	2				■	■				
Siemens ITE		CMD6	3						■			
Siemens ITE		CMD6-ETI	3						■			
Siemens ITE		CND6	3						■			
Siemens ITE		CPD6	3						■			
Siemens ITE		CQD	1-3		■	■						■
Siemens ITE		E2			■							■
Siemens ITE		E4	1		■							■

				IDEAL									
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Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Siemens ITE		ED2	1-3		■							■
Siemens ITE		ED4	1-3		■							■
Siemens ITE		ED6	1-3		■							■
Siemens ITE		ED6-ETI	3		■							■
Siemens ITE		EE3			■	■						■
Siemens ITE		EH3			■	■						■
Siemens ITE		EQP	4							■		■
Siemens ITE		EQT QF										
Siemens ITE	F-Frame	ET			■	■						■
Siemens ITE		FD6A	2-3			■	■	■				
Siemens ITE		FJ2-B	2-3		■	■	■	■				
Siemens ITE		FJ3	2				■					
Siemens ITE		FJ6	2				■	■				
Siemens ITE		FXD6A	2-3				■	■				
Siemens ITE		FXD6-ETI	2-3				■	■				
Siemens ITE		GF	1		■							■
Siemens ITE		HBL	1	■	■							■
Siemens ITE		HBL	2-3							■		■
Siemens ITE		HBQ	1	■	■							■
Siemens ITE		HBQ	2-3							■		■
Siemens ITE		HE4			■							■
Siemens ITE		HED4	1-3		■							■
Siemens ITE		HED6	2-3		■							■
Siemens ITE		HFD6	2-3				■	■				
Siemens ITE		HFXD6	2-3				■	■				
Siemens ITE		HHED6	2-3		■							■
Siemens ITE		HHFD6	2-3				■	■				
Siemens ITE		HHJD6	2-3				■					
Siemens ITE		HHJXD6	2-3				■					
Siemens ITE		HJD6	2-3				■					
Siemens ITE		HJD6-A	2-3				■					
Siemens ITE		HJXD6	2-3				■					
Siemens ITE		HJXD6-A	2-3				■					
Siemens ITE		HMD6	2-3						■			
Siemens ITE		HMXD6	2-3						■			
Siemens ITE		HND6	2-3						■			
Siemens ITE		HNXD6	2-3						■			
Siemens ITE		HPD6	3						■			
Siemens ITE		HPXD6	3						■			
Siemens ITE		HQJ2-H	3		■							■
Siemens ITE		HQP	1	■	■							■
Siemens ITE		HQP	2-3							■		■
Siemens ITE		HQPP	1	■	■							■
Siemens ITE		HQPP	2-3							■		■
Siemens ITE		HQPPH	2							■		■
Siemens ITE		HRD6	3						■			
Siemens ITE		HRXD6	3						■			
Siemens ITE		JD6-A	2-3				■					
Siemens ITE		JJ3					■					
Siemens ITE		JL3	3				■					
Siemens ITE		JXD2-A	2-3				■					
Siemens ITE		JXD6-A	2-3				■					
Siemens ITE		LL3					■					
Siemens ITE		MD6	2-3						■			
Siemens ITE		MXD6	2-3						■			
Siemens ITE		MXD6-ETI	2-3						■			
Siemens ITE		ND6	2-3						■			
Siemens ITE		NXD6	2-3						■			
Siemens ITE		PD6	3						■			
Siemens ITE		PXD6	3						■			
Siemens ITE		QJ2	2-3		■	■						■
Siemens ITE		QJ2-H	2-3		■	■						■
Siemens ITE		QJH2	2-3		■	■						■
Siemens ITE		QP	1	■	■							■
Siemens ITE		QP	2-3							■		■
Siemens ITE		QP1	1		■							■

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Siemens ITE		QPH	1	■	■							■
Siemens ITE		QPH	4							■		■
Siemens ITE		QPH	2-3							■		■
Siemens ITE		QPP	1	■	■							■
Siemens ITE		QPP	2-3							■		■
Siemens ITE		QPPH	1	■	■							■
Siemens ITE		QPPH	2-3							■		■
Siemens ITE		RD6	3						■			
Siemens ITE		RXD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SCMD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SCND6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SHMD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SHND6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SMD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SND6	3						■			
Simplex		NX	3				■	■				
Square D		EDB	1-3		■							■
Square D		EGB	1-3		■							■
Square D		EH4	1-3		■							■
Square D		EHB	1-3		■							■
Square D		EHB	2-3							■		■
Square D		EJB	1-3		■							■
Square D		EZ	3						■			
Square D	100 Amp Frame	FA	1-3		■	■						
Square D	100 Amp Frame	FAL	1-3		■	■						
Square D	100 Amp Frame	FC	3		■	■						
Square D	100 Amp Frame	FCL	2-3		■	■						
Square D	FDA 34040	FDA			■							■
Square D	100 Amp Frame	FH	1-3		■	■						
Square D	100 Amp Frame	FHL	1-3		■	■						
Square D	100 Amp Frame	FHL-DC	3		■	■						
Square D	100 Amp Frame	FI	3		■	■						
Square D	100 Amp Frame	FIL	3		■	■						
Square D	100 Amp Frame	FY	1		■	■						
Square D	Mag Gard	GJL	3		■	■						
Square D	250 Amp Frame	KA	2-3		■	■						
Square D		KAL	2-3		■	■						
Square D		KAP					■					
Square D	250 Amp Frame	KC	2-3		■	■						
Square D		KCL	2-3		■	■						
Square D	250 Amp Frame	KH	2-3		■	■						
Square D		KHL	3		■	■						
Square D	250 Amp Frame	KI	2-3		■	■						
Square D	250 Amp Frame	KIL	2-3		■	■						
Square D	400 Amp Frame	LA	2-3				■	■				
Square D		LAL	2-3				■	■	■			
Square D	400 Amp Frame	LH	2-3				■	■				
Square D		LHL	3				■	■	■			
Square D		LHP					■	■	■			
Square D		MA	3						■			
Square D	1000 Amp Frame	MA	2-3				■	■				
Square D		MAL	3						■			
Square D	1000 Amp Frame	MH	2-3				■	■				
Square D		MHL	2-3						■			
Square D		ML-1	3				■	■				
Square D		ML-3	3						■			
Square D	250 Amp Frame	Q1B	2-3		■							■
Square D	250 Amp Frame	Q1L	2-3		■							■
Square D	250 Amp Frame	Q2	2-3		■	■						
Square D	250 Amp Frame	Q2H	2-3		■	■						
Square D	250 Amp Frame	Q2L	2-3		■	■						

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Square D	250 Amp Frame	Q2MT	2-3		■	■						
Square D	400 Amp Frame	Q4	2-3				■	■				
Square D	400 Amp Frame	Q4L	2-3				■	■				
Square D	QO	QO	1								■	
Square D	QO	QO	2-3	■	■						■	■
Square D	QO	QOB	1								■	
Square D	QO	QOB	2-3	■	■						■	■
Square D	QO	QOB-H	2								■	
Square D	QO	QOB-VH	1	■	■						■	
Square D	QO	QOB-VH	2-3							■		
Square D	QO	QO-H	2								■	
Square D	Main Circuit Breaker QO	QOM1-VH	2		■							■
Square D	Main Circuit Breaker QO	QOM2-VH	2		■							■
Square D	QO	QO-SWN	2-3	■	■						■	■
Square D	DIN Rail Mnt QO	QOU	1								■	
Square D	DIN Rail Mnt QO	QOU	2-3		■						■	■
Square D	DIN Rail Mnt QO	QOU w/tie	2-3							■		■
Square D	QO	QO-VH	1								■	
Square D	QO	QO-VH	2-3	■	■						■	■
Square D	DIN Rail Mount	QYU	1								■	
Square D	2500 Amp Frame	RG	2-4									
Square D	2500 Amp Frame	RJ	2-4									
Square D	2500 Amp Frame	RL	2-4									
Square D		Y1					■					
Sylvania GTE		QC	2							■		■
Sylvania GTE		Type C	2							■		■
T&B		F Frame	1-3		■							■
Westinghouse		BA	1		■							■
Westinghouse		BA	2-3		■							■
Westinghouse		BA	2-3							■		
Westinghouse		BA	1	■	■							■
Westinghouse		BAB	1	■	■							■
Westinghouse		BR	1	■	■							■
Westinghouse		BR	2-3							■		■
Westinghouse		BRH	2-3							■		
Westinghouse		CA			■	■						
Westinghouse		DA					■					
Westinghouse		DK					■					
Westinghouse		EB	1-3		■	■						■
Westinghouse		ED			■							■
Westinghouse		EH	1-3		■							■
Westinghouse		EHB	1-3		■	■						
Westinghouse		EHD	1-3		■							■
Westinghouse		FA	3		■	■						■
Westinghouse		FB	2-3		■	■						■
Westinghouse		FD	1-4		■							■
Westinghouse		FDB	2-4		■							■
Westinghouse		FDC	2-4		■							■
Westinghouse	For Fire Protect.	FP	3				■	■				
Westinghouse		GB	1-3		■							■
Westinghouse		GBH	1-3		■							■
Westinghouse		GHB	1-3		■							■
Westinghouse		GR	3				■					
Westinghouse		HBAW	1	■	■							■
Westinghouse		HBAX	1	■	■							■
Westinghouse		HCA	3		■	■						■
Westinghouse		HFB	1-3		■	■						■
Westinghouse		HFD	1-4		■							■
Westinghouse		HKD	3				■					
Westinghouse		HLA					■					
Westinghouse		HLB					■					
Westinghouse		HMC					■					
Westinghouse		HMCP			■	■						■
Westinghouse		HNC							■			
Westinghouse		HQNP	3		■							■

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Westinghouse		HQP	1									
Westinghouse		JA										
Westinghouse		JD	2-4									
Westinghouse		KA	3									
Westinghouse		KB										
Westinghouse		LA	3									
Westinghouse		LB										
Westinghouse		LBB	3									
Westinghouse		LH										
Westinghouse		MA	2-3									
Westinghouse		MC	2-3									
Westinghouse		MCC	2-3									
Westinghouse		MCPO	3									
Westinghouse		NB										
Westinghouse		P	3									
Westinghouse		QBHW	1									
Westinghouse		QC	1									
Westinghouse	Quicklag C	QC	3									
Westinghouse		QCHQ	1									
Westinghouse		QHCW	1									
Westinghouse		QHCX	1									
Westinghouse		QHPW	1									
Westinghouse		QPHW	1									
Westinghouse		Quicklag P										
Westinghouse		RE										
Westinghouse		RH	3									
Westinghouse		WPHX	1									
Zinsco		HQB	3									
Zinsco		QB	1									
Zinsco		QCB	2									
Zinsco		Type Q	1									
Zinsco		Type T	1									

Commutator Maintenance

How to Select Resurfacer Grade

Small Motor and Pocket Resurfacers

Grade code letters designate the following grade combinations:

A Medium/Finish
B Coarse/Finish
D Finish/Polish
H Medium/Polish

All Other Resurfacers

Resurfacers for commutators and copper-alloy slip rings are made in four grades:

C Coarse—fast cutting
M Medium—for general use, high mica, small ridges and burns
F Finish—for use after the three grades above, for periodic application and for removing small burns and ridges immediately after their appearance
P Polish—very fine grade (220 aggregate grain) for burnish finish

For all resurfacers, specify grade by adding the appropriate letter as a suffix to the catalog number. (Example: 80-475M for medium grade.)

How to Select Resurfacer Size

Size is always written length x width x thickness (working face area x depth of stone). For handle types, the handle is mounted parallel to the first dimension. Always use a resurfacer with the largest face possible (length x width). Thickness should be governed by clearance around commutator or ring.

Commutator Resurfacers

The resurfacer should have a width of approximately 3/4 the length of the commutator bar and as long as will conveniently go between the brush riggings. For periodic application, three or four sizes are generally sufficient. After determining approximate dimensions, select nearest standard size and type.

Slip Ring Resurfacers

When space permits, use a resurfacer about 1 in. wider than the face width of the ring. Length should be at least three times greater than the longest flat spot to bridge over and ensure a true ring.

Small Motor-Type Resurfacer

- Different grades of stone on each end
- 10 in. handle
- For use on small fractional horsepower motors

Description	Size (In.)	Grades	Part No.
Small Motor-Type Resurfacer	3/4 x 1/2 x 3/8	A, B, D	**80-012***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Tool-Type Resurfacers

- For use in lathe-turning device
- Two resurfacers required for each grinder

Description	Size (In.)	Grades	Part No.
Tool-Type Resurfacer	1 x 1-1/2 x 6-1/2	C, M, F	**80-454***
Tool-Type Resurfacer	1 x 2 x 8	C, M, F	**80-461***
Tool-Type Resurfacer	2 x 2 x 8	C, M, F	**80-475***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Pencil-Type Resurfacer

- For use on fans, signal motors, auto generators, locomotive headlight motors and other fractional horsepower motors

Description	Size (In.)	Grades	Part No.
Pencil-Type Resurfacer	5/8 x 3/8 x 6	C, M, F, P	**80-075***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Tramway-Handle Resurfacers

- Handle shaped to ensure secure grip
- 10-1/2 in. handle permanently mounted at 45° angle

Description	Size (In.)	Grades	Part No.
Tramway-Handle Resurfacer	2 x 1-1/2 x 2	M, F	**80-255***
Tramway-Handle Resurfacer	2 x 2 x 2	C, M, F	**80-265***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Commutator Smoothie® Resurfacing Tool

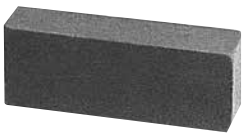
- Designed to smooth commutators of auto generators, starting motors and other similar equipment
- 8-1/2 in. plastic handle with a 5/16 in. x 7/8 in. x 11/16 in. resurfacer on each end
- Features one polish-grade and one finish-grade resurfacer
- Bent handle reaches into any motor frame
- Non-conductive for user safety

Description	Part No.
Commutator Smoothie® Resurfacing Tool	**80-033**

Please allow 4-5 weeks for delivery.

Powr-Polish™ Flexible Abrasives

- Fine-grain, non-dusting abrasive held together by a flexible bond
- Serves as both commutator cleaner and burnisher
- Removes dirt and grease—imparts super-finished surface
- Non-conductive and non-loading



Description	Size (In.)	Part No.
Powr-Polish™ Flexible Abrasive	3/8 x 1/2 x 5	**82-001**
	3/8 x 3/4 x 5	**82-002**
	5/8 x 1 x 5	**82-003**
	1 x 2 x 5	**82-004**
	1 x 4 x 5	**82-005**
	1/8 x 1 x 5	**82-006**

Please allow 4-5 weeks for delivery.

Brush Seater & Commutator Cleaners

- Gentle acting abrasive for seating carbon brushes and cleaning commutators and slip rings
- Soft, loosely bound grain produces a scouring effect when held against commutator
- Will not remove or scratch copper
- Self-cleaning
- Available in soft(S), medium(M) and hard(H) grades

Description	Size (In.)	Grades	Part No.
Brush Seater & Commutator Cleaner	1/4 x 1/4 x 4-3/4	M, H	**23-001***
	1/2 x 1/4 x 4-3/4	M, H	**23-002***
	3/8 x 3/8 x 4-3/4	M	**23-003***
	1/2 x 3/8 x 4-3/4	M, H	**23-004***
	1/2 x 1/2 x 4-3/4	M	**23-005***
	5/8 x 1/2 x 4-3/4	M	**23-006***
	3/4 x 1/2 x 4-3/4	S, M, H	**23-007***
	1-1/8 x 5/8 x 4-3/4	S, M, H	**23-008***
	1/2 x 1 x 4-3/4	S, M	**23-027***
	1 x 1 x 4-3/4	—	**23-035S**
	2 x 1 x 4-3/4	—	**23-036S**
	3 x 2 x 6	—	**23-041S**
	3 x 2 x 8	—	**23-042S**

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

AEROSPACE

Stripmaster® & Stripmaster® Lite Wire Strippers
Blades C-5
Accessories C-6
Replacement Parts C-6

Custom Stripmaster® Wire Strippers
Blades C-7

Custom Stripmaster® Lite Wire Strippers
Blades C-8
Replacement Parts C-9

Pneumatic Wire Strippers
Accessories C-11

Aerospace

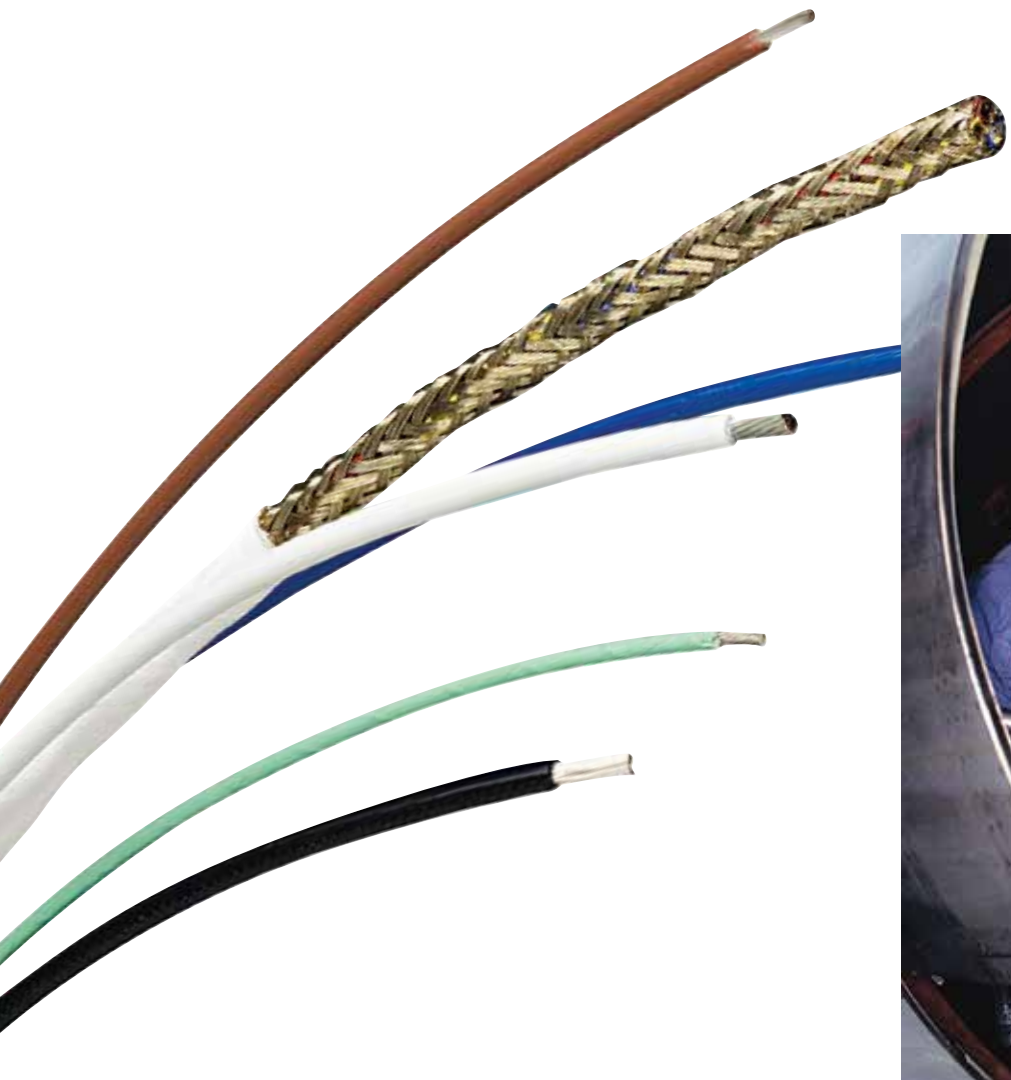
Every aspect of the aerospace industry demands precision and accuracy. That includes wire processing - our area of expertise at IDEAL. Working with both wire manufacturers and aerospace engineers, we develop unique blades with tight tolerances that strip wire accurately and dependably.

Wire Stripping Basics

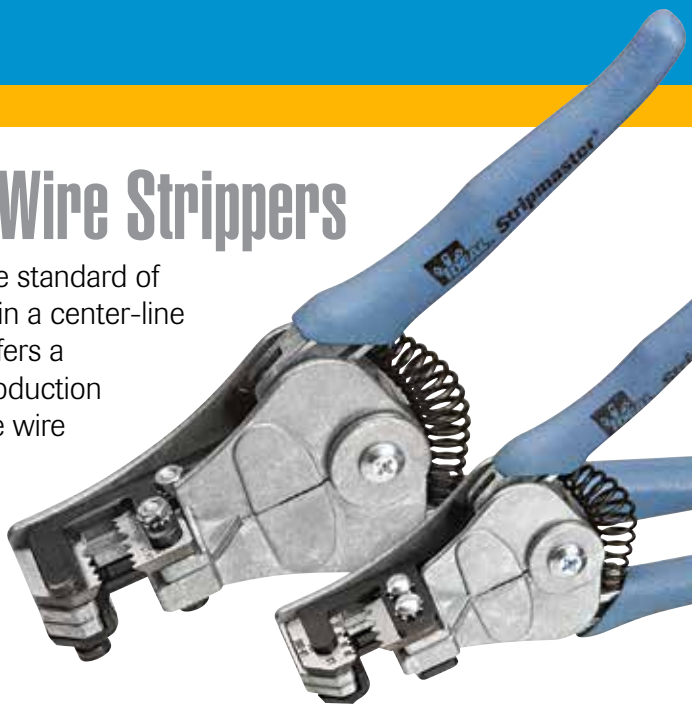
There are two basic levels of wire stripping—precision and non-precision. The first type, precision wire stripping, is employed where extreme reliability and critical tolerances must be achieved. Aircraft, computers, aerospace, missiles, radar guidance systems, and communications systems are examples of applications where precision wire stripping is required. In many cases, the military standard is called for and meeting that standard is rigidly enforced and calls for the highest quality precision wire stripping.

The second, non-precision stripping, is used in the manufacturing of lighting fixtures, electrical appliances, automotive harnesses, etc. This requires wire strips that assure product reliability and are obtained at a relatively low cost.

For each type of wire stripping and production requirement, the best tool and/or method to get the job done right must be determined, and IDEAL Electrical is there to assist with free wire analysis.



Stripmaster® & Stripmaster® Lite Wire Strippers

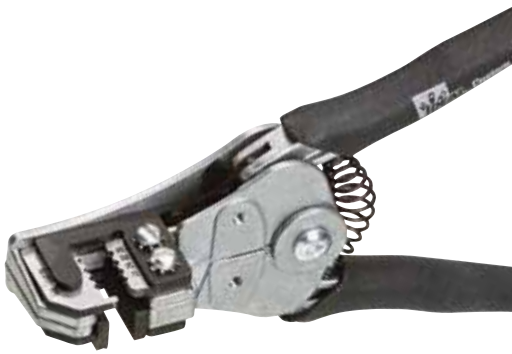


The versatile Stripmaster®/Stripmaster® Lite Wire Strippers are the standard of the industry. They incorporate a gripper that firmly holds the wire in a center-line position with the stripping hole. The lever action of the stripper offers a mechanical advantage that makes stripping easier. This aids in production applications and reduces operator fatigue. One squeeze strips the wire clean, up to a full 7/8 in. (22mm). The jaws are automatically held open to allow removal of the wire without damaging its end. This stripper virtually eliminates all nicking, cutting or fraying on non-precision wire.

Custom Stripmaster® Wire Strippers

The Custom Stripmaster® Wire Stripper has set the industry standard in hand-held, precision wire stripping. It provides fast, accurate wire stripping with its one-step, squeeze-action stripping and unique precision blade design. This light-weight wire stripper, made from sturdy die-cast zinc, is designed for maximum mobility and high productivity in all types of non-precision and precision stripping applications. The Custom Stripmaster® Wire Stripper offers extra leverage with its spring-action mechanical design for reduced operator effort. It can be customized with your choice of gripper pads and blade sets to match your wire stripping requirements. The comfort grip handles are color-coded to identify the best tool for the application. Red handles are used for larger wire (10–14 AWG) and black handles are used for smaller wire (16–30 AWG). The blades and grippers installed in the tool are specific to the application. Optional short-stop latch and transparent wire stop increases tool versatility and insures consistent strip lengths.

Custom Stripmaster® Lite Wire Strippers



The Custom Stripmaster® Lite Wire Stripper marks the beginning of a new era of light-weight, precision wire strippers designed specifically for improved operator comfort. It utilizes the same type of precision die-blade construction and features an optional short-stop latch and transparent wire stop. Built of sturdy die-cast zinc, this compact stripper weighs 50% less than its full-sized counterparts, and will impress you with both its ease of operation and durable performance.

Stripmaster® & Stripmaster® Lite Wire Strippers

- One-step stripping enhances productivity
- Precision-ground, knife-type blades provide clean, accurate stripping
- Sturdy die-cast zinc frame provides long-term durability
- Stripmaster® Lite designed for smaller hands – 3/4 the size of the standard Stripmaster®
- 90-day warranty

Stripmaster® Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter in Inches (mm)													Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blades Part No.
Wire Size AWG															
6	8	10	12	14	16	18	20	22	24	26	28	30			
	0.159 (4.0)	.141 (3.6)	.106 (2.7)										L-4419	L-5620	45-090
		.144 (3.6)	.105 (2.7)	.085 (2.2)	.073 (1.8)	.073 (1.8)							L-4420	L-5620	45-091
		.144 (3.6)	.113 (2.9)	.090 (2.3)	.072 (1.8)	.061 (1.5)	.048 (1.2)	.048 (1.2)					L-4421	L-5620	45-092 or 45-292*
				.090 (2.3)	.072 (1.8)	.061 (1.5)	.039 (1.0)	.039 (1.0)					L-4422	L-5620	45-093
.230 (2.3)	.198 (5.0)	*This tool has a custom steel frame & custom step grippers.*											L-4453	LB-1091	45-096
					.072 (1.8)	.061 (1.5)	.048 (1.2)	.039 (1.0)	.032 (0.8)	.026 (0.7)			L-4994	L-5620	45-097
							.048 (1.2)	.039 (1.0)	.032 (0.8)	.026 (0.7)	.021 (0.5)	.016 (0.4)	L-5361	L-5620	45-098
	.198 (5.0)	.167 (4.2)			.062 (1.6)	.055 (1.4)							L-8763	L-5620	45-099

* Blister Card Tolerances ±.001"

Stripmaster® Lite Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter Inches (mm)										Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blades Part No.
Wire Size AWG												
12	14	16	18	20	22	24	26	28	30			
		.072 (1.8)	.061 (1.5)	.048 (1.2)	.039 (1.0)					LB-1001	LB-1421	45-671
						.032 (0.8)	.026 (0.7)	.021 (0.5)	.016 (0.4)	LB-1002	LB-1421	45-672
.113 (209)	.090 (2.3)	.072 (1.8)	.061 (1.5)	All stranded wire						LB-1003	LB-1421	45-673
.096 (2.4)	.085 (2.2)	.073 (1.9)	.061 (1.5)	12 & 14 Solid Wire, 16 & 18 Stranded Wire						LB-1004	LB-1421	45-674

Tolerances ±.001"

Stripmaster® Wire Strippers and Knife-Type Blades for Metric Wire

Specifications — Stripping Hole Diameter (mm)														Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blades Part No.
Wire Size mm²																
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5	2.5	4	6	8	10			
												4.3	5.0	L-4419M	LA-2358	45-090-341
						1.3	1.6	1.9	2.4	3	3.6			L-4421M	LA-2358	45-092-341 or 45-292-341*
0.6	0.7	0.8	0.9	1.0	1.1									L-5361M	LA-2358	45-098-341

*Blister Card Tolerances ±.025mm

Stripmaster® Lite Wire Strippers

Stripmaster® Lite Wire Strippers and Knife-Type Blades for Metric Wire

Specifications — Stripping Hole Diameter (mm) Wire Size mm²									Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blade Part No.
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5			
				1.0	1.1	1.3	1.6	1.9	**LB-1001M**	**H-2909**	**45-671-341**
0.6	0.7	0.8	0.9						**LB-1002M**	**H-2909**	**45-672-341**

Coax Stripmaster® Wire Strippers & Blades

Description	Repl. Blade Part No.	Tool w/Blade Part No.
Coax Stripmaster® for RG-6	**LB-740**	**45-262**
Coax Stripmaster® for RG-58	**LB-742**	**45-264**
Coax Stripmaster® for RG-59	**LB-743**	**45-265**
Coax Stripmaster® for RG-6 QuadShield	**LA-3953**	**45-282**

Coaxial Cables: two-step strip for termination, jacket and dielectric.

Stripmaster® Wire Strippers with Rectangular Holes

Description	Replacement Blades (Pair) Part No.	Tool w/Blade Part No.
For Flat Telephone Cable (.060 in. or 1.52mm)	**LB-1155**	**N/A**
For European Flat Lamp Cord	**L-8762**	**45-089**
For SP-SPT Lamp Cord	**L-4452**	**45-095***

*Also strips 2- and 3-conductor low-voltage wire used in E.E. and Touchplate remote control wiring system.

Optional Accessories

- Wire Stop provides uniform stripping length, range = 3/32" to 3/4"
- Short stop latches protect wire strands by limiting stripping stroke to 5/32 in. and retain slug until wire is ready for terminating.

Description	Part No.
Transparent Adjustable Wire Stop (for Stripmaster® Wire Strippers)	**L-5270**
Transparent Adjustable Wire Stop (for Stripmaster® Lite Wire Strippers)	**LB-1195**
Transparent Adjustable Wire Stop (for Metric Stripmaster® Wire Strippers)	**45-2019**
Short Stop Latch for Custom & Customer Steel Stripmaster® Wire Strippers	**L-5269**
Short Stop Latch for Custom Stripmaster® Lite Wire Strippers	**LB-1194**

Replacement Parts

Description	Part No.
Replacement Frame for Stripmaster® Wire Strippers	**L-5620**
Replacement Frame for Stripmaster® Lite Wire Strippers	**LB-1421**
Replacement Moveable Gripper for Stripmaster® Wire Strippers	**L-1953**
Replacement Moveable Gripper for Stripmaster® Lite Wire Strippers	**K-6603**

FREE APPLICATION ENGINEERING SERVICE AVAILABLE. CONTACT IDEAL ELECTRICAL FOR COMPLETE INFORMATION AT 1-800-324-9571 OR DOWNLOAD APPLICATION AT WWW.IDEALIND.COM.

Custom Stripmaster® Wire Strippers

- Strips 30 - 10 AWG solid or stranded wire
- Mil-spec die-type blades allow precision stripping
- Inner cutting hole sized to conductor and counter-bored holes sized to insulation
- Replaceable grippers
- Optional short stop-latch and transparent wire stop
- Cushioned, comfort grip handles
- Engineering service and made-to-order blades available. Contact factory for complete product and blade number listing.
- 90-day Warranty

Die-Type Blades

Specifications – Cutting Hole Diameter / Counterbore Diameter in Inches

Wire Size AWG											Blade Only Part No.	Stripper Part No.
10	12	14	16	18	20	22	24	26	28	30		
For MIL16878 Type E (600V)												
.119/.136	.096/.113	.076/.0935									**L-5559**	**45-176**
			.061/.081	.052/.070	.042/.0595	.034/.052	.028/.043	.023/0.39			**L-5560**	**45-177**
								.023/.039	.019/.035	.016/.032	**L-5561**	**45-178**
For MIL16878 Type EE (1000V)												
.119/.144	.096/.125	.076/.104									**L-5562**	**45-173**
			.061/.089	.052/.0735	.042/.067	.034/.0595	.028/.055	.023/.0465			**L-5563**	**45-174**
								.023/.0465	.019/.043	.016/.042	**L-5564**	**45-175**
For Other Misc. Insulations												
.116/.154	.0937/.136	.076/.113									**L-5210**	**45-170**
			.062/.096	.052/.086	.042/.073	.035/.0635	.0292/.0595	.022./052			**L-5211**	**45-171**
								.024/.043	.020/.040	.016/.037	**L-5436**	**45-172**
Other Thin Insulations												
							Three identical holes			.012./020	**L-7625**	**45-179**
				Solid Wires			.024/.033	.018/.025	.014/.023	.012/.019	**L-9300**	**45-169**

Tolerances: Cutter Dia.: ± .001; Counter-bore Dia.: ± .002. The 45-170 Series is a Custom Stripmaster® Wire Stripper frame without the short stop latch and wire stop.

Custom Steel Stripmaster® Wire Strippers and Special Flat-Blades for Ribbon and Multi-Conductor Cable

Description	Blade Gap vertical height	Blade Only Part No.	Frame & Blade Part No.
Custom Steel frame only	N/A	N/A	**LB-1091**
Flat blade for 26 AWG (.40mm dia.) multi-conductor	.022 in.	**LB-1151**	**45-890**
Flat blade for 24 AWG (.00mm dia.) multi-conductor	.030 in.	**LB-1152**	**45-891**
Flat blade for 22 AWG (.64mm dia.) multi-conductor	.038 in.	**LB-1153**	**45-892**
Flat blade for 20 AWG (.00mm dia.) multi-conductor	.050 in.	**LB-1154**	**45-893**
Flat blade for 18 AWG (1.02mm dia.) multi-conductor	.060 in.	**LB-1155**	**45-894**
Flat blade for 16 AWG (1.29mm dia.) multi-conductor	.075 in.	**LB-1156**	**45-895**

Custom Stripmaster® Lite Wire Strippers

- Custom Stripmaster® Lite is 3/4's the size of Custom Stripmaster® Wire Stripper and strips 16 - 30 AWG solid or stranded wire
- Custom Stripmaster® Lite requires one-third less hand pressure for each strip actuation
- Engineering Service and made-to-order blades available. Contact factory for complete product and blade number listing.

Die-type Blades

Specifications – Cutting Hole Diameter / Counterbore Diameter in Inches

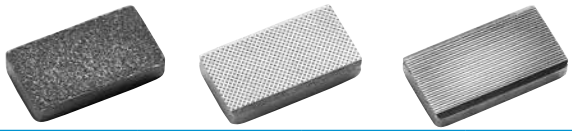
16	18	20	22	24	26	28	30	Blade Only Part No.	Stripper Part No.
For MIL16878 Type E (600V)									
.061/.081	.052/.070	.042/.0595	.034/.052					**LB-918**	**45-638**
		.042/.0595	.034/.052	.028/.043	.023/.039			**LB-919**	**45-639**
				.028/.043	.023/.039	.019/.035	.016/.032	**LB-920**	**45-640**
For MIL16878 Type EE (1000V)									
.061./089	.052./0785	.042./067	.034/.0595					**LB-915**	**45-635**
		.042./067	.034/.0595	.028/.055	.023/.0465			**LB-916**	**45-636**
				.028/.055	.023/.0465	.019/.043	.016./042	**LB-917**	**45-637**
For Other Misc. Insulations									
.062./096	.052./086	.042./073	.035/.0635					**LB-912**	**45-632**
		.042./073	.035/.0635	.0292/.0595	.022/.052			**LB-913**	**45-633**
				.0292/.0595	.024/.043	.020/.040	.016/.037	**LB-914**	**45-634**
Other Thin Insulations									
							.012/.020	**LB-921**	**45-641**
				.024/.033	.018/.025	.014/.023	.012/.019	**LB-911**	**45-631**

Tolerances: Cutter Dia.: ± .001; Counter-bore Dia.: ± .002.

Custom Steel Stripmaster® Wire Strippers & Special Flat-Blades for Ribbon and Multi-Conductor Cable

Description	Blade Gap vertical height	Blade Only Part No.	Frame & Blade Part No.
Custom Steel frame only	—	—	**LB-1091**
Flat blade for 26 AWG (.40mm dia.) multi-conductor	.022 in.	**LB-1151**	**45-890**
Flat blade for 24 AWG (.00mm dia.) multi-conductor	.030 in.	**LB-1152**	**45-891**
Flat blade for 22 AWG (.64mm dia.) multi-conductor	.038 in.	**LB-1153**	**45-892**
Flat blade for 20 AWG (.00mm dia.) multi-conductor	.050 in.	**LB-1154**	**45-893**
Flat blade for 18 AWG (1.02mm dia.) multi-conductor	.060 in.	**LB-1155**	**45-894**
Flat blade for 16 AWG (1.29mm dia.) multi-conductor	.075 in.	**LB-1156**	**45-895**

Replacement Gripper Pads



For Custom Stripmaster® and Custom Steel Stripmaster® Wire Strippers			
Surface Type	**Gripper Set* Part No.**	**Movable Gripper Part No.**	**Stationary Gripper Part No. (Thickness)**
Grit**	**LB-197**	**L-5212**	**L-5215** (.129 in.)
Grit**	**LB-198**	**L-5212**	**L-5217** (.156 in.)
File‡	**LB-721**	**LB-718**	**LB-719** (.129 in.)
File‡	**LB-722**	**LB-718**	**LB-720** (.156 in.)
Parallel	**LB-730**	**LB-727**	**LB-728** (.129 in.)
Parallel	**LB-731**	**LB-727**	**LB-729** (.156 in.)
For Custom Stripmaster® Lite Wire Strippers			
Surface Type	**Gripper Set* Part No.**	**Movable Gripper Part No.**	**Stationary Gripper Part No. (Thickness)**
Grit**	**LB-1188**	**LB-882**	**LB-883** (.109 in.)
File‡	**LB-1189**	**LB-1184**	**LB-1185** (.109 in.)
Parallel	**LB-1190**	**LB-1186**	**LB-1187** (.109 in.)

* Gripper Set includes one movable gripper and one stationary gripper.
** Grit pads are standard for most Custom Stripmaster® and Custom Stripmaster® Lite products.
‡ For use on hard-to-grip surfaces.
Gripper pad selection depends on insulation type and user preference.
Note: For 10-14 AWG, use .129 in. stationary gripper. For 16-30 AWG, use .156 in. gripper.

Replacement Frame Assemblies with Grit Grippers

For Custom Stripmaster® Wire Strippers	Part No.
Frame only, 10-14 AWG	**L-5616**
Frame only, 16-30 AWG	**L-5617**
Frame only, 10-14 AWG, Wire Stop and Latch	**L-5618**
Frame only, 16-30 AWG, Wire Stop and Latch	**L-5619**
Frame only, 10-14 AWG, internal spring (see note)	**L-9039**
Frame only, 16-30 AWG, internal spring (see note)	**L-9038**

Note: Frames with internal springs allow additional blade penetration pressure for difficult and multi-layered insulation types.

For Custom Stripmaster® Lite Wire Strippers	Part No.
Frame only	**LB-895**
Frame only, Wire Stop and Latch	**LB-896**

For Custom Steel Stripmaster® Wire Strippers	Part No.
Frame only, 10-14 AWG	**LB-1091**
Frame only, 16-30 AWG	**LB-1092**
Frame only, 10-14 AWG, internal spring (see note)	**LB-1090**
Frame only, 16-30 AWG, internal spring (see note)	**LB-1089**

Note: Frames with internal springs allow additional blade penetration pressure for difficult and multi-layered insulation types.

Pneumatic Wire Strippers

- Hand-held pneumatic powered wire strippers for various single wire conductors
- Interchangeable blade offers versatility using either the Custom Stripmaster® Die-Type blade series for Mil-Spec wire stripping applications or the standard Stripmaster® Knife-Type blade series for general purpose wire stripping
- Rotating stripping head for ease of left-hand or right-hand operation
- Adjustable Speed Control allows the operator to regulate the speed of the stripping operation
- In-line stripping reduces potential blade contact with conductors

Technical Information

		45-2530	45-600	45-650
Strip Lengths	Minimum:	1/8 in.		
	Maximum:	1/2 in.		
Dimensions	Length:	6-5/8 in.	7-7/8 in.	8-7/8 in.
	Width:	2 in. dia.	1-1/2 in. dia.	1-7/8 in. dia.
	Height:	2-5/8 in.	2-1/2 in.	2-5/8 in.
	Weight:	1.75 lb.	1.65 lb.	2.32 lb.
Air Requirements (5CFM/Cycle)		.002	.002	.004
PSI Requirements		80-120 PSI	80-120 PSI	95-120 PSI
Air Hose Length		9 ft.		
Warranty		1-Year Limited		

Rotating Stripping Head

Standard Pneumatic Wire Stripper

- Uses Custom Stripmaster® and standard Stripmaster® 16-30 AWG blades
- Blades sold separately
- Refer to specification charts for Stripmaster® and Custom Stripmaster® blade selection
- For Mil-Spec blades not referenced in this catalog, refer to the Aerospace Catalog or take advantage of our free Applications Engineering service for wire evaluation

Description	Part No.
Standard Pneumatic Wire Stripper	**45-2530**

Lite Pneumatic Wire Stripper

- Uses Custom Stripmaster® Lite and standard Stripmaster® Lite 16-30 AWG blades
- Blades sold separately
- Refer to specification charts for Stripmaster® Lite and Custom Stripmaster® Lite blade selection
- For Mil-Spec blades not referenced in this catalog, refer to the Aerospace Catalog or take advantage of our free Applications Engineering service for wire evaluation

Description	Part No.
Lite Pneumatic Wire Stripper	**45-600**

Heavy-Duty Pneumatic Wire Stripper

- Uses Custom Stripmaster® and standard Stripmaster® 10-30 AWG blades
- Blades sold separately
- Refer to specification charts for Stripmaster® and Custom Stripmaster® blade selection
- For Mil-Spec blades not referenced in this catalog, refer to the Aerospace Catalog or take advantage of our free Applications Engineering service for wire evaluation

Description	Part No.
Heavy-Duty Pneumatic Wire Stripper	**45-650**

Pneumatic Wire Stripper Accessories

Description	Part No.
Wire Stop (45-2530 & 45-650)	**L-5270**
Wire Stop (45-600)	**LB-1195**
Air Regulator (45-2530, 45-650 & 45-600)	**45-906**

FREE Application Engineering Service

Whatever your particular wire or cable preparation challenge, we're ready to assist you with practical solutions. Simply send us at least five feet of your wire or cable and complete the questionnaire below. Copy this form and mail to:

IDEAL INDUSTRIES, INC.
Precision Tool Lab
Attn: Wire Stripping Applications Analysis
1101 Park Avenue; Sycamore, Illinois 60178

We'll quickly recommend a practical stripping or cutting solution designed to meet your needs. Remember, this is a free service that we're eager to provide whenever you need it.

For immediate assistance, call our Industrial Support Line at 800-324-9571 or e-mail industrial@idealindustries.com.

Wire Stripping Recommendations

Completion of this information is a request for recommended tools or equipment only and does not place the individual or the company inquiring under any obligation to purchase. This is a free service of IDEAL INDUSTRIES, INC., Sycamore, Illinois.

Please enclose at least **five feet of your wire or cable** and answer the following questions to expedite a reply for your particular application.

1. **Method Preference:**
   - **A. Hand Type**
   - **B. Production Strippers**
     1. **45-930 STP Stripping System**
     2. **45-950 Stripmaster® Model 950 Wire Stripper**
2. **Stripping Tolerance:**
   - **A. Precision**
   - **B. Non-Precision**
3. **Present Method:** _____
4. **Type of Insulation:** _____

Customer Information

Please enclose business card or complete the following:

Name _____

Title _____

Company _____

Street _____

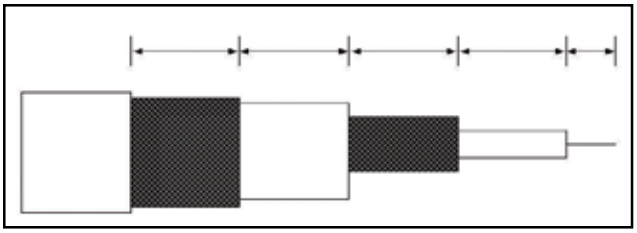
City _____ State _____ Zip _____

Phone _____ Fax _____

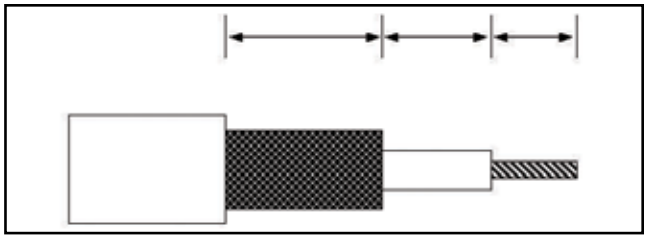
E-mail _____

5. **Wire Gauge:** _____
6. **MIL-Spec:** _____
7. **Number of Strips per Day:** _____

Triaxial Cable



Coax Cable



5. **Remarks:** _____

Test & Measurement

Circuit Tracers D-4

Clamp Meters D-7

Branch Circuit Analysis and Testing
- Circuit Analyzer D-11
- Circuit Breaker Finder D-12
- Multimeters D-13
- Voltage Testers D-14
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Specialty Testers
- Ground Resistance Meters D-15
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- Phase & Rotation Testers D-15

Accessories
- Adapters D-16
- Thermocouples D-16
- Carrying Cases D-17

Test & Measurement

IDEAL has been in the Electrical Test and Measurement Business for over 80 years. Throughout that time we have remained dedicated to providing the professional electrician with the tools and support required to safely and efficiently verify and analyze electrical systems and equipment. So, whether you are conducting routine measurements, testing installed devices, checking branch circuit integrity, locating breakers, tracing wires, or verifying grounding integrity, IDEAL has the tools to help you get the job done safely and efficiently.

NEW
Refined Performance

SureTrace™ Circuit Tracers

IDEAL, a leader in Circuit Tracing technology, has released the latest generation of circuit tracers with refinements in performance, ease-of-use and safety.

Performance

- Four defined ranges let you quickly select the proper sensitivity for your job
- Easy-to-replace AA batteries

Ease-of-Use

- Super-bright OLED display (61-957 and 61-959) indicates a numeric value between 0 and 99, providing a quick and easy way to determine received signal strength
- Audible indication with variable tone assists in locating signal source
- Peak detection provides instantaneous signal strength feedback
- SureTrace™ Circuit Tracers feature the only rotating display in the industry. Regardless of the receiver orientation, the display automatically adjusts itself to a vertical position for easy reading.

Exclusive Rotating Display

Safety

- Designed for durability and safety
- CAT III 600V
- High energy fuse

Features

- Can be used on circuits 0-600V AC/DC
- Identifies breakers and fuses
- Pinpoints opens and shorts
- Traces wires behind walls

CertainCircuit™

After the correct breaker has been identified and tripped, the transmitter senses the loss of power and sends a different signal back to the receiver at the panel to give the user confidence that the right circuit has been de-energized.

Energized **De-energized**

Pinpoints Opens & Shorts

Traces behind walls

Traces on de-energized circuits

Inductive Clamp

SureTrace™ Circuit Tracers

- Receiver display rotates automatically for easy viewing
- Identifies breakers and fuses with CertainCircuit™ detection
- Pinpoints opens and shorts
- Traces wires
- "0-99" display of signal strength
- Audible indication intensifies in tone/pitch with signal strength
- Works on energized or de-energized circuits (0 - 600V AC/DC)
- Four sensitivity levels
- Peak reading bar graph
- 2-year warranty

Description	Part No.
Receiver with super-bright OLED Rotating Display (in 90° increments) – Kit includes Transmitter TR-955, Receiver RC-959, Lead Set TL-956, Inductive Clamp IC-958, Battery Pack BP-958 & Strap 61-565, Hard Carrying Case C-959, Batteries and Instruction Manual	**61-959**
Receiver with super-bright OLED Rotating Display (in 90° increments) – Kit includes Transmitter TR-955, Receiver RC-959, Lead Set TL-956, Hard Carrying Case C-957, Batteries and Instruction Manual	**61-957**
Receiver with Rotating LED Display (in 180° increments) – Kit includes Transmitter TR-955, Receiver RC-955, Lead Set TL-956, Hard Carrying Case C-955, Batteries and Instruction Manual	**61-955**

Kit Components	61-959	61-957	61-955
Transmitter	**TR-955**	**TR-955**	**TR-955**
Receiver	**RC-959**	**RC-959**	**RC-955**
Tracer Test Lead Set	**TL-956**	**TL-956**	**TL-956**
Inductive Clamp	**IC-958**	—	—
Battery Pack & Strap (61-565)	**BP-958**	—	—
Hard Carrying Case	**C-959**	**C-957**	**C-955**
Batteries	•	•	•
Instruction Manual	•	•	•
Battery Pack Strap	**61-565**	—	—

Notes:
- Circuit breaker identification is not possible using the inductive clamp. Connect directly to the H-N for breaker or fuse identification.
- The inductive clamp is intended for use on de-energized closed loop circuits, low voltage conductors, or live circuits up to 120V AC with less than 5 Amps of current flowing.
- All instruction manuals are included and are available on-line.

RC-959 Receiver

- Super-bright OLED display
- Rotating display (in 90° increments)
- Displays 0-99 numeric signal strength
- Four sensitivity levels
- CertainCircuit™ detection
- Peak reading bar graph
- Audible indication (variable pitch/ tone)
- Displays Battery life remaining
- Supplied with 3 AA batteries

Description	Part No.
Receiver	**RC-959**

TR-955 Transmitter

- Rated for use on circuits from 0 to 600V AC/DC
- Works on de-energized circuits
- Can be used on GFCI protected circuits
- Indicates presence of AC/DC voltage
- Low battery indicator
- Supplied with 4 AA batteries

Description	Part No.
Transmitter	**TR-955**

Inductive Clamp & Battery Pack

- Induces a signal in a conductor
- 1 in. jaw opening/6 ft. cord
- Works on de-energized circuits and energized circuits up to 5A, also low voltage wiring and metal conduit
- Powered solely by a separate battery pack (supplied with 8 C-cell batteries)
- Battery pack has magnetic strap for hanging in panels

Description	Part No.
Inductive Clamp	**IC-958**
Battery Pack	**BP-958**

Included in 61-659 kit only.

RC-955 Receiver

- Red LED display (suitable for indoor lighting conditions)
- Rotating display (in 180° increments)
- Displays 0-99 numeric signal strength
- Four sensitivity levels
- CertainCircuit™ detection
- Peak reading bar graph
- Audible indication (variable pitch/tone)
- Displays battery life remaining
- Supplied with 3 AA batteries

Description	Part No.
Receiver	**RC-955**

Accessories

TL-956 Lead Adapter Kit

CR-959

Replacement Parts	Part No.
Cradle for Receiver (threaded for use on standard extension pole)	**CR-959**
Fuse (for TR-955 Transmitter) - Contact Technical Services for information/availability	**F-956**
Lead/Adapter Kit (contains items 1 through 6 below)	**TL-956**
1. 3 ft. Lead Adapters for Transmitter (set of 2)	—
2. 25 ft. Lead Adapter for Transmitter	—
3. Alligator Clips for Lead Adapters (set of 2)	—
4. Blade Prongs for Lead Adapters (set of 2)	—
5. Prong for Lead Adapters	—
6. Outlet Plug Adapter for Transmitter	—

TightSight™ Clamp Meters

Problem: Have you ever had to measure the circuit current in a confined, dimly lit and hard to reach location?

Solution: **IDEAL TightSight™ Clamp Meter!** This meter allows the user to safely and easily view current measurements with the exclusive second TightSight® display.

Safety

- Patented TightSight™ display lets you easily view readings while keeping your head at a safe distance from the panel – no more need to twist the meter or risk pulling on an energized conductor
- Easy-to-read backlit display with large numbers and icons so you can always see the correct reading
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Electronic overload protection on all ranges
- Supplied with test leads complying with UL 61010-031

Productivity

- Read instantaneous values while clamped instead of holding the reading, unclamping, moving and then viewing
- Hook tip for easier wire separation and tapered jaws for reaching into tight spaces
- Help troubleshoot with min and max value readings over a period, i.e. nuisance tripping and power supply fluctuations
- True RMS provides accurate readings of non-sinusoidal voltages and currents
- Broad current range from 0 to 1000 amps (61-770 series) covers multiple applications
- Large jaw diameter for cables up to 2" (51mm) in diameter (770 series only)

Value

- Includes carrying case and test leads with alligator clips
- Full AC/DC capabilities: the Tightsight™ is equally adaptable for both AC and DC current measurement requirements – such as solar, public transportation, and battery backup applications (Models 61-765 & 61-775)
- Calibration services available
- 2-year warranty

VISIT CLAMP-METER.COM FOR MORE INFORMATION.

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CAT IV 600V

CAT III 1000V

TightSight™ 1000A Clamp Meters

- TightSight™ second display
- Tapered jaws with hook tip
- True RMS current and voltage
- AC/DC Voltage
- Audible continuity
- High frequency rejection*
- Peak hold
- Max/min hold
- Data hold
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Selectable auto power off
- Backlit display
- Low battery indicator

** Reads accurately on noisy electrical circuits.*

Description	Part No.
1000A AC Clamp Meter	**61-773**
1000A AC/DC Clamp Meter	**61-775**

Includes: Carrying Case and Test Leads w/Alligator Clip.

TightSight™ 660A Clamp Meters

- TightSight™ bottom display
- Tapered jaws with hook tip
- True RMS current and voltage
- AC/DC Voltage
- Audible continuity
- High frequency rejection*
- Peak hold
- Max/min hold
- Data hold
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Selectable auto power off
- Backlit display
- Low battery indicator

** Reads accurately on noisy electrical circuits.*

Description	Part No.
660A AC Clamp Meter	**61-763**
660A AC/DC Clamp Meter	**61-765**

Includes: Carrying Case and Test Leads w/Alligator Clip.

Specifications	Range & Resolution				Accuracy
	61-773	61-775	61-763	61-765	
AC Current	0.0-999.9A		0.0-660.0A		2.0%
DC Current	—	0.0-999.9A	—	0.0-660.0A	2.0%
AC Voltage	0.0-750.0V				1.0%
DC Voltage	0.0-999.9V				1.0%
Resistance	0.0-999.9Ω				1.5%
Capacitance	0.0-999.9µF				5.0%
Continuity	0.0-999.9Ω				Audible @ <30Ω
Frequency (clamp head or test leads)	20.0-400.0Hz				0.5%
Jaw Size	2" (51mm)		1.42" (36mm)		—

Accessories	Part No.
Test Leads w/Large Alligator Clips	**TL-770**
Nylon Carrying Case (for 61-763 & 61-765)	**C-760**
Nylon Carrying Case (for 61-773 & 61-775)	**C-770**

c UL us CAT IV 600V CAT III 1000V

Clamp-Pro™ Clamp Meters 600 Amp (740 Series)

- Measures up to 600A AC
- Non-contact voltage indicator (70V-600VAC)
- Audible continuity
- Tapered jaws with hook tip
- Auto/manual ranging
- Data hold
- Auto power off
- Low battery indicator

Description	Part No.
600A AC Clamp Meter	**61-744**
600A AC Clamp Meter w/TRMS	**61-746**

Includes: Carrying Case and Test Leads.

Specifications	Range & Resolution	Accuracy
AC Current	40.00/400.0/600A	1.7%
AC Voltage	400.0/600 V	1.2%
DC Voltage	400.0/600 V	0.5%
Resistance	400.0/4.000k/ 40.00k 400.0k/4.000M/40.00M Ω	1.0%

Jaw opening is 1.25" (32mm).

4-in-1 Test Tool

- 200AAC current capability
- Non-contact voltage (40-600VAC)
- Visual, audible and tactile (shaker) indication of high AC/DC voltage at terminals
- Clean voltage indicator
- Max hold
- Audible continuity
- Low battery indication
- Integral lead storage
- Auto power off
- Ergonomic hourglass shape
- Compact clamp head

Description	Part No.
4-in-1 Test Tool w/TRMS, Backlight	**61-704**

Includes: Carrying Case and Silicone Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	2000m/200.0/750 V	1.2%
DC Voltage	2000m/200.0/1000 V	0.5%
AC Current	200A	3.0%
Resistance	200.0/200.0k Ω	1.0%
Capacitance	200.0µ F	3.0%

Jaw opening is 1.3" (33mm).

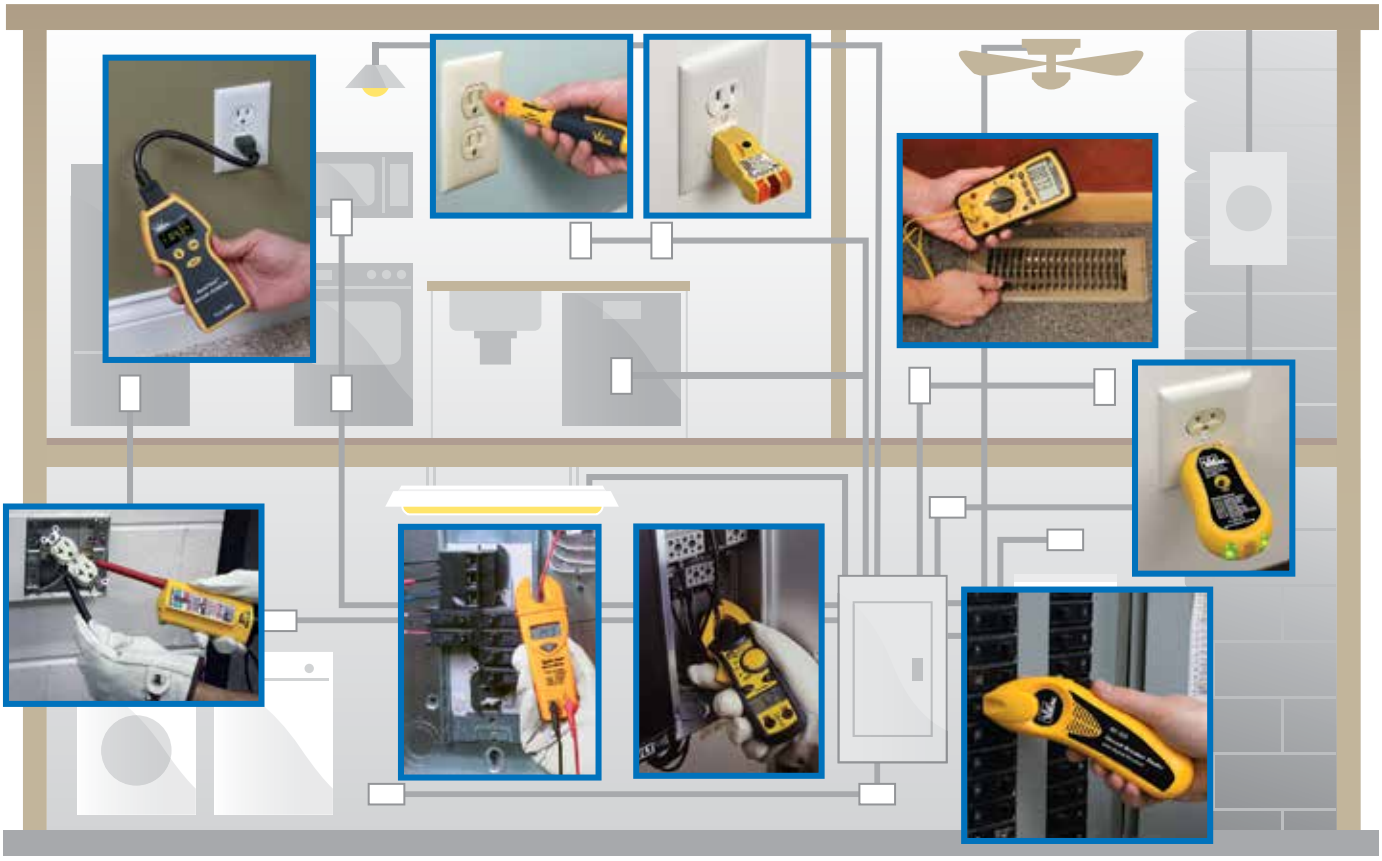
Clamp Meter Selection Guide

CLAMP METER SELECTION GUIDE	700	740 Series		760 Series		770 Series	
	61-704	61-744	61-746	61-763	61-765	61-773	61-775
MEASUREMENT FUNCTIONS							
AC Voltage	•	•	•	•	•	•	•
DC Voltage	•	•	•	•	•	•	•
AC Current	•	•	•	•	•	•	•
DC Current					•		•
Resistance	•	•	•	•	•	•	•
Audible Continuity	•	•	•	•	•	•	•
Diode Test	•						
Capacitance	•			•	•	•	•
Frequency				•	•	•	•
FEATURES							
Display Type (Digital)	D	D	D	D	D	D	D
AC Current Capacity - Amps	200	600	600	660	660	1000	1000
DC Current Capacity - Amps					660		1000
True RMS	•		•	•	•	•	•
Auto Ranging	•						
Auto/Manual Ranging		•	•	•	•	•	•
Data Hold		•	•	•	•	•	•
Max Hold	•						
Peak Hold				•	•	•	•
Min/Max				•	•	•	•
DCA Zero					•		•
Auto Power Off	•	•	•	•	•	•	•
Non-Contact Voltage Indication	•	•	•				
Harmonics Indicator	•						
Vibration Mode	•						
Backlight	•			•	•	•	•
Low Battery Indication	•	•	•	•	•	•	•
High Voltage Warning	•			•	•	•	•
Overload Protection on all Ranges	•	•	•	•	•	•	•
Conductor Size – Inches (mm)	1.3" (33)	1.5" (38)	1.5" (38)	1.4" (36)	1.4" (36)	2.0" (51)	2.0" (51)
Warranty (years)	2	2	2	2	2	2	2
CERTIFICATIONS							
UL 61010 Listed	•	•	•	•	•	•	•
Category Safety Rating	III	III	III	IV	IV	IV	IV

Branch Circuit Analysis and Testing

Proper wiring is crucial to ensure safety and performance of Branch circuits. From a safety perspective, shock hazards and fires are mainly due to poor installation or failure of protective devices, such as GFCIs. From a performance perspective, electrical equipment and high-tech devices are found everywhere in residential and commercial buildings. They require reliable power to operate and function properly and to ensure their longevity.

IDEAL has a long history of providing the professional electrician with the tools and knowledge required to safely and efficiently verify and analyze Branch Circuits. So, whether you are; conducting routine measurements, testing installed devices or the integrity of a Branch Circuit, locating a breaker, or tracing wires, IDEAL has the tools for the job.



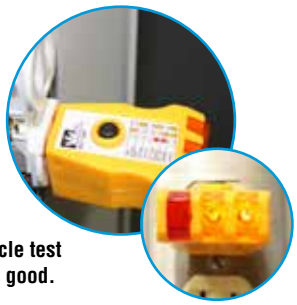
SureTest® Circuit Analyzer

Have wiring issues ever required you to remove multiple outlet covers and pull outlets out of their boxes to look for a problem? Have you ever suspected that wiring integrity is the issue but your meter shows 120 volts and your receptacle tester indicates wiring is correct?

The SureTest® Circuit Analyzer from IDEAL is a comprehensive branch circuit analyzer that allows you to "look behind the walls" to find wiring problems, saving you time and money while letting you get the job done with safety and confidence.

SureTest Circuit Analyzer finds many of the toughest problems:

Bootleg Grounds have been fooling inspectors for years when checking circuits for integrity. Receptacle (Plug) testers test for voltage and can't identify this improper wiring condition. Bootleg grounds set up the potential for dangerous undetected fault conditions.

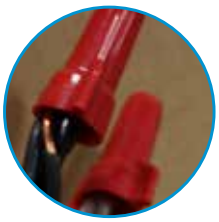


Traditional receptacle test indicates circuit is good.

Solution: The SureTest® by IDEAL can't be fooled, its advanced processing software gives it the capability to quickly identify bootleg grounds within 15 ft. of the outlet being tested.

IDEAL SureTest™ clearly identifies a fault with the ground.

Improper Installations can result in electrical fire hazards, personal shock hazards. and premature equipment failure.



Improper solid wire connection.

Improper stranded wire connection.

Improperly torqued circuit breaker lugs.

Solution: The SureTest® measures and displays individual Line Impedance giving the electrician/inspector valuable insight as to whether a particular conductor is the problem due perhaps to faulty splicing, overly long conductor runs, or undersized wire gauge.

Excessive voltage drop in a circuit can cause lights to flicker or burn dimly, heaters to heat poorly, and motors to run hotter than normal and burn out. It also causes overheating of components, often resulting in expensive damage or fire.

Solution: SureTest® measures the line voltage under simulated load conditions. Results are displayed for 12A, 15A, and 20A loads.

- Measures voltage drop under load*
- Hot, neutral, and ground conductor impedances
- Estimates Load on Line (ELL) up to 15A
- Tests GFCIs and EPDs for proper operation
- Super-bright OLED display
- True RMS
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Tests without disturbing sensitive loads
- Verifies isolated grounds (with 61-176 adapter)
- 2-year warranty

**12A, 15A, 20A load tests*

Description	Part No.
SureTest® Circuit Analyzer	**61-164**

Includes: Carrying Case and Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	85.0 - 265.0 VAC	1.0%
Frequency	45.0 - 65.0 Hz	1.0%
Impedance	0.00 - 3.00 Ω	5.0%
Ground-Neutral Voltage	0.0 - 24.0 VAC	2.0%
% Voltage Drop 12A, 15A, 20A load tests	0.1% - 50.0%	5.0%
GFCI Test Current/Time	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%

Accessories	Part No.
Ground Continuity Adapter	**61-175**
Isolated Ground Adapter	**61-176**
Alligator Clip Adapter	**61-183**
1' Extension Cord	**61-182**
Nylon Carrying Case	**61-179**

Circuit Breaker Finder w/GFCI Receptacle Testing and Non-Contact Voltage Sensing

Locating breakers is often a two person job, one turning off breakers, the other waiting to see when a specific circuit is de-energized. It is frequently done by trial and error, or even by dangerously grounding a wire to the box to trip a breaker.

When locating breakers becomes needlessly time consuming and short cuts are taken, nobody wins. It was with this challenge in mind that IDEAL developed the Digital Circuit Breaker Finder.

The patented 61-534 Digital Circuit Breaker Finder from IDEAL makes locating breakers in AC circuits quick and easy. No need to interrupt the supply - simply plug the transmitter into an outlet, then two quick passes of the receiver over the breakers will reveal the associated breaker with clear audible and visual indicators. The 61-534 Digital Circuit Breaker Finder enables safer and more reliable working by taking the guesswork out of circuit identification.

The IDEAL 61-534 Circuit Breaker Finder provides three testers in one device. The receiver identifies breakers by detecting a signal applied to the branch circuit by the transmitter, and additionally incorporates a non-contact voltage sensing function. The transmitter also works as a GFCI receptacle tester, allowing you to verify AC is present in an outlet and to detect nearly all common improper wiring conditions. So you get the functionality of a circuit breaker finder, a non-contact voltage tester, and a GFCI receptacle tester in one versatile tool.

Features & Specifications

Transmitter

- Triple function - acts as a Signal Transmitter, Polarity Indicator and GFCI Receptacle Tester
- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot in 3 wire, AC circuits
- 3-pin plug format allows direct connection to standard NEMA 5 15R receptacles
- Power Supply: Line powered (115-250VAC)
- Supply Frequency: 47-63Hz
- Weight: 50g approx.
- Pulse Amplitude: 18A approx. @ 120V
- Pulse Rate: 4mS every 17ms (@ 60Hz)
- Power Consumption: 200mW max. @ 120VAC

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Receiver

- Dual function - acts as a Non-Contact Voltage Tester and Breaker Finder
- Ergonomic Bent Tip Design w/ flat surface to support correct receiver orientation when scanning the panel
- Visual and audible indicators
- Low battery detect
- Auto Power off (after 10 mins of no activity)
- Power Supply: 9V Alkaline Battery
- Weight: 85g (without battery)

System

- Warranty: 2-years (limited)
- Certification: UL 1436
- Use Environment: Cat II 300V
- Operating Temperature: 32 to 122°F (0 to 50°C)

Description	Part No.
Circuit Breaker Finder w/Digital Receiver & GFCI Circuit Tester	**61-534**

Split-Jaw™ Smart Meter

- Measures
  - 0.9-200AAC
  - 1.3-750VAC
  - 2.1-1000VDC
  - 0.0-9999Ω
- Audible continuity
- Data hold
- Integral lead storage
- Replaceable test leads
- Auto power off
- Low battery indication
- Test leads UL 61010-031 compliant
- 2-year warranty

c UL us CAT IV 600V CAT III 1000V

Description	Part No.
Split-Jaw™ Smart Meter	**61-096**

Includes: Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	1.3 - 750 V	1.5%
DC Voltage	1.8 - 1000 V 0.6 - 1000 V	1.0%
AC Current	0.6 - 200.0A	3.0%
Resistance	0 - 2000 Ω	1.0%

*Note: Jaw opening is 0.6 in. (16mm) - up to 1/0 copper cable.

486 Commercial-Grade Multimeter

- Voltage
- Current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Data hold
- Min/max/relative modes
- Backlight
- True RMS
- Auto AC/DC voltage detect w/ low impedance (Auto - VLoZ)
- Analog bar graph
- Non-contact voltage detection
- Peak hold
- Low battery indication
- Auto power off
- Limited 2-year warranty

Description	Part No.
Digital Multimeter w/peak hold, temperature, includes thermocouple	**61-486**

Includes: Test Leads & Carrying Case.

Specifications	Range & Resolution	Accuracy
AC Voltage	6.000/60.00/600.0/1000.0 V	0.80%
AC mV	600.0 mV	1.2%
DC Voltage	6.000/60.00/600.0/1000.0 V	0.08%
DC mV	60.00/600.0 mV	
AC Current	60.00m/600.0m/6.000/10.00A	1.2%
DC Current	60.00m/600.0m/6.000/10.00A	0.80%
Resistance	600.0/6.000k/60.00k/600.0k/ 6.000M/40.00M Ω	0.80%
Capacitance	1nF to 10mF	0.1%
Frequency	99.9 to 100.0k Hz	0.1%
Temperature	-40°F to 752°F (-40°C to 400°C)	1.0%

340 Series Test-Pro® Multimeters

- Voltage
- Current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Data hold
- Min/max/relative modes
- Backlight
- Low battery indication
- Auto power off
- Limited 2-year warranty

61-342

Description	Part No.
Test-Pro® Multimeter w/TRMS	**61-342**
Test-Pro® Multimeter	**61-340**

Includes: Test Leads and Thermocouple.

Specifications	Range & Resolution	Accuracy
AC Voltage	4.000/40.00/400.0/600 V	1.5%
DC Voltage	400.0m/4.000/40.00/400.0/600 V	0.5%
Current	400.0µ/4000µ/40.00m/400.0m/4.000/10.00A AC/DC	1.5%
Resistance	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	1.0%
Capacitance	40.00n/400.0n/4.000µ/ 40.00µ/400.0µ F	3.0%
Frequency	10.000/100.00/1.000k/10.00k/100.0k/1.000M/4.000M Hz	0.3%
Temperature	-4° F to 1382° F (-20° C to 750° C)	3.0%

Accessories	For Use with	Part No.
Nylon Carrying Case	61-340, 61-342	**C-290**
Test Leads w/Alligator Clips, Standard	61-340, 61-342, 61-486	**TL-495**
Test Leads w/Larger Alligator Clip	61-340, 61-342, 61-486	**TL-770**
Test Leads with Alligator Clips, Premium	61-340, 61-342, 61-486	**TL-795**
Beaded K-type Thermocouple*	61-340, 61-342, 61-486	**61-461**
Thermocouple Adapter*	61-340, 61-342, 61-486	**61-465**
Replacement Thermocouple	61-486	**TC-486**

*Note: K-type thermocouple plugs into digital multimeter voltage jacks with 61-465 voltage.

Solenoid Voltage Testers

- Extremely rugged and reliable
- Vibrates when AC voltage is present
- Indicates AC/DC voltage level
- Replaceable leads with shielded probe tips (UL 61010-031 compliant)
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- 2-year warranty

Description	Part No.
Vol-Con® Voltage/Continuity Tester, 5-600V AC/DC	61-076
Vol-Test® Voltage Tester, 100-600V AC/DC	61-065
Nylon Carrying Case	C-90
Standard Test Leads (for use with 61-076 & 61-065)	61-070
Resistor Fused Leads (for use with 61-076 & 61-065)	61-072

Includes: Standard Test Leads.

E-Z Check® Circuit Tester

- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot in 3-wire, 120VAC circuits
- Simulates ground fault for testing GFCIs (61-051 only)
- No-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough, impact-resistant case
- 2-year warranty

Description	Part No.
E-Z Check® Plus GFCI Circuit Tester	61-051
E-Z Check® Circuit Tester	61-035

Receptacle Tester

- Tests for correct wiring in 3-wire receptacles
- For use on 120VAC circuits
- 1-year warranty

Description	Part No.
GFCI Receptacle Tester	61-501

Vol-Con® Elite Digital Voltage Tester

- Tests for AC Voltage from 24-600VAC and DC Voltage from 6-220VDC
- Visual and audible warning
- Audible continuity
- Non-contact voltage indication (40-600VAC)
- Low impedance to eliminate ghost voltages
- Low battery indicator
- Replaceable silicone test leads (UL 61010-031 compliant)
- Integral lead storage
- 2-year warranty

Description	Part No.
Vol-Con® Elite Digital Voltage Tester w/vibration mode	61-092
Nylon Carrying Case	C-90
Silicone Test Leads	TL-102

Includes: Silicone Test Leads.

VoltAware™ Non-Contact Voltage Tester

- Indicates presence of voltage from 40-1000VAC
- Visual indication of voltage; green LED shows unit is active, flashing red indicates live voltage
- Selectable audible indication of voltage
- Sleek, compact design
- Auto shut-off to conserve battery life after ten minutes
- Low battery detector and easy battery (2 AAA included) replacement
- 2-year warranty

Description	Part No.
VoltAware™ Non-Contact Voltage Tester	61-025

VoltSensor™ Non-Contact Voltage Tester

- Tests for voltage from 40-600VAC
- Audible and visual indication
- 1-year warranty

Description	Part No.
Volt-Sensor™ Non-Contact Voltage Tester	61-063

Ground Resistance Meters

- Auto ranging
- Auto power off
- Hard case included
- 2-year warranty

61-796

CAT III 300V

61-920

CAT IV 300V

Description	Part No.
Ground Resistance Clamp Meter	61-920
3-Pole Ground Resistance Tester (includes TL-796 lead set kit)	61-796
Earth Resistance Lead Set Kit (not shown)	TL-796

Specifications	Range & Resolution	Accuracy	Range & Resolution	Accuracy
	61-920		61-796	
Ground Resistance	0/120/1200 Ω	1.5%	20.00/200.0/ 2000 Ω	2.0%
Ground Leakage Current	100m/1000m/ 15/30 A	2.0%	—	—

3-Phase Sequence Tester

- For use from 120 to 600VAC
- Color-coded insulators
- Shock resistant housing
- Easy to read
- 2-year warranty

Description	Part No.
3-Phase Sequence Tester	61-520

Includes Carrying Case.

3-Phase/Motor Rotation Tester

- Identifies three-phase sequence
- Indicates motor rotation
- Checks for open phases
- For use up to 600VAC
- 2-year warranty

CAT III 300V

Description	Part No.
3-Phase/Motor Rotation Tester	61-521
Test Lead Set	TL-521

Includes Carrying Case.

Insulation Testers

- Checks new installations for damaged insulation
- Checks existing installations and motor windings for breakdowns in insulation
- 2-year warranty

61-797

61-795

c UL us

CAT IV 600V

Description	Part No.
Insulation Meter w/PI, DAR, Remote Probe - Includes Test Lead and Carrying Case	61-797
Remote Probe Test Leads (61-797)	TL-797RP
Insulation Tester - Includes Test Leads and Carrying Case	61-795
Test Leads w/Alligator Clips, Premium (for 61-795 & 61-797)	TL-795
Test Leads w/Alligator Clips, Standard (for 61-795 & 61-797)	TL-495

Specifications	Range & Resolution	
	61-797	61-795
Test Voltage	50/100/250/500/1000 VDC	250/500/1000 VDC
Voltage AC/DC	0.1-600.0 V	0.1-600.0 V
Continuity	—	0.01-20.0 Ω
Resistance	—	0-200.0Ω
Insulation Resistance	Up to 20G Ω	Up to 4000M Ω
Earth-Bond Resistance	0.01 Ω to 40.00k Ω	0.01 Ω to 19.99 Ω

Digital Light Meter

- Responds to all visible light sources
- Measures in four ranges up to 20,000 Foot Candles or 200,000 Lux
- +/- 3% basic accuracy
- Data hold mode
- Max reading mode
- Auto zero adjustment
- Low battery indication
- Auto power off
- Remote sensor with 59 in. (1.5m) cable
- 2-year warranty

CE

Description	Part No.
Digital Light Meter	61-686

Includes Carrying Case.

Accessories & Replacement Parts

Ground Continuity Adapter

- Verifies cabinet or equipment chassis has been properly bonded to system ground

Description	Part No.
Ground Continuity Adapter for 61-164 Circuit Analyzer	61-175

Isolated Ground Adapter

- Verifies receptacle is isolated from system ground and bonded to other devices on the branch circuit

Description	Part No.
Isolated Ground Adapter for 61-164 Circuit Analyzer	61-176

Extension Cord

Description	Part No.
1' Extension Cord for 61-164 Circuit Analyzer	61-182

Alligator Clip Adapter

- Allows SureTest® Circuit Analyzer to analyze non-outlet based circuit for branch circuit safety and performance

Description	Part No.
Alligator Clip Adapter for 61-164 Circuit Analyzer	61-183

Magnetic Strap

- Frees up hands to help work safely
- Fits 480/340 Series Multimeters

Description	Part No.
Magnetic Strap	61-565

Thermocouple

61-461

61-465

- Measures up to 275°F
- K-type thermocouple plugs into digital multimeter voltage jacks with 61-465 adapter

Description	Part No.
Beaded K-type Thermocouple	61-461
Thermocouple Adapter	61-465
Replacement Thermocouple for 61-486 Digital Multimeter	TC-486

Test Leads

Description	Category Rating	Part No.
Test Leads		TL-95
Silicone Test Leads	CATIII 1000V CATIV 600V	TL-102
Test Leads w/alligator clips (standard)		TL-495
Test Lead Set		TL-521
Premium Test Leads w/alligator clips	CATIII 1000V CATIV 600V	TL-770
Test Leads w/alligator clips (premium)		TL-795
Earth Resistance Lead Set		TL-796
Remote Probe Test Lead		TL-797RP
Test Lead Set		TL-956
Standard Test Leads (for use with 61-076 & 61-075)		61-070
Resistor Fused Test Leads (for use with 61-076 & 61-075)		61-072

Carrying Case Selection Guide

61-179

C-90

C-290

C-700

Selection Guide	VOLTAGE TESTERS				160	340		480	700	740		760		770	
	61-065	61-076	61-092	61-096	61-164	61-340	61-342	61-486	61-704	61-744	61-746	61-763	61-765	61-773	61-775
61-179 Nylon Carrying Case					•										
C-90 Nylon Carrying Case	•	•	•	•						•	•				
C-290 Nylon Carrying Case						•	•	•							
C-700 Nylon Carrying Case									•						
C-760 Nylon Carrying Case												•	•		
C-770 Nylon Carrying Case														•	•

Replacement Parts Selection Guide

Selection Guide			060	070	090		340		480	500	700	740		760		770		790			900		
			61-065	61-076	61-092	61-096	61-340	61-342	61-486	61-521	61-704	61-744	61-746	61-763	61-765	61-773	61-775	61-795	61-796	61-797	61-955	61-957	61-959
FUSES																							
F-105	1A (600V)	10.3 x 35mm																•					
F-340	0.5A (500V)	6.35 x 32mm					•	•															
F-341	10A (1000V)	10 x 38mm					•	•															
F-497	440mA (1000V)	10 x 35mm							•														
F-498	11A (1000V)	10 x 38mm							•														
F-797	315mA (1000V)	5 x 32mm																		•			
BATTERIES																							
—	1.5V (AAA)											•	•					•		•			
—	9V					•	•	•	•		•			•	•	•	•						
TEST LEADS																							
TL-796	Earth Resistance Lead Set																		•				
TL-797RP	Remote Probe Test Lead																			•			
61-072	Resistor Fused Test Leads		•	•																			
TL-102	Silicone Test Leads				•						•												
61-070	Standard Test Leads		•	•																			
TL-770	Test Leads w/larger Alligator Clips						•	•	•			•	•	•	•	•	•						
TL-95	Test Leads					•																	
TL-495	Test Leads w/Alligator Clips (Standard)						•	•	•									•		•			
TL-521	Test Lead Set									•													
TL-795	Test Leads w/Alligator Clips (Premium)						•	•	•									•		•			
TL-956	Test Lead Set																				•	•	•

Safety in the Field

IEC (International Electrotechnical Commission) Category Ratings

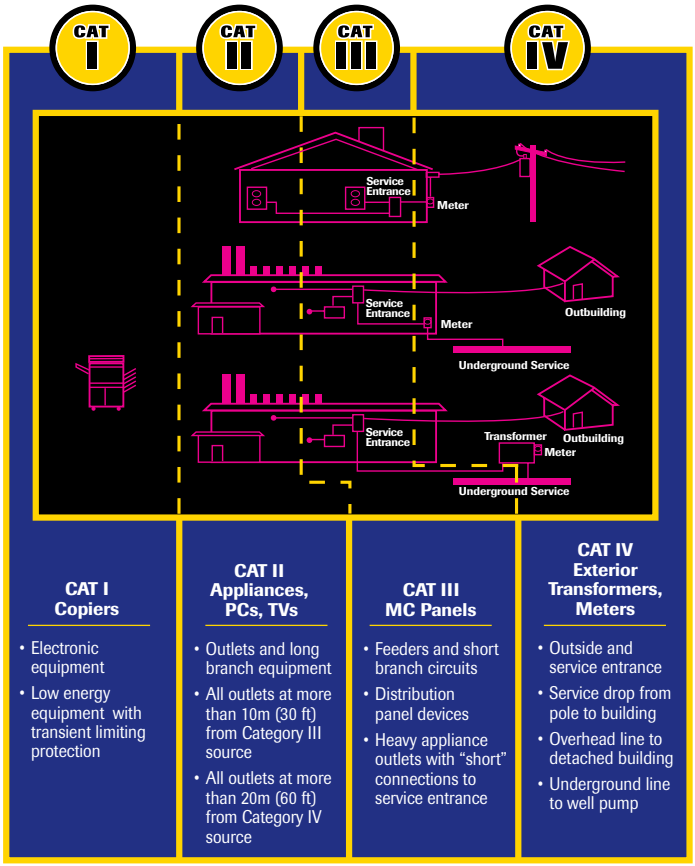
Category I – The signal level for telecommunications, electronic and other low-energy equipment with transient limiting protection. Peak impulse transient range is 600-4,000 volts with 30 ohm source.

Category II – The local level for fixed and non-fixed powered devices including appliances, lighting and portable equipment. Outlets located more than 30 feet from CAT III sources and 60 feet from CAT IV sources. Peak impulse transient range is from 600-6,000 volts with a 12 ohm source.

Category III – The distribution level for fixed primary feeders or branch circuits. Circuits that are separated from CAT IV sources by at least one level of transformer isolation. Peak impulse transient range is 600-8,000 volts with a 2 ohm source.

Category IV – The primary supply level for the highest levels of transient over voltage. Includes the utility service both outside and at the service entrance, service drop from the pole to the building, overhead line to remote buildings, and underground line to a well pump. Peak impulse transient range is 600-12,000 volts with less than a 1 ohm source.

Visit www.idealind.com for more technical product details, application support, white papers, videos and software.



DataComm

Testers

SignalTEK® II Transmission Testers E-3
SecuriTEST® PRO CCTV/Security Tester E-3
VDV II Cable Verifiers E-3
TraceTone® Tone Generator & Amplifier Probe Tester E-4
LinkMaster™ Tester E-4

Compression Tools/Connectors

OmniSeal™ Pro XL Compression Tool E-5
LinearX® Pro Compression Tool E-5
Compression Connectors E-6

Tools

Crimpmaster™ Crimp Tool E-7
Punchdown Tool E-9
Telephone Tools E-9
Modular Plugs E-10
Strippers E-11
Cutters/Scissors E-12
Splitters E-13
Kits E-13
Fiber Optic E-16

Enhance existing technologies and provide a foundation for tomorrow

IDEAL DataComm provides installation and testing solutions for twisted pair, coax and fiber based applications. Designed for the professional, IDEAL tools, testers and connectivity products offer an integrated approach to cut, strip, terminate and test a wide variety of low-voltage applications. Combined with our technical expertise, product training and customer support, this integrated approach ensures that your total cost of ownership is minimized.

SignalTEK® II Ethernet Data Transmission Testers

- If you install or maintain data cabling, SignalTEK® CT & SignalTEK® NT allow you to generate PDF test reports that prove installed links run at Gigabit Ethernet transmission rates.
- For installers, this means having a cost-effective way to demonstrate that the cabling was installed correctly and is capable of supporting Ethernet applications. By proving real world performance, SignalTEK® CT confirms a professional job - reducing the risk of call backs.
- SignalTEK® NT tests cable as well as active Ethernet networks by transmitting simulated web, VoIP, IP video and IP CCTV data through the LAN, stress-testing both the network equipment and the cable. SignalTEK® NT will also test fiber optic cable and connect to live fiber optic LANs with optional SFP (small form-factor pluggable) modules.
- SignalTEK® gives network installers and owners the assurance that installed cabling will support bandwidth hungry services like VoIP, IP CCTV and video streaming at full gigabit speeds without dropping data packets as required by the IEEE 802.3ab Ethernet standard.

Description	Part No.
SignalTEK® CT Transmission Tester	**R156004**
SignalTEK® NT Transmission Tester	**R156003**

VDV II Voice, Data and Video Cable Verifier

The new VDV II Series are easy to use cable testers that check the integrity of copper cables commonly found in domestic, commercial or industrial voice, data or video installations, including telephone wiring, data network and video/security cabling.

- **Accurate** – Advanced TDR (Time Domain Reflectometry) measures cable length and provides distance to fault information (Pro model)
- **Fast** – Identifies wiring errors instantly and displays the results all on one screen (all models)
- **Intelligent** – Quickly determines which media service is running over cables, such as ISDN, PBX and PoE (Pro model)

SecuriTEST® PRO CCTV/Security Tester

SecuriTEST® PRO is the most versatile all-in-one installation and troubleshooting tool for the CCTV professional. CCTV installers often need to carry a variety of testing tools to complete their work. SecuriTEST® PRO combines the most needed tools in one easy-to-carry package. Since all connections (video/communications/DMM) attach to a single unit, SecuriTEST® PRO eliminates the need to juggle several devices while on a ladder or lift, making working conditions safer and increasing productivity.

- IRE video level and sync tests
- Sound level test through integrated speaker and on screen level indicator
- High capacity lithium ion battery
- Support for additional PTZ protocols
- Carrying case included
- **Seven Essential CCTV Tools** - Combines a CCTV video tester, PTZ camera controller, Digital Multimeter, UTP cable tester, video test pattern generator, PTZ protocol analyzer and camera programmer in a single compact package.
- **Save Time & Money** - Test, aim, focus and program cameras when working alone. Save time by not having to walk back to the control center to verify functionality of each camera.
- **Compact Design** - Combines all the most needed security tools in a lightweight easy-to-carry unit. Sharp, bright 2.5 in. (6.3 cm) color LCD screen with on-screen displays for PTZ control/diagnostics and DMM readouts.
- **PTZ Protocol Analyzer** - Compatible with 20+ PTZ protocols to test and program cameras in the field. Decodes and identifies output from PTZ console to aid in troubleshooting.

Description	Part No.
SecuriTEST® PRO CCTV/Security Tester only	**33-892**
Replacement Lithium Polymer (LiPo) Battery	**33-892-BP**

Description	Part No.
VDV II Cable Verifier includes: Tester, remote, battery and user's guide	**R158000**
VDV II Plus Cable Verifier includes: Tester, remote, battery, user's guide, cables, adapters and carrying case	**R158002**
VDV II Pro Cable Verifier includes: Tester, remote, battery, user's guide, cables, adapters and carrying case	**R158003**
RJ-45 Remote Units (12) - #1 - #12	**158050**
RJ-45 Identifiers (24) - #1 - #24	**158051**
Coax Remote Units (12) - #1 - #12	**158053**

VISIT WWW.VDVII.COM FOR MORE INFORMATION ON THE **VDV II.**

Test-Tone-Trace Kit

- Kit includes the VDV (33-856), Amplifier Probe (62-164), carrying case and accessories
- Tests and traces coax, twisted pair and telephone cables

Description	Part No.
Test-Tone-Trace Kit	33-866

VDV MultiMedia Cable Tester

All in one tester for installers working with voice, data and video applications.

- **Voice** – tests 2 or 3 pair, 6-position RJ-11/12 phone cables for wiremap/ continuity.
- **Data** – tests 8 position 8 contact CAT 3/5e/6/6a shielded and unshielded cable testing for wiremap/continuity to TIA 568A/B standards
- **Video** – tests coax cable for opens and shorts via F-connector interface
- Wiremap tests for opens, shorts, miswires, reversals and split pairs.
- LCD display with "PASS or ERROR" indicator displayed after each test
- Internal tone generator: Tone by pin/pair/entire cable with four different tones making fault isolation easier
- Main remote stores in base of tester

Description	Part No.
VDV MultiMedia Cable Tester	33-856
Replacement Remote	IA-5516

LinkMaster™ Tester

LED based tester for wiremapping CAT 3/5e/6/6a twisted pair cabling.

- Wiremap for opens, shorts, reversal, miswire and split pair
- Tests by pair: 1/2, 3/6, 4/5, 7/8
- Tests shielded and unshielded RJ-45 cabling
- Debug feature cycles through errors one at a time

Description	Part No.
LinkMaster™ Tester and Remote	62-200

MiniTracker™ PRO Tester

- Coax cable mapper and tracer with eight remotes
- LEDs identify remote number, opens and shorts
- Built in Tone Generator
- Includes carrying case with tester and remote storage

Description	Part No.
MiniTracker™ PRO Tester	62-1202

PRO Amplifier Probe and Tone Generator Kit

Amplifier Probe

- Identifies and traces wire or cables within a group
- Adjustable volume knob
- Detects and audibly amplifies analog tone generation
- Compatible with analog tone generators

Tone Generator

- Emits three tone patterns
- F-Connector & RJ-11/12 interface for toning twisted pair and copper cables
- Includes alligator clips for toning de-energized copper cables
- Auto-off after three hours of non-use

Description	Part No.
Amplifier Probe & Tone Generator Kit - includes 62-164, 62-160, Lead Set, Cable Assembly	33-864
Amplifier Probe	62-164
Amplifier Probe Replacement Tip	LA-4145
Tone Generator	62-160

TRACETone® Tone Generator & Amplifier Probe Tester

- Economical solution for tracing copper low-voltage cabling
- Two selectable tone styles and adjustable volume control
- RJ-11 Alligator Clip, RJ-11 Cable Assembly included

Description	Part No.
TRACETone® Tester	62-140

OmniSeal™ PRO XL Compression Tool

Made in U.S.A. of U.S. and Global Components

- Connects BNC, F-Type, RG11-F, RCA, 90°/Right Angle and Mini Coax compression connectors on coaxial cable
- Compresses ALL IDEAL compression connectors
- Fast and reliable solution to home theater, CATV, satellite systems and security applications
- Permanent connection so your connector never comes loose.
- Universal design with spin knob and adjustable post height works with most non-IDEAL compression connectors

Description	Part No.
OmniSeal™ PRO XL Compression Tool	30-793

LinearX®3 Compression Tool

Made in U.S.A. of U.S. and Global Components

INCLUDES 4 WeatherProof™ Connectors

- Compresses F/BNC/RCA connectors
- Adjustable post for different length/style connectors
- Linear stroke for consistent compression results & easy operation
- Durable & rugged zinc die-cast body with protective powder coated paint finish
- Includes four RTQ™ XR™ RG-6 Weatherproof F-Compression Connectors

Description	Part No.
LinearX®3 F/BNC/RCA Compression Tool (Adjustable) with four RTQ™ XR™ F-Connectors	33-632

VISIT WWW.IDEALIND.COM FOR CONNECTOR AND TOOL COMPATIBILITY.

Compression Connectors

RTQ™ XR™ Reg/Tri/Quad & Plenum F-Connectors
- Fits 60% regular, tri-shield and quad shield cables
- Nickel-plated, brass-construction for superior corrosion resistance
- Designed for use in satellite and cable TV installations
- Weatherproof for indoor and outdoor use
- Use 30-793 or LinearX® Compression Tools

RG-11 RTQ™ InSITE™ F-Connectors
- Fits 60% regular and quad shield RG-11 cables
- Plenum cable version also available
- Use 30-793 Compression Tool for termination
- Standard 1/4" x 1/4" cable prep. Use 45-111 Coax Stripper

InSITE™ BNC Connectors
- Clear 360° window for confident cable insertions
- Nickel-plated, brass-construction for superior corrosion resistance
- Moisture-inhibiting design
- Use 30-793 or 33-632 Compression Tool
- 75 Ohm nominal impedance
- Gold-plated pin contact area
- Available in straight, 90° and plenum versions

OmniCONN™ F-Connectors
- Non corrosive nickel plated brass body and polycarbonate bushing
- Nylon adapter sleeve and o-ring provide double protection for a watertight seal
- Free spinning hex nut for ease of installation onto all 7/16 ports
- 75 ohm nominal impedance
- Two-piece pre-assembled connectors

NJX™ Connectors
- 75 ohm nominal impedance
- Bandwidth up to 3 GHZ
- Compatible with all IDEAL Compression Tools
- Compact body size
- RG-6 and RG-6 Quad versions

TLC™ Connectors
- No compression tool required
- 75 ohm nominal impedance
- Bandwidth up to 3 GHZ
- Compact body size
- RG-6 and RG-6 Quad versions

Compression Connectors

Type		Image	Series/Model #	Cable Type	Center Conductor	Dielectric Diameter	Jacket Diameter	Quantity	Part No.
BNC	RG-59		InSITE™ Model #59BNCIS	RG-59	23-18 AWG Solid .023" - .040"	.142" - .148"	.230" - .250"	Card of 4	**92-704**
								Card of 15	**89-047**
								Jar of 35	**89-5047**
								Bulk 1,000	**89-1047**
			InSITE™ 90° Model #59BNCRAIS	RG-59	23-18 AWG Solid .023" - .040"	.142" - .148"	.230" - .250"	Card of 5	**92-693**
			InSITE™ Model #59PLBNCIS	RG-59 Plenum	23-18 AWG Solid .023" - .040"	.134" - 140"	.193" - 224"	Card of 15	**89-049**
	RG-6		InSITE™ RTQ™ Model #6BNCISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	23-18 AWG Solid .023" - .040"	.168" - 183"	.226" - 305"	Card of 4	**92-705**
								Card of 15	**89-048**
								Jar of 35	**89-5048**
			InSITE™ 90° Model #6BNCRAISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	23-18 AWG Solid .023" - .040"	.168" - 183"	.226" - 305"	Card of 5	**92-695**
F	RG-6		RTQ™ XR™ Model #6FRTQXR	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	N/A	.168" - .183"	.226" - .310"	Card of 10	**92-651**
								Jar of 50	**92-650**
								Jar of 100	**92-656**
								Bulk 1,000	**92-659**
			InSITE™ RTQ™ 90° Model #6FRAISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	23-18 AWG Solid .023" - .040"	.168" - 183"	.226" - 305"	Card of 5	**92-691**
			NJX™ Model #6FNJX	RG-6	N/A	.175" - .183"	.254" - .278"	Card of 10	**89-040**
			NJX™ Model #6QFNJX	RG-6 Quad	N/A	.175" - .183"	.275" - .305"	Card of 10	**89-041**
			TLC™ Model #6FTLC	RG-6	N/A	.175" - .183"	.254" - .278"	Card of 10	**85-068**
								Card of 50	**85-168**
			TLC™ Model #6QFTLC	RG-6 Quad	N/A	.175" - .183"	.275"- .305"	Card of 50	**85-178**
			OmniConn™ Model #6FOC	RG-6	N/A	.175" - .183"	.260" - .280"	Jar of 50	**89-044**
								Bulk 1,000	**89-1544**
			OmniConn™ Model #6QFOC	RG-6 Quad	N/A	.175" - .183"	.270" - .295"	Jar of 50	**89-045**
	RG-59		RTQ™ Model #59FRTQ	RG-59/59Q RTQ™	N/A	.142" - .148"	.230" - .270"	Card of 10	**92-611**
								Jar of 50	**92-610**
	RG-11		RTQ™ Model #11FISRTQ	RG-11 RTQ™ RG-11 Quad	18-14 AWG Solid .040" - .066"	.280" - .285"	.390" - .416"	Card of 10	**89-211**
								Bulk 500	**89-1211**
			Cable Specific Model #11PLFIS	RG-11/11Q Plenum	18-14 AWG Solid .040" - .066"	.270" - .280"	.340" - .356"	Card of 10	**92-212**
RCA	RG-59		RTQ™ Model #59RCARTQ	RG-59/59QRTQ™	20-18 AWG Solid .029" - .040"	.142" - .148"	.230" - .270"	Jar of 35	**89-570**
	RG-6		RTQ™ Model #6RCARTQ	RG-6/6Q RTQ™	20-18 AWG Solid .029" - .040"	.175" - .183"	.267" - .305"	Jar of 35	**89-580**

Compression Connectors

Visit www.idealind.com/products/datacomm for Compression Connector Installation Instructions.

Crimpmaster™ Ratcheting Crimp Tool

- Ratcheting tool frame ensures full crimp cycle
- Provides a consistent crimp every time
- Dies change quickly and easily with a screwdriver
- Tool frame works with all IDEAL Crimpmaster™ Die Sets
- Cushioned, comfort-grip handles

Description	Part No.
Crimpmaster™ Crimp Frame Tool (Die set not included)	**30-506**
Replacement Screws	**LB-1284**

Crimpmaster™ Tools and Die Sets

30-556 **Die only**
RJ-11 Crimp Tool for two, four or six-position modular plugs

30-559 **Tool w/die 30-522**
RJ-45 CAT 5/5e Eight-position Crimp Tool for keyed or non-keyed modular plugs. Not for Cat 6

30-560 **Tool w/die 30-521**
RJ-45 Eight-position Crimp Tool for AMP® RJ-45 modular plugs

30-573 **Tool w/die 30-481**
Cambridge CP-88, CP-89 BNC/TNC coax connectors with RG-58, RG-59/RG-62 AU cables (Hex 0.305 (7.75mm), 0.068 (1.73mm), 0.228 (5.79mm)

30-576 **Die only**
RG-174, Mini 59 BNC/TNC Connectors (Hex, 0.178 (4.52mm), 0.128 (3.25mm), 0.068 (1.73mm)

30-577 **Tool w/die 30-482**
N-Series and RG-8/11 Connectors (Hex, 0.429 (10.90mm), 0.100 (2.54mm), 0.080 (2.03mm)

30-578 **Tool w/die 30-483**
RG-59, RG-6, and 8281 50 and 75 OHM cables (Hex, 0.324 (8.23mm), 0.255 (6.48mm), 0.068 (1.73mm), 0.042 (1.07mm)

30-581 **Tool w/die 30-502**
RG-58, RG-59/62, BNC/TNC Coax Connectors (Hex, 0.255 (6.48mm), 0.213 (5.41mm), 0.068 (1.73mm)

30-582 **Tool w/die 30-503**
F-type CATV RG-59, RG-6 Connectors (Hex, 0.350 (8.89mm), 0.320 (8.13mm), 0.255 6.48mm)

30-587 **Die only**
RG-58, RG-174 and G-8218 for both 50 and 75 ohm cables (Hex 0.213 (5.41mm), 0.178 (4.52mm), 0.068 (1.73mm), 0.042 (1.07mm)

30-591 **Die only**
Plenum and Non-Plenum Thinwire Cables RG-58 and 59 (Hex, 0.213 (5.41mm), 0.190 (4.83mm), 0.068 (1.73mm), 0.042 (1.07mm)

30-593 **Die only**
Mini UHF and BNC/TNC 5 cavity (Hex, 0.052 (1.32mm), 0.068 (1.73mm), 0.100 (2.54mm), 0.213 (5.41mm), 0.255 (6.48mm)

30-572 **Die only**
16-26 AWG (1.31mm² - .128mm²) miniature insulated rings, spade and butt splices

30-579 **Tool w/die 30-500**
22-10 AWG (.324mm² - 5.261mm²) insulated terminals/ color coded nests

30-580 **Die only**
22-8 AWG (.3mm² - 8mm²)
non-insulated terminals

30-586 **Die only**
22-12 AWG (.324mm² - 3.31mm²)
Non Insulated Open Barrel Connectors, Commercial Type

30-594 **Die only**
Fully Insulated quick disconnect terminals with thinner wire barrels 22-10 AWG (.324mm² - 5.261mm²)

30-599 **Die only**
30-18 AWG (.205mm² - 2.08mm²) Open Barrel Pins and Sockets

Crimp-on F-Connectors

Nickel plated brass connectors designed for indoor coax terminations for video and other RF applications

- RG-59, RG-6, RG-6 Quad versions are available
- All versions require a hex crimp to secure cable to connector
- 1/4"x 1/4"cable prep for all models
- Crimp with 30-503 Crimpmaster™ Ratcheting Crimp tool
- Hex crimp sizes: RG-59 and RG-6, .320" cavity. RG-6 Quad, .350" cavity

Description	Quantity	Part No.	Quantity	Part No.
RG-6 F Crimp-on Coax Connector	Card of 10	**85-037**	Card of 50	**85-017**
RG-6 F Quad Crimp Connector	Card of 10	**85-057**	—	—
RG-59 F Crimp-on Coax Connector	Card of 10	**85-036**	—	—

Twist-On F-Connectors

- After cable is 1/4 in. x 1/4 in. stripped, simply twist on connector
- No termination tool required
- Available in two styles, RG-6 and RG-59

Description	Quantity	Part No.
F-Type RG-6 Twist-On Connector	Card of 10	**85-053**
	Card of 50	**85-039**
F-Type RG-59 Twist-On Connector	Card of 4	**84-018**
	Card of 10	**85-035**

Connector Installation and Removal Tool

- Patented design works on BNC and F connectors
- Works on compression and hex connectors
- Comfort grip handle aids in installing and removing connectors on coax cable
- F-post for aid in cable to connector assembly

Description	Part No.
F & BNC Coax Connector Tool - 8 in. length	**35-046**

Coax Strip & Crimp Tool

- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals
- Cushioned, comfort-grip handles

Description	Part No.
Coax Strip & Crimp Tool	**30-433**

F-Type Adapters & Terminators

- Nickel-plated brass construction
- For 75Ω applications

Description	Quantity	Part No.
3GHz F-Splice Adapter, high bandwidth, for standard and high definition applications, <0.25dB insertion loss, >25dB return loss	Card of 4	**85-339**
	Card of 10	**85-340**
Female to RCA Male Adapter – converts female F-connectors to male RCA connectors	Card of 2	**85-936**
RCA Female-to-Female Adapter	Card of 2	**85-937**
Coax Cable F-Terminators - for all open ports on coax wall plates and splitters	Card of 4	**85-073**
90° F-Adapter - F-female to F-male coax adapter	Card of 2	**85-070**
BNC Female to BNC Female Adapter	Card of 2	**85-075**
	Card of 10	**92-817P**

Impact Punchdown Tool

- Insert and cut cable terminations effortlessly
- Adjustable high/low actuation setting accommodates termination requirements
- Turn-Lock™ Style blade holding design
- Impact-absorbing cushioned grip reduces operator stress for high volume installers

Description	Part No.
Punchmaster™ II Punchdown Tool w/full 110 & 66 blades	35-485

Punchdown Tool Blades

Removable Blades	Part No.
110 Turn-Lock™ blade	35-495
66 Turn-Lock™ blade	35-497
110/66 combo blade w/cutting edges	35-407
Krone® blade	35-478
Bix® blade	35-479

Bix® is a registered trademark of Nortel. Krone® is a registered trademark of Krone, Inc.

Ratchet Telemaster™ Modular Plug Crimping Tool

- Heavy-duty version of the 30-496 Telemaster™ tool requires less user hand force
- Ratchet ensures full cycle crimping every time
- Crimps RJ-45 (8P8C) and RJ-11/12 (6P6C/6P4C) modular plugs
- Multi-function tool also cuts UTP/STP and strips CAT 5e/6 cable jacket and flat cable jackets
- Black oxide coated steel frame with cushioned handles for strength and comfort

Description	Part No.
Ratchet Telemaster™	30-696
Replacement Cut & Strip Blade Set	LA-4102

Telemaster™ Modular Plug Crimping Tool

- Crimps RJ-45 (8P8C) and RJ-11/12 (6P6C/6P4C) modular plugs
- Multi-function tool also cuts UTP/STP and strips round CAT 5e/6 cable jacket
- Black oxide coated steel frame with cushioned handles for strength and comfort

Description	Replacement Blade	Kit Part No.	Tool Only Part No.
Telemaster™ Crimping Tool RJ-45 and RJ-11/12	LB-1747	33-700*	30-496

*Kit includes 10 each, RJ-45 8P8C, RJ-11 6P6C and RJ-11 6P4C modular plugs.

Data/Voice Crimp Tool Kit

- Compact design is 2/3 the size of traditional crimp tools
- Crimps RJ-45 (8P8C) and RJ-11/12 (6P6C/6P4C) modular plugs
- One tool assembly process – cut, strip and crimp connectors on to CAT 3/5e/6 cables
- Black oxide coated steel core with spring loaded handle and locking feature

Description	Part No.
Data/Voice Crimp Tool Kit includes ten RJ-11 (6P6C) and ten RJ-45 connectors	33-396

Probe Pic & Spudger

- For isolating conductors and removing terminated wires from voice and data IDC contacts

Description	Part No.
Probe Pic & Spudger	35-473

Telephone/Data Cable Splice and Repair Kit

- All in one specialty tool for crimping UR/UY/UB IDC splice connectors
- Features a parallel crimping surface to prevent damage to connectors during crimping process
- Two stripping holes for 22 to 24 AWG (phone/twisted pair) cables
- Cutter for cable and conductor trimming
- Plier nose for pulling and sorting wires in a box

Description	Part No.
Kinetic® Super Wire Stripper/Crimper Kit – includes 25 IDC connectors (UR-I, 3-Wire Butt Splice)	**33-719**

Insulation Displacement Connectors

85-925/86-925

85-950

85-900

IDC connectors create fast splice and tap connections on solid copper wires. Designed for low voltage telecommunication cables.

- Moisture-resistant sealant protects wires from corrosion
- Use with solid copper single-conductor wire
- Use 33-719 tool for proper crimping force and crimping angle

Description	Quantity	Part No.
UR-I, 3-Wire Butt Splice IDC	25	**85-925**
UR-I, 3-Wire Butt Splice IDC	100	**86-925**
UY-I, 2-Wire Butt Splice IDC	25	**85-950**
UB-I, 2-Wire Tap Splice IDC	25	**85-900**
IDC Combo Pack – includes 10 UR, 10 UY and 5 UB	25	**85-960**

CAT 5e RJ-45/RJ-11 Modular Plugs

- Plugs support the latest cable system performance categories when installed in compliance with appropriate standards and methods
- Plugs work with 24 AWG solid or stranded conductors and round or flat cables.
- 50 micron gold contacts

Description	Quantity	Part No.
CAT 5e 8-Position 8-Contact, RJ-45	10	**85-147**
	25	**85-346**
	50	**85-396**
	100	**86-396**
6-Position 6-Contact, RJ-11 (RJ-12)	25	**85-345**
6-Position 4-Contact, RJ-11	25	**85-344**

CAT 6 RJ-45 Modular Plugs

- Three-piece design provides easy installation and optimal performance
- Crimps with a standard RJ-45 crimp tool
- 50 micron gold contacts, 8-position, 8-contact
- Suitable for solid or stranded conductors 23-24 AWG
- Not compatible with Crimpmaster™ RJ-45 Die Set

Description	Quantity	Part No.
CAT 6 RJ-45 Modular Plugs	25	**85-366**

Compatible with IDEAL 30-696, 30-496 and 33-396 Modular Plug Crimp Tools.

Strain Relief Boots for Modular Plugs

- Prevents broken connector tabs and snagging while extending connector life
- Minimizes cable bends that can reduce data speed and result in data loss
- Dampens cable movement and vibrations that can result in premature connector failure
- For CAT5e and CAT6 RJ-45 modular plugs

Description	Quantity	Part No.
Strain Relief Boots for Modular Plugs	25	**85-380**
15 Strain Relief Boots and 15 8P8C RJ-45 CAT5e Modular Plugs	15	**85-379**

Ringer™ Adjustable Blade Strippers

- Four models cover cable diameters up to 9/16 in.
- All models include two adjustable depth blades and one adjustable round slitting blade
- Common uses are for fiber jackets, mini-coax prep, twisted pair cables and other specialty copper cables where standard stripping products are not available
- Replacement blades available for all models

Description	Typical RG Cables	Replacement Blade*	Part No.
Cable Stripper, up to 1/8 in. (3.2mm) O.D (Gray)	RG-174, RG-187	**L-9225**	**45-162**
Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D. (Blue)	Mini Coax RG-58,CB	**L-9225**	**45-163**
Big Blue Cable Stripper, 1/4 in. (6.4mm) to 9/16 in. (14.3mm) O.D. (Blue)	RG-11, RG-8	**L-9226**	**45-164**
Cable Stripper, 3/16 in. (4.8mm) to 5/16 in. (8mm) O.D. (Black)	RG-59/6, UTP Cable	**L-9225**	**45-165**

*A set of blades consists of three straight blades and one round blade.

Economy UTP Cable Stripper

- Strips Cat 3, 5, 5e & 6 cables
- One-step stripping

Description	Part No.
Economy UTP Cable Stripper	**45-167**

PrepPRO® Coax/UTP Cable Stripper

- Auto adjusting blade depth for 6/6Quad/59 coax cable
- Strips RG-59/6 Plenum cables
- 1/4" x 1/4" coax preparation
- Replaceable blade cartridges
- CAT5e/6 jacket stripping
- Spring loaded for consistent cutting force

Description	Part No.
PrepPRO® Coax/UTP Cable Stripper	**45-605**
Replacement Coax Cartridge	**45-6051**
Replacement UTP/STP Jacket Cartridge	**45-6052**

RG-11 Coax Stripper

- For use with IDEAL RG-11 compression connectors (89-211, 89-1211), provides 1/4 in. x 1/4 in. strip
- Fixed blade depth

Description	Part No.
RG-11 Coax Stripper for Compression Connectors	**45-111**

Adjustable Blade Coax Strippers

- Two and three blade models for prepping coax cables
- Adjustable blade depth (hex wrench included in handle) for fine calibration to any cable jacket thickness and overall diameter.
- All blades are spaced approximately ¼" apart for compatibility with traditional compression or crimp connectors requiring a ¼" x ¼" cable preparation.
- Blades can be adjusted to a no-cut position for most size cables when only a single blade is needed.
- Slider bar offers fast variation in blade depth without need for adjusting the individual hex screws.

Description	Replacement Blade	Part No.
Coax Stripper - 2 Step (Blue cartridge)	**45-524**	**45-526**
Coax Stripper - 3 Step (Black cartridge)	**45-522**	**45-520**

Coax Stripmaster® Wire Strippers

- Provides variable stripping lengths
- Knife-type blades feature multiple hole diameters sized for two step removal of outer jacket insulation and center conductor

Description	Replacement Blade	Part No.
Coax Stripmaster® for RG-6 Coax Cable	**LB-740**	**45-262**
Coax Stripmaster® for RG-59 Coax Cable	**LB-743**	**45-265**
Coax Stripmaster® for RG-6 Quad Shield Coax Cable	**LA-3953**	**45-282**

Round Cable Slitting & Ringing Tool

- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 1.75 in. O.D.
- Blade adjusts for jacket thicknesses up to .125 in.
- Spare blade in handle base

Description	Replacement Blade*	Part No.
Round Cable Slitting and Ringing Tool	**LB-1748**	**45-144**

*2/package

Data T®-Cutter

- Cuts any round copper cable and helps maintain cable geometry
- Compact size is smaller and lighter than traditional 9" cable cutters
- Steel reinforced center conductors can be trimmed with bolt cutting holes
- Locking latch keeps tool closed in pouch

Description	Part No.
Data T®-Cutter	**45-074**

Electrician's Scissors

- Designed for use in telephone and electrical service applications
- Cut up to 16 AWG solid and 12 AWG stranded wire
- Serrated surface on back blade edge cleans wire
- Stripping notches strip 19 and 23 AWG wire
- Chrome over nickel plating

Description	Part No.
Electrician's Scissors w/stripping notches	**35-088**

Cable Splicing Kit

- Kit designed for use in telephone and electrical service applications
- High carbon steel blade in Splicing Knife remains sharp and cuts easily through many insulation types
- Kit includes Scissors 35-088, Splicing Knife 35-1091 and Leather Holder

Description	Part No.
Cable Splicing Kit	**35-093**
Cable Splicing Knife (only)	**35-1091**

2.4 GHz Satellite & Digital TV Splitters

- Designed for easy mounting over cable
- All ports are F female connectors, 75Ω
- Two grounding screws eliminate the need for grounding block
- All ports power pass

Description	Part No.
2-Way, 5MHz - 2.4GHz	**85-332**
3-Way, 5MHz - 2.4GHz	**85-333**
4-Way, 5MHz - 2.4GHz	**85-334**

1 GHz Cable TV/General Purpose Splitters

- Nickel-plated housing, soldered back
- High-performance Printed Circuit Board design

Description	Part No.
High Performance Cable Splitter, 5MHz-1GHz, 2-Way	**85-132**
High Performance Cable Splitter, 5MHz-1GHz, 3-Way	**85-133**
High Performance Cable Splitter, 5MHz-1GHz, 4-Way	**85-134**

Use terminators (85-073) on all unused ports for optimal performance.

Master Series Network Service Kit

- Kit allows user to cut, strip, terminate and test data cables. Use for Cat 5e, Cat 6 and voice installations.

Description		Part No.
Master Series Network Service Kit		**33-706**
Kit Includes:	**Qty.**	**Part No.**
Ratchet Telemaster™	1	**30-696**
Punchmaster™ II w/110 & 66 Blades	1	**35-485**
Probe Pic and Spudger	1	**35-473**
UTP/STP Stripper	1	**45-165**
Cable Splicing Kit	1	**35-098**
LinkMaster™ Tester	1	**62-200**
7-in-1 Twist-a-Nut™ Screwdriver	1	**35-908**
PRO Amplifier Probe & Tone Generator Kit	1	**33-864**
Kinetic Super™ Wire Stripper/Crimper	1	**45-719**
8-Position RJ-45 Modular Plugs	50	**85-396**
Large Mouth Bag, 13 in.	1	**35-410**

Pro XL Compression Hip Kit

- Cut, strip and terminate in one handy professional tool kit.
- For F/BNC/RCA compression

Description		Part No.
Pro XL Compression Hip Kit		**33-793**
Kit Includes:	**Qty.**	**Part No.**
OmniSeal™ Pro XL Compression Tool	1	**30-793**
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
Pouch with Belt Clip	1	—

RF Coax Crimp & Compression Kit

- Professional kit for security and cable/satellite installers to crimp or compress F and BNC coax connectors. Multiple die sets offer a wide range of connectors to terminate.

Description		Part No.
RF Coax Crimp & Compression Kit		**33-410**
Kit Includes:	**Qty.**	**Part No.**
OmniSeal™ PRO XL Compression Tool	1	**30-793**
Ratchet Crimp Tool	1	**30-503**
2-Step Adjustable Coax Stripper	1	**45-526**
3-Step Adjustable Coax Stripper	1	**45-520**
Replacement Cassette	1	**45-523**
Data T®-Cutter	1	**45-074**
58/59 BNC/TNC Die Set	1	**30-581**
RG-59 Cambridge-type Die Set	1	**30-573**
RG-174 Mini-59 Die Set	1	**30-576**
RG-6 RTQ™ Compression F-Connector	50	**92-650**
Mechanic's Bag	1	**35-535**

LinearX®3 Hip Kit

- Cut, strip and terminate F/BNC/RCA connectors in one handy starter tool kit.

Description		Part No.
LinearX®3 Hip Kit		**33-622**
Kit Includes:	**Qty.**	**Part No.**
LinearX®3 Compression Tool	1	**33-632**
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
Pouch with Belt Clip	1	—

Pro Compression Starter Kit

- Service kit includes both F and BNC connectors as well as professional tools to cut, strip and terminate coax cables. Designed for security and cable/satellite installation.

Description		Part No.
Service Compression Kit		**33-639**
Kit Includes:	**Qty.**	**Part No.**
OmniSeal™ PRO XL Compression Tool	1	**30-793**
PrepPRO® Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
RTQ™ XR RG-6 F Compression Connectors	25	**92-650**
RG-59 InSITE™ BNC Compression Connectors	10	**89-047**
RG-6 InSITE™ BNC Compression Connectors	5	**89-048**
RG-59 Plenum InSITE™ BNC Compression Connectors	5	**89-049**
RG-6 90° F Compression Connectors	3	**92-691**
RG-59 90° BNC Compression Connectors	3	**92-693**
3GHz F-81 Splice Adapters	3	**85-340**
BNC Adapters	3	**85-592**

Economy Compression Kit

- Starter kit includes the tools and connectors to cut, strip and terminate coax cables.
- For use with F Connectors

Description		Part No.
Economy Compression Kit		**33-620**
Kit Includes:	**Qty.**	**Part No.**
LinearX®3 Compression Tool	1	**33-632**
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
RG-59 RTQ™ Compression Connectors	10	**92-610**
RG-6 RTQ™ XR™ Compression Connectors	30	**92-650**

Technician's Service Kit

- Kit includes tools to install twisted pair cable on blocks and data jacks.

Description		Part No.
Technician's Service Kit		**33-505**
Kit Includes:	**Qty.**	**Part No.**
Electrician's Scissors w/Stripping Notches	1	**35-088**
Probe Pic & Spudger	1	**35-473**
Punchmaster™ Punchdown Tool w/110 & 66 Blades	1	**35-485**
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	1	**35-908**
UTP/STP Stripper	1	**45-165**
Nylon case	1	**62-205**

RJ-45/11 Four, Six & Eight-Position Combination TelCom Termination Kit

- TelCom Kit is designed for the user who will terminate RJ-11 and RJ-45 twisted pair cables.

Description		Part No.
TelCom Termination Kit		**33-704**
Description	**Qty.**	**Part No.**
Telemaster™ for RJ-11/RJ-45 Plugs	1	**30-496**
6P4C RJ-11 Modular Plugs	15	**85-344**
6P6C RJ-11 Modular Plugs	15	**85-345**
8P8C RJ-45 CAT 5e Modular Plugs	15	**85-346**

RJ-45 Termination Kit

- Suited for the user who will cut and terminate RJ-45 Modular Plugs.

Description		Part No.
RJ-45 Termination Kit		**33-750**
Description	**Qty.**	**Part No.**
Telemaster™ for RJ-11/RJ-45 Plugs	1	**30-496**
UTP/Coax Stripper	1	**45-165**
8-Position RJ-45 CAT5e Modular Plugs	50	**85-346**

Telemaster™ Crimp Kit

Description		Part No.
Telemaster™ Crimp Kit		**33-700**
Description	**Qty.**	**Part No.**
Telemaster™ for RJ-11 (1, 2, 3 pair) and RJ-45 Plugs	1	**30-496**
CAT 5e 8-Position, 8-Contact RJ-45 Modular Plugs	10	**85-346**
6-Position RJ-11 Modular Plugs	10	**85-345**
6-Position, 4-Contact RJ-11 Modular Plugs	10	**85-344**

PRO Network/Telco Installer Kit

- Kit allows user to terminate modular plugs as well as data blocks or jacks.

Description	Part No.
PRO Network/Telco Installer Kit	**33-506**

Description	Qty.	Part No.
Ratchet Telemaster™	1	**30-696**
Punchmaster™ II 110 & 66 Blades	1	**35-485**
Probe Pic and Spudger	1	**35-473**
UTP/STP Stripper	1	**45-165**
Electrician's Scissors w/Stripper Notches	1	**35-088**
8-Position RJ-45 Modular Plugs	50	**85-396**
Mechanic's Bag	1	**35-535**

Visual Fault Finder

Laser light source used to locate breaks, faulty splices and crimps

- 2.5mm Universal Adapter for all ST®, SC and FC connectors
- Useful over a distance of 5km (3 miles)
- Two AA batteries (included) provide over 30 hours of continuous use
- Slim, pocket-sized tool in rugged solid aluminum body
- Nylon carrying case with belt loop included

Description	Part No.
Visual Fault Finder	**VFF5**

Note: ST® is a registered trademark of AT&T.

FiberMASTER™ Fiber Optic Test Kit

- **Fiber Optic Power Meter & Light Source** – Four wavelength power meter for multimode and single mode testing, and 850nm multimode LED light source.
- **Calibration Function** – Stores reference power level for quick dB loss measurements eliminating the need to manually calculate loss.
- **Save Time and Money** – Power meter features 2.5mm universal and FC adapters, light source includes ST®, SC and FC adapters to test the most common interfaces.
- **Ready for FTTx** – 1490nm measurement wavelength for use with nearly all single mode Fiber-To-The-Home applications.
- **Designed for the Field** – Unique "docking" light source and easy three-button operation make this the perfect fiber tester for use in the field.

Description	Part No.
Power meter with 850NM fiber light source	**33-928**
Power meter with four wavelength MM/SM light source	**33-931**

Note: ST® is a registered trademark of AT&T.

MiniLite-Strip™ Optical Fiber Stripper

- Small strip notch engineered and precision-ground to strip 900 micron or 250 micron buffer coatings from 125 micron fiber
- Larger round strip notch machined to remove the 3mm outer jacket
- Strip notches pre-set and locked, no field adjustment necessary

Description	Part No.
MiniLite-Strip™ Optical Fiber Stripper	**45-352**

Stripmaster® Ribbon Fiber Jacket Stripper

- Removes jacket from Ribbon Fiber without damage to the Kevlar® strength member of the Ribbon Fiber

Description	Part No.
Stripmaster® Wire Stripper Frame only	**L-5620**
Blade-set for use with Corning® Plenum and Riser Ribbon Fiber Cable	**LB-1152**
Blade-set for use with Corning® "Fanout" Ribbon Cable	**LB-1153**

Note: Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company. Corning® is a registered trademark of Corning, Inc.

Frame and blade set sold separately.

Serrated Kevlar® Cutter

- Superior quality high-carbon stainless steel with molybdenum and vanadium provides hard, razor-sharp edges
- Breaker notch cuts jacket and breaks fiberglass in one step
- Textured cushioned-grip handles
- Designed to cut up to 3mm fiber cables

Description	Part No.
Serrated Cutter w/Breaker Notch (Patent pending)	**45-344**

Note: Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company.

DualScribe™ Double-Ended Fiber Optic Scribes

- Three professional quality blade styles to choose from to meet your specific needs – Ruby, Sapphire, Carbide
- 30° single bevel – DualScribe™ reversible blade doubles tool life
- Soft non-slip grip provides precise control during scribing
- Clear safety cap protects the blades from damage when not in use

Description	Part No.
Ruby Blade Fiber Optic Scribe (Red Handle)	**45-357**
Sapphire Blade Fiber Optic Scribe (Blue Handle)	**45-358**
Carbide Blade Fiber Optic Scribe (Black Handle)	**45-359**

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Merchandising

MAXIMIZE YOUR SALES BY MAKING KEY PRODUCTS STAND OUT.

Your store's shelf is a battleground for the electrician's dollar. If it's advertising that gets customers into the store, it's merchandising that gets them to select the right products for the job once they are there. At IDEAL Electrical, we are dedicated to building in-store merchandising to maximize your sales by making key products stand out, educating the tradesman on the right tools for the job and giving them one stop shop options to get everything they need and get back on the job site.

IDEAL Electrical merchandising solutions include our most basic racks and signage to our compelling and powerful Profit Center solutions. As the market leader in many of the categories we serve, you can count on IDEAL Electrical to be your category partner to drive profitable growth and deliver a shopping experience that is meaningful to the electrician.

Ask your IDEAL Sales Rep about our Merchandising Seminars!

Counter Displays

Perfect for showing off impulse items or specialty SKUs. Available to help maximize your point-of-purchase sales.

Floor Displays

Maximize your floor space with an attractive design. IDEAL floor displays make it easy for your customers to browse for specific products.

Rolling Displays

Arrange your displays and move them anywhere on your showroom floor with ease.

Wall Displays

Gondolas, specialty displays, signage and accessories provide a clutter-free organized area in your store.

IDEAL INDUSTRIES, INC.
1375 PARK AVENUE, SYCAMORE, IL 60178, USA
815-895-5181 • 800-435-0705 IN USA

INTERNATIONAL OFFICES:
AUSTRALIA / BRAZIL / CANADA / CHINA / FRANCE / GERMANY / INDIA / MEXICO / PUERTO RICO / UK

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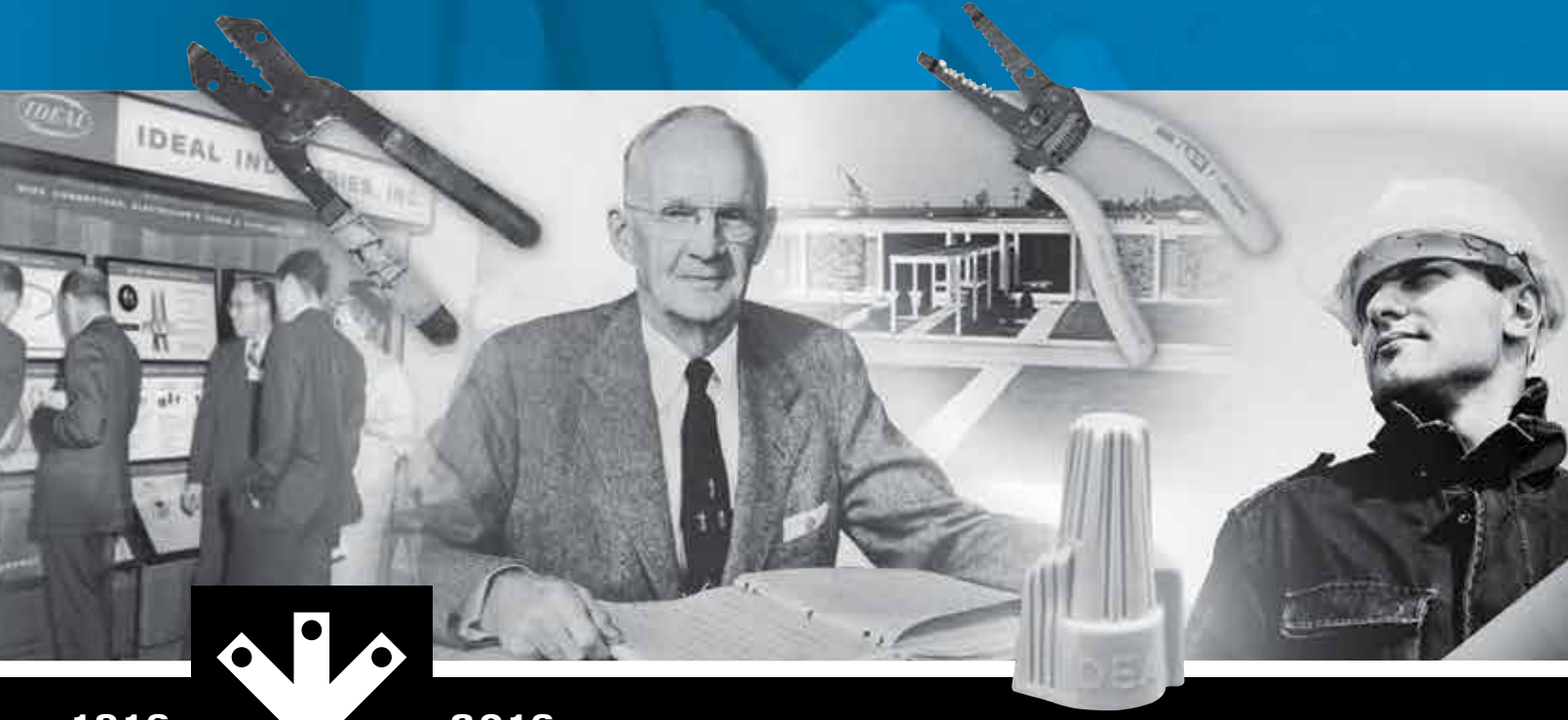
WWW.IDEALIND.COM

IDEAL INDUSTRIES, INC.

P-070 2/16

IDEAL®

ELECTRICAL PRODUCTS



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CELEBRATING
THE **IDEAL** CENTURY

FULL-LINE CATALOG

An American Original.

AT HOME IN THE HEART OF AMERICA.

Entrepreneurial in spirit, grounded in the values of American ingenuity, IDEAL was founded on the basis that every product we make will exceed the value of the price paid for it. When it comes to creating value, IDEAL is an American original. Today, we exemplify those values in our vision, our mission and the future of our business. We are investing in the success and revitalization of American innovation and we are committed to manufacturing American Value In Every Tool We Make.

IDEAL IS WITH YOU EVERY STEP OF THE WAY.

We believe in innovative ideas for hardworking professionals — skilled tradesmen like electricians, contractors, mechanics, data communications pros and systems builders. These unsung problem solvers demand smart, tough, high-performance products that work right the first time. They also demand the innovations that keep them a step ahead of the challenges that drive the industries in which they work.

We innovate by listening. While most companies tell customers "Here's what we've got," we're constantly asking, "What do you need?"

Wire Connectors

IDEAL is the leader in wire connectors. For wire termination, IDEAL is the industry standard.

Wire Pulling Lubricants

The environmentally safe lubes from IDEAL provide exceptional lubricity for rapid pulls.

Fish Tapes

IDEAL manufactures a variety of fish tapes for all applications, and our durable impact-resistant cases are the best in the market.

Conduit Benders

IDEAL benders are constructed of exceptionally durable materials and reinforced at stress points for long life.

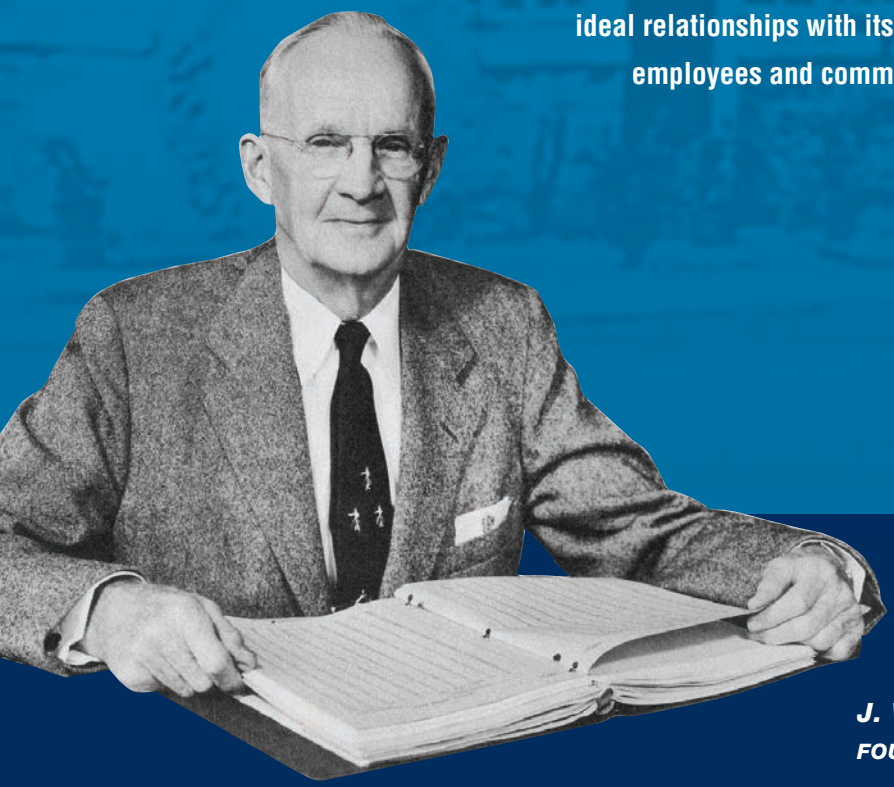
Wire Strippers

Ergonomically designed in a variety of models for every application, IDEAL manufactures the finest wire strippers on the market.

CELEBRATING
THE **IDEAL** CENTURY

Celebrating 100 years of Success with YOU!

We at IDEAL would like to thank all of our channel partners and customers for helping us to achieve this milestone! Since the beginning, this family-run enterprise has been committed to building ideal relationships with its customers, employees and communities.



J. WALTER BECKER
FOUNDER

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Wire Termination

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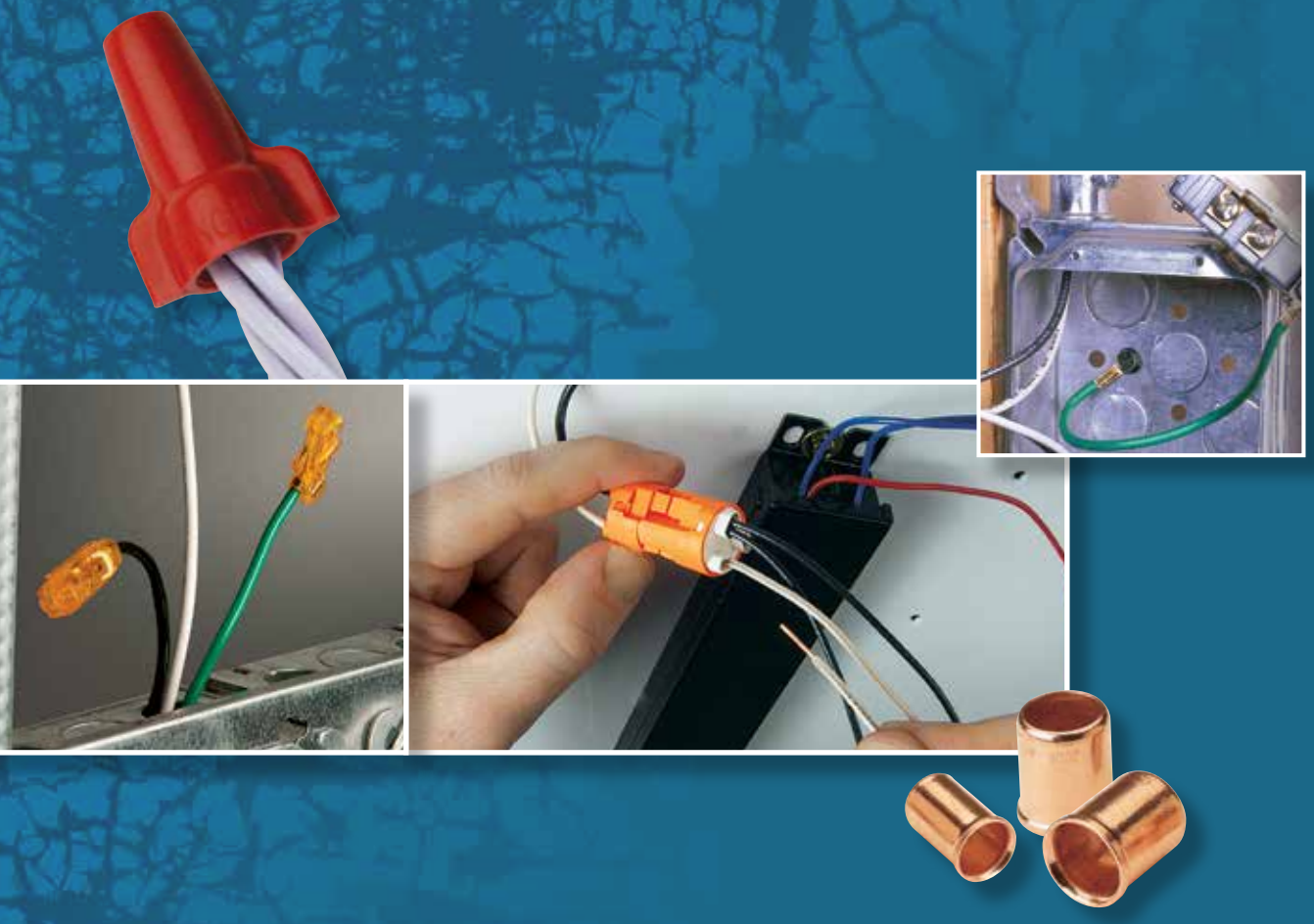
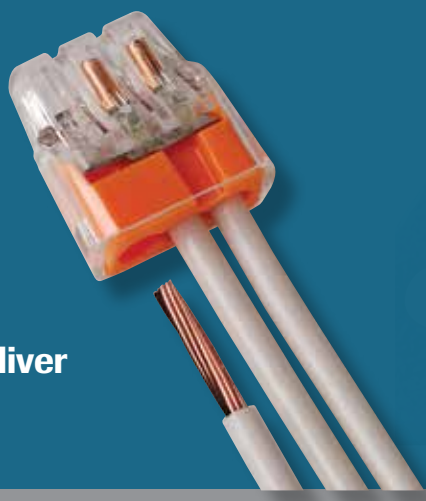




Ingenuity & Performance

From the introduction of our first twist-on wire connector in 1928, IDEAL has been the leading force in wire termination technology. Through ingenuity, proven performance and innovative engineering, IDEAL continues to lead the electrical industry with products that deliver more than the price paid.

Twist-On Wire Connectors... a design for every application.

Wire-Nut® Wire Connectors
This American classic is the original connector that started it all. The Wire-Nut® Wire Connector has five color-coded models that cover a full range of applications from 20 to 6 AWG. The ribbed shell provides a positive grip and the fixed, square-wire spring provides a secure connection.

Wing-Nut® Wire Connectors
For extra leverage and superior torque, the Wing-Nut® Wire Connector provides an easy, secure grip when connecting a wide range of wires. The specially designed contoured wings make for extra torque and quick work on any electrical job. Three models cover from 18 to 6 AWG and include, the Red 452® Wing-Nut® with the widest range of any wing-styled connector in the industry.

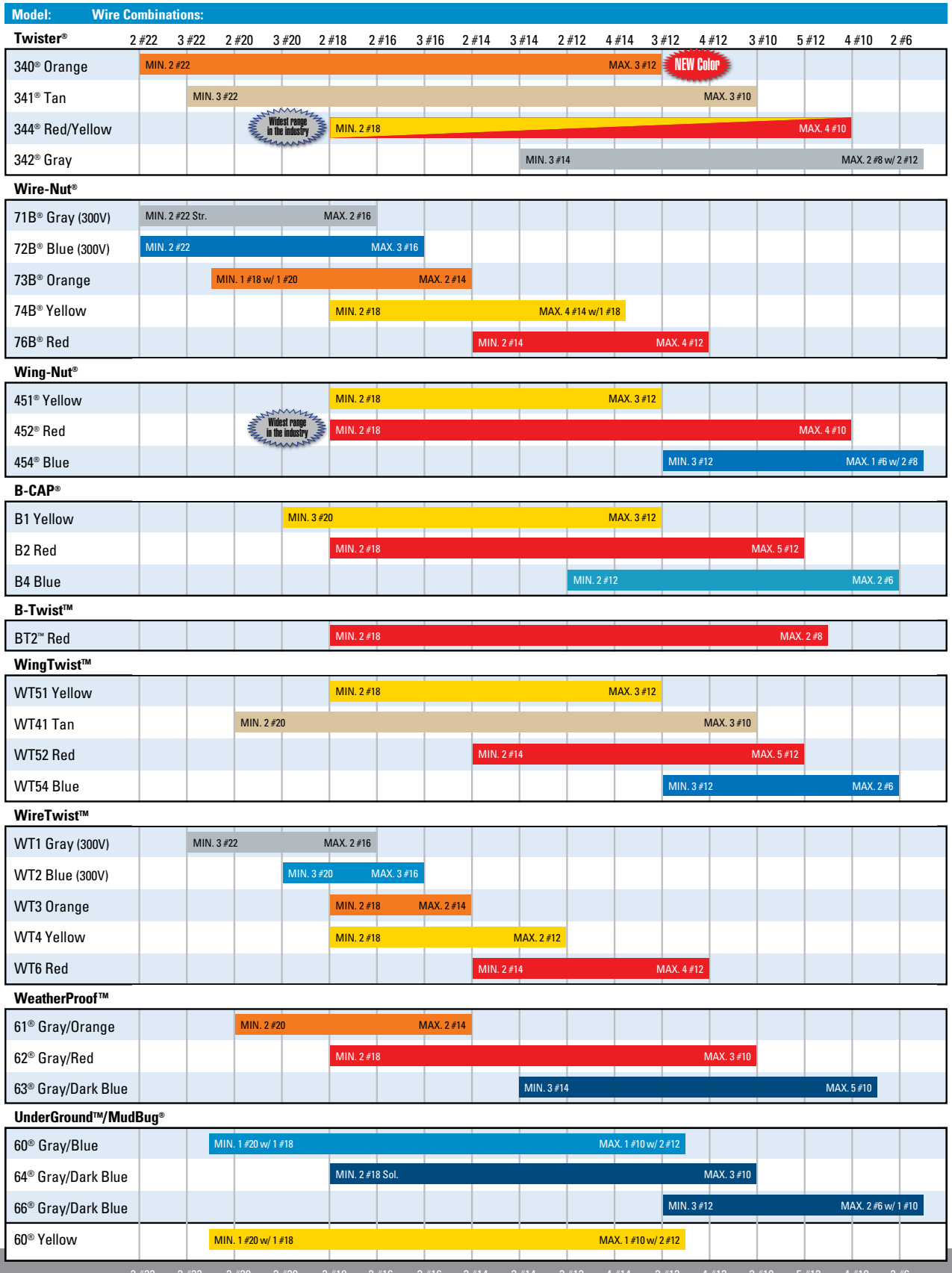
Twister® Wire Connectors
The industry's choice for comfort. With three models, the Twister® Wire Connector easily handles the most common wiring configurations for residential construction projects from 22 to 6 AWG. A patented, expanding square-wire spring helps to ensure a quick, secure connection.

B-CAP® Wire Connectors
The B-CAP® Wire Connector gets you into those hard-to-reach spots comfortably, especially when you're retrofitting or updating. The contoured classic fin design provides a secure grip for extra torque, while the expanding interior spring accepts a wide range of wire sizes and combinations. Three models cover from 22 through 6 AWG.

B-Twist™ Wire Connectors
The All-in-One connector that gets the job done. The B-Twist™ Wire Connector combines all the features of red and yellow wire connectors in one outstanding design. The rounded "dial-top" provides fast, fingertip starts that come to torque quickly and the low-profile design fits easily into electrical boxes. With a super-wide range, the B-Twist™ provides top performance at a great value.

WeatherProof™ / UnderGround™ Wire Connectors
Twist-on connectors for underground and wet location installations. Six models cover a wide range of wire sizes from 22 through 6 AWG. The WeatherProof™ and UnderGround™ Wire Connector line features a 100% non-hardening silicone sealant to provide safe, moisture-free electrical connections. UL Listed and CSA Certified for damp/wet and direct burial applications.

Twister® Al/Cu Wire Connectors
The only twist-on connector for aluminum-to-copper connections. The specially formulated anti-oxidant compound prevents oxidation on aluminum conductors for improved conductivity and cooler connections. UL Listed and CSA Certified for aluminum-to-copper connections.


Model:
Wire Combinations:
2 #22
3 #22
2 #20
3 #20
2 #18
2 #16
3 #16
2 #14
3 #14
2 #12
4 #14
3 #12
4 #12
3 #10
5 #12
4 #10
2 #6
Twister®
340® Orange
MIN. 2 #22
MAX. 3 #12
NEW Color
341® Tan
MIN. 3 #22
MAX. 3 #10
344® Red/Yellow
Widest range in the industry
MIN. 2 #18
MAX. 4 #10
342® Gray
MIN. 3 #14
MAX. 2 #8 w/ 2 #12
Wire-Nut®
71B® Gray (300V)
MIN. 2 #22 Str.
MAX. 2 #16
72B® Blue (300V)
MIN. 2 #22
MAX. 3 #16
73B® Orange
MIN. 1 #18 w/ 1 #20
MAX. 2 #14
74B® Yellow
MIN. 2 #18
MAX. 4 #14 w/1 #18
76B® Red
MIN. 2 #14
MAX. 4 #12
Wing-Nut®
451® Yellow
MIN. 2 #18
MAX. 3 #12
452® Red
Widest range in the industry
MIN. 2 #18
MAX. 4 #10
454® Blue
MIN. 3 #12
MAX. 1 #6 w/ 2 #8
B-CAP®
B1 Yellow
MIN. 3 #20
MAX. 3 #12
B2 Red
MIN. 2 #18
MAX. 5 #12
B4 Blue
MIN. 2 #12
MAX. 2 #6
B-Twist™
BT2™ Red
MIN. 2 #18
MAX. 2 #8
WingTwist™
WT51 Yellow
MIN. 2 #18
MAX. 3 #12
WT41 Tan
MIN. 2 #20
MAX. 3 #10
WT52 Red
MIN. 2 #14
MAX. 5 #12
WT54 Blue
MIN. 3 #12
MAX. 2 #6
WireTwist™
WT1 Gray (300V)
MIN. 3 #22
MAX. 2 #16
WT2 Blue (300V)
MIN. 3 #20
MAX. 3 #16
WT3 Orange
MIN. 2 #18
MAX. 2 #14
WT4 Yellow
MIN. 2 #18
MAX. 2 #12
WT6 Red
MIN. 2 #14
MAX. 4 #12
WeatherProof™
61® Gray/Orange
MIN. 2 #20
MAX. 2 #14
62® Gray/Red
MIN. 2 #18
MAX. 3 #10
63® Gray/Dark Blue
MIN. 3 #14
MAX. 5 #10
UnderGround™/MudBug®
60® Gray/Blue
MIN. 1 #20 w/ 1 #18
MAX. 1 #10 w/ 2 #12
64® Gray/Dark Blue
MIN. 2 #18 Sol.
MAX. 3 #10
66® Gray/Dark Blue
MIN. 3 #12
MAX. 2 #6 w/ 1 #10
60® Yellow
MIN. 1 #20 w/ 1 #18
MAX. 1 #10 w/ 2 #12
2 #22
3 #22
2 #20
3 #20
2 #18
2 #16
3 #16
2 #14
3 #14
2 #12
4 #14
3 #12
4 #12
3 #10
5 #12
4 #10
2 #6

Model	RESIDENTIAL: Light Switches	Receptacles	Ceiling Fans	Can Lights	Thermostat Controls	HVAC	Smoke/CO Detectors	Garage Door Openers	Door Bells	COMMERCIAL: Multi-Gang Switch Boxes	Security Systems	Intercoms	Recessed Lighting Controls	Illuminated Signage	Receptacles	3-Phase Motors	HVAC
Twister®																	
340® Orange	●		●	●			●		●		●	●	●				
341® Tan	●	●				●	●	●			●		●	●			●
344® Red/Yellow	●	●				●		●		●	●			●	●	●	●	●
342® Gray										●				●	●		●	●
Wire-Nut®																		
71B® Gray					●						●	●						
72B® Blue					●	●			●		●	●						
73B® Orange			●	●			●		●		●	●	●					
74B® Yellow	●		●	●			●						●	●				
76B® Red	●	●				●		●		●				●	●	●	●	●
Wing-Nut®																		
451® Yellow	●	●	●	●			●		●				●					
452® Red	●	●				●		●		●				●	●	●	●	●
454® Blue										●				●	●		●	●
B-CAP®																		
B1 Yellow	●		●	●			●		●		●	●	●					
B2 Red	●	●				●		●		●				●	●	●	●	●
B4 Blue										●				●	●		●	●
B-Twist™																		
BT2™ Red	●	●				●		●		●				●	●	●	●	●
WingTwist™																		
WT51 Yellow	●		●	●			●		●		●	●	●					
WT41 Tan	●	●				●	●	●			●		●	●				●
WT52 Red	●	●				●		●		●				●	●	●	●	●
WT54 Blue										●				●	●		●	●
WireTwist™																		
WT1 Gray					●						●	●						
WT2 Blue					●	●			●		●	●						
WT3 Orange			●	●			●		●		●	●	●					
WT4 Yellow	●		●	●			●		●				●	●				
WT6 Red	●	●				●		●		●				●	●	●	●	●

	RESIDENTIAL: Landscape Lighting	Pool Filters/Controls	Outdoor Power Outlets	Patio/Deck Lighting	Bathroom/Spa Vent Fans	Security Systems	Basement/Garage	Lawn-Sprinkler Controls	Sump/Well Pumps	COMMERCIAL: Landscape Lighting	Security Systems	Exterior Lighting	Street/Parking Lot Lighting	Car Washes	Processing Plants	Traffic Signals	Ejection Pumps	HVAC
WeatherProof™																		
61® Gray/Orange					●	●		●			●			●	●	●		●
62® Gray/Red		●	●	●			●		●			●		●	●			●
63® Gray/Dk. Blue		●	●	●			●		●			●	●	●	●			
UnderGround™																		
60® Gray/Blue	●			●	●			●	●	●	●		●			●	●	
64® Gray/Dk. Blue	●				●				●	●			●			●	●	
66® Gray/Dk. Blue													●			●		

Wire-Nut® Wire Connectors

CLASSIC from the IDEAL family of Performance & Reliability

- Fixed square spring for a secure hold
- Refined range to handle all common applications
- Positive grip shell that is perfect to twist-on with fingers
- Excellent for fine stranded wire applications

UL LISTED Wire Connector 774A Cu/Cu Only CSA CE

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
71B® (Suitable for use in Air Handling Spaces)	Gray	300V 22 to 16 AWG Min. 2 #22 – Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Box of 100	**30-071**
				Keg of 25,000	**30-271**
72B®	Blue	300V 22 to 14 AWG Min. 2 #22 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Box of 100	**30-072**
				Keg of 10,000	**30-272**
				Barrel of 85,000	**30-872**
73B®	Orange	600V* 22 to 14 AWG Min. 1 #18 & 1 #20 Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Box of 100	**30-073**
				Jar of 300	**30-073J**
				Bag of 500	**30-273**
				Keg of 10,000	**30-673**
				Barrel of 50,000	**30-873**
74B®	Yellow	600V* 18 to 12 AWG Min. 2 #18 Max. 4 #14 & 1 #18	600V* ,75mm² to 4,0mm² Min. 2-,75mm² Max. 4-2,5mm² w/1-,75mm²	Box of 100	**30-074**
				Jar of 175	**30-074J**
				Bag of 500	**30-274**
				Keg of 5,000	**30-674**
76B®	Red	600V* 18 to 6 AWG Min. 2 #14 Max. 4 #12	600V* ,75mm² to 16,0mm² Min. 2-2,5mm² Max. 2-4,0mm²	Box of 100	**30-076**
				Jar of 150	**30-076J**
				Bag of 250	**30-276**

*1,000V maximum in fixtures and signs

High-Temp Wire-Nut® Wire Connectors

All of the same features as the Wire-Nut® Wire Connector, plus:

- Black, thermoplastic shell designed to withstand extreme heat build-up found in high-wattage light fixtures and signs
- UL Listed to 150°C (302°F)

UL LISTED Wire Connector 774A Cu/Cu Only CSA

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
71B® (Suitable for use in Air Handling Spaces)	Black	300V 22 to 16 AWG Min. 2 #22 Str – Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² – Max. 2-1,5mm²	Box of 100	**30-3627**
				Keg of 25,000	**30-251**
72B®	Black	300V 22 to 14 AWG Min. 2 #22 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² – Max. 3-1,5mm²	Box of 100	**30-3628**
				Keg of 10,000	**30-252**
73B®	Black	600V* 22 to 14 AWG Min. 1 #18 w/1 #20 Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Box of 100	**30-3629**
				Keg of 10,000	**30-253**
				Barrel of 50,000	**30-803**
59B™	Black	600V* 22 to 12 AWG Min. 2 #20 – Max. 3 #14	600V* ,34mm² to 4,0mm² Min. 2-,5mm² – Max. 3-2,5mm²	Box of 100	**30-059**
				Keg of 5,000	**30-259**

*1,000V maximum in fixtures and signs

Wing-Nut® Wire Connectors

POWER from the IDEAL family of Performance & Reliability

- Contoured wing profile provides extra leverage for superior torque
- Expanding, live-action spring expands to accommodate a wide range of wire sizes and combinations
- Co-polymer shell expands for smooth, progressive tightening providing dependable connections
- Removable for repeat usage on same size or larger combinations
- Tough, UL94V-2 flame retardant shell rated at 105°C (221°F)

UL Wire Connector 774A LISTED Cu/Cu Only CSA CE

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
451®	Yellow	600V* 18 to 10 AWG Min. 2 #18 – Max. 3 #12	600V* ,75mm² to 6,0mm² Min. 2-,75mm² – Max. 3-4,0mm²	Box of 100	**30-451**
				Jar of 225	**30-451J**
				Jar of 500	**30-651J**
				Bag of 500	**30-651**
				Barrel of 35,000	**30-851**
452®	Red	600V* 18 to 8 AWG **Min. 2 #18 – Max. 4 #10** **(Widest range in the Industry!)**	600V* ,75mm² to 10,0mm² Min. 2-,75mm² – Max. 4-6,0mm²	Box of 100	**30-452**
				Jar of 300	**30-452J**
				Jar of 500	**30-652J**
				Bag of 500	**30-652**
				Barrel of 25,000	**30-852**
454®	Blue	600V* 14 to 6 AWG Min. 3 #12 – Max. 1 #6 w/2 #8	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² – Max. 2-16,0mm² w/1-4,0mm²	Box of 25	**30-454**
				Bag of 100	**30-654**

*1,000V maximum in fixtures and signs

Greenie® Grounding Wire Connectors

- Designed for making ground connections and bonding non-metallic sheathed cable
- Contoured wings for superior leverage
- Live-action, square-wire spring provides quality grounding connections
- Tough, UL 94V-2 flame-retardant shell

UL Ground Connector 951L LISTED Cu/Cu Only CSA

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
92®	Green	14 to 10 AWG Min. 2 #14 – Max. 4 #12	2,5mm² to 6,0mm² Min. 2-2,5mm² Max. 2-4,0mm² w/1-2,5mm²	Box of 100	**30-092**
				Jar of 150	**30-092J**
				Bag of 500	**30-292**

Greenie® Grounding Connector fully meets the intent of the NEC and specifically aids in compliance with the following:

ARTICLE 250: GROUNDING

250-146 Connecting Receptacle Grounding Terminal to Box

250-148 Continuity and Attachment of Equipment Grounding Conductors to Boxes
(B) Grounding continuity
(D) Nonmetallic boxes

See Page A-19 for more IDEAL Grounding Products.

Preferred Choice for Residential Jobs

COMFORT from the IDEAL family of Performance & Reliability

Twister® Wire Connectors

NEW COLOR, SAME WIDE WIRE RANGE

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA · CE

- Swept wings for more comfort, extra leverage, and less effort on large combinations
- Expanding, live-action spring supports a wide range of common wiring configurations
- Polypropylene shell expands for smooth, progressive tightening providing dependable connections
- Hexagonal shape accommodates standard nutdriver for easy installation
- Quick take-up on even the toughest combinations, including solid-to-stranded

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
340™	Orange	600V* 22 to 10 AWG Min. 2 #22 – Max. 3 #12	600V* ,34mm² to 4,0mm² Min. 2-,34mm² – Max. 3-4,0mm²	Box of 100	**30-340**
				Jar of 500	**30-640J**
341®	Tan	600V* 22 to 8 AWG Min. 3 #22 – Max. 3 #10	600V* ,34mm₂ to 10,0mm² Min. 3-,34mm² – Max. 3-6,0mm²	Box of 100	**30-341**
				Jar of 400	**30-441J**
				Bag of 500	**30-641**
				Jar of 750	**30-341J**
				Barrel of 25,000	**30-841**
342®	Gray	600V* 18 to 6 AWG Min. 3 #14 – Max. 2 #8 w/2 #12	600V* ,75mm² to 10,0mm² Min. 3-2,5mm² – Max. 2-10,0mm² w/2-4,0mm²	Box of 50	**30-342**
				Bag of 250	**30-642**
				Barrel of 15,000	**30-842**

*1,000V maximum in fixtures and signs

Twister® Pro Wire Connectors

Twister PRO

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA

COMFORT from the IDEAL family of Performance & Reliability

- SureGrip™ overmolding provides improved leverage, more torque, and faster connections
- Comfortable swept wings ease hand fatigue
- Expanding square-wire spring provides a secure connection every time
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
344®	Red/Yellow	MAX. 4-10s 600V* 22 to 8 AWG **Min. 2 #18 – Max. 4 #10** **(Widest range in the Industry!)**	600V* ,34mm² to 10,0mm² Min. 2-,75mm² Max. 4,0-6,0mm²	Box of 50	**30-144**
				Jar of 250	**30-244J**
				Jar of 500	**30-644J**
				Barrel of 20,000	**30-944**

*1,000V maximum in fixtures and signs

COMBO PACKS AVAILABLE

WeatherProof™ Wire Connectors

- 100% Silicone-based sealant protects against moisture and corrosion
- UL Listed to 486D for use in damp/wet locations or above-grade applications
- Easy to apply, pre-filled twist-on wire connectors
- Swept wing design is built for comfort and efficiency
- Eliminates the need for heat-shrink or excessive taping
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

LISTED Sealed Wire Connector System 5N35 Cu/Cu Only

UnderGround™ Wire Connectors

- 100% Silicone-based sealant protects against moisture and corrosion
- UL Listed to 486D for use in damp/wet locations or direct burial/below-grade applications
- Easy to apply, pre-filled twist-on wire connectors
- Expanding, live-action square-wire spring for fast, secure and long-lasting connections
- Deep skirt provides superior moisture resistance to protect connections
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

LISTED Sealed Wire Connector System 5N35 Cu/Cu Only

WeatherProof™ Wire Connectors

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
61®	Gray/Orange	600V* 22 to 14 AWG Min. 2 #20 – Max. 2 #14	600V* ,34mm² to 4,0mm² Min. 2-,5mm² – Max. 2-2,5mm²	Card of 25	**30-1161**
				Jar of 150	**30-1261J**
				Carton of 1,000	**30-1361**
62®	Gray/Red	600V* 18 to 8 AWG Min. 2 #16 – Max. 2 #10	600V* ,75mm² to 10,0mm² Min. 2-1,5mm² – Max. 2-6,0mm²	Card of 20	**30-1162**
				Jar of 100	**30-1262J**
				Carton of 1,000	**30-1362**
63®	Gray/Dk. Blue	600V* 16 to 6 AWG Min. 3 #14 – Max. 5 #10	600V* 1,5mm² to 16,0mm² Min. 3-2,5mm² – Max. 5-6,0mm²	Card of 15	**30-1163**
				Jar of 50	**30-1263J**
				Carton of 1,000	**30-1363**

UnderGround™ Wire Connectors

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
60®	Gray/Gray	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 Max. 1 #10 w/2 #12	600V* ,5mm² to 6,0mm² Min. 1-,5mm² w/1,75mm² Max. 1-6,0mm² w/2-4,0mm²	Card of 25	**30-1160**
				Box of 100	**30-1260**
64®	Gray/Dk. Blue	600V* 18 to 8 AWG Min. 2 #18 Sol. – Max. 3 #10	600V* ,75mm² to 10,0mm² Min. 2-,75mm² Sol. - Max. 3-6,0mm²	Box of 50	**30-1264**
66™	Gray/Dk. Blue	600V* 14 to 6 AWG Min. 3 #12 – Max. 2 #6 w/1 #10	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² Sol. – Max. 2-16,0mm² w/1-6,0mm²	Box of 50	**30-1066**

Combination Packages

Model	Color	Quantity	Part No.
61®/62®	Gray/Orange • Gray/Red WeatherProof™ Wire Connectors	Card of 10 (5 ea.)	**30-6162**
60®/64®	Gray/Blue • Gray/Dk. Blue UnderGround™ Wire Connectors	Card of 10 (5 ea.)	**30-6064**

*1,000V maximum in fixtures and signs **WARNING: One time use only. Do not reuse connector.**

MudBug® Utility Wire Connectors

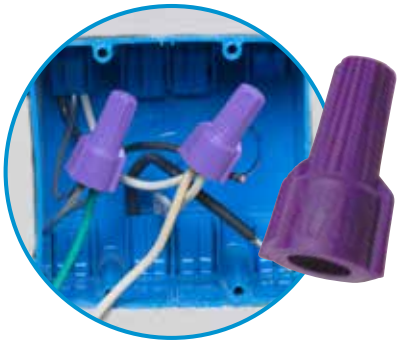
- Connects underground gas tracer lines providing superior protection
- Moisture and corrosion resistant, pre-filled with non-hardening, 100% silicone
- UL Listed to direct burial test standard 486D up to 600V maximum voltage

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
60®	Yellow	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 – Max. 1 #10 w/2 #12	600V* ,5mm² to 6,0mm² Min. 1-,5mm² w/1,75mm² – Max. 1-6,0mm² w/2 - 4,0mm²	Box of 1,000	**30-360Y**

*1,000V maximum in fixtures and signs

UL LISTED Sealed Wire Connector System 5N35 Cu/Cu Only CSA®

Twister® Al/Cu Wire Connectors



- Only aluminum-to-copper twist-on connector specifically designed to provide a secure connection while preventing aluminum corrosion
- Pre-filled antioxidant compound prevents oxidation of aluminum conductors
- Patent swept wings and hexagonal head for easy installation by hand or with standard nutdriver
- Live-action, square-wire spring expands and contracts with aluminum wire
- Entry-cap retains corrosion-resistant compound
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Complies with N.E.C. Section #110-14(b) for aluminum-to-copper connections; UL Listed to 486C and CSA Certified to C22.2 #188

WARNING:
1. **One time use only. Do not reuse connector.**
2. **Do not use on aluminum to aluminum wire combinations.**
3. **Wiring must comply with all applicable electrical codes.**

Model	Color	Wire Combination Ranges		Quantity	Part No.
65	Purple	1 #10 Al solid w/1 or 2 #10 Cu solid 1 #10 Al w/1 or 2 #12 Cu 2 #10 Al solid w/1 #12 Cu 1 #10 Al w/1 or 2 #14 Cu 2 #10 Al solid w/1 #14 Cu 2 #12 Al solid w/1 #10 Cu 1 #12 Al solid w/1 or 2 #10 Cu 1 #12 Al stranded w/1 or 2 #10 Cu solid 1 #12 Al w/1 or 2 #12 Cu 2 #12 Al solid w/1 #12 Cu	1 #12 Al w/1 or 2 #14 Cu 2 #12 Al solid w/1 #14 Cu 1 #10 Al w/1 or 2 #18 Cu 2 #10 Al solid w/1 #18 Cu 1 #12 Al w/1 or 2 #16 Cu 2 #12 Al solid w/1 #16 Cu 1 #10 Al w/1 or 2 #16 Cu 2 #10 Al solid w/1 #16 Cu 1 #12 Al w/1 or 2 #18 Cu 2 #12 Al solid w/1 #18 Cu	Card of 2	**30-065**
				Card of 10	**30-765**
				Card of 25	**30-165**
				Box of 100	**30-265**
				Carton of 1,000	**30-365**

600V maximum building wire; 1,000V signs or light fixtures

UL LISTED Wire Connector 774A — Wire Connector also listed as grounding equipment CSA®

FOR A COMPLETE LISTING OF UL APPROVED WIRE COMBINATIONS, VISIT US AT WWW.IDEALIND.COM

B-CAP® Wire Connectors

COMPACT from the IDEAL family of Performance & Reliability

- Low profile design gets into tight spaces and hard-to-reach spots comfortably
- Slim, classic fins offer a secure grip for extra leverage and easy installation
- Live-action spring expands to accept wire shape and size with no pre-twisting
- Unique, space-saving profile is perfect for “old work” or shallow boxes
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Green-B® designed for making ground connections and bonding non-metallic sheathed cable

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA LR9706 · CE

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
B1	Yellow	600V* 22 to 10 AWG Min. 3 #20 – Max. 3 #12	600V* ,34mm² to 6,0mm² Min. 3-,5mm² – Max. 3-4,0mm²	Box of 100	**B1-1**
				Jar of 250	**B1-250JR**
				Jar of 500	**B1-500JR**
				Bag of 500	**B1-B**
B2	Red	600V* 22 to 8 AWG Min. 2 #18 – Max. 5 #12	600V* ,34mm² to 10,0mm² Min. 2-,75mm² – Max. 5-4,0mm²	Box of 100	**B2-1**
				Jar of 350	**B2-350JR**
				Jar of 500	**B2-500JR**
				Bag of 500	**B2-B**
B4	Blue-Gray	600V* 14 to 6 AWG Min. 2 #12 – Max. 2 #6	600V* 2,5mm² to 16,0mm² Min. 2-4,0mm² – Max. 2-16,0mm²	Box of 25	**B4-1**
				Carton of 250	**B4-B**
BGR	Green	14 to 10 AWG Min. 2 #14 – Max. 5 #12	2,5mm² to 6,0mm² Min. 2-2,5mm² - Max. 5-4,0mm²	Box of 50	**BGR-1**
				Carton of 250	**BGR-B**

*1,000V maximum in fixtures and signs

B-Twist™ Wire Connectors

SPEED from the IDEAL family of Performance & Reliability

- All-in-one connector with wide red/yellow range from 2#18 to 2 #8
- Rounded dial-top with vertical ribs provides fast fingertip starts
- Connection comes to torque quickly to get the job done efficiently
- Long swept-wings improve comfort and torque
- Wide, expanding spring makes for easy starts on even the largest combinations
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

B-TWIST

UL Wire Connector 774A LISTED · Cu/Cu Only · CSA LR9706

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
BT2™	Red	600V* 18 to 8 AWG Min. 2 #18 – Max. 2 #8	600V* ,75mm² to 10mm² Min. 2-,75mm² – Max. 1-8,0mm² w/2-6,0mm²	Box of 100	**BT2-1**
				Jar of 500	**BT2-500JR**
				Barrel of 25,000	**BT2-SK**

*1,000V maximum in fixtures and signs

FOR A COMPLETE LISTING OF UL APPROVED WIRE COMBINATIONS, VISIT US AT WWW.IDEALIND.COM

WireTwist™ Wire Connectors

- Positive grip shell design for fast, easy installation
- Fixed, square-wire spring creates secure connections
- Deep skirt protects against flash-over
- Tough, UL 94V-2 flame-retardant shell (105°C/221°F)

UL LISTED Wire Connector 774A · Cu/Cu Only · CSA LR9706

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
WT1	Gray	300V 22 to 14 AWG Min. 3 #22 – Max. 2 #16	300V ,34mm² to 2,5mm² Min. 3-,34mm² – Max. 2-1,5mm²	Box of 100	**WT1-1**
				Bag of 500	**WT1-B**
WT2	Blue	300V 22 to 14 AWG Min. 3 #20 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 3-,50mm² – Max. 3-1,5mm²	Box of 100	**WT2-1**
				Bag of 500	**WT2-B**
WT3	Orange	600V* 22 to 14 AWG Min. 2 #18 – Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 2-,75mm² – Max. 2-2,5mm²	Box of 100	**WT3-1**
				Bag of 500	**WT3-B**
WT4	Yellow	600V* 22 to 10 AWG Min. 2 #18 – Max. 2 #12	600V* ,75mm² to 6,0mm² Min. 2-,75mm² – Max. 2-4,0mm²	Box of 100	**WT4-1**
				Bag of 500	**WT4-B**
WT6	Red	600V* 20 to 8 AWG Min. 2 #14 – Max. 4 #12	600V* ,50mm² to 10,0mm² Min. 2-2,5mm² – Max. 4-4,0mm²	Box of 100	**WT6-1**
				Bag of 250	**WT6-B**

*1,000V maximum in fixtures and signs

WingTwist™ Wire Connectors

- Contoured wing design provides enhanced torque
- Expanding, square-wire spring creates secure connections
- Wide, deep skirt opening accommodates a variety of wire combinations
- Tough, UL 94V-2 flame retardant shell (105°C/221°F)

UL LISTED Wire Connector 774A · Cu/Cu Only · CSA LR9706

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
WT51	Yellow	600V* 18 to 10 AWG Min. 2 #18 – Max. 3 #12	600V* ,75mm² to 6,0mm² Min. 2-,75mm² – Max. 3-4,0mm²	Box of 100	**WT51-1**
				Bag of 500	**WT51-B**
				Jar of 500	**WT51-500JR**
				Barrel of 25,000	**WT51-SK**
WT41	Tan	600V* 22 to 10 AWG Min. 2 #20 – Max. 3 #10 Solid	600V* ,34mm² to 6,0mm² Min. 2-0,5mm² – Max. 3-6,0mm²	Box of 100	**WT41-1**
				Bag of 500	**WT41-B**
				Jar of 500	**WT41-500JR**
				Barrel of 25,000	**WT41-SK**
WT52	Red	600V* 18 to 10 AWG Min. 2 #14 – Max. 5 #12	600V* ,75mm² to 6,0mm² Min. 2-2,5mm² – Max. 5-4,0mm²	Box of 100	**WT52-1**
				Bag of 500	**WT52-B**
				Jar of 500	**WT52-500JR**
				Barrel of 25,000	**WT52-SK**
WT54	Blue	600V* 14 to 6 AWG Min. 3 #12 – Max. 2 #6	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² – Max. 2-16,0mm²	Box of 50	**WT54-1**
				Bag of 100	**WT54-B**
WGR	Green	14 to 10 AWG Min. 2 #14 – Max. 5 #12	2,5mm² to 6,0mm² Min. 2-2,5mm² – Max. 5-4,0mm²	Box of 50	**WGR-1**
				Bag of 250	**WGR-B**
				Jar of 500	**WGR-500JR**

*1,000V maximum in fixtures and signs

FOR A COMPLETE LISTING OF UL APPROVED WIRE COMBINATIONS, VISIT US AT WWW.IDEALIND.COM

Combination WingTwist™/WireTwist™ Wire Connectors

- Kit Contains:
  - WT1 WireTwist™ Wire Connector, Gray, (Qty. 100)
  - WT2 WireTwist™ Wire Connector, Blue, (Qty. 100)
  - WT3 WireTwist™ Wire Connector, Orange, (Qty. 100)
  - WT4 WireTwist™ Wire Connector, Yellow, (Qty. 100)
  - WT6 WireTwist™ Wire Connector, Red, (Qty. 25)
  - WT41 WingTwis™ Wire Connector, Tan, (Qty. 60)
  - WT51 WingTwist™ Wire Connector, Yellow, (Qty. 100)
  - WT52 WingTwist™ Wire Connector, Red, (Qty. 25)
  - WT54 WingTwist™ Wire Connector, Blue, (Qty. 10)
  - Reusable case

Description	Quantity	Part No.
WireTwist™/WingTwist™ Wire Connector Combination Kit	620 pcs.	**30-2091**

Spin-Twist® Wire Connector Socket

- Speeds installation of IDEAL and Buchanan Wire Connectors
- For use with electric corded or cordless drill drivers
- 1/4 in. chuck fits most drills or drive sockets

Description	Part No.
For Connector Models Wire-Nut®, Wing-Nut®, Twister®, B-CAP®, WireTwist™ & WingTwist™ Wire Connectors	**30-902**

IDEAL Wire connectors are available in:

Barrels
For really big jobs when you can't afford to run out of connectors.

Power Pouch™ Bags
These bags are convenient, re-closeable and stand-up on the job.

Store 'N Pour™ Jars
Easy-pour design keeps connectors clean and your shelf organized.

Boxes
For small jobs at hand, just grab a box.

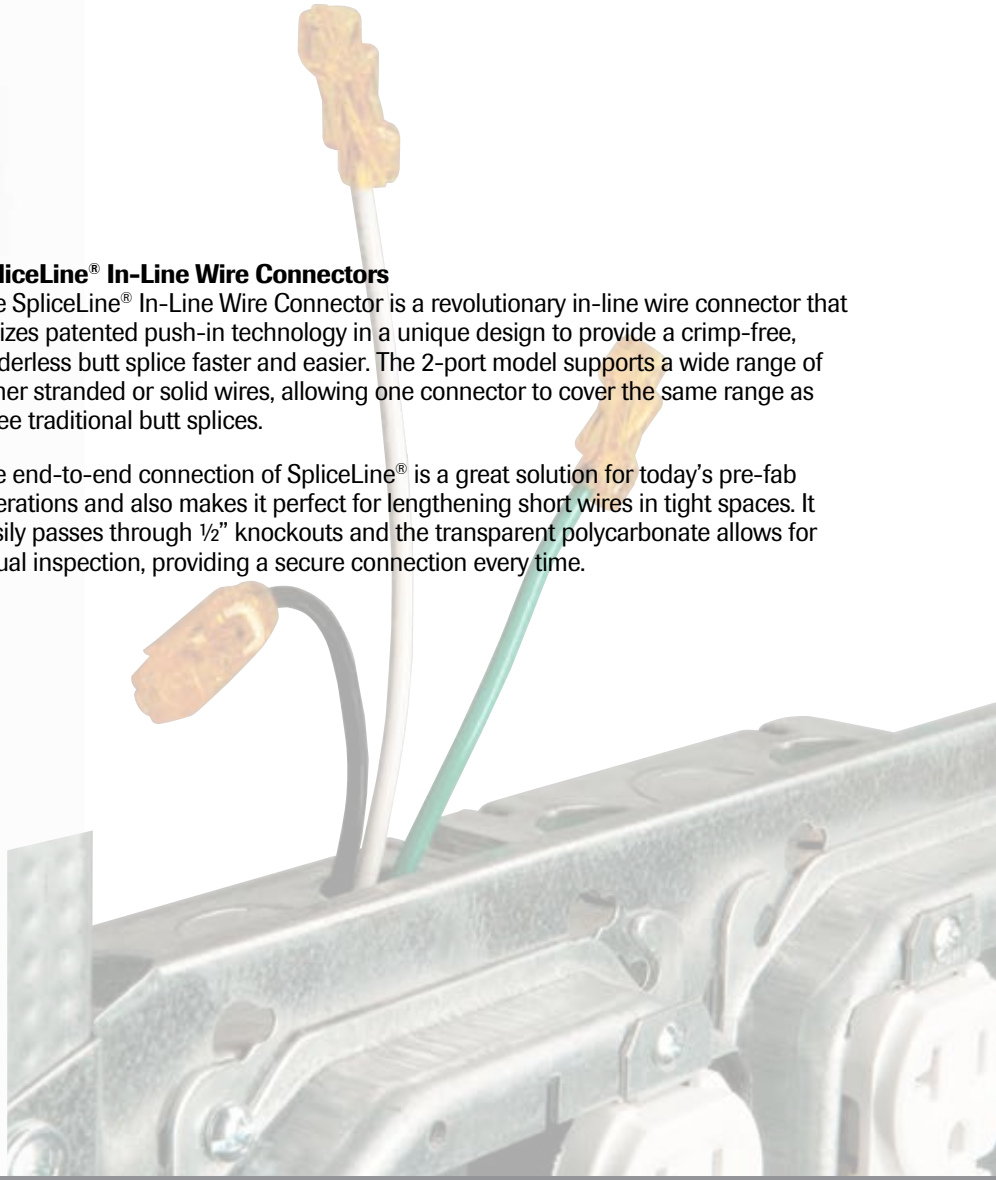
Push-In Wire Connectors

In-Sure® Push-In Wire Connectors
If it's IDEAL, it's a quality connector – and the In-Sure® Push-In Wire Connector is no exception. Color-coded, the clear polycarbonate housing allows for visual verification of every connection. The ergonomic design of the In-Sure® is easier to grip which means more comfortable push-in type connections.

Perfect for OEM lighting manufacturing, prefabricated wiring systems, and any other branch circuit wiring applications where a traditional twist-on wire connector would be used. Simply push the wire in – the low insertion force makes it easy. UL Listed, CSA Certified and rated to 600V and 105°C, the In-Sure™ Push-In Wire Connector saves time and improves productivity while perfecting connections.

SpliceLine® In-Line Wire Connectors
The SpliceLine® In-Line Wire Connector is a revolutionary in-line wire connector that utilizes patented push-in technology in a unique design to provide a crimp-free, solderless butt splice faster and easier. The 2-port model supports a wide range of either stranded or solid wires, allowing one connector to cover the same range as three traditional butt splices.

The end-to-end connection of SpliceLine® is a great solution for today's pre-fab operations and also makes it perfect for lengthening short wires in tight spaces. It easily passes through ½" knockouts and the transparent polycarbonate allows for visual inspection, providing a secure connection every time.



SpliceLine® In-Line Wire Connectors

- Faster alternative to traditional butt splices
- Crimp-free, solderless push-in butt splice
- Slim design fits through 1/2 in. knockout
- Perfect for lengthening wire
- Transparent polycarbonate housing for visual inspection of connection

SpliceLine®

UL LISTED Wire Connector 774A Cu/Cu Only CSA

Model	Color	Rating	Wire Range	Quantity	Part No.
42	Orange	600V/20A 105°C	Solid: 12 – 20 AWG Stranded: 12 – 16 AWG (≤19 str.) Stranded Tin-Bonded: 14 – 18 AWG (≤19 str.)	Bag of 10	**30-1342S**
				Box of 100	**30-1042**
				Jar of 300	**30-1042J**
				Box of 2,500	**30-1642**

In-Sure® Push-In Wire Connectors

- No-twist push-in design reduces repetitive motion fatigue
- Low insertion force for fast and easy connections
- Compact size makes installation easy
- Clear shell gives visual verification of connection
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)

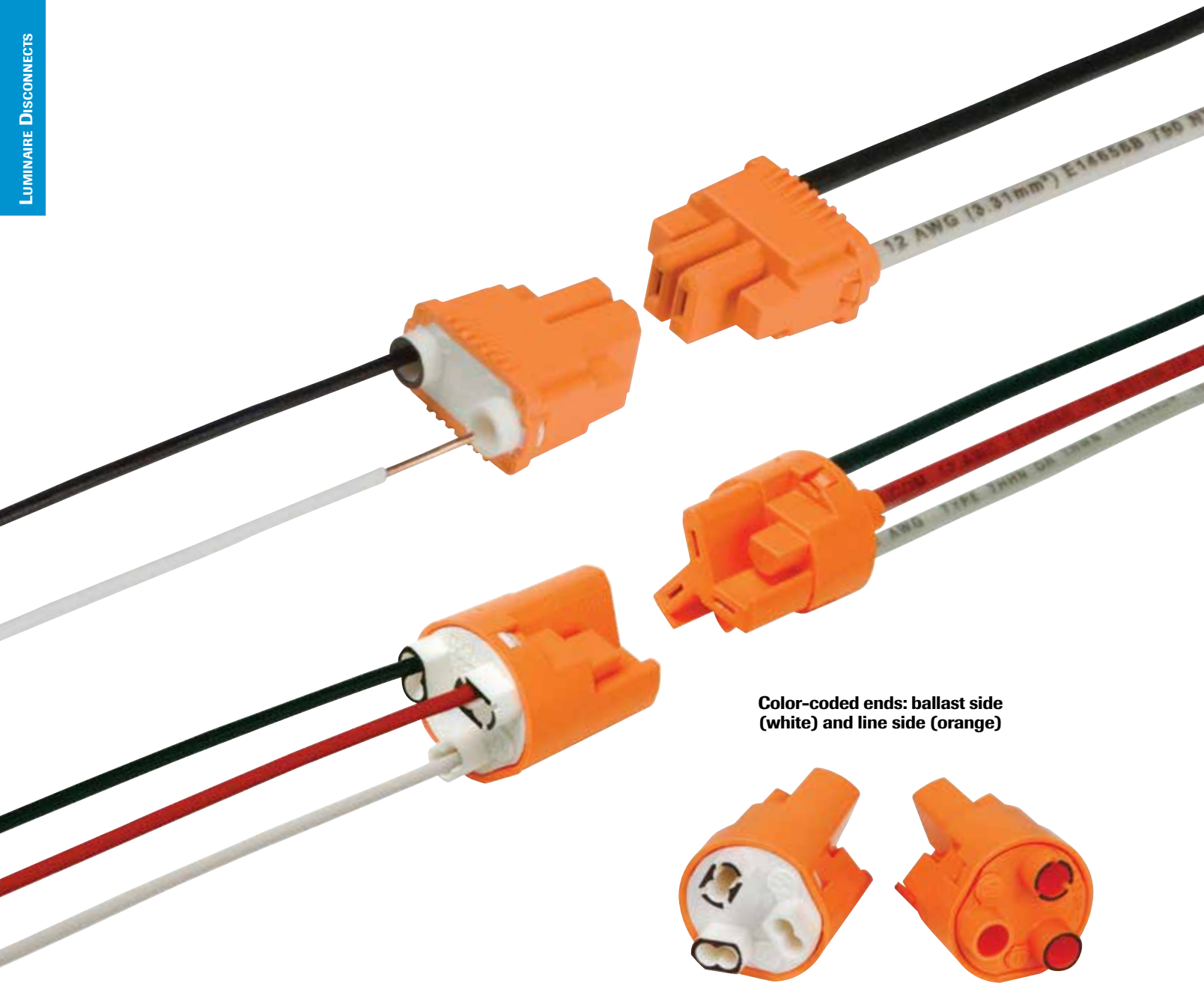
UL LISTED Wire Connector 774A Cu/Cu Only CSA

Model	Color	Ports	Amp Rating	Wire Range	Quantity	Part No.
32	Red	2	20 Amp	Solid: 20 – 12 AWG Stranded: 12 – 16 AWG (≤19 str.) 18 AWG (7 Strand) Stranded (Tin Bonded): 18 – 14 AWG (≤19 str.)	Box of 100	**30-1032**
					Jar of 300	**30-1032J**
					Box of 5,000	**30-1632**
33	Orange	3	20 Amp		Box of 100	**30-1033**
					Jar of 250	**30-1033J**
					Box of 5,000	**30-1633**
34	Yellow	4	20 Amp		Box of 100	**30-1034**
					Jar of 200	**30-1034J**
					Box of 5,000	**30-1634**
87	Gray	5	20 Amp	Solid: 20 – 12 AWG Stranded: 16 – 14 AWG (≤19 str.) 18 AWG (7 Strand) Stranded (Tin Bonded): 18 – 14 AWG (≤19 str.)	Jar of 150	**30-087J**
					Box of 3,000	**30-687**
88	Blue	6 Stacked	20 Amp		Jar of 100	**30-088J**
					Box of 2,500	**30-688**
90	Black	8	20 Amp		Jar of 100	**30-090J**
					Box of 2,000	**30-690**
39	Blue	3	30 Amp	Solid: 14 – 10 AWG Stranded: 12 – 10 AWG (≤19 str.) Stranded (Tin Bonded): 14 – 10 AWG (≤19 str.)	Box of 50	**30-1039**
					Jar of 150	**30-1039J**

COPPER TO COPPER ONLY. Do not use on aluminum. Temperature rating: 105°C (221°F) maximum. 600V maximum building wire, 1000V maximum signs or lighting fixtures

PowerPlug® Luminaire Disconnects

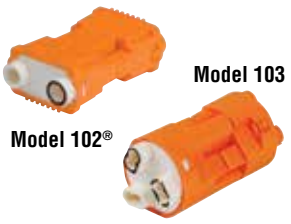
The IDEAL PowerPlug® Luminaire Disconnect fully meets the current National Electric Code and Canadian Electric Code for non-residential fluorescent luminaires. The PowerPlug® helps reduce electrical shock hazard during ballast replacement by safely disconnecting hot and neutral ballast wiring. Both halves of PowerPlug® meet UL and CSA finger-probe safety requirements. Advanced push-in technology provides fast, efficient ballast connections resulting in reduced installation time and improved labor savings. The PowerPlug® is available in 2-pole and 3-pole models with options for new installation or ballast retrofitting.

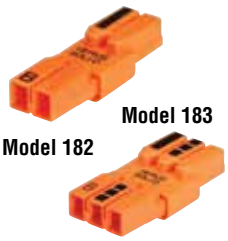


Color-coded ends: ballast side (white) and line side (orange)

PowerPlug® Luminaire Disconnects

- Allows safe disconnect of hot and neutral ballast wiring
- Perfect for new, retrofit or OEM lighting installations
- Push-in technology results in quicker connections, saving time and increasing productivity
- Both halves are "touch-safe"per UL 2459
- Fits through 1/2 in. knockout





LISTED
Luminaire Disconnect
3HME

Selection Chart

Application	New Installations	Retrofits
For 1-ballast fixtures	102	102, 182
For 2-ballast, dimming and switching fixtures	103	103, 183

Model	Color	Electrical Rating	Line Side	Ballast Side	Quantity	Part No.
102® 2-wire	Orange	6 Amps/600 Volts Max.	Solid: #12 - #18 Stranded: #12 – #14 (≤19 str.) Stranded Tin-Bonded: #12 – #14 (≤19 str.) #16 (≤26 str.) #18 (≤16 str.)	Solid: #12 - #18 Stranded: #12 – #14 (≤19 str.) Stranded Tin-Bonded: #12 – #14 (≤19 str.) #16 (≤26 str.) #18 (≤16 str.)	Card of 25	**30-372**
					Jar of 75	**30-382J**
					Jar of 150	**30-352J**
					Box of 1,000	**30-102**
103 3-Wire	Orange	6 Amps/600 Volts Max.	Solid: #12 - #18 Stranded: #12 – #14 (≤19 str.) Stranded Tin-Bonded: #12 – #14 (≤19 str.) #16 (≤26 str.) #18 (≤16 str.)	Solid: #18 Stranded: None Stranded Tin-Bonded: #18 (≤16 str.)	Card of 20	**30-383X**
					Jar of 100	**30-353XJ**
					Box of 1,000	**30-103X**
182 2-Wire	Orange	3 Amps/600 Volts Max.	Solid: #18	Solid: #18	Box of 100	**30-082**
					Box of 2,500	**30-682**
183 3-Wire	Orange	3 Amps/600 Volts Max.	Solid: #18	Solid: #18	Box of 100	**30-083**
					Box of 2,500	**30-683**

1,000V maximum fixtures and signs.

Basic Lighting Maintenance Kit

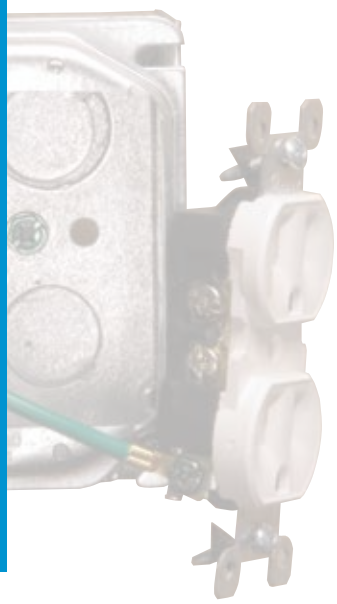
- Kit Contains:
  - Wire-Nut® Wire Connectors (25 Model 72B® Blue, 25 Model 73B® Orange)
  - In-Sure® Push-In Wire Connectors (25 Model 33, Orange)
  - SpliceLine® In-Line Wire Connectors (25 Model 42 Orange)
  - PowerPlug® Luminaire Disconnects (30 Model 102® 2-Port, 15 Model 103 3-Port, 50 Model 182 2-Port)

Description	Part No.
Basic Lighting Maintenance Kit	**30-2255**

Lighting Installation Kit

- Kit Contains:
  - Wire-Nut® Wire Connectors (100 Model 72B® Blue)
  - In-Sure® Push-In Wire Connectors (50 Model 33 Orange)
  - PowerPlug® Luminaire Disconnects (30 Model 102® 2-Port, 50 Model 182 2-Port)
  - 1 Twist-a-Nut™ Screwdriver/Nutdriver (35-908)
  - 1 Reflex™ Super T®-Stripper Wire Stripper (45-615)

Description	Part No.
Lighting Installation Kit	**30-2257**



Grounding Products

We've got grounding covered!
Grounding pigtails are designed for a wide variety of grounding applications. The ultra-flexible lead wire and bonding jumpers make fast and efficient pigtailing.

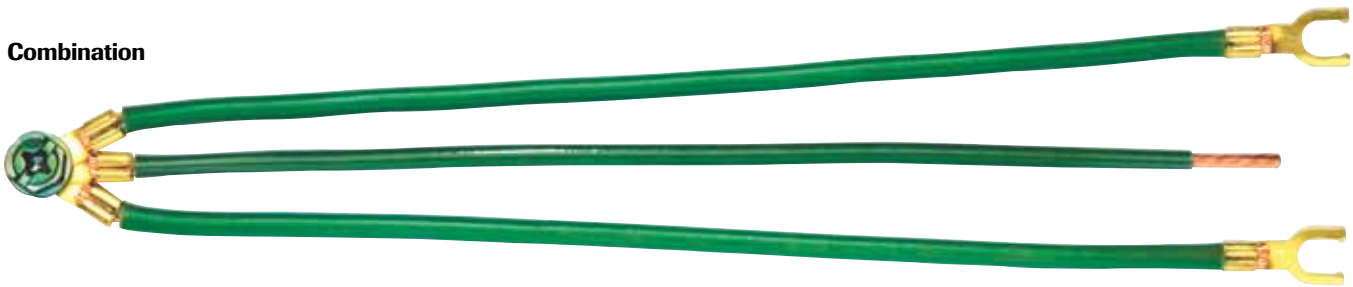
- Convenient for device grounding applications
- Safe, fast and efficient for cost-effective grounding jobs
- Ensures compliance with Article 250 of the National Electrical Code

Stranded

- Heavy-duty fork terminals attach easily to device grounding screw

Solid

Combination



Screws

- Thread-forming, hole-finding ground screw with combination Slotted, Phillips, Hex and #2 Robertson head. Sold individually or factory-assembled on to pigtails.

Solid Wire Grounding Tails

Description	Quantity	Part No.
14 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3390**
12 AWG solid, 6.5 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3404**
12 AWG solid, 6.5 in. tail w/loop & ground screw and stripped end	Bulk Pack of 1,000	**30-3402**
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3392**
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Plastic Box of 100	**30-3399**

Bulk packs are bundled in quantities of 50.

Description	Quantity	Part No.
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Bulk Pack of 1,000	**30-3496**
12 AWG solid, 10 in. tail w/loop & ground screw and stripped end	Bag of 50	**30-3410**
12 AWG solid, 10 in. tail w/loop & ground screw and stripped end	Bulk Pack of 500	**30-3394**
12 AWG solid, 12 in. tail w/loop & ground screw and stripped end	Box of 50	**30-3498**
12 AWG solid, 12 in. tail w/loop & ground screw and stripped end	Bulk Pack of 1,000	**30-3396**

Stranded Wire Grounding Tails

Description	Quantity	Part No.
14 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Bag of 25	**30-3183**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Bag of 25	**30-3184**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Plastic box of 50	**30-3385**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring and ground screw	Bulk pack of 1,000	**30-3284**
12 AWG stranded, 8 in. tail w/#10 fork & #10 ring (no ground screw)	Bulk pack of 1,000	**30-3285**
12 AWG stranded, 8 in. tail w/#10 fork & stripped end	Bag of 25	**30-3480**

Bulk packs are bundled in quantities of 50.

Description	Quantity	Part No.
12 AWG stranded, 8 in. tail w/#10 fork & stripped end	Bulk pack of 1,000	**30-3580**
12 AWG stranded, 8 in. tail w/#10 ring & ground screw and stripped end	Bulk Pack of 1,000	**30-3201**
12 AWG stranded, 10 in. tail w/#10 fork & #10 ring and ground screw	Box of 50	**30-3310**
12 AWG stranded, 10 in. tail w/#10 fork & #10 ring and ground screw	Bulk pack of 500	**30-3311**
12 AWG stranded, 12 in. tail w/#10 fork & #10 ring and ground screw	Box of 50	**30-3412**
12 AWG stranded, 12 in. tail w/#10 fork & #10 ring and ground screw	Bulk pack of 1,000	**30-3413**

Combo Grounding Tails

Description	Quantity	Part No.
2-wire combo: 12 AWG solid tail, one stripped end, one end w/ground screw; joined to 12 AWG stranded tail at a ring terminal, w/fork terminal on second end	Box of 500	**30-3286**
2-wire combo: 12 AWG stranded w/#10 ring & ground screw, one stripped-end tail and one #10 fork tail	Bag of 25	**30-3287**

Bulk packs are bundled in quantities of 50.

30-3289

Description	Quantity	Part No.
2-wire combo: 12 AWG stranded w/#10 ring and ground screw and two #10 fork tails	Bag of 25	**30-3288**
3-wire combo: 12 AWG stranded w/#10 ring & ground screw, one stripped-end tail and two #10 fork tails	Bag of 25	**30-3289**

Grounding Screws

- Zinc-plated grounding screws offer a thread-forming, hole-finding feature plus combination hex, Phillips, slotted and Robertson head

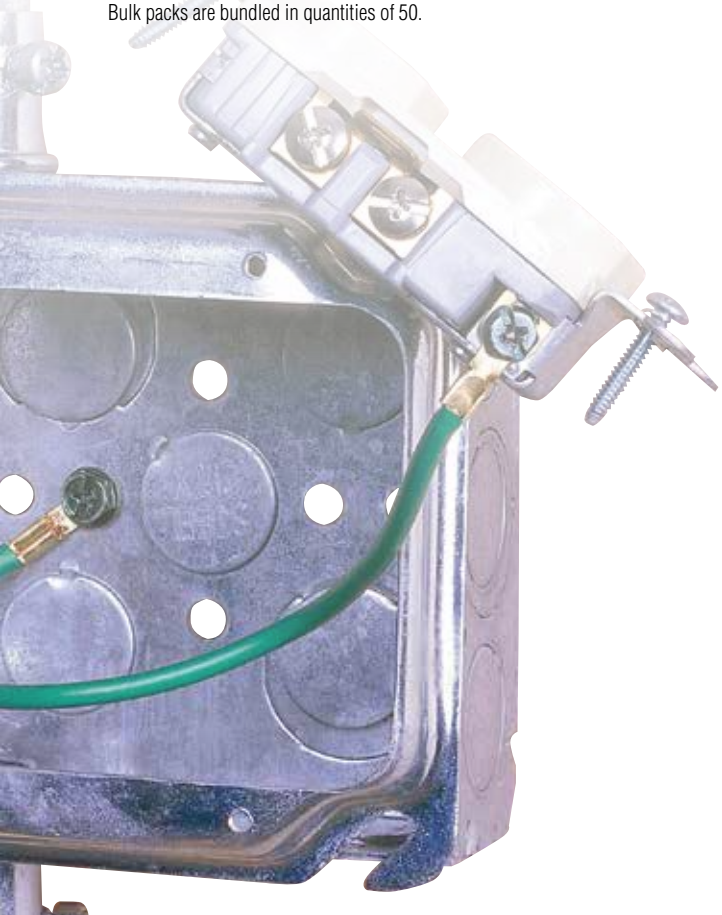
Description	Quantity	Part No.
Thread-forming, hole-finding, combination hex, Phillips, slotted and Robertson head	Jar of 100	**30-3594**
	Pack of 50	**30-3194**

Non-Grounding Stranded Wire Pigtails

- 8 in. 12 AWG Stranded Pigtails – White or Black, #10 Fork and Stripped end

Description	Quantity	Part No.
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, white	Bag of 25	**30-3470**
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, black	Bag of 25	**30-3471**
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, white	Bulk pack of 1,000	**30-3570**
12 AWG stranded, 8 in. tail w/#10 fork and stripped end, black	Bulk pack of 1,000	**30-3571**

Bulk packs are bundled in quantities of 50.



Grounding Recap

Solid (w/loop and Ground Screw)

- **14 AWG**
  - 8 in.
- **12 AWG**
  - 6-1/2 in.
  - 8 in.
  - 10 in.
  - 12 in.

Stranded

- **14 AWG**
  - 8 in. w/#10 Fork and #10 Ring & Ground Screw
- **12 AWG**
  - 8 in. w/#10 Fork & Stripped End
  - 8 in. w/#10 Fork and #10 Ring
  - 8 in. w/ #10 Fork and #10 Ring & Ground Screw
  - 10 in. w/#10 Fork and #10 Ring & Ground Screw
  - 12 in. w/#10 Fork and #10 Ring & Ground Screw

Combo (12 AWG only):

- **2-Wire**
- **3-Wire**

Steel Crimp Connectors

Cu/Cu Only

LISTED
Wire Connector

- Designed for making fast, permanent, pressure-type connections
- Long-zinc-plated steel sleeves maximize contact area with conductors
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E
- Temperature rating: 105°C (221°F)

Model	Wire Combination Range	Quantity	Part No.
410	600V 18 – 10 AWG Min. 1 #14 & 1 #18 – Max. 2 #10 & 2 #14	Bag of 100	**30-410**
		Carton of 1,000	**30-510**
		Keg of 10,000	**30-610**
411	600V 18 – 8 AWG Min. 3 #12 – Max. 4 #10	Box of 50	**30-411**
		Carton of 1,000	**30-511**
412	600V 18 – 4 AWG Min. 1 #14 & 1 #16 – Max. 2 #8 & 1 #6	Box of 50	**30-412**
		Carton of 1,000	**30-512**

IDEAL hand crimp tools UL listed for Models 410, 411, 412: 30-428, 30-429, 30-430.

Wrap-Cap® Insulators

LISTED
Wire Connector

- Provide high dielectric and physical protection for UL Listed, non-insulated pressure-type wire connectors
- Unique design completely covers splice – insulates both around and between wires and eliminates need for tape
- UL Listed to 486C and CSA Certified for 600V maximum building wiring (1,000V maximum for fixtures and signs); temperature rated at 75°C (167°F) maximum.

Model	Description	Quantity	Part No.
415	Insulator for Model 410 Connectors. Can also be used on Buchanan 2006S & 2011S Copper Crimps	Box of 50	**30-445**
		Carton of 1,000	**30-515**
417	Insulator for Model 411 & 412 Connectors. Can also be used on Buchanan 2011S Copper Crimps	Box of 25	**30-447**
		Carton of 1,000	**30-517**

Copper Splice Cap Crimp Connectors

- Designed for making fast, permanent, pressure-type connections
- Solid copper sleeves require less crimping pressure and resist corrosion in harsh environments
- UL 486C Listed and CSA C22.2 #188 Certified; comply with Federal Specification W-S-61D

Description	Wire Combination Range	Quantity	Part No.
Copper Crimp Connector	600V* 18 to 10 AWG Min. 2 #18, Max. 4 #12	Bag of 100	**2006S**
		Bag of 1,000	**2006SB**
	600V* 14 to 4 AWG Min. 2 #10, Max. 2 #6	Bag of 50	**2011S**
		Bag of 500	**2011SB**

*1,000V maximum in fixtures and signs.

IDEAL hand crimp tools UL Listed for models 2006S and 2011S: C24, 30-428, 30-429 and 30-430.

Cu/Cu Only

LISTED
Wire Connector

Splice Cap Insulators

- Convenient, safe and fast installation
- Snap-on nylon construction
- Rated at 105°C (221°F) – 600V (1,000V maximum in fixtures and signs)

Description	Quantity	Part No.
For use on Connector Model 2006S	Box of 100	**2007**
	Bag of 1,000	**2007B**
For use on Connector Model 2011S	Box of 50	**2014**
	Bag of 500	**2014B**

SLK® Disconnect Fuse Kits

- Breakaway fuseholder for use in:
  - Roadway & street lighting
  - Parking lot & area lighting
- UL Listed for submersible installations
- Bright orange color for ease of visibility
- Large selection of configurations
- Set screw or crimp terminations available

SLK® DISCONNECT FUSE KIT

The IDEAL SLK® Disconnect Fuse Kit is a waterproof breakaway safety device that de-energizes roadway lights, streetlights, parking lot lights, and other freestanding electrical fixtures in the event of a knockdown, or when the fixtures need maintenance. This helps protect first responders, bystanders, and service personnel from potentially life-threatening electrical shock hazards.

The SLK® is the first Disconnect Fuse Kit listed to UL's ECIS category for special purpose connectors. This new category contains a set of rigorous tests from a host of UL standards, including UL 486D, the standard for submersibility. This means that the SLK® will stand up to the wet conditions often seen in and around pole bases, junction boxes, and hand holes.

In addition, the bright orange color of the SLK® makes the product easy to locate in dark junction boxes, in hand holes, or in a nighttime knockdown situation when the connector is often buried amongst dirt, mud, and debris.

- Accepts 13/32" x 1-1/2" midget-style fuse (Note: Fuse not included)
- Wire Range: 2-14 AWG (Cu & Al rated)
- Ratings: 30A, 600V, 105°C
- Maximum available short circuit current of 10,000

Neutral configurations come with white fuseholder and dummy fuse

Paired (hot/neutral) configurations are keyed to prevent reverse polarities

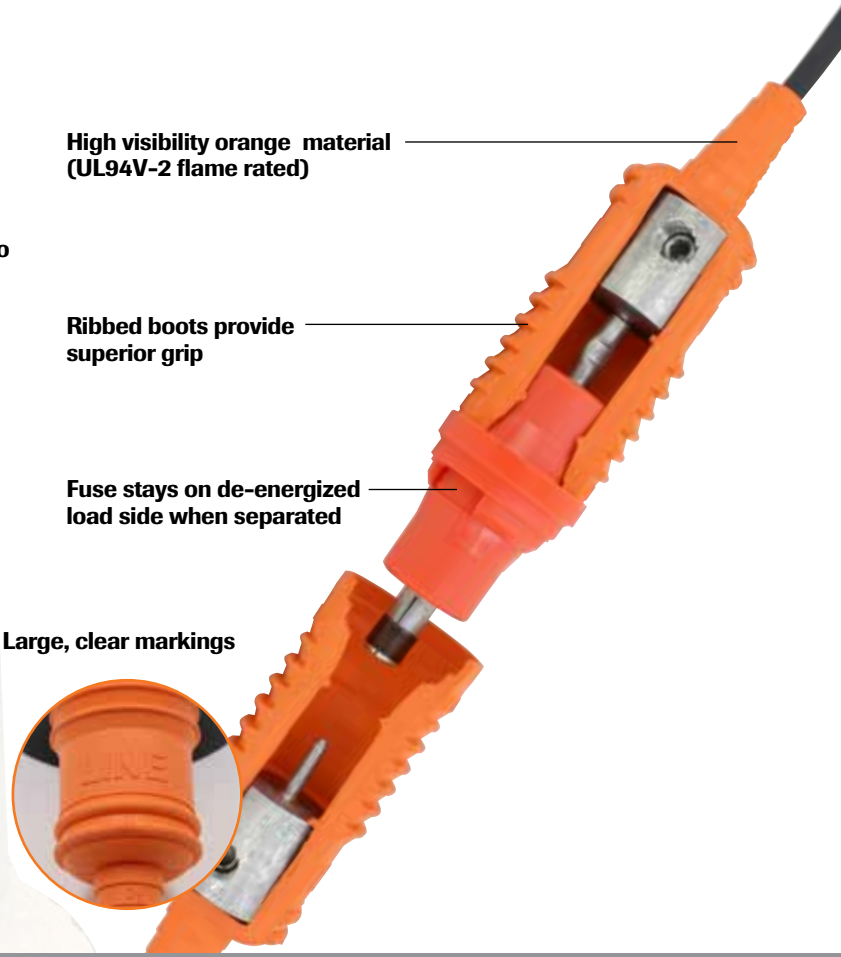
Crimp or set screw terminations

High visibility orange material (UL94V-2 flame rated)

Ribbed boots provide superior grip

Fuse stays on de-energized load side when separated

Large, clear markings



SLK® Ordering Information

To Determine which Kit to Use:

1. Select the base part number, based on crimp termination (TABLE 1) or set screw termination (TABLE 3), number of wires on line/load side, and wire size.
2. If necessary, modify the base part number according to neutral, dual, paired, or tap (i.e., non-breakaway) configurations. Use TABLE 2 for crimp variations and TABLE 4 for set screw variations.
3. See right for examples.

Examples:

1. An in-line fused breakaway kit with crimp terminations, one 10 AWG wire on the line side and one 10 AWG wire on the load side is ordered as a 30-C1616.
2. An in-line non-fused (i.e., neutral) breakaway kit with set screw terminations, one 6 AWG wire on the line side and one 10 AWG wire on the load side is ordered as a 30-S1212N.
3. A Y-tap fused breakaway kit with crimp terminations, two 6 AWG wires on the line side and one 10 AWG wire on the load side is ordered as a 30-C2216.

CRIMP

Table 1: Crimp Base Part numbers

			Load													
			1 Wire							2 Wire						
			2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG	2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG
Line	1 Wire	2 AWG	30-C1212	30-C1212	30-C1216	30-C1216	30-C1216	30-C1216	30-C1216			30-C1222	30-C1222	30-C1226	30-C1226	30-C1226
		4 AWG		30-C1212	30-C1216	30-C1216	30-C1216	30-C1216	30-C1216			30-C1222	30-C1222	30-C1226	30-C1226	30-C1226
		6 AWG			30-C1616	30-C1616	30-C1616	30-C1616	30-C1616			30-C1622	30-C1622	30-C1626	30-C1626	30-C1626
		8 AWG				30-C1616	30-C1616	30-C1616	30-C1616				30-C1622	30-C1626	30-C1626	30-C1626
		10 AWG					30-C1616	30-C1616	30-C1616					30-C1626	30-C1626	30-C1626
		12 AWG						30-C1616	30-C1616						30-C1626	30-C1626
		14 AWG							30-C1616							30-C1626
	2 Wire	2 AWG	30-C2012	30-C2012	30-C2016	30-C2016	30-C2016	30-C2016	30-C2016			30-C2022	30-C2022	30-C2026	30-C2026	30-C2026
		4 AWG		30-C2012	30-C2016	30-C2016	30-C2016	30-C2016	30-C2016			30-C2022	30-C2022	30-C2026	30-C2026	30-C2026
		6 AWG			30-C2216	30-C2216	30-C2216	30-C2216	30-C2216			30-C2222	30-C2222	30-C2226	30-C2226	30-C2226
		8 AWG				30-C2216	30-C2216	30-C2216	30-C2216				30-C2222	30-C2226	30-C2226	30-C2226
		10 AWG					30-C2616	30-C2616	30-C2616					30-C2626	30-C2626	30-C2626
		12 AWG						30-C2616	30-C2616						30-C2626	30-C2626
		14 AWG							30-C2616							30-C2626

One kit will cover large wire range

Note: Crimp connections on larger gauge wire (2 #8, 2 #6, 1 #8, 1 #6 or 1 #4) require IDEAL #88-843 Mechanical Indentor and Crimp Tool.

Table 2: Crimp Variations

Base Part Number (Hot)	Variation (If applicable)			
	Neutral	Dual	Paired	Non-Breakaway
30-C1212	30-C1212N	30-C1212D	30-C1212P	
30-C1216	30-C1216N	30-C1216D	30-C1216P	
30-C1616	30-C1616N	30-C1616D	30-C1616P	
30-C1222	30-C1222N			
30-C1226	30-C1226N			
30-C1622	30-C1622N			
30-C1626	30-C1626N			
30-C2012	30-C2012N			30-C2012T

Base Part Number (Hot)	Variation (If applicable)			
	Neutral	Dual	Paired	Non-Breakaway
30-C2016	30-C2016N			30-C2016T
30-C2216	30-C2216N			30-C2216T
30-C2616	30-C2616N			30-C2616T
30-C2022	30-C2022N			
30-C2026	30-C2026N			
30-C2222	30-C2222N			
30-C2226	30-C2226N			
30-C2626	30-C2626N			

SET SCREW

Table 3: Set Screw Base Part numbers

			Load													
			1 Wire							2 Wire						
			2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG	2 AWG	4 AWG	6 AWG	8 AWG	10 AWG	12 AWG	14 AWG
Line	1 Wire	2 AWG	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222
		4 AWG		30-S1212	30-S1212	30-S1212	30-S1212	30-S1212	30-S1212		30-S1222	30-S1222	30-S1222	30-S1222	30-S1222	30-S1222
		6 AWG			30-S1212	30-S1212	30-S1212	30-S1212	30-S1212			30-S1222	30-S1222	30-S1222	30-S1222	30-S1222
		8 AWG				30-S1212	30-S1212	30-S1212	30-S1212				30-S1222	30-S1222	30-S1222	30-S1222
		10 AWG					30-S1212	30-S1212	30-S1212					30-S1222	30-S1222	30-S1222
		12 AWG						30-S1212	30-S1212						30-S1222	30-S1222
		14 AWG							30-S1212							30-S1222
	2 Wire	2 AWG	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222
		4 AWG		30-S2212	30-S2212	30-S2212	30-S2212	30-S2212	30-S2212		30-S2222	30-S2222	30-S2222	30-S2222	30-S2222	30-S2222
		6 AWG			30-S2212	30-S2212	30-S2212	30-S2212	30-S2212			30-S2222	30-S2222	30-S2222	30-S2222	30-S2222
		8 AWG				30-S2212	30-S2212	30-S2212	30-S2212				30-S2222	30-S2222	30-S2222	30-S2222
		10 AWG					30-S2212	30-S2212	30-S2212					30-S2222	30-S2222	30-S2222
		12 AWG						30-S2212	30-S2212						30-S2222	30-S2222
		14 AWG							30-S2212							30-S2222

One kit will cover large wire range

Table 4: Set Screw Variations

Base Part Number	Variation (If applicable)			
	Neutral	Dual	Paired	Non-Breakaway
30-S1212	30-S1212N	30-S1212D	30-S1212P	
30-S1222	30-S1222N			
30-S2212	30-S2212N			30-S2212T
30-S2222	30-S2222N	30-S2222D	30-S2222P	

Note: For combination 2 wire line (2-14 AWG Set Screw) and 1 wire load (6-14 AWG Crimp), use 30-B2216.

In-Line Fused

Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S1212**
In-Line Breakaway, crimp; fused (Hot)	2-4 AWG	2-4 AWG	**30-C1212**
In-Line Breakaway, crimp; fused (Hot)	2-4 AWG	6-14 AWG	**30-C1216**
In-Line Breakaway, crimp; fused (Hot)	6-14 AWG	6-14 AWG	**30-C1616**

Y-Tap Fused

Description	2 Line Side	1 Load Side	Part No.
Y-Tap Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S2212**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	2-4 AWG	**30-C2012**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	6-14 AWG	**30-C2016**
Y-Tap Breakaway, crimp; fused (Hot)	6-8 AWG	6-14 AWG	**30-C2216**
Y-Tap Breakaway, crimp; fused (Hot)	10-14 AWG	6-14 AWG	**30-C2616**
Combination Y-Tap Breakaway, fused (Hot)	2-14 AWG set screw	6-14 AWG crimp	**30-B2216**

Non-Breakaway Fused

Description	2 Line Side	1 Load Side	Part No.
Y-Tap Non-Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S2212T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	2-4 AWG	2-4 AWG	**30-C2012T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	2-4 AWG	6-14 AWG	**30-C2016T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	6-8 AWG	6-14 AWG	**30-C2216T**
Y-Tap Non-Breakaway, crimp; fused (Hot)	10-14 AWG	6-14 AWG	**30-C2616T**

Single-Pole In-Line Paired

Description	1 Line Side	1 Load Side	Part No.
Paired In-Line Breakaway, set screw; one fused (Hot); one non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S1212P**
Paired In-Line Breakaway, crimp; one fused (Hot); one non-fused (Neutral)	6-14 AWG	6-14 AWG	**30-C1212P**
Paired In-Line Breakaway, crimp; one fused (Hot); one non-fused (Neutral)	2-4 AWG	6-14 AWG	**30-C1216P**
Paired In-Line Breakaway, crimp; one fused (Hot); one non-fused (Neutral)	2-4 AWG	2-4 AWG	**30-C1616P**

In-Line Non-Fused

Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S1212N**
In-Line Breakaway, crimp; non-fused (Neutral)	2-4 AWG	2-4 AWG	**30-C1212N**
In-Line Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-14 AWG	**30-C1216N**
In-Line Breakaway, crimp; non-fused (Neutral)	6-14 AWG	6-14 AWG	**30-C1616N**

Y-Tap Non-Fused

Description	2 Line Side	1 Load Side	Part No.
Y-Tap Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S2212N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	2-4 AWG	**30-C2012N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-14 AWG	**30-C2016N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	6-8 AWG	6-14 AWG	**30-C2216N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	10-14 AWG	6-14 AWG	**30-C2616N**

Dual In-Line Fused

Description	1 Line Side	1 Load Side	Part No.
Dual In-Line Breakaway, set screw; fused (both Hot)	2-14 AWG	2-14 AWG	**30-S1212D**
Dual In-Line Breakaway, crimp; fused (both Hot)	2-4 AWG	2-4 AWG	**30-C1212D**
Dual In-Line Breakaway, crimp; fused (both Hot)	2-4 AWG	6-14 AWG	**30-C1216D**
Dual In-Line Breakaway, crimp; fused (both Hot)	6-14 AWG	6-14 AWG	**30-C1616D**

SLK® DISCONNECT FUSE KIT

SLK accepts solid or stranded and copper or aluminum conductors.

One Wire Line/ 2 Wires Load Fused

Description	1 Line Side	2 Load Side	Part No.
Y-Tap Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S1222**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	6-8 AWG	**30-C1222**
Y-Tap Breakaway, crimp; fused (Hot)	2-4 AWG	10-14 AWG	**30-C1226**
Y-Tap Breakaway, crimp; fused (Hot)	6-14 AWG	6-8 AWG	**30-C1622**
Y-Tap Breakaway; crimp; fused (Hot)	6-14 AWG	10-14 AWG	**30-C1626**

2 Wires Line/2 Wires Load Fused

Description	2 Line Side	2 Load Side	Part No.
2-Pole Breakaway, set screw; fused (Hot)	2-14 AWG	2-14 AWG	**30-S2222**
2-Pole Breakaway, crimp; fused (Hot)	2-4 AWG	6-8 AWG	**30-C2022**
2-Pole Breakaway, crimp; fused (Hot)	2-4 AWG	10-14 AWG	**30-C2026**
2-Pole Breakaway, crimp; fused (Hot)	6-8 AWG	6-8 AWG	**30-C2222**
2-Pole Breakaway, crimp; fused (Hot)	6-8 AWG	10-14 AWG	**30-C2226**
2-Pole Breakaway, crimp; fused (Hot)	10-14 AWG	10-14 AWG	**30-C2626**

2-Pole Dual Fused

Description	2 Line Side	2 Load Side	Part No.
Dual 2-Pole Breakaway, set screw; fused (both Hot)	2-14 AWG	2-14 AWG	**30-S2222D**

Y-Tap Dual Fused

Description	2 Line Side	1 Load Side	Part No.
Dual, Y-Tap Breakaway, set screw; fused (both Hot)	2-14 AWG	2-14 AWG	**30-S2212D**

SLK accepts solid or stranded and copper or aluminum conductors.

One Wire Line/2 Wires Load Non-Fused

Description	1 Line Side	2 Load Side	Part No.
Y-Tap Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S1222N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-8 AWG	**30-C1222N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	2-4 AWG	10-14 AWG	**30-C1226N**
Y-Tap Breakaway, crimp; non-fused (Neutral)	6-14 AWG	6-8 AWG	**30-C1622N**
Y-Tap Breakaway; crimp; non-fused (Neutral)	6-14 AWG	10-14 AWG	**30-C1626N**

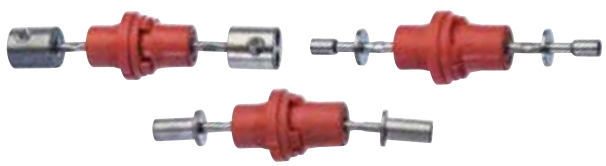
2 Wires Line/2 Wires Load Non-Fused

Description	2 Line Side	2 Load Side	Part No.
2-Pole Breakaway, set screw; non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S2222N**
2-Pole Breakaway, crimp; non-fused (Neutral)	2-4 AWG	6-8 AWG	**30-C2022N**
2-Pole Breakaway, crimp; non-fused (Neutral)	2-4 AWG	10-14 AWG	**30-C2026N**
2-Pole Breakaway, crimp; non-fused (Neutral)	6-8 AWG	6-8 AWG	**30-C2222N**
2-Pole Breakaway, crimp; non-fused (Neutral)	6-8 AWG	10-14 AWG	**30-C2226N**
2-Pole Breakaway, crimp; non-fused (Neutral)	10-14 AWG	10-14 AWG	**30-C2626N**

2-Pole Paired

Description	2 Line Side	2 Load Side	Part No.
Paired 2-Pole Breakaway, set screw; one fused (Hot); one non-fused (Neutral)	2-14 AWG	2-14 AWG	**30-S2222P**

Fuseholders (No Boot Included)



Description	1 Line Side	1 Load Side	Part No.
Fuseholder only, non-breakaway, set screw, fused	2-14 AWG	2-14 AWG	**30-HS2**
Fuseholder only, non-breakaway, crimp, fused	2-4 AWG	2-4 AWG	**30-HC2**
Fuseholder only, non-breakaway, crimp, fused	6-14 AWG	6-14 AWG	**30-HC6**

Breakaway Streetlight Connector & Splice Insulating Kits

- Safe and easy installation in five minutes or less
- No special equipment necessary – requires only a knife, wire stripper, and a hex tool or crimp tool
- Built-in break-away design eliminates de-energization of complete circuits
- Safely separates upon impact without breaking wires – eliminates potential danger and electrical shock
- Spring-loaded contacts compensate for thermal expansion to maintain integrity of connection (breakaway models)

Application Guide

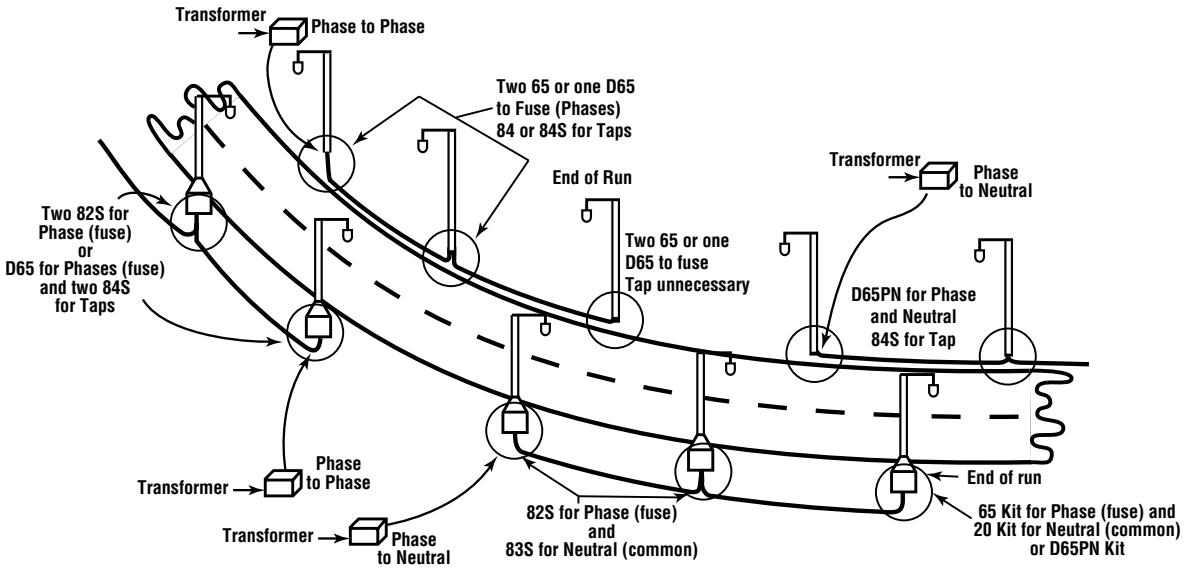
(Examples of Several Configurations)

For Poles with Transformer Bases, Standard Bases and Junction Boxes

Underground Feed Phase to Phase	
Configurations	**Comments**
D65 dual-in-line for phases and two 84S kits for taps	Recommended configuration
Two 82S Y-Tap Kits for phases and taps	Cost effective
Underground Feed Phase to Neutral	
DP65PN dual-in-line for phase and neutral and two 84S kits for tap	Recommended configuration
One 82S Y-Tap Kit for phase and tap and one 83S Y-Tap Kit for neutral and tap	Cost effective

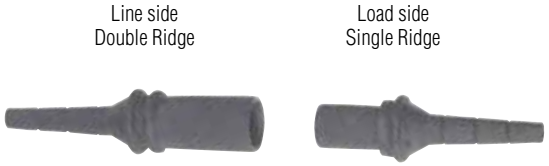
For Lights Mounted to Utility Poles, etc.

Overhead Feed	
Configurations	**Comments**
Two B-Tap® Insulation Piercing Connectors for phase and/or tap (for insulated conductors only)	Recommended configuration, see B-Tap® Insulation Piercing Connectors on page A-37.



Note: Fused kits require a 13/32" x 1-1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.** Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**

In-Line Fused (Hot)

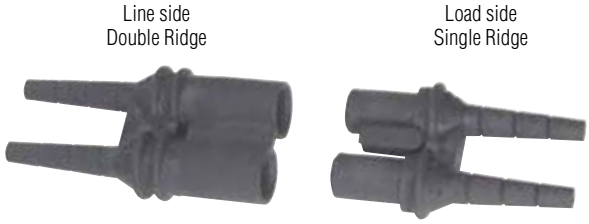


Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, crimp, fused	12-6 AWG Cu	12-6 AWG Cu	**65U**
In-Line Breakaway, crimp, fused	4-2 AWG Cu	12-6 AWG Cu	**65LC-U**
In-Line Breakaway, crimp, fused	4-2 AWG Cu	4-2 AWG Cu	**65-LC**

In-Line Non-Fused (Neutral)

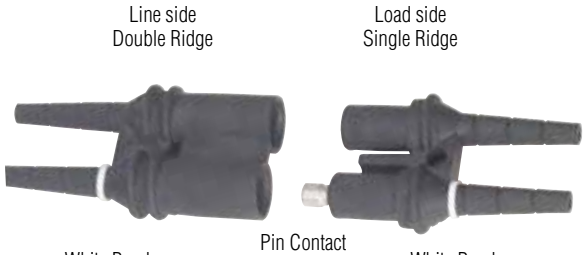
Description	1 Line Side	1 Load Side	Part No.
In-Line Breakaway, crimp, non-fused	12-6 AWG Cu	12-6 AWG Cu	**20U**
In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	12-6 AWG Cu	**20-LC-U**
In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	4-2 AWG Cu	**20-LC**

Dual In-Line Fused (Both Hot)



Description	1 Line Side	1 Load Side	Part No.
Dual In-Line Breakaway, crimp, fused	12-6 AWG Cu	12-6 AWG Cu	**D65U**
Dual In-Line Breakaway, crimp, fused	4-2 AWG Cu	12-6 AWG Cu	**D65-LC-U**
Dual In-Line Breakaway, crimp, fused	4-2 AWG Cu	4-2 AWG Cu	**D65-LC**

Paired In-line Non-Fused (One Hot, One Neutral)

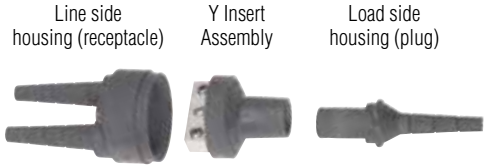


Description	1 Line Side	1 Load Side	Part No.
Paired In-Line Breakaway, crimp, non-fused	12-6 AWG Cu	12-6 AWG Cu	**D65PN-U**
Paired In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	12-6 AWG Cu	**D65PN-LC-U**
Paired In-Line Breakaway, crimp, non-fused	4-2 AWG Cu	4-2 AWG Cu	**D65PN-LC**

Stated wire range for crimping stranded conductors. For crimping solid wire: 14-4 AWG, use codes. U, 2 AWG use code LC.
Note: Fused Kits require a 13/32" x 1-1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.** Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**
Insulation O.D. range is .120"-.430".

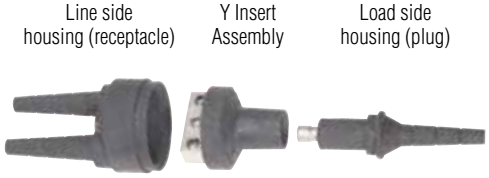
LR32565

Y-Tap Fused (Hot)



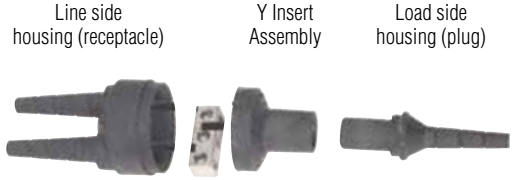
Description	2 Line Side Set Screw	1 Load Side Crimp	Part No.
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	12-6 AWG Cu	**82S-ADB1-C**
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	4-2 AWG Cu	**82S-ADB1-LC**
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	12-6 AWG Cu	**82S-EAFB1-C**
Y-Tap Breakaway, fused	10-2 AWG Cu/Al	4-2 AWG Cu	**82S-EAFB1-LC**

Y-Tap Non-Fused (Neutral)



Description	2 Line Side Set Screw	1 Load Side Crimp	Part No.
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	12-6 AWG Cu	**83S-ADB1-C**
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	4-2 AWG Cu	**83S-ADB1-LC**
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	12-6 AWG Cu	**83S-EAFB1-C**
Y-Tap Breakaway, non-fused	10-2 AWG Cu/Al	4-2 AWG Cu	**83S-EAFB1-LC**

Y-Splice Kits (Non-Breakaway/No Fuse)



Description	2 Line Side Set Screw	1 Load Side Set Screw	Part No.
Y-Splice Set Screw Tap & Run	10-2 AWG Cu/Al	10-2 AWG Cu/Al	**84S-ADB1**
Y-Splice Set Screw Tap & Run	10-2 AWG Cu/Al	10-2 AWG Cu/Al	**84S-EAFB1**

For Insulation O.D. range .120"-.430" use ADB1. For Insulation O.D. range .420"-.785" use EAFB1

Example:
A Y-Tap Kit with set screws for a 2 AWG phase line side conductor with a diameter of .472" and a 10 AWG copper load side conductor is ordered as an 82S-EAFB1-C

Stated wire range for crimping stranded conductors. For crimping solid wire: 14-4 AWG, use codes. U, 2 AWG use code LC.
Note: Fused Kits require a 13/32" x 1-1/2" fuse. **DO NOT USE GLASS OR INDICATING TYPES.** Waterproof or direct burial wire is recommended. **THHN is NOT recommended.**

LR32565

Electrical Crimp Terminals

The complete line of IDEAL crimp terminals, disconnects and splices offer the right product for any electrical system that might be encountered. From rings and spades to insulated disconnects, there's a product for any wire range. All insulated terminals are color-coded for easy identification and come in durable plastic packaging for easy storage.

- Butted seam-construction prevents splitting under maximum pressure
- Internal barrel serrations grip wires tightly to resist pull-out and reduce electrical resistance
- Tin-plated brass construction for corrosion resistance
- Shouldered barrel insulation quickly positions terminal for proper crimping
- Expanded insulation entry accommodates a wide variety of insulation diameters and provides additional insulation support

Rings & Forks

Disconnects

Splices

Durable plastic package for easy storage.

Ring Terminals

Vinyl Insulated

Wire Range	Stud Size in.	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.157 (4,0mm)	25	**83-2121**	—	—
	8 (4,3mm)		25	**83-2131**	—	—
	10 (5,3mm)		25	**83-2141**	—	—
	1/4 (6,4mm)		25	**83-2151**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	0.177 (4,5mm)	25	**83-2221**	—	—
	8 (4,3mm)		25	**83-2231**	—	—
	10 (5,3mm)		25	**83-2241**	1,000	**84-2241**
	1/4 (6,4mm)		25	**83-2251**	—	—
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	0.248 (6,3mm)	25	**83-2331**	—	—
	10 (5,3mm)		25	**83-2341**	1,000	**84-2341**
	1/4 (6,4mm)		25	**83-2351**	—	—
	5/16 (8,4mm)		25	**83-2361**	—	—
	3/8 (10,5mm)		25	**83-2371**	—	—

75° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Non-Insulated

Wire Range	Stud Size	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	8 (4,3mm)	25	**83-0131**	—	—
	10 (5,3mm)	25	**83-0141**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	25	**83-0221**	—	—
	8 (4,3mm)	25	**83-0231**	—	—
	10 (5,3mm)	25	**83-0241**	1,000	**84-0241**
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	25	**83-0331**	—	—
	10 (5,3mm)	25	**83-0341**	1,000	**84-0341**
	1/4 (6,4mm)	25	**83-0351**	—	—
8 AWG (8,0mm²)	10 (5,3mm)	25	**83-0421**	500	**84-0421**
	1/4 (6,4mm)	25	**83-0431**	—	—
	5/16 (8,4mm)	25	**83-0441**	—	—
	3/8 (10,5mm)	25	**83-0451**	—	—
6 AWG (14,0mm²)	10 (5,3mm)	20	**83-0511**	—	—
	1/4 (6,4mm)	20	**83-0521**	—	—
	5/16 (8,4mm)	20	**83-0531**	—	—
	3/8 (10,5mm)	20	**83-0541**	—	—
4 AWG (22,0mm²)	1/4 (6,4mm)	20	**83-0611**	—	—
	5/16 (8,4mm)	20	**83-0621**	—	—
	3/8 (10,5mm)	20	**83-0631**	—	—

105°C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Spade Terminals

Vinyl Insulated

Wire Range	Stud Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.157 (4,0mm)	25	**83-7111**	1,000	**84-7111**
	8 (4,3mm)		25	**83-7121**	—	—
	10 (5,3mm)		25	**83-7131**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	0.177 (4,5mm)	25	**83-7151**	—	—
	8 (4,3mm)		25	**83-7161**	1,000	**84-7161**
	10 (5,3mm)		25	**83-7171**	1,000	**84-7171**
12 – 10 AWG (4,0 – 6,0mm²)	6 (3,7mm)	0.248 (6,3mm)	25	**83-7201**	—	—
	8 (4,3mm)		25	**83-7211**	—	—
	10 (5,3mm)		25	**83-7221**	500	**84-7221**
	1/4 (6,4mm)		25	**83-7231**	—	—

75° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Vinyl Insulated Snap

Wire Range AWG	Stud Size In.	Max. Wire Ins. Dia. In.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.134 (4,0mm)	25	**83-7011**
	8 (4,3mm)		25	**83-7021**
	10 (5,3mm)		25	**83-7031**
16 – 14 AWG (1,5 – 2,5mm²)	6 (3,7mm)	0.161 (4,5mm)	25	**83-7051**
	8 (4,3mm)		25	**83-7061**
	10 (5,3mm)		25	**83-7071**
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	0.248 (6,0mm)	25	**83-7081**
	10 (5,3mm)		25	**83-7091**
	1/4 (6,4mm)		25	**83-7101**

75° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Non-Insulated

Wire Range	Stud Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	6 (3,7mm)	0.157 (4,0mm)	25	**83-6111**	—	—
	8 (4,3mm)		25	**83-6121**	—	—
	10 (5,3mm)		25	**83-6131**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	8 (4,3mm)	0.177 (4,5mm)	25	**83-6161**	—	—
	10 (5,3mm)		25	**83-6171**	1,000	**84-6171**
12 – 10 AWG (4,0 – 6,0mm²)	8 (4,3mm)	0.248 (6,3mm)	25	**83-6211**	—	—
	10 (5,3mm)		25	**83-6221**	—	—
	1/4 (6,4mm)		25	**83-6231**	—	—

105° C/600 Volts max.

UL LISTED Wire Connector 774A Cu only c UL

Disconnects

Vinyl Insulated Female

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.110 x .020 (2,8mm x 0,5mm)	0.150 (3,8mm)	25	**83-9511**	—	—
	.187 x .020 (4,75mm x 0,5mm)		25	**83-9541**	—	—
	.250 x .032 (6,35mm x 0.8mm)		25	**83-9571**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	.110 x .020 (2,8mm x 0,5mm)	0.185 (4,7mm)	25	**83-9521**	—	—
	.187 x .020 (4,75mm x 0,5mm)		25	**83-9551**	—	—
	.250 x .032 (6,35mm x 0.8mm)		25	**83-9581**	500	**84-9581**
14 – 12 AWG (2,5mm – 4,0mm²)	.250 x .032 (6,35mm x 0.8mm)	0.244 (6,2mm)	25	**83-9591**	—	—
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0.8mm)	0.244 (6,2mm)	25	**83-9601**	500	**84-9601**

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Insulated Male

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.150 (3,8mm)	25	**83-9971**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9981**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9991**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Female

Wire Range	Tab Size	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.110 x .020 (2,8mm x 0,5mm)	25	**83-9411**
16 – 14 AWG (1,5 – 2,5mm²)	.110 x .020 (2,8mm x 0,5mm)	25	**83-9421**
22 – 18 AWG (0,5 – 1,0mm²)	.187 x .020 (4,75mm x 0,5mm)	25	**83-9441**
16 – 14 AWG (1,5 – 2,5mm²)	.187 x .020 (4,75mm x 0,5mm)	25	**83-9451**
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	25	**83-9471**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	25	**83-9481**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	25	**83-9501**

105° C/300 Volts max. Not UL Listed.

Nylon Fully-Insulated Female

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.150 (3,8mm)	25	**83-9771**	1,000	**84-9771**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9781**	1,000	**84-9781**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9791**	500	**84-9791**

105° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Nylon Fully-Insulated Male

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.150 (3,8mm)	25	**83-9911**	500	**84-9911**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9921**	500	**84-9921**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9931**	500	**84-9931**

105° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Insulated Bullet

Wire Range	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (0,5mm – 1,0mm²)	0.150 (3,8mm)	25	**83-8001**
16 – 14 AWG (1,5 – 2,5mm²)	0.185 (4,7mm)	25	**83-8011**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Fully-Insulated Receptacles

Wire Range	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (0,5mm – 1,0mm²)	0.150 (3,8mm)	25	**83-8101**
16 – 14 AWG (1,5 – 2,5mm²)	0.185 (4,7mm)	25	**83-8111**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Disconnects

Vinyl Insulated Multi-Stack

Wire Range	Tab Size	Max. Wire Ins. Dia.	Qty.	Part No.
22 – 18 AWG (5,0 – 1,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.15 (3,8mm)	25	**83-9611**
16 – 14 AWG (1,5 – 2,5mm²)	.250 x .032 (6,35mm x 0,8mm)	0.185 (4,7mm)	25	**83-9621**
12 – 10 AWG (4,0 – 6,0mm²)	.250 x .032 (6,35mm x 0,8mm)	0.244 (6,2mm)	25	**83-9631**

75° C/300 Volts max.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Flag Female

Wire Range	Tab Size	Qty.	Part No.	Qty.	Part No.
16 – 14 AWG (1,5 –2,5mm²)	0.250 x .032 (6,35mm x 0,8mm)	25	**83-9401**	500	**84-9401**

105° C/300 Volts max. Not UL Listed.

Wire Connector 774A LISTED Cu only c UL

Adapter - Male to Female (2-1)*

Tab Size	Qty.	Part No.
0.250 x .032 (6,35mm x 0,8mm)	25	**83-9801**

105° C/300 Volts max. Not UL Listed.

Wire Connector 774A LISTED Cu only c UL

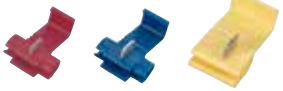
Splices

Vinyl Insulated Butt

Wire Range	Max. Wire Ins. Dia.	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	0.157 (4,0mm)	25	**83-9281**	1,000	**84-9281**
16 – 14 AWG (1,5 – 2,5mm²)	0.177 (4,5mm)	25	**83-9291**	1,000	**84-9291**
12 – 10 AWG (4,0 – 6,0mm²)	0.248 (6,3mm)	25	**83-9301**	500	**84-9301**

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL



Tap

Wire Range	Color	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	Red	25	**83-3261**	250	**84-3261**
16 – 14 AWG (1,5 – 2,5mm²)	Blue	25	**83-3271**	—	—
12 – 10 AWG (4,0 – 6,0mm²)	Yellow	25	**83-3281**	—	—

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL

Vinyl Insulated Parallel

Wire Range	Max. Wire Ins. Dia.	Quantity	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	0.157 (4,0mm)	1,000	**83-9351**
16 – 14 AWG (1,5 – 2,5mm²)	0.177 (4,5mm)	1,000	**83-9361**
12 – 10 AWG (4,0 – 6,0mm²)	0.248 (6,3mm)	500	**83-9371**

75° C/600 Volts max.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Butt

Wire Range	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	25	**83-9001**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	25	**83-9011**	1,000	**84-9011**
12 – 10 AWG (4,0 – 6,0mm²)	25	**83-9021**	500	**84-9021**
8 AWG (8,0mm²)	25	**83-9031**	250	**84-9031**
6 AWG (14,0mm²)	20	**83-9041**	—	—
4 AWG (22,0mm²)	20	**83-9051**	—	—

105° C/600 Volts max. Not UL Listed.

Wire Connector 774A LISTED Cu only c UL

Non-Insulated Parallel

Wire Range	Qty.	Part No.	Qty.	Part No.
22 – 18 AWG (0,5 – 1,0mm²)	25	**83-9071**	—	—
16 – 14 AWG (1,5 – 2,5mm²)	25	**83-9081**	1,000	**84-9081**
12 – 10 AWG (4,0 – 6,0mm²)	25	**83-9091**	1,000	**84-9091**

105° C/600 Volts max. Not UL Listed.

Pre-Insulated Crimp Connectors

LISTED Wire Connector Cu/Cu Only

- Compact design fits easily into tight locations
- Flared skirt protects against turned-back strands
- Beveled opening eases wire entry
- Tough UL 94V-2 flame-retardant shell rated at 105°C (221°F)

Model	Wire Combination Range	Quantity	Part No.
48	600V* Min. 2 #22 Max. 1 #14 w/2 #18	Carton of 1,000	**30-245**
		Keg of 10,000	**30-645**
49	600V* Min. 1 #22 w/1 #18 Max. 1 #12 w/1 #16	Carton of 1,000	**30-249**
		Keg of 10,000	**30-649**
NC-8	600V* Min. 4 #16 Max. 1 #12 w/4 #14	Carton of 1,000	**30-148**
		Keg of 5,000	**30-648**
NC-2212**	600V* Min. 2 #22 Max. 5 #18	Carton of 1,000	**30-146**
		Key of 10,000	**30-646**

*1,000V maximum in fixtures and signs. Note: Connectors are transparent.
**Stranded wires only.

Set Screw Wire Connectors

- Eliminates need for re-stripping wire each time connection is disturbed
- Solid brass sleeves
- Set-screw easily and securely applies maximum compression to conductors to ensure a vibration-resistant splice
- Permits fast visual inspection of splice
- Tough, flame-retardant shell rated at 150°C (302°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E

LISTED Wire Connector Cu/Cu Only

Model	Wire Combination Range	Quantity*	Part No.
10	300V 22 thru 10 AWG Min. 1 #20 w/1 #22 – Max. 2 #14 w/1 #16	Box of 100	**30-210**
		Carton of 1,000	**30-310**
11	600V 22 thru 10 AWG Min. 1 #14 w/1 #20 – Max. 3 #14 w/2 #18	Box of 100	**30-211***
		Carton of 1,000	**30-311***
22	600V 20 thru 10 AWG Min. 1 #16 w/3 #18 – Max. 2 #10 w/1 #12	Box of 100	**30-222***
		Carton of 1,000	**30-322***

*Package includes (1) K-2422 Set Screw Holder.

Set Screw Holder

- Convenient tool for holding and tightening set-screw connectors
- Accepts IDEAL Models 11 and 22 set-screw connectors

Description	Part No.
For Connector Models 11 & 22	**K-2422**

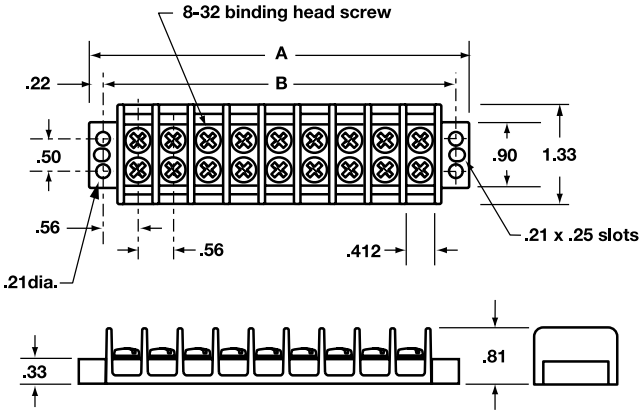
Terminal Strips & Accessories

IDEAL Terminal and Barrier Strips are designed and manufactured to be rugged, reliable and easy to use. A thermoplastic base and corrosion-resistant screws and hardware provide extended service life. Optional accessories provide convenient, versatile application. Available in a wide variety of circuit configurations, electrical ratings and center-spacing, there is an IDEAL terminal strip for virtually every job.

- Heavy-duty, corrosion-resistant screws, surface plates and optional hardware
- Accessory hardware provides a variety of termination options
- Rugged polyester thermoplastic base (UL Rated 94V-0)
- Operating temperature rated from 130°C (260°F) to -40°C (-40°F)
- UL Recognized (E82048) and CSA Certified (LR15364)

89-200 Series Terminal Strips

- .562" (14.28mm) center spacing
- Accepts wire sizes from 10 through 22 AWG Cu
- #8-32 Philslot, zinc-plated steel terminal screws
- Recommended torque: 16 in. - lb.

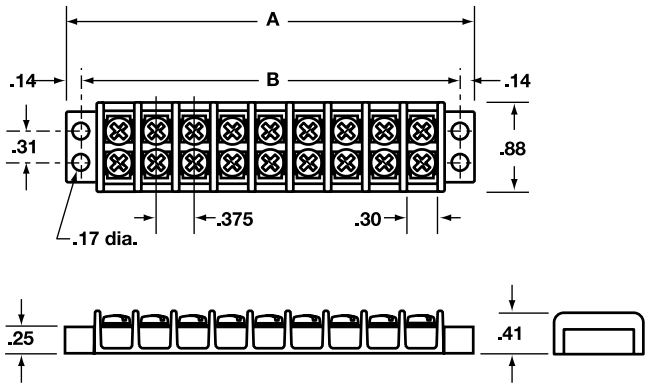


No. of Poles	Dimensions (Inches)		Part No.
	A	B	
2	2.13	1.69	**89-202**
3	2.69	2.25	**89-203**
4	3.25	2.81	**89-204**
6	4.37	3.94	**89-206**
8	5.50	5.06	**89-208**
10	6.62	6.19	**89-210**
12	7.75	7.31	**89-212**

Ratings: 30A/600V UL Listed, CSA Certified (30A/250V when used with optional quick connects).

89-300 Series Terminal Strips

- .375" (9.52mm) center spacing
- Accepts wire sizes from 14 through 22 AWG Cu
- #6-32 Philslot, zinc-plated steel terminal screws
- Recommended torque: 9 in. - lb.

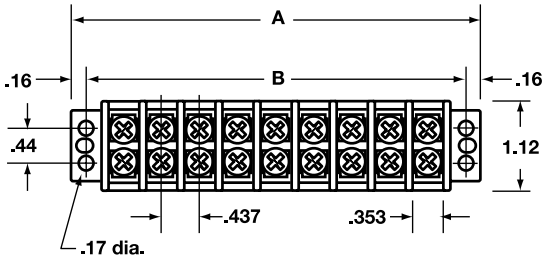


No. of Poles	Dimensions (Inches)		Part No.
	A	B	
2	1.40	1.12	**89-302**
4	2.16	1.88	**89-304**
6	2.90	2.62	**89-306**
8	3.66	3.38	**89-308**
10	4.40	4.12	**89-310**
12	5.16	4.88	**89-312**

Ratings: 30A/300V UL Listed, 20A/150V CSA Certified (15A/125V when used with optional quick connects).

89-400 Series Terminal Strips

- .437" (11.10mm) center spacing
- Accepts wire sizes from 12 through 22 AWG Cu
- #6-32 Philslot, zinc-plated steel terminal screws
- Recommended torque: 9 in. - lb.



No. of Poles	Dimensions (Inches)		Part No.
	A	B	
2	1.63	1.31	**89-402**
4	2.51	2.18	**89-404**
6	3.38	3.06	**89-406**
8	4.25	3.93	**89-408**
10	5.13	4.81	**89-410**
12	6.00	5.68	**89-412**

Ratings: 30A/300V UL Listed, CSA Certified.

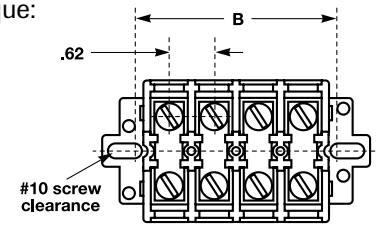
Quick Connects

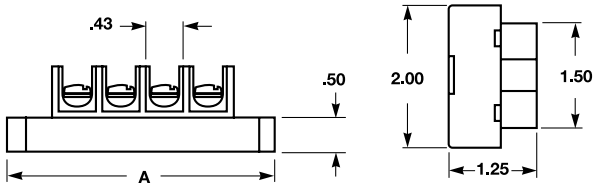
- Allows fast, flexible circuit changes

For use with Terminal Strip Series:	Tab size (in.)	Quantity	Flat-None Part No.	Flat-Flat Part No.
89-300	.187 x .020	10	**89-314**	**89-317**
89-200 & 89-400	.250 x .031	10	**89-414**	**89-417**

89-500 Series Terminal Strips

- Available in standard or shorting block styles
- .625" (15.88mm) center spacing
- Accepts wire sizes from 6 through 22 AWG Cu
- #10-32 Philslot, nickel-plated brass terminal screws
- Recommended torque: 20 in. - lb.





No. of Poles	Dimensions (Inches)		Standard Block Part No.	Shorting Block Part No.
	A	B		
4	3.75	2.87	**89-504**	**89-505**
6	5.00	4.12	**89-506**	**89-507**
8	6.25	5.37	**89-508**	**89-509**
12	8.75	7.87	**89-512**	**89-513**

Ratings: 60A/600V UL Listed, CSA Certified (Max. rating achieved with #6 AWG Cu wire crimped to ring terminals)

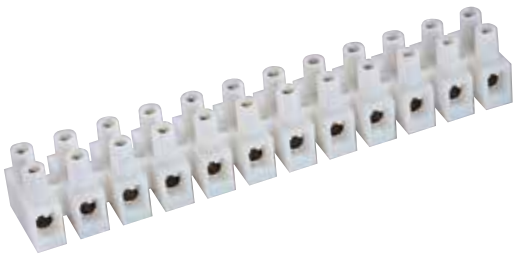
Jumpers

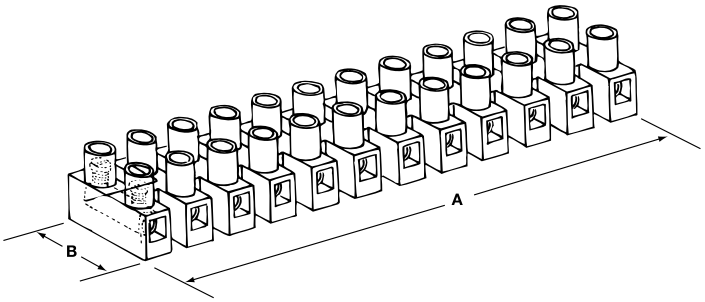
- Provides easy connection of multiple circuits

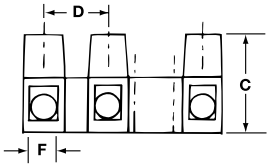
For use with Terminal Strip Series	Center Spacing (in.)	Quantity	Flat Slip-on Part No.	Over Barrier Slip-on Part No.	Flat 12-Circuit Part No.
89-200	.562	10	**89-229**	**89-224**	—
		100	**89-230**	—	—
89-300	.375	10	**89-323**	**89-324**	—
		100	**89-330**	—	—
89-400	.437	10	**89-423**	**89-424**	—
		100	**89-430**	—	—
89-500	.625	2	—	—	**89-525**

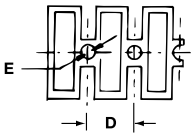
Barrier Strips

- Recessed screws and tubular contacts provide added safety and help prevent short circuits
- Tubular contacts connect stripped, un-terminated solid or stranded wire directly to each contact
- Integrated wire protectors prevent twisting and breakage of stranded wire during connection
- Modular 12-circuit design can be cut into smaller sections, or stacked end-to-end
- Rugged nylon construction, UL 94V2
- Operating temperature rated to 105°C (221°F)









Electrical Ratings	Wire Range	No. of Circuits	Torque in.- lb.	Dimensions (Inches)						Part No.
				A	B	C	D	E	F*	
20A/300V UL 20A/600V CSA	22 - 12 AWG 20 - 18 AWG	12	3.5	3.787	0.669	0.570	0.315	0.114	0.110	**89-608**
30A/300V UL 30A/600V CSA	22 - 10 AWG 18 - 14 AWG	12	4.4	4.626	0.795	0.670	0.394	0.142	0.134	**89-610**
35A/300V UL/CUL	22 - 10 AWG	12	7.0	5.540	0.937	0.748	0.472	0.154	0.154	**89-612**
50A/300V UL/CUL	20 - 8 AWG	12	12.0	6.220	1.008	0.992	0.531	0.173	0.189	**89-614**

*Plus or minus .004 in.

B-TAP® Insulation-Piercing Tap Connectors

B-TAP® Insulation Piercing Connectors

Safe, dependable and easy. The Buchanan B-TAP® Insulation Piercing Connector offers a breakaway torque nut that guarantees a perfect connection every time, no more guesswork. It simply snaps off when UL torque requirements are met. The grease-filled rubber end caps provide superior water and corrosion resistance, while the insulation-piercing design eliminates downtime and power interruptions.

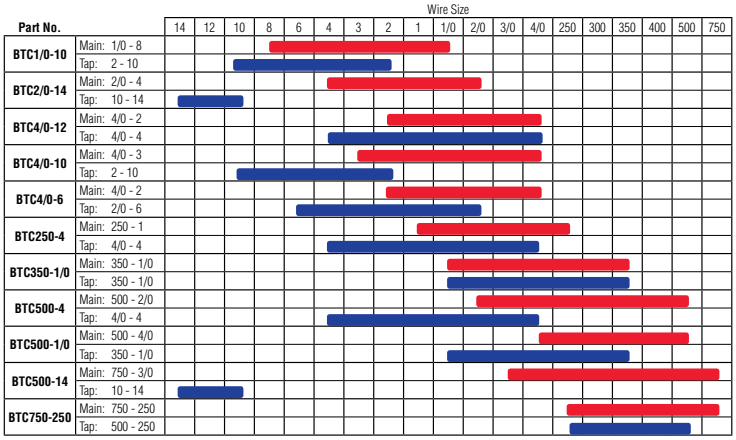
That translates into a 60% installed cost savings compared to split bolts. Installation is easy; all you need is a standard socket or wrench. B-TAP® Connectors can be safely installed on energized systems, eliminating power interruptions and downtime.

B-TAP® Connectors...EASY AS 1, 2, 3.

1. Select proper B-TAP® connector.
2. Position cables. No need to turn off power.
3. Tighten breakaway torque nut with a standard socket or wrench.

To determine the most appropriate B-TAP® connector for a specific main and tap combination, see chart.

Wire Range Chart



Full-line is 600V dual-rated, 194°F (90°C)

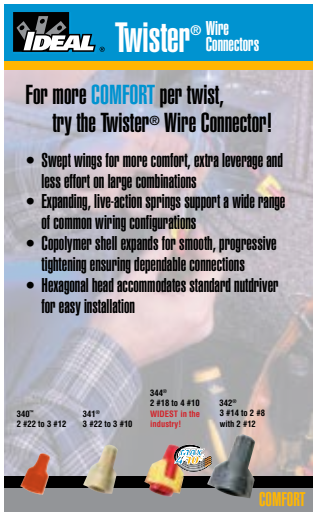
Conductor Range		Voltage Rating	Socket Size (Inches)	Torque (In. Lbs.)	No. of Bolts	Part No.
Run	Tap					
1/0-8	2-10[1]	600V	1/2	80	1	**BTC1/0-10**
2/0-4	10-14[2]	600V	1/2	80	1	**BTC2/0-14**
4/0-2	4/0-4	600V	1/2	160	1	**BTC4/0-2**
4/0-3	2-10[3]	600V	1/2	125	1	**BTC4/0-10**
4/0-2	2/0-6	600V	1/2	160	1	**BTC4/0-6**
250-1	4/0-4	600V	1/2	160	1	**BTC250-4**
350-1/0	350-1/0	600V	5/8	330	2	**BTC350-1/0**
500-2/0	4/0-4	600V	5/8	330	2	**BTC500-4**
500-4/0	350-1/0	600V	5/8	330	2	**BTC500-1/0**
750-3/0	10-14[4]	600V	1/2	80	1	**BTC500-14**
750-250	500-250	600V	5/8	330	2	**BTC750-250**

[1] Tap #2 - #10 Cu solid/stranded; #2 - #10 Al stranded
[2] Tap #10 - #14 Cu solid/stranded; #10 - #14 Al stranded
[3] Tap #2 - #10 Cu solid/stranded; #2 - #8 Al stranded
[4] Tap #10 - #14 Cu solid/stranded; #10 - #12 Al stranded

UL LISTED

IDEAL Connector Sample Packs

P-5305



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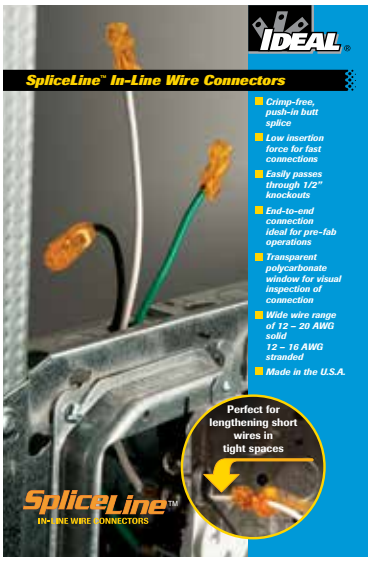

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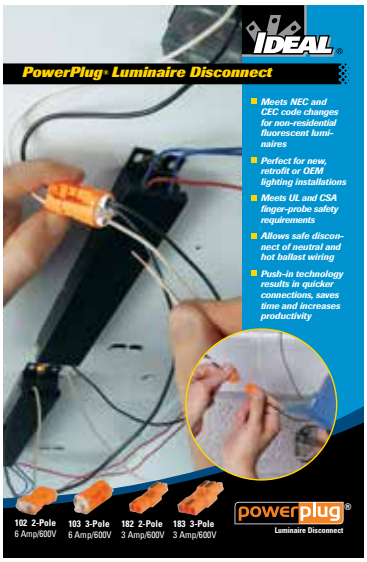

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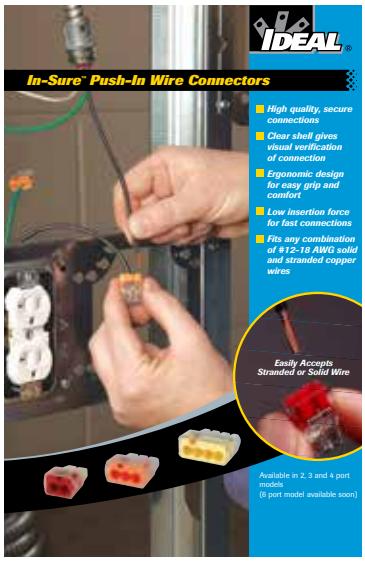

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Visit us at www.idealind.com for more information or email us at contactus@idealindustries.com for a free sample!

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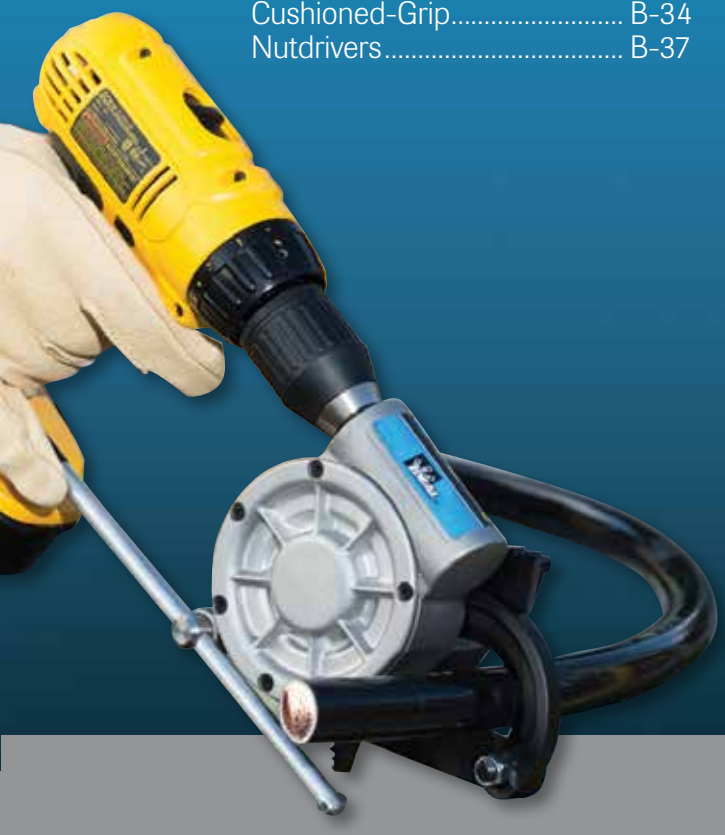


PROFESSIONAL QUALITY, INNOVATIVE SOLUTIONS

When it comes to quality, performance and durability, IDEAL is the professional choice for tools, cutting tools, fish tapes, benders and lubes. The community of professionals know what it takes to succeed in today's electrical world and IDEAL fills those needs with high-quality innovative solutions. The expansion of the IDEAL U.S. manufacturing and engineering supported by strategic international facilities has been providing professional electricians with quality tools since 1916.

Wire Fishing

Type

Blued Steel™

- Laser etched in 12 in. increments to provide instant conduit length
- Stiffer for long runs
- Highest grade carbon steel
- Tensile strength 1,600 lbs.

Gold-Fish®

- Brass-plated coiled steel
- Kink proof
- Tensile strength 700 lbs.

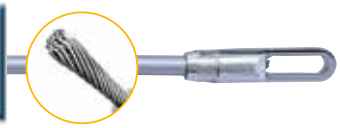
Stainless Steel

- Laser etched in 12 in. increments to provide instant conduit length
- Tensile strength 1,600 lbs.

S-Class®

- Non-conductive fiberglass tape for use around live circuits
- Omni-directional pushing
- 3 tip choices - leader, metal eyelet and non-conductive eyelet
- Pulling strength 500 lbs.

Zoom™



- 19 strands of stainless steel
- Ultra hard nylon jacket adds slipperiness, protects cables and user's hands
- Pulling strength 1,000 lbs.

Volt-Guard

- Non-conductive tape for use around live circuits
- Pulling strength 350 lbs.

Cases

Tuff-Grip™ Pro

- Durable case takes up to 20 ft. drop without breaking
- Full-perimeter handle band helps keep dirt and moisture out
- Superior pull-out and rewind characteristics

Rapid-Pak®

- Inner rotating reel with winding knob for increased labor savings
- Funneled tape opening reduces kinking and tape breakage
- Reversible, hinged knob for right or left handed rewinds

Thumb Winder™

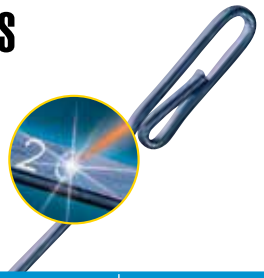
- Convenient 7 in. size for easy tool bag storage
- Durable impact resistant ABS case
- Easy-to-use thumb-operated rewind

⚠ WARNING

Always use approved safety glasses when using this product. Do not use near energized equipment. Electrical shock may occur. Make sure all power is off. Do not use pliers or other tools that may kink, damage, or weaken any round fish tapes such as S-Class®, Nylon or Zoom™. Use only a fish tape puller designed for this purpose. While fish tapes made of fiberglass, nylon or other composite materials are non-conductive, they may have a metal eyelet that is conductive and could be grounded against conduit. Do not use on live electrical circuits. Do not attempt to use fish tape that is fractured or has multiple ends. Keep the fish tape wound in the reel to prevent damage to the tape. Use this product in a safe work position to prevent loss of balance. Never remove the screws from case while fish tape is coiled inside the reel. Failure to follow instructions may result in severe bodily harm or damage to property.

Blued-Steel™ Fish Tapes

- Laser etched in 12 in. increments to provide instant conduit length
- High column strength for longer runs
- Non-oily finish resists rust



Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Thumb-Winder™	Replacement Tapes (No Case)
25	1/8 in. x .045 in.	7 in.	Formed hook	–	**31-012**	–
50	1/8 in. x .045 in.	7 in.	Formed hook	–	**31-010**	–
50	1/8 in. x .060 in.	9 in.	Formed hook	**31-033**	–	**31-004**
60	1/8 in. x .060 in.	12 in.	Formed hook	**31-055**	–	**31-035**
120	1/8 in. x .060 in.	12 in.	Formed hook	**31-056**	–	**31-036**
240	1/8 in. x .060 in.	12 in.	Formed hook	**31-057**	–	**31-038**
50	1/4 in. x .060 in.	12 in.	Formed hook	**31-059**	–	**31-051**
100	1/4 in. x .060 in.	12 in.	Formed hook	**31-058**	–	**31-050**
200	1/4 in. x .060 in.	None	Formed hook	–	–	**31-052**
400	1/4 in. x .060 in.	None	Formed hook	–	–	**31-2128**
—	1/4 in. x .060 in.	None	Formed hook	–	–	**31-2982***

*Bulk roll 750 lbs. (approximately 12,000 ft.)

Stainless Steel Fish Tapes

- Laser etched in 12”increments to provide instant conduit length
- Tape will not rust or corrode in humid environments
- Stainless steel design provides a smooth pay-out

Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tape (No Case)
120	1/8 in. x .060 in.	12 in.	Formed hook	**31-066**	—
240	1/8 in. x .060 in.	12 in.	Formed hook	**31-067**	**31-074**

Zoom™ Fish Tapes

- Great for hard to navigate conduit with multiple bends
- Nylon jacket protects the stainless steel core while adding to the slipperiness of Zoom™

Length (ft.)	Diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes (No Case)
50	3/16 in.	12 in.	Metal Eyelet	**31-090**	**31-091**
100	3/16 in.	12 in.	Metal Eyelet	**31-092**	**31-093**
200	3/16 in.	16 in.*	Metal Eyelet	**31-096**	—

*Traditional handle

S-Class® Fiberglass Fish Tapes

- Non-conductive tape for use around live circuits
- Structural glass core provides a more durable fiberglass tape
- Fiberglass cone with nylon outer jacket provides durability

Length (ft.)	Diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Rapid-Pak®	Replacement Tapes (No Case)
50	3/16 in.	12 in.	Leader	**31-060**	**31-187**	**31-150**
50	3/16 in.	12 in.	Metal Eyelet	**31-062**	**31-190**	**31-160**
50	3/16 in.	12 in.	Non-Conductive Eyelet	**31-086**	**–**	**31-200**
100	3/16 in.	12 in.	Leader	**31-061**	**31-186**	**31-152**
100	3/16 in.	12 in.	Metal Eyelet	**31-063**	**31-189**	**31-162**
100	3/16 in.	12 in.	Non-Conductive Eyelet	**31-087**	**–**	**31-201**
200	3/16 in.	16 in.*	Leader	**31-064**	**31-207**	**31-155**
200	3/16 in.	16 in.*	Metal Eyelet	**31-065**	**31-208**	**31-165**
200	3/16 in.	16 in. *	Non-Conductive Eyelet	**31-088**	**–**	**31-202**

*Traditional handle

Volt-Guard Fish Tapes

- Light-duty non-conductive tape for use around live circuits
- Elliptical design gives the Volt-Guard greater pushing power
- Repair kit available, order #31-541

Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes (No Case)
60	3/16 in. x .094 in.	12 in.	Non-Conductive Eyelet	**31-542**	**31-552**
120	3/16 in. x .094 in.	12 in.	Non-Conductive Eyelet	**31-544**	**31-554**

Gold-Fish® Fish Tape

- Ultra-flexible tape for hard-to-navigate areas
- Brass-plated coils resist rust
- No “memory” – hangs straight after being coiled for long periods

Length (ft.)	Diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tape (No Case)
50	3/16 in.	12 in.	Metal Eyelet	**31-144**	**31-141**

Fish Tape Leaders

- Guides fish tape around bends in conduit
- Handles up to six 10 AWG bare wires
- Pulls up to 500 lbs.

Description	Part No.
Fish Tape Leader for steel or stainless steel tapes	**31-148**
Fish Tape Leader for S-Class® Fiberglass Fish Tape	**31-159**

Fish Tape Swivel Ball

- Swivels to prevent wires from twisting during pull
- Designed for use on 1/8 in. steel or stainless steel tapes
- Eyelet holds up to four 10 AWG bare wires

Description	Part No.
Fish Tape Swivel Ball	**31-085**

Tuff-Grip™ Pro Accessories

- Replacement includes: Fish Tape Case (2 halves) and Handle (1)

Description	Part No.
Fish Tape Parts Kit	**KB-0173**
Screws (not included, kit requires 4)	**LA-4218**

Screws not included, must be ordered separately.

Fish Tape Non-Conductive Tip Replacement Kits

31-203

31-541

- Easy to apply
- Each kit includes two eyelets & adhesive

Description	Part No.
Volt-Guard Fish Tape Repair Kit	**31-541**
S-Class® Fish Tape Repair Kit	**31-203**

Fish Tape Field Application Repair Kits

- For use on S-Class® & Zoom™ Fish Tapes
- Crimps on new eyelet or leader in minutes
- Dies can be used with Crimpmaster™ Crimp Tool
- Connection guaranteed to withstand 500 lbs.

31-158

31-166

31-156

Description	Part No.
Field Application Kit includes: Crimpmaster™ Crimp Tool frame, die set, S-Class® eyelets (2), S-Class® leaders (2), Zoom™ eyelets (2) & instant adhesive	**31-156**
Die Set Kit includes: eyelets (2), leaders (2) & instant adhesive (for those who already have a Crimpmaster™ Crimp Tool)	**31-164**
Replacement eyelets (4) for S-Class® Fish Tapes & adhesive	**31-158**
Replacement leaders (4) for S-Class® Fish Tapes & adhesive	**31-159**
Replacement eyelets (2) for Zoom™ Fish Tapes	**31-094**
Die Set Only (for those who already have a Crimpmaster™ Crimp Tool)	**31-166**

Tuff-Rod™ Regular Flex Fishing Poles

- Strong, lightweight, flexible extendable fiberglass rod kits
- Use to reach and pull wires over suspended ceilings, in cable trays or through interior walls
- Packaged in clear tubes for protection and long-term storage
- 1/4 in. white fiberglass
- Extra stiffness for added control when maneuvering wires

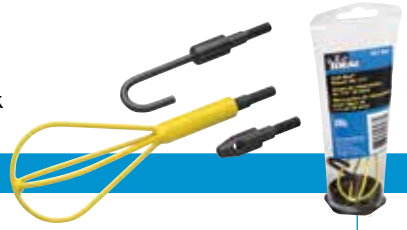
Description	Length	Diameter	Sections	Part No.
Fixed bullet nose and threaded J hook	12 ft. total	1/4 in.	3 ea. 4 ft.	**31-611**
Fixed bullet nose and threaded J hook	24 ft. total	1/4 in.	4 ea. 6 ft.	**31-612**
Replacement Rods	4 ft. x 12	1/4 in.	12 ea. 4 ft.	**31-643**
Replacement Rods	6 ft. x 12	1/4 in.	12 ea. 6 ft.	**31-644**

Tuff-Rod™ Extra Flex Glow Fishing Poles

- Strong, lightweight, flexible extendable fiberglass rod kits
- Use to reach and pull wires over suspended ceilings, in cable trays or through interior walls
- Packaged in clear tubes for protection and long-term storage
- 3/16 in. pale green luminescent fiberglass
- Glow-in-the-dark material for easy use in attics, basements and other dimly lit areas

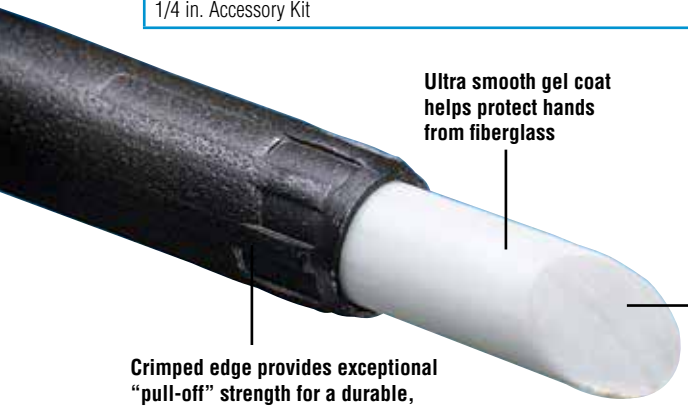
Description	Length	Diameter	Sections	Part No.
Fixed bullet nose and threaded J hook	12 ft. total	3/16 in.	3 ea. 4 ft.	**31-631**
Fixed bullet nose and threaded J hook	30 ft. total	3/16 in.	5 ea. 6 ft.	**31-633**
Replacement Rods	4 ft. x 12	3/16 in.	12 ea. 4 ft.	**31-647**
Replacement Rods	6 ft. x 12	3/16 in.	12 ea. 6 ft.	**31-648**

Tuff-Rod™ Accessory Kits



- Includes replacement heads: one threaded bullet nose, one threaded J hook and one threaded whisk

Description	Part No.
3/16 in. Accessory Kit	**31-651**
1/4 in. Accessory Kit	**31-652**



Wire Lubricants & Accessories

Commercial Wire Pulling

Application Location	Finished Construction	New Construction
	Indoors/Outdoors	
Temperature Range	40°F - 120°F 4°C - 49°C	
Length of Run	Up to 75 ft.	Up to 1,200 ft.
Installation Time	8 hrs.	24 hrs.
Best Choice	Use: ClearGlide®	Use: Yellow 77® and Yellow 77® Plus

Utility Wire Pulling

Indoors or Outdoors	Outdoors Only	Outdoors	Indoors or Outdoors
40°F - 120°F 4°C - 49°C	-28°F - 40°F -33°C - 4°C	40°F - 120°F 4°C - 38°C	40°F - 140°F 4°C - 82°C
Up to 250 ft. 24 hrs.	Up to 250 ft. 72 hrs.	Up to 250 ft. 24 hrs.	Up to 250 ft. 24 hrs.
Use: Aqua-Gel® II	Use: Aqua-Gel® CW	Use: Aqua-Gel® IIP	Use: Velocity™

Selection Guide

	ClearGlide® Wire Pulling Lubricant	Yellow 77® Wire Pulling Lubricant	Yellow 77® Plus Wire Pulling Lubricant	Aqua-Gel® II Wire Pulling Lubricant	Aqua-Gel® IIP Wire Pulling Lubricant	Aqua-Gel® CW Wire Pulling Lubricant	Velocity™ Wire Pulling Lubricant
Color	Clear	Yellow	Yellow	Blue	Blue	Pink	Cream
Base	Polymer	Wax	Wax	Polymer	Polymer	Polymer	Polymer
Average Coefficient of Friction*	.23	.17	.16	.19	.19	.19	.16
Stability Range	32°F – 180°F (0°C – 82°C)	32°F – 130°F (0°C – 54°C)	32°F – 190°F (0°C – 88°C)	32°F – 180°F (0°C – 82°C)	32°F – 180°F (0°C – 82°C)	-28°F – 190°F (-33°C – 82°C)	40°F – 140°F (4°C – 82°C)
Application Temperature Range	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	40°F – 100°F (4°C – 38°C)	-28°F – 40°F (-33°C – 4°C)	25°F – 140°F (-3.9°C – 60°C)
Compatibility (Cable Types):							
Rubber	•	•	•	•	•	•	•
Neoprene	•	•	•	•	•	•	•
Nylon	•	•	•	•	•	•	•
PVC	•	•	•	•	•	•	•
High-density or cross-linked polyethylene	•	•	•	•	•	•	•
Low-density polyethylene	•		•	•	•	•	•
Semiconducting jacket	•		•	•	•	•	•
Hypalon	•	•	•	•	•	•	•

*Results from NEETRAC, an independent testing laboratory affiliated with The Georgia Institute of Technology.

Recommended Qty. of Lubricant Formula

Q = .0015 x L X D
Q = Quantity of recommended lube in gallons
L = Length of pull in feet
D = Nominal ID of conduit in inches

This formula is used as a guideline on estimating the quantity of lube needed for various jobs. Many factors go into a cable pull, however, this formula is just based on length of the pull and diameter of the conduit. Increase quantities for the following troubles:

- Stiff, heavy cable
- Rough, old or dirty conduits
- High percent conduit fill
- Pulls with several bends
- High temperatures
- Not food grade

Yellow 77® Plus Wire Pulling Lubricant

- Rapid Glide™ polytetrafluoroethylene additive provides greater lubricity than other wax-based lubricants – great for tough pulls
- Safe to use with all cable types
- Clings to cable throughout long runs, even where moisture is present
- Remains stable in high temperatures – usable from 32°F to 190°F (-1°C to 88°C)
- Dries slowly to a thin, non-conductive film that won't harden in conduit
- Creamy texture applies easily and uniformly by hand or brush
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-398**
1-gal. Bucket	**31-391**
5-gal. Bucket	**31-395**

Yellow 77® Wire Pulling Lubricant

- The #1 brand of wire pulling lubricant since 1959 – the perfect general purpose lube
- Wax-based formula provides superior lubricity
- Safe to use with most cable types except low-density polyethylene and semi-conducting jackets
- Clings to cable throughout long pulls, even where moisture is present
- Won't break down or separate after repeated exposure to freezing temperatures
- Dries to a thin, non-conductive film
- Creamy texture applies easily and uniformly by hand or brush
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-358**
1-gal. Bucket	**31-351**
5-gal. Bucket	**31-355**
55-gal. Drum	**31-365**

ClearGlide® Wire Pulling Lubricant

- Clear and colorless for quick and easy clean-up – great for indoor and retrofit pulls
- Exceptional lubricity for super-fast pulls
- Polymer-based formula is perfect for all electrical and datacomm applications
- Safe to use with all cable types
- Controlled evaporation rate is ideal for shorter runs
- Remains stable over wide temperature ranges – usable from 32°F to 180°F (-1°C to 82°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-388**
1-gal. Bucket	**31-381**
5-gal. Bucket	**31-385**
55-gal. Drum	**31-2143**

Aqua-Gel® II Cable Pulling Lubricant

- Polymer-based formula provides maximum tension reduction in high-stress electrical and communication cable-pulling operations
- Compatible with most cable types except composite rubber
- Cleans up easily with soap and water
- Clings to cable throughout long pulls
- Remains stable over wide temperature range — usable from 28°F to 180°F (-2°C to 88°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive
- For outdoor use only

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-378**
1-gal. Bucket	**31-371**
5-gal. Bucket	**31-375**
55-gal. Drum	**31-3855**

Aqua-Gel® IIP Cable Pulling Lubricant

- Features the same excellent qualities as Aqua-Gel® II Cable Pulling Lubricant with a lower viscosity for easy pouring and pumping
- Pourable formula clings to cable – eliminates hand application for a clean and safe job
- Compatible with most cable types, except composite rubber
- Cleans up easily with soap and water
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-gal. Jug	**31-421**
5-gal. Bucket	**31-425**
55-gal. Drum	**31-435**

Aqua-Gel® CW Cable Pulling Lubricant

- Features the same excellent qualities as Aqua-Gel® II Cable Pulling Lubricant with a lower temperature range for use outdoors in cold weather
- Polymer-based, cold-weather formula remains stable in storage from -28°F to 190°F (-33°C to 82°C)
- Formulated for exterior use in cold weather conditions
- Cleans up easily with soap and water
- Clings to cable throughout long pulls
- Well-suited for hand or poured applications
- Environmentally safe — non-toxic, non-flammable and non-corrosive
- Not recommended for indoor use

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-298**
1-gal. Jug	**31-291**
5-gal. Bucket	**31-295**

Velocity™ Wire Pulling Lubricant

- High cling factor
- Maximum friction reduction
- Specification grade
- Compatible with all popular cable types
- Temperature stable
- Non-combustible residue
- Environmentally safe – non-toxic, non-flammable and non-corrosive

UL LISTED

Description	Part No.
1-qt. Squeeze Bottle	**31-276**
1-gal. Bucket	**31-277**
5-gal. Bucket	**31-278**

Duct Seal

- Seals around junction boxes, flashings and service entrances
- Permanently soft, non-toxic compound can be painted immediately after application
- Won't adversely affect other plastic materials or corrode metals

UL LISTED

Description	Quantity	Part No.
1 lb. Block	Carton of 10	**31-601**
5 lb. Block	Carton of 10	**31-605**

For a Safety Data Sheet on Noalox® and other products visit us at www.idealind.com

Noalox® Anti-Oxidant

- Anti-oxidant compound improves efficiency and service life of aluminum electrical applications
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inner-strand and inner-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to minimize further oxidation
- For use with pressure-type wire connectors including lugs, taps, service entrances and split-bolts
- Reduces galling and seizing when applied on aluminum conduit joints promoting good ground continuity

UL LISTED

Description	Part No.
1/2-oz. Tube	**30-024**
4-oz. Squeeze Bottle	**30-026**
8-oz. Squeeze Bottle	**30-030**
8-oz. Brush Cap	**30-031**
1-gal. Bucket	**30-032**
5-gal. Bucket	**30-040**
55-gal. Drum	**30-1216**

Powr-Fish® Pull Line

- White with blue tracer for easy identification
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use

Description	Tensile Strength	Length	Part No.
Powr-Fish® Pull-Line	210 lbs.	6,500 ft./ Bucket	**31-340**
Powr-Fish® Pull-Line	210 lbs.	500 ft./ Canister	**31-348**

Valu-Line™ Pull Line

- White with gray tracer for easy identification
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use

Description	Tensile Strength	Length	Part No.
Valu-Line™ Pull-Line	190 lbs.	6,500 ft./ Bucket	**31-338**

Conduit Measuring Tape

- Provides quick and accurate measurement of conduit runs
- Easy-to-read markings in sequential one-foot increments
- 160 lb. tensile strength
- Pulls rope through raceways without stretching
- Will not rot or mildew

Description	Tape Width	Length	Part No.
Conduit Measuring Tape	.188 in.	3,000 ft.	**31-347**

Powr-Fish® Pull Line

- White with red tracer for easy identification
- 500 lb. tensile, our highest tensile-rated pull-line
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use

Description	Tensile Strength	Length	Part No.
Powr-Fish® Pull-Line	500 lbs.	2,200 ft./ Bucket	**31-344**

3-in-1 Premise MULETAPE®

- Reduces installation time and saves money on premise jobs
- Blow, measure and pull with single product
- Imprinted with sequential footage or meter markings
- Fewer installation steps, significant material and labor savings

Description	Pulling Strength	Tape Width	Length/ Bucket	Part No.
3-in-1 Premise MULETAPE®	400 lb.	1/4 in.	4,500 ft.	**31-314**
	1,800 lb.	1/2 in.	1,300 ft.	**31-315**

MULETAPE® is a registered trademark of NEPTCO, INC.

Foam Carriers

- Attach to a suitable line to serve as a piston – clears out water or debris as they travel through conduit
- Durable foam construction for repeated use and long life
- For use with any type of blower or vacuum system

Description	Quantity	Part No.
1/2 in. Foam Carrier	5/bag	**31-466**
3/4 in. Foam Carrier	5/bag	**31-467**
1 in. Foam Carrier	5/bag	**31-468**
1-1/4 in. Foam Carrier	3/bag	**31-469**
1-1/2 in. Foam Carrier	2/bag	**31-470**
2 in. Foam Carrier	1/bag	**31-471**
2-1/2 in. Foam Carrier	1/bag	**31-322**
3 in. Foam Carrier	1/bag	**31-323**
3-1/2 in. Foam Carrier	1/bag	**31-324**
4 in. Foam Carrier	1/bag	**31-325**
5 in. Foam Carrier	1/bag	**31-326**
6 in. Foam Carrier	1/bag	**31-327**

Pro-Pull™ Rope

- Low-friction polypropylene rope slides easily through conduit
- Both rope ends looped
- Non-sliver surface can be handled without gloves
- Will not rot or mildew
- Rugged, lightweight construction

Description	Tensile Strength	Length	Part No.
1/4 in.	1,125 lbs.	250 ft./Reel	**31-839**
1/4 in.	1,125 lbs.	600 ft./Reel	**31-840**
1/4 in.	1,125 lbs.	1,000 ft./Reel	**31-841**
3/8 in.†	2,430 lbs.	250 ft./Reel	**31-844**
3/8 in.†	2,430 lbs.	600 ft./Reel	**31-845**
3/8 in.†	2,430 lbs.	1,200 ft./Reel	**31-846**
1/2 in.†	3,780 lbs.	250 ft./Reel	**31-849**
1/2 in.†	3,780 lbs.	600 ft./Reel	**31-850**
1/2 in.†	3,780 lbs.	1,200 ft./Reel	**31-851**
5/8 in.†	5,580 lbs.	600 ft./Reel	**31-853**
5/8 in.†	5,580 lbs.	1,200 ft./Reel	**31-854**
3/4 in.†	7,650 lbs.	300 ft./Reel	**31-855**
3/4 in.†	7,650 lbs.	600 ft./Reel	**31-856**
3/4 in.†	7,650 lbs.	1,200 ft./Reel	**31-857**

† Eye splice on working end.

Line Packages

- One-piece pull line and foam tip unwind as they move through conduit
- One-piece construction for fast, easy use with no knots or foam carriers to retrieve
- Line tensile strength of 17 lbs.
- For use with any type of blower or vacuum system

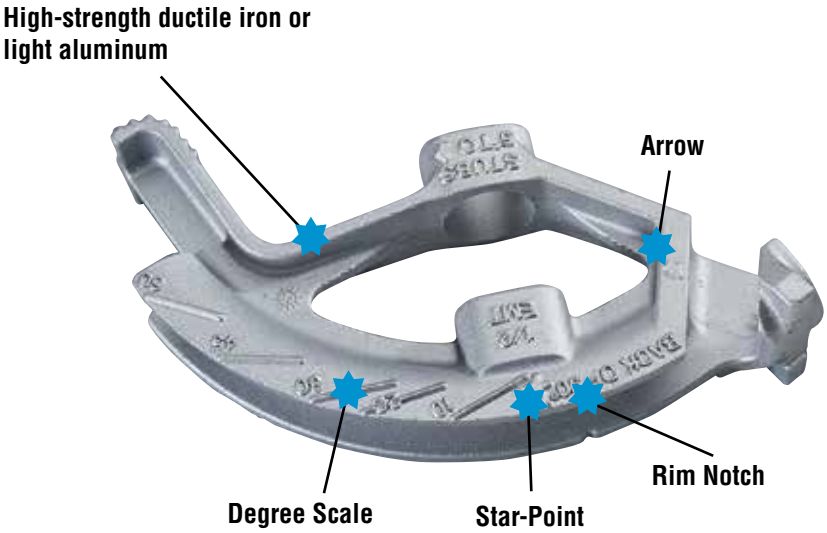
Description	Color	Quantity	Part No.
Line Package, 1/2 in. x 75 ft.	Red	10/bag	**31-472**
Line Package, 1/2 in. x 150 ft.	Red	10/bag	**31-473**
Line Package, 3/4 in. x 200 ft.	Yellow	5/bag	**31-475**
Line Package, 3/4 in. x 300 ft.	Yellow	5/bag	**31-476**
Line Package, 3/4 in. x 450 ft.	Yellow	5/bag	**31-477**
Line Package, 1 in. x 200 ft.	White	5/bag	**31-479**
Line Package, 1 in. x 300 ft.	White	5/bag	**31-480**
Line Package, 1 in. x 450 ft.	White	5/bag	**31-481**

Benders

- Available in ductile iron and aluminum heads
- Exceptional, durable, materials for extra strength
- Reinforced at stress points to provide longer life
- Markings are raised and cast into the bender body on both sides for easy visibility
- Deeply serrated step helps prevent slippage when applying force
- Grooved internal hook surface helps prevent conduit from slipping
- Flat hook surface provides stable starting point
- Desirable bending system

Handles

- Rugged, steel construction for long-term durability
- Baked-on blue enamel finish resists corrosion and enhances visibility
- Convenient bending guide for offset bends



Ductile Iron Benders

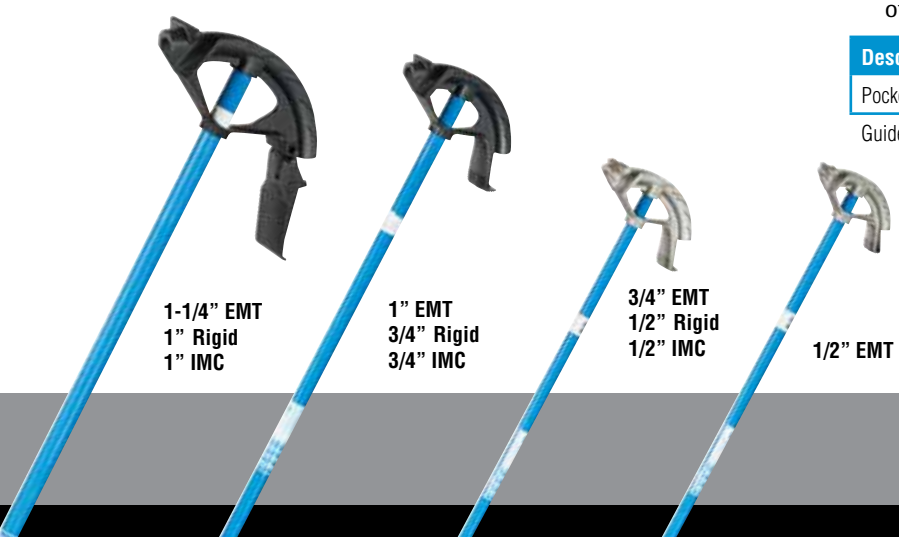
- Withstands a lifetime of heavy use
- Ductile iron material is stronger than malleable iron or aluminum

Conduit Type and Size	Part No. (head only)	Part No. (handle only)	Part No. (head and handle)
1/2 in. EMT	**74-001**	**74-019**	**74-026**
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	**74-002**	**74-019**	**74-027**
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	**74-003**	**74-020**	**74-028**
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	**74-006**	**74-021**	**74-034**

Aluminum Benders

- Lightweight aluminum for easy handling
- Strong enough for every day use

Conduit Type and Size	Part No. (head only)	Part No. (handle only)	Part No. (head and handle)
1/2 in. EMT	**74-031**	**74-019**	**74-046**
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	**74-032**	**74-019**	**74-047**



The BenderBoot™ patented foot provides stability and leverage while its grooved rubber foot pad helps prevent slippage.

BenderBoot™

- Grooved patented foot provides stability and leverage
- Santoprene® tread and hand grip provides support for saddle and offset bends
- Easy push-on assembly to 1/2 in. and 3/4 in. bender handles

Description	Part No.
BenderBoot™	**74-037**

Santoprene® is a registered trademark of Exxon Mobil Corporation.

Pocket Bender Guide

- Convenient pocket-sized reference guide
- Includes simple, concise bending techniques for precision stubs, back-to-back, offset and saddle bends

Description	Part No.
Pocket Bender Guide	**P-100**

Guide can be downloaded from our website at www.idealind.com.

Wire Strippers

Invented and manufactured at our Sycamore, Illinois facility, the T®-Stripper Wire Stripper line is the leading brand name in the world.

Made in U.S.A.

Kinetic® Reflex™ T®-Stripper Wire Stripper

Ergonomic handles with Santoprene® thermoplastic grip and Thumb Valley™ make this the premier wire stripper in the market.

- *Thumb Valley™ Protection*
- *Pocket Locket Locking Hasp*
- *Shear Cut Bolt Cutters*
- *Santoprene® Thermoplastic Grips*
- *Ergo Handles*

Kinetic® Super Wire Stripper

The ergonomic design and patented Santoprene® thermoplastic grip wicks away perspiration and reduces muscle fatigue. The Thumb Valley™ makes stripping easy and accurate.

- *Thumb Valley™ Protection*
- *Pocket Locket Locking Hasp*
- *Shear Cut Bolt Cutters*
- *Santoprene® Thermoplastic Grips*
- *Curved Handles*

Reflex™ Super T®-Stripper Wire Stripper

The ergonomic design with curved handles reduces wrist fatigue. Features 6/32 and 8/32 self-chasing, bolt cutting holes and a locking pawl for safe storage.

- *Locking Pawl*
- *Bolt Cutting*
- *Extended Textured Comfort*
- *Ergo Handles*

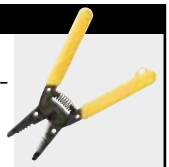
Reflex™ Premium T®-Stripper Wire Stripper

Designed for total-comfort and wire stripping. Ergonomic handles fit an electrician's natural grip and reduces hand fatigue. Textured, slip-resistant sleeves cushion thumb and fingers.

- *Extended Textured*
- *Ergo Handles*

T®-Stripper Wire Stripper

The industry standard for decades. Compact, lightweight and easy to use. Features precision-ground, knife-type blades, built-in looping holes, wire cutters and a convenient plier nose.



- *Straight Handles*

T®-Stripper Wire Stripper Selection Guide

Hole Size		#45-100's	#45-400's	#45-600's	#45-700's	#45-900's
6 10 12 14 16 18 20 22 24 26 28 30	Solid	45-125	45-417	—	—	—
8 10 12 14 16 18 20 22 24 26 28 30 32	Stranded					
14 16 18 20 22 24	Solid	45-121	45-416	—	45-716	—
16 18 20 22 24 26	Stranded					
10 12 14 16 18	Solid	45-120	45-415	—	45-715	45-915
12 14 16 18 20	Stranded					
8 10 12 14 16	Solid	—	—	45-615	—	—
10 12 14 16 18	Stranded					
6 8 10 12 14	Solid	45-124	45-418	45-618	45-718	45-918
8 10 12 14 16	Stranded					
	T®-Cutter	45-123	—	—	—	—

Santoprene® is a registered trademark of Exxon Mobil Corporation.

T®-Stripper Wire Strippers

- Form-ground, knife-type blades for accurate, easy stripping without nicking conductor
- Laser-etched wire gauge for easy-to-read visibility
- Spring-loaded automatic opening
- Corrosion-resistant, black oxide finish
- Tough steel construction

Description	Solid	Stranded	Part No.
T®-5 T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	**45-120**
T®-6 T®-Stripper Wire Stripper	14-24 AWG	16-26 AWG	**45-121**
T®-7 T®-Stripper Wire Stripper	22-30 AWG	24-32 AWG	**45-125**
T®-8 T®-Stripper Wire Stripper	6-14 AWG	8-16 AWG	**45-124**
T®-Stripper Wire Stripper – Metric	0,75-6mm²		**45-120-341**
T®-Stripper Wire Stripper – Metric	0,5-4mm²		**45-125-341**

Kinetic® Super Wire Strippers

- Non-slip textured grips and thumb rest
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easy and accurate

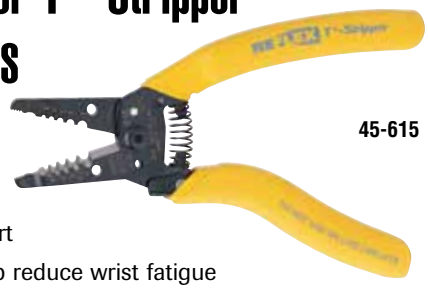
Description	Solid	Stranded	Part No.
Kinetic® Super Wire Stripper	10-18 AWG	12-20 AWG	**45-715**
	14-24 AWG	16-26 AWG	**45-716**
	6-14 AWG	8-16 AWG	**45-718**

Kinetic® Reflex™ T®-Stripper Wire Strippers

- Non-slip textured grips and thumb rest
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easy and accurate

Description	Solid	Stranded	Part No.
Kinetic® Reflex™ T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	**45-915**
	6-14 AWG	8-16 AWG	**45-918**

Reflex™ Super T®-Stripper Wire Strippers



- 6/32 and 8/32 self-chasing screw-cutting holes
- Ergonomic design for maximum comfort
- Curved handles help reduce wrist fatigue
- Textured sleeves with extra cushioning for added comfort

Description	Solid	Stranded	Part No.
Reflex™ Super T®-Stripper Wire Stripper	8-16 AWG	10-18 AWG	**45-615**
	8-14 AWG	8-16 AWG	**45-618**
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	12-2 and 14-2 AWG	—	**45-621**

Reflex™ Premium T®-Stripper Wire Strippers

- Ergonomic design for maximum comfort
- Curved handles help reduce wrist fatigue
- Textured sleeves with extra cushioning for added comfort

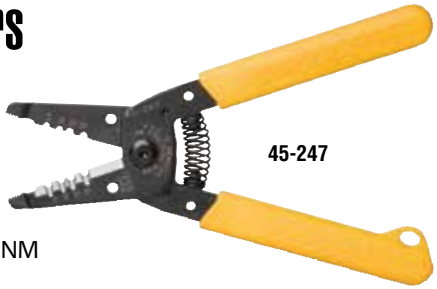
Description	Solid	Stranded	Part No.
Reflex™ Premium T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	**45-415**
	14-24 AWG	16-26 AWG	**45-416**
	22-30 AWG	24-32 AWG	**45-417**
	6-14 AWG	8-16 AWG	**45-418**
Reflex™ Premium T®-Stripper – Metric	0,5mm²-4,0mm²		**45-425-341**

T-90™ Wire Stripper

- Patented bent nose design for easy, long reach into confined spaces
- Quickly removes jacket with precision cut and straight pull
- Less fatigue with straight pull versus the side twist wrist motion
- Corrosion-resistant, black oxide finish
- Tough steel construction with sheer-type blades

Description	Solid	Stranded	Part No.
T-90™ Bent Nose 12-2 NM Wire Stripper	12 - 2 AWG	18 AWG	**45-649**

NM Cable Dual-Hole T®-Stripper Wire Strippers



- Stripping holes for stripping two 12 AWG or two 14 AWG wires simultaneously
- Ability to strip both conductor wires of NM cable at one time

Description	Solid	Part No.
Premium T®-14 T®-Stripper Wire Stripper	12 or 14 AWG	**45-247**
14/2 NM Cable T®-Stripper Wire Stripper		**45-248**
12/2 NM Cable T®-Stripper Wire Stripper		**45-249**

1000V Insulated Wire Stripper

- UL Classified
- High visibility, double insulated handles provide safety, comfort and control

Description	Part No.
1000V Insulated Wire Stripper	**45-9120**

7-in-1 Stripper

- Versatile, seven-function tool features precision-ground stripping blades, cushioned grips and plier nose
- Crimps bare and insulated terminals for 10–22 AWG wire, RG-59 coax connectors and 7 to 8mm auto ignition connectors
- Cuts unhardened wire, bolts and screws (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads
- Cuts stranded, solid, NM wire and U.F. wire to 8 AWG

Description	Solid	Stranded	Part No.
7-in-1 Stripper	8 - 16 AWG	10 - 18 AWG	**45-777**

V-Notch Stripper

- Cuts copper or aluminum wire, solid or stranded
- Rotating cam wheel adjusts to strip 10-24 AWG wire
- Looping holes for solid wire

Description	Part No.
V-Notch Stripper	**45-101**

Lil' Ripper Stripper™

- Rips outer jacket of NM cable cleanly and quickly
- Clips outer sheathing to remove excess wire jacket
- V-Notch strips inner wires
- Looping holes loop wire for screw-on connections

Description	Part No.
Lil' Ripper Stripper™	**45-025**

Underground Feeder (UF) Cable Stripper

- Self-adjusting stripping blades automatically select proper position
- Strips 12/2 AWG solid to 14/2 AWG Underground Feeder (UF) Cable
- Strips Twin and Earth cable
- Open-throat construction allows unlimited strip length
- Neatly removes outer cable sheath and inner wire sheathing to desired lengths
- Lightweight, ergonomic design helps reduce user fatigue

Description	Part No.
Underground Feeder Cable Stripper	**45-235**

Cable Ripper

- Slits NM cable wire sheathing before stripping wires
- Quick, clean and easy end or mid-run removal of jacket
- Convenient built-in wire gauge

Description	Part No.
Side Entry Cable Ripper	**45-118SRS**

T®-Cutter Wire Cutter

- Hardened steel, sheer-type blades
- Spring-loaded automatic opening
- Convenient plier nose for extra gripping strength
- Corrosion-resistant, black oxide finish
- Tough steel construction

Description	Part No.
T®-Cutter Wire Cutter	**45-123**

Data T®-Cutter Wire Cutter

- Cuts round communication cable and maintains cable geometry for better cable performance
- Cuts multi-pair cable up to .500 in. (12.7mm) and coaxial cable up to RG-9/U
- Suitable for soft cables (not ACSR)
- Steel reinforced center conductors can be trimmed with bolt cutting holes
- Cushioned comfort grip handles
- Locking latch keeps tool closed in pouch

Description	Part No.
Data T®-Cutter	**45-074**

Combo Tool

- Convenient, four-function tool features precision-ground stripping holes and knife-to-anvil cutting blades
- Crimps bare and insulated terminals
- Cuts unhardened bolts (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads

Description	Solid	Stranded	Part No.
Combo Tool	8-20 AWG	10-22 AWG	**30-428**

Multi-Crimp Strip Tool

- Cuts wire
- Crimps insulated and non-insulated wires
- Cuts bolts
- Strips 10-22 AWG wire

Description	Part No.
Multi-Crimp Strip Tool	**45-778**

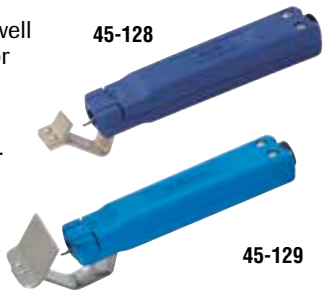
Coax Strip and Crimp Tool

- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals

Description	Part No.
Coax Strip & Crimp Tool	**30-433**

Round Cable Slitting and Ringing Tools

- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 1.50 in. O.D.
- Blade adjusts for jacket thicknesses up to .125 in.
- Spare blade in handle base



Description	Replacement Blades	Part No.
Cable Stripper for 1/4 in. to 3/4 in. O.D.	L-7486*	**45-128**
Cable Stripper for 3/4 in. to 1-1/2 in. O.D.		**45-129**

*Two Blades/package

Made in the U.S.A.

At a time when some companies are taking manufacturing jobs overseas, our commitment to American-made quality and homegrown manufacturing has never been stronger. At IDEAL, we are committed to American quality and the American electrician.

With forging facilities in Colorado Springs, Colorado and our efficient manufacturing and distribution center in Sycamore, Illinois, IDEAL Electrical pliers are crafted with American steel right here in the U.S.A. for quality and performance you can trust.

IDEAL Electrical is proud to be part of IDEAL INDUSTRIES INC., a family-owned, blue-collar American company that believes in serving the hardest working tradesmen in the world.

Colorado Springs, CO

Sycamore, IL

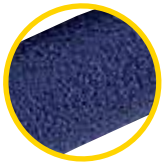
Pottstown, PA

Pliers

- Custom alloyed, premium quality tool steel provides excellent cutting performance and commercial use durability
- Precision ground knife-to-knife cutting blades for accurate, quick wire cutting
- Hardened and tempered body and cutting edges for optimum performance
- High leverage pivot design provides great cutting and gripping power

Made in U.S.A.

Grips



Heavy-Duty Dipped Grip

Smart-Grip™ Dual Durometer Molded

1000V Grip

Color-coding and **FastFinder™** letter markers on SmartGrip™ handles provide quick tool identification, even by touch!

LIMITED LIFETIME IDEAL WARRANTY

Lineman's

Long Nose

Tongue & Groove

Cable Cutter

Diagonal

Crimper

Slip-Joint

Lineman's Pliers

- Knife-to-knife blades provide excellent cutting performance
- Cuts hardened wire, bolts and stainless steel wire

Description (Smart-Grip™ Handles)	Part No.
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
Description (Dipped-Grip Handles)	**Part No.**
9-1/2 in. Lineman's Plier w/New England nose, crimping die and fish tape puller	**30-430**

Long-Nose Pliers

- Narrow profile head designed for working in tight areas
- Serrated jaws provide secure gripping surface
- Drop-forged, high-carbon steel construction
- Blades provide excellent cutting performance
- Laser-hardened blades cut hardened wire, bolts and stainless steel wire

Description (Smart-Grip™ Handles)	Part No.
8-1/2 in. Long-Nose Pliers w/Cutter	**35-3038**
Description (Dipped-Grip Handles)	**Part No.**
6 in. Long-Nose Pliers w/Cutter	**35-036**
8-1/2 in. Long-Nose Pliers w/Cutter	**35-038**

Diagonal-Cutting Pliers

- Knife-to-knife blades provide excellent cutting performance
- High-leverage design provides more cutting power
- Models 35-029 and 35-3029 feature a convenient angled head for hard-to-reach areas and rocking out nails

Description (Smart-Grip™ Handles)	Part No.
8 in. Diagonal-Cutting Pliers	**35-3028**
8 in. Diagonal-Cutting Pliers w/angled head	**35-3029**
Description (Dipped-Grip Handles)	**Part No.**
8 in. Diagonal-Cutting Pliers	**35-028**
8 in. Diagonal-Cutting Pliers w/angled head	**35-029**

Tongue & Groove Pliers

- Reinforced flange protects against breakage
- Drop-forged, high-carbon steel construction

Description (Smart-Grip™ Handles)	Jaw Opening	Part No.
9-1/2 in. Tongue & Groove Pliers	2 in.	**35-3420**
Description (Dipped-Grip Handles)	**Jaw Opening**	**Part No.**
9-1/2 in. Tongue & Groove Pliers	2 in.	**35-420**
7 in. Tongue & Groove Pliers	1 in.	**35-426**
10-1/2 in. Tongue & Groove Pliers w/V-Jaw	2 in.	**35-430**
12 in. Tongue & Groove Pliers	2-1/4 in.	**35-440**

Cable Cutters

- Drop-forged, high-carbon steel construction
- Precision-ground, hardened cutting edges provide accurate cuts without cable distortion
- Cuts 2/0 copper and 4/0 aluminum (not for use on ACSR)

Description (Smart-Grip™ Handles)	Part No.
9-1/2 in. Cable Cutter	**35-3052**
Description (Dipped-Grip Handles)	**Part No.**
9-1/2 in. Cable Cutter	**35-052**

Multi-Crimp Tools

- Crimps bare or insulated terminals and splices on 10–22 AWG wire
- Knife-to-anvil blades provide long-lasting cutting performance
- High leverage for easy crimping and cutting
- Drop-forged, high-carbon steel construction

Description (Smart-Grip™ Handles)	Part No.
9-3/4 in. Multi-Crimp Tool	**30-3429**
Description (Dipped-Grip Handles)	**Part No.**
9-3/4 in. Multi-Crimp Tool	**30-429**

Slip-Joint Pliers

- Two position slip joints fit large and small jobs
- Dipped comfort-grip handles for a secure grip
- Flush rivet

35-100

Description	Part No.
6 in. Slip Joint Pliers	**35-100**
8 in. Slip Joint Pliers	**35-102**

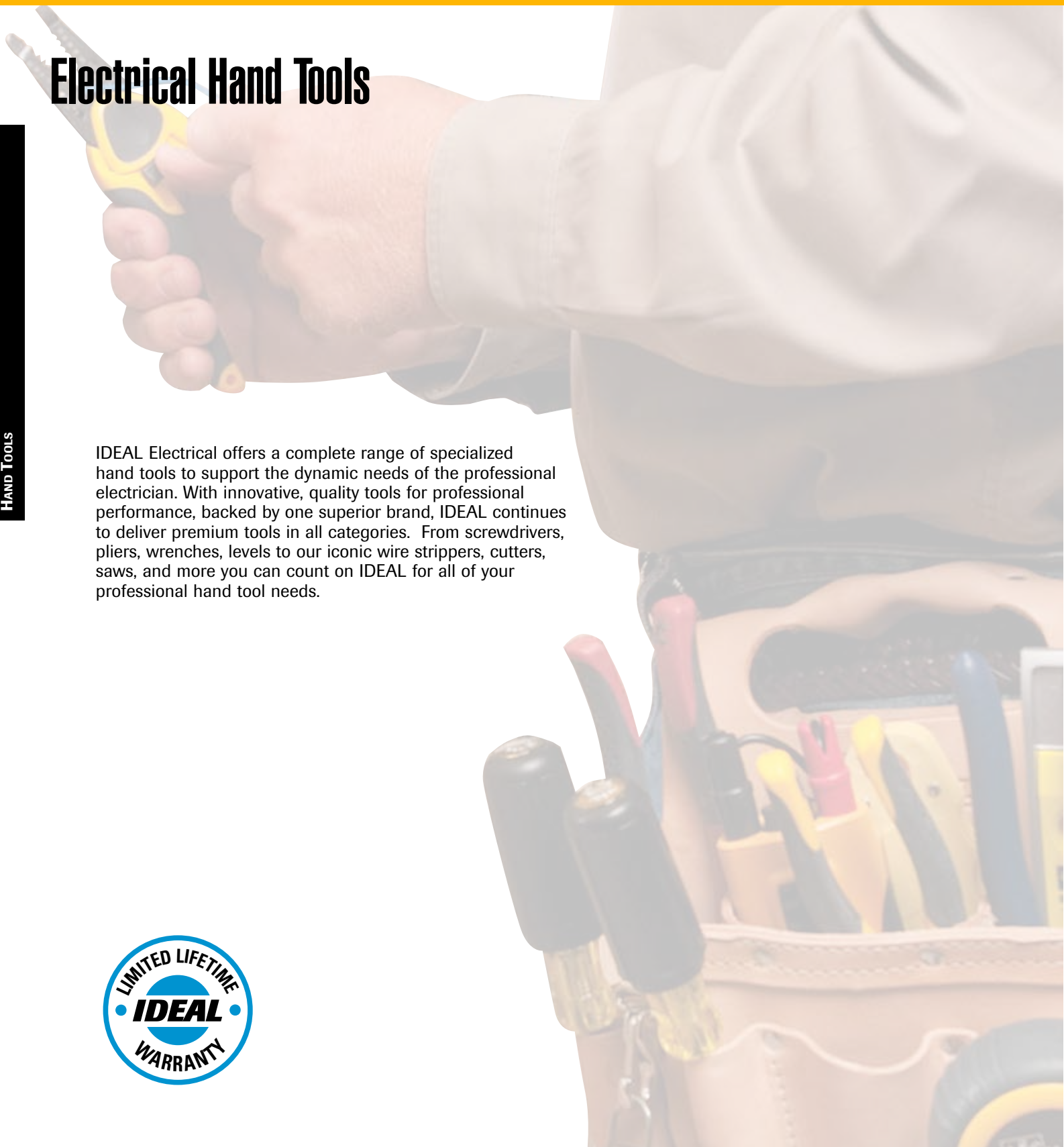
Tenite® Grips

- Not insulated from electrical shock
- Boil in water to soften for easy installation onto handles

Description	Part No.
Replacement grips for 8 in. or 9 in. pliers (one pair)	**35-008**

Tenite® is a registered trademark of Eastman Chemical Company.

Electrical Hand Tools



IDEAL Electrical offers a complete range of specialized hand tools to support the dynamic needs of the professional electrician. With innovative, quality tools for professional performance, backed by one superior brand, IDEAL continues to deliver premium tools in all categories. From screwdrivers, pliers, wrenches, levels to our iconic wire strippers, cutters, saws, and more you can count on IDEAL for all of your professional hand tool needs.

LIMITED LIFETIME IDEAL WARRANTY

SirNickless™ Cutter

- Handles all common BX, MCAP®, MC and Flex cables
- Blade cuts armor without damage to internal conductors
- Splices cleanly through casings with only a few turns
- Handle knob stores up to six replacement blades
- Cutter comes with one blade installed

Description	Quantity	Part No.
Rotary Armored Cable Cutter	—	**35-782**
Replacement Blades	5/pack	**35-781**
	1/pack	**35-781-1**

MCAP® is a registered trademark of Southwire Company.

Mechanical Indentor and Crimp Tool

- Use with aluminum (6 AWG to 4/0) and copper (8 AWG to 250 KCMIL) wires
- Adjustable crimping nests with clearly marked gauges
- Lightweight and easy to operate
- Rugged cast steel construction for long-term durability

Description	Part No.
Mechanical Indentor & Crimp Tool	**88-843**

Ratchet Crimp Tool

- Crimps insulated or bare terminals and splices on 10–22 AWG wire
- Ratchet action prevents release prior to crimp connection – helps ensure uniform crimps
- Vinyl-coated handles provide a solid, comfortable grip

Description	Part No.
Ratchet Crimp Tool	**83-001**

Four-Way Crimp Tool

- Design ensures even compression and reliable connections
- Spring-loaded, cam-actuated plungers
- Fingertip adjustment for two connector sizes

Description	Part No.
Four-Way Crimp Tool for use with Buchanan 2006S and 2011S Crimp Connectors	**C-24**

IDEAL Wipes Multi-Purpose Towels

- Durable pre-moistened fabric scrubs without tearing
- Cleans dirt, grease, lube and grime from most surfaces
- Infused with natural hand moisturizers and Vitamin E, orange citrus scent
- Meets California C.A.R.B. standards
- Available bracket for easy access storage

Description	Part No.
IDEAL Wipes, 12 in. x 9 in. (82/can)	**38-500**
IDEAL Wipes Canister Bracket	**38-500BR**

Aviation Tin Snips

- Labor-saving design cuts straight, left and right, with one tool
- Chrome-molybdenum steel forged blades for strength and durability
- Serrated edges provide a stable hold when cutting

Description	Part No.
Aviation Tin Snips	**35-001**

Drop-Forged Hammer

- One-piece drop-forged, tempered-steel polished head and handle
- Long, straight claws simplify removal of electrical fixtures
- Comfortable, perforated anti-vibe grips

Description	Part No.
18 oz. x 12-1/2 in. Drop-Forged Handled Hammer	**35-210**

Torpedo Level

- 9 in. aluminum frame with magnetic and V-grooved edges
- Windows provide easy reading of plumb level and 45° angle
- Three rare earth magnets for strong cling to conduit

Description	Part No.
9 in. Torpedo Level	**35-205**

Adjustable Wrenches

35-021

- Forged steel construction with narrow profile head reaches into tight spaces
- Tight tolerance on thumbscrew will not loosen or wobble with use
- Extra wide jaw capacity with standard and metric markings

Description	Jaw Capacity	Part No.
6 in. Adjustable Wrench	7/8 in.	**35-019**
8 in. Adjustable Wrench	1-1/8 in.	**35-020**
10 in. Adjustable Wrench	1-5/16 in.	**35-021**

Center Punch

- Accurately start drilling holes on steel surfaces
- One-piece construction
- Hardened and tempered for long life

Description	Part No.
Center Punch	**35-192**

Chisels

35-187

35-189

- Hardened and tempered for long life
- Use Wood Chisel by hand or mallet

Description	Part No.
Cold Chisel (for cutting cold metals)	**35-187**
Wood Chisel	**35-189**

Measuring Tapes

35-242

35-238

Magnetic-tipped end hook

- Measurement marks on both sides of tape
- Blade automatically stays out when extended
- Push button for smooth blade retraction
- Comfortable, shock-resistant rubber grip

Description	Tape Width	Part No.
Auto-Lock Tape Measure - 25 ft.	1 in.	**35-242**
Automatic Blade Lock w/Magnetic-Tip - 30 ft.	1 in.	**35-238**

Electric Engraving Tool

- Engraves metal, glass, stone, ceramics, plastics, hard rubber, wood and many other hard materials
- Unique design reduces bouncing and provides smooth, easy writing; operating at 7,200 strokes per minute
- Stroke adjusts to vary depth of mark
- Includes carbide-tipped point for normal markings
- Diamond point available for engraving extra-hard materials (50 to 64 Rockwell, scale C)

Description	Part No.
Engraver w/carbide-tipped point & 3-conductor grounded cord (7 ft.) & plug — 120V, 60 Hz	**11-113**
Carbide-Tipped replacement point	**11-200**
Diamond replacement point	**11-201**

Hex-Key Sets

- High-quality steel construction
- Dual-durometer, slip-resistant grip

Description	Part No.
4 in. handle w/nine 3-in. keys (5/64 in., 3/32 in., 7/64 in., 1/8 in., 9/64 in., 5/32 in., 3/6 in., 7/32 in. & 1/4 in.)	**35-146**
5-1/4 in. handle w/five 5-in. keys (3/16 in., 7/32 in., 1/4 in., 5/16 in. & 3/8 in.)	**35-147**

Folding Saw

- Light-weight, heavy-duty die cast construction
- Ergonomic rubber comfort grip
- Blade safely and conveniently folds down in handle
- Accepts most standard 6 in. recip blades

Description	Part No.
Folding Saw	**35-274**

Utility Knife

- Quick-change retractable blade system – no disassembly required
- Built in pull-line cutter
- Includes three blades in storage compartment

Description	Replacement Blades	Part No.
Utility Knife	**35-301***	**35-300**

*Five universal blades per package.

Jab Saw

- Ergonomic, textured non-slip grip w/plunge-tip design
- Wallboard blade
- Weighted head provides superior balance

Description	Part No.
Jab Saw	**35-275**

Pocket Knives

- 2-1/4 in. blade locks in position
- High-carbon stainless steel blade construction for extra strength and durability
- Durable non-slip handle
- Brass liners

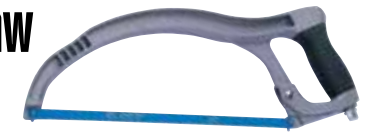
Description	Blade Type	Part No.
Electrician's Knife	Spear point and Screwdriver	**35-285**
Hawkbill Knife	Curved	**35-286**
Lineman's Jack Knife	Sheepfoot	**35-287**

Heavy-Duty Hacksaw

- Cushioned ergonomic grip for performance and comfort
- Rugged frame provides lightweight rigidity and exceptional control
- Includes 12 in. x 24T bi-metal blade, stores up to nine extra blades
- Blades can be adjusted to 55° angle for flush cutting and tensioned to 30,000 psi

Description	Part No.
Heavy-Duty Hacksaw	**35-260**

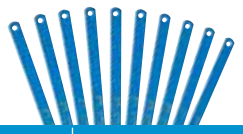
Ergonomic Hacksaw



- Angled handle for easier cutting
- Blade can easily be adjusted for flush cutting
- Easy tensioning wing-nut keeps blades tight for straighter cuts
- Cushioned ergonomic grip for performance and comfort

Description	Part No.
Ergonomic Hacksaw with 12 in. x 24T bi-metal blade	**35-261**

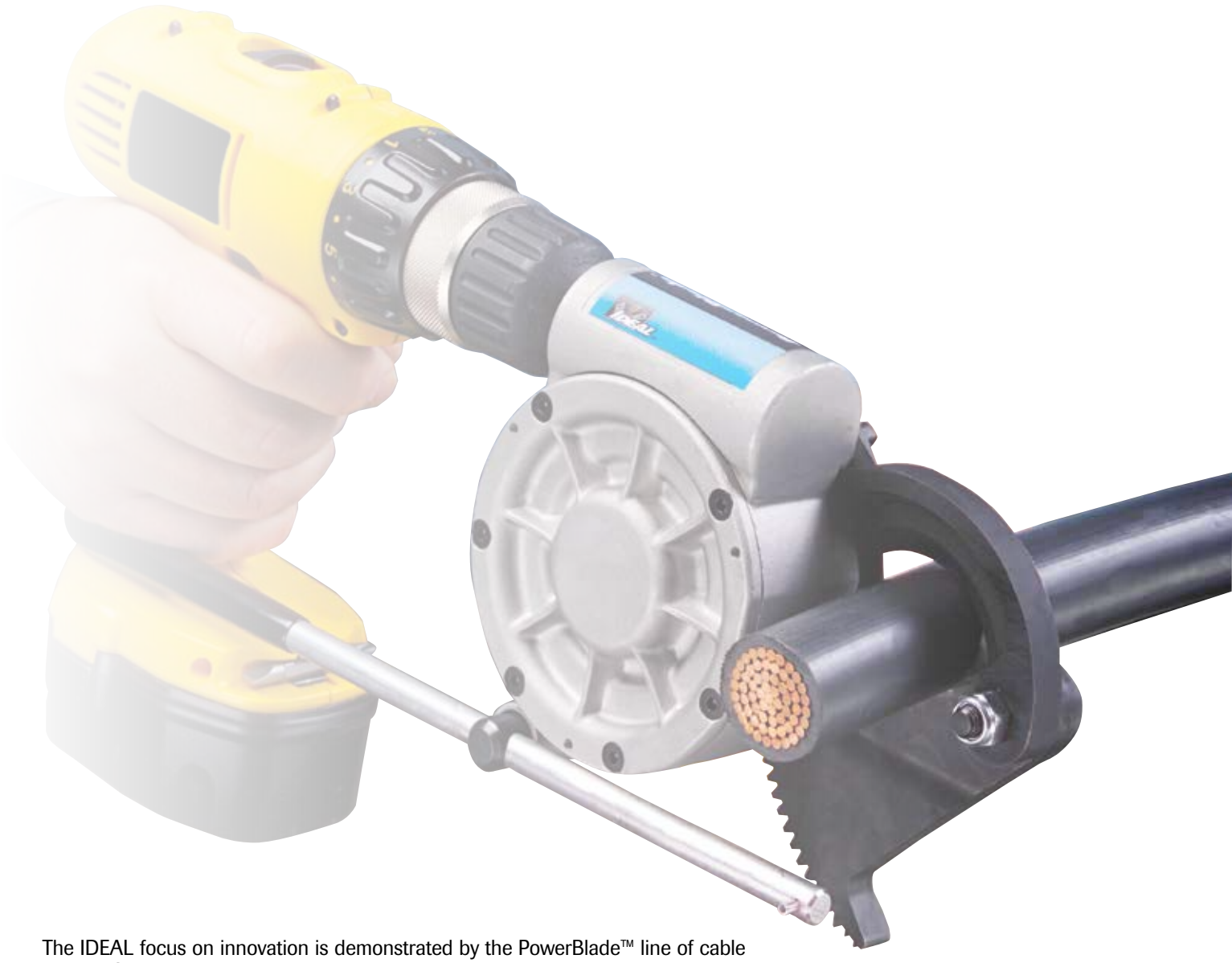
Hacksaw Blades



- Bi-metal blades provide strength, flexibility and long life

Description	Quantity	Part No.
12 in. x 18T Blades	10	**35-271**
12 in. x 24T Blades	10	**35-272**
12 in. x 32T Blades	10	**35-273**
12 in. x 18T Blades	100	**35-262**
12 in. x 32T Blades	100	**35-264**

Cable Cutters



The IDEAL focus on innovation is demonstrated by the PowerBlade™ line of cable cutters. Chucked into virtually any drill these robust cutters save time and money for utilities and commercial electricians.

*Drill not included.

Big Kahuna™ Cable Cutter

- Fits most standard power drills
- Jaw opening of 3-1/2 in.
- Cuts copper cable up to 1250 MCM and aluminum cable up to 1250 MCM
- Specially hardened, rounded blades minimize cable distortion for professional quality

Description	Replacement Blade*	Part No.
Big Kahuna™ Cable Cutter	**KB-0276R**	**35-076**

*Two blades per package, 1 upper blade and 1 lower blade.

(Drill not included)

PowerBlade™ 750 Cable Cutter

- Fits most standard power drills
- Jaw opening of 1-1/2 in.
- Cuts copper cable up to 750 MCM and aluminum cable up to 1000 MCM
- Specially hardened, rounded blades minimize cable distortion for professional quality

Description	Replacement Blade*	Part No.
PowerBlade™ 750 Cable Cutter	**K-8906R**	**35-078**

*Two blades per package, 1 upper blade and 1 lower blade.

(Drill not included)

Merlin™ ACSR Cable Cutter

- Fits most standard power drills
- Jaw opening of 3/4 in. for precision and accuracy
- Especially designed for reinforced aluminum cable
- Cuts up to Merlin ACSR cable size or 250 MCM Copper or Aluminum

Description	Replacement Blade*	Part No.
Merlin™ ACSR Cable Cutter	**KB-0278R**	**35-077**

*Two blades per package, 1 upper blade and 1 lower blade.

(Drill not included)

PowerBlade™ Cable Cutter Replacement Parts

Replacement Parts	Part No.
Gearbox Assembly	**H-3400**

Replacement Parts	Part No.
PowerBlade™ Replacement Folding Assembly	**H-3507**
PowerBlade™ Replacement Torque Arm Assembly	**K-8909**

CHECK OUT OUR POWERBLADE VIDEOS AT WWW.IDEALIND.COM

Ratcheting Cable Cutter

- Cuts hard drawn copper up to 400 KCMIL (MCM) and soft copper, aluminum and multiple conductor cable up to 600 KCMIL (MCM)
- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage

Description	Part No.
400 KCMIL (MCM) Ratcheting Cable Cutter*	**35-056**
Replacement blade (movable side only)	**35-085**

*Max. Jaw Opening - 2 in. Not for cutting steel or ACSR.

Long-Arm Cable Cutters

- High strength forged blades for ultimate durability
- Precision-ground jaws make clean cuts with minimal cable distortion
- Replaceable blades
- For copper and aluminum only.
  Not designed for steel or ACSR.

Description	Length	Replacement Head	Part No.
250 MCM Long-Arm Cable Cutter	14 in.	**35-031B**	**35-031**
500 MCM Long-Arm Cable Cutter	22 in.	**35-032B**	**35-032**
1000 MCM Long-Arm Cable Cutter	32 in.	**35-033B**	**35-033**

CAUTION: Comfort-grip handles are not designed for protection against electrical shock. Do not use on live circuits.

BigFoot™ Ratcheting Cable Cutter

- Designed to cut 750 KCMIL (MCM) and smaller hard-drawn copper and aluminum cables
- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage
- Molded-in foot provides stability and leverage when making multiple cuts

Molded foot for stability and leverage.

Description	Part No.
750 KCMIL (MCM) Ratcheting Cable Cutter*	**35-053**
Replacement blade (movable side only)	**35-057**

*Max. Jaw Opening - 2 in. Not for cutting steel or ACSR.

Screwdriver Types

Specialty
- Top quality screwdrivers designed especially for the professional electrician
- Multi-functional for all your fastening needs

Cushioned-Grip
- Cushioned-grip provides comfort and maximum torque
- Blasted tip helps prevent plate chipping
- Nickel chrome steel shank for maximum strength and durability
- Mini cushioned-grip tightens small fasteners easily and accurately

Nutdrivers
- Hollow shanks handle longer bolts
- Available in long lengths to accommodate extra long bolts
- Cushioned-gripped for comfort and maximum torque

Screwdriver Advanced Features

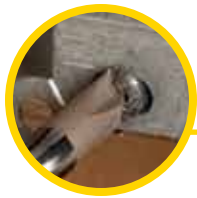
Specialty

Patented Wire Connector Wrench in handle

Accu-Loop™ Wire Looping Holes make perfect loops!

Cushioned-Grip

FastFinder™ icon shows tip type on handle end



Combo Head™ tip ensures full fastener engagement

21-in-1 Twist-a-Nut™ Ratcheting Screwdriver

- Patented Wire Connector Wrench accepts a wide variety of connectors and reduces finger fatigue
- Pro-quality, 28 tooth, all metal ratchet can handle 225 lbs. of torque without failure
- Ergonomic, slip-free textured grip provides excellent torque and is impervious to perspiration, gas, oil and chemicals
- Multiple bit storage unit in handle
- Bits included: #1 Phillips, #2 Phillips, #3 Phillips, 3/16" Slotted, 1/4" Slotted, 5/16" Slotted, #1 Square, #2 Square, #15 Star, #20 Star, #25 Star, #30 Star, 3/32" Hex, 1/8" Hex, 3/16" Hex, 5/32" Hex, 1/4" Nut, 5/16" Nut and 7/16" Nut

Description	Part No.
21-in-1 Twist-a-Nut™ Screwdriver	**35-688**

9-in-1 Ratch-a-Nut™ Screwdriver

- Patented Wire Connector Wrench accepts a wide variety of connectors and reduces finger fatigue
- Pro-quality, 28 tooth, all metal ratchet can handle 225 lbs. of torque without failure
- Ergonomic, slip-free textured grip provides excellent torque and is impervious to perspiration, gas, oil and chemicals
- Accepts Twist-a-Nut™ replacement bits
- Bits included: 1/4 in. Slotted, 3/16 in. Slotted, #1 Phillips, #2 Phillips, 1/4 in. Nutdriver, 5/16 in. Nutdriver, and 7/16 in. Nutdriver

Description	Part No.
9-in-1 Ratch-a-Nut™ Screwdriver	**35-988**

7-in-1 Twist-a-Nut™ Screwdriver

- Patented Wire Connector Wrench accepts a wide variety of connectors and reduces finger fatigue
- Ergonomic, slip-free textured grip provides excellent torque and is impervious to perspiration, gas, oil and chemicals
- Handle is interchangeable with conduit deburrer head (#35-096) and 6-in-1 Tap Tool (#35-922)
- Bits included: 1/4 in. Slotted, 3/16 in. Slotted, #1 Phillips, #2 Phillips, 1/4 in. Nutdriver and 5/16 in. Nutdriver

Description	Part No.
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	**35-908**
Replacement Handle	**K-8964**

6-in-1 Twist-a-Nut™ Tap Tool

- Forms new threads, re-forms burred threads and cleans out obstructions
- Reversible, high-carbon tap with three clearly marked thread sizes on each end
- Handle is interchangeable with 7-in-1 Screwdriver (#35-908) and Conduit Deburrer (#35-083)
- Includes: 6-32, 8-32 & 10-32 on one tapping side and 10-24, 12-24 & 1/4-20 on other side

Description	Part No.
6-in-1 Twist-a-Nut™ Tapping Tool	**35-922**
Replacement collar and six taps	**35-923**

Replacement Tips (for 7-in-1 Twist-a-Nut™ and 9-in-1 Ratch-a-Nut™ Screwdrivers)

Description	Part No.
1/4 in. Slotted – #2 Phillips	**35-911**
3/16 in. Slotted – #1 Phillips	**35-912**
1/4 in. Slotted – #2 Square	**35-913**
3/16 in. Slotted – #1 Square	**35-914**
#15 & #10 Star	**35-915**

Twist-a-Nut™ Conduit Deburring Tools

- Deburrs inside and outside edges of 1/2 in., 3/4 in. and 1 in. thin wall conduit
- Hooded tip tightens EMT fitting set screws without slipping
- Square tip "seats" much more quickly on fitting screws than slotted version
- Head removes and is interchangeable with IDEAL 7-in-1 Twist-a-Nut™ Screwdriver shaft (#35-908)
- Head can be used at low speed setting in drill or cordless screwdriver

Description	Tip Type	Part No.
Conduit Deburring Tool	Slotted	**35-083**
Conduit Deburring Tool	#2 Square	**35-075**
Conduit Deburring Tool (head only)	Slotted	**35-096**
Conduit Deburring Replacement Blade		**35-097**
Conduit Deburring Tool (head only)	#2 Square	**35-098**

Twist-a-Nut™ Conduit Wiring Kit

- Includes:
  - Twist-a-Nut™ Screwdriver (35-908)
  - Twist-a-Nut™ Deburring Head - Square Tip (35-098)
  - Twist-a-Nut™ Tap Tool Shaft (35-923)
  - Three Spare Bits – 1/4 in. Slotted & #2 Square, 3/16 in. Slotted & #1 Square, #10 & #15 Star
  - 8-Pocket Carrying Pouch (35-927)
- Nylon carrying pouch with metal belt clip holds all three Twist-a-Nut™ tools plus room for four replacement bits or taps

Description	Part No.
Twist-a-Nut™ Conduit Wiring Kit	**35-926**
Twist-a-Nut™ Carrying Pouch only	**35-927**

Twist-a-Nut™ Pro Electrician's Screwdrivers

- Vapor-blasted tip improves screw grip
- Tough, chrome vanadium steel shank

Description	Part No.
#2 x 6 in. Square Twist-a-Nut™ Pro Electrician's Screwdriver	**30-330**
1/4 in. x 4 in. Slotted Twist-a-Nut™ Pro Electrician's Screwdriver	**30-331**
1/4 in. x 6 in. Slotted Cabinet Tip Twist-a-Nut™ Pro Electrician's Screwdriver	**30-333**

11-in-1 Screwdriver/Nutdriver

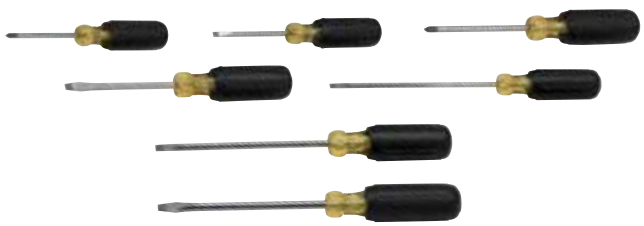
- Includes: 1/4 in. Slotted, 3/16 in. Slotted, #2 Phillips, #1 Phillips, #1 Square, #2 Square, #15 Star, #10 Star, 5/16 in. Nutdriver & 1/4 in. Nutdriver
- Cushioned grip for comfort and performance
- Accu-Loop™ Wire looping holes

Description	Part No.
11-in-1 Screwdriver/Nutdriver	**35-910**
Replacement Bits	**Part No.**
1/4 in. Slotted - #2 Phillips (2/pack)	**35-940**
3/16 in. Slotted - #1 Phillips (2/pack)	**35-941**
#1 & #2 Square (2/pack)	**35-942**
#15 & #10 Star (2/pack)	**35-943**

8-Piece Cushioned-Grip Screwdriver Set

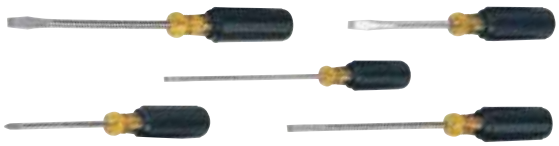
Description	Part No.
8-Piece Screwdriver Set	**35-298**
Set Includes:	
#1 Phillips	**35-193**
3/16 in. Slotted	**35-183**
#2 Phillips	**35-194**
1/4 in. Heavy-Duty Round Keystone	**35-164**
1/4 in. Heavy-Duty Square Keystone	**35-154**
3/16 in. Cabinet	**35-186**
1/4 in. Heavy-Duty Cabinet	**35-151**
5/16 in. Heavy-Duty Keystone	**35-166**

7-Piece Cushioned-Grip Screwdriver Set



Description	Part No.
7-Piece Screwdriver Set	**35-1298**
Set Includes:	
#1 Phillips	**35-193**
1/4 in. Heavy-Duty Cabinet	**35-150**
#2 Phillips	**35-194**
1/4 in. Heavy-Duty Square Keystone	**35-154**
3/16 in. Cabinet	**35-183**
1/4 in. Heavy-Duty Cabinet	**35-156**
3/16 in. Heavy-Duty Keystone	**35-186**

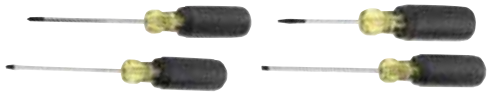
5-Piece Cushioned-Grip Screwdriver Set



Description	Part No.
5-Piece Screwdriver Set	**35-297**
Set Includes:	
#2 Phillips	**35-194**
1/4 in. Heavy-Duty Square Keystone	**35-154**
3/16 in. Cabinet	**35-186**
1/4 in. Heavy-Duty Cabinet	**35-151**
5/16 in. Heavy-Duty Keystone	**35-166**

4-Piece Mini Cushioned-Grip Screwdriver Set

- Set Includes: #0 Phillips, 1/16 in. Keystone, 3/32 in. Cabinet and 1/8 in. Cabinet



Description		Part No.
4-Piece Screwdriver Set	**SOLD ONLY AS A SET**	**35-1301**

2-Piece Stubby Cushioned-Grip Screwdriver Set

- Set Includes: #2 Phillips and Keystone

Description		Part No.
2-Piece Stubby Screwdriver Set	**SOLD ONLY AS A SET**	**35-1300**

Phillips Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
#1 Phillips	3 in.	3-3/4 in.	6-3/4 in.	**35-193**
#2 Phillips	1-1/2 in.	1-15/16 in.	3-7/16 in.	**35-191**
#2 Phillips	4 in.	4-5/16 in.	8-5/16 in.	**35-194**
#2 Phillips	6 in.	4-5/16 in.	10-5/16 in.	**35-195**
#3 Phillips	6 in.	5-23/64 in.	11-23/64 in.	**35-196**

Square Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
#0 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-690**
#1 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-691**
#1 Square	8 in.	4-5/16 in.	12-5/16 in.	**35-692**
#2 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-693**
#2 Square	8 in.	4-5/16 in.	12-5/16 in.	**35-694**
#3 Square	4 in.	4-5/16 in.	8-5/16 in.	**35-695**

Cabinet Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
3/16 in. shank and tip	3 in.	3-3/4 in.	6-3/4 in.	**35-183**
3/16 in. shank and tip	4 in.	3-3/4 in.	7-3/4 in.	**35-184**
3/16 in. shank and tip	6 in.	3-3/4 in.	9-3/4 in.	**35-186**
3/16 in. shank and tip	8 in.	3-3/4 in.	11-3/4 in.	**35-188**
3/16 in. shank and tip	10 in.	3-3/4 in.	13-3/4 in.	**35-190**

Heavy-Duty Cabinet Cushioned-Grip Screwdrivers

Description	Blade Length	Handle Length	Overall Length	Part No.
1/4 in. shank and tip	4 in.	4-5/16 in.	8-3/8 in.	**35-150**
1/4 in. shank and tip	6 in.	4-5/16 in.	10-3/8 in.	**35-151**
1/4 in. shank and tip	8 in.	4-5/16 in.	12-3/8 in.	**35-152**

Heavy-Duty Round Shaft Keystone Cushioned-Grip Screwdrivers

Round Shank	Blade Length	Handle Length	Overall Length	Part No.
1/4 in. shank and tip	1-1/2 in.	1-15/16 in.	3-7/16 in.	**35-161**
1/4 in. shank and tip	4 in.	4-5/16 in.	8-5/16 in.	**35-164**
5/16 in. shank and tip	6 in.	5-11/32 in.	11-11/32 in.	**35-166**
3/8 in. shank and tip	8 in.	5-11/32 in.	13-11/32 in.	**35-168**

Heavy-Duty Square Shaft Keystone Cushioned-Grip Screwdrivers

Square Shank	Blade Length	Handle Length	Overall Length	Part No.
1/4 in. shank and tip	4 in.	4-5/16 in.	8-5/16 in.	**35-154**
5/16 in. shank and tip	6 in.	5-11/32 in.	11-11/32 in.	**35-156**
3/8 in. shank and tip	8 in.	5-11/32 in.	13-11/32 in.	**35-158**

Combo Head™ Cushioned-Grip Screwdriver

Patented Combo Head™ tip ensures full fastener engagement

- Designed to accurately and securely fit most fasteners
- Patented design

Description	Blade Length	Handle Length	Overall Length	Part No.
Combo Head™ Cushioned-Grip Screwdriver	4 in.	4-5/16 in.	8-5/16 in.	**35-204**

Quick Rotating Screwdriver

- Ideal for threading screws in switches, fixtures and anchors
- Quick and easy crank action

Description	Blade Length	Handle Length	Overall Length	Part No.
Cabinet Quick Rotating Screwdriver	5-9/16 in.	3-3/4 in.	9-3/8 in.	**35-200**
Phillips Quick Rotating Screwdriver	5-5/8 in.	4-5/16 in.	9-15/16 in.	**35-203**

Awl

- Heavy-duty construction for piercing, punching and scribing

Description	Blade Length	Handle Length	Overall Length	Part No.
Awl	3 in.	3-3/4 in.	6-3/4 in.	**35-202**

Grip-n-Screw™ Screwdriver

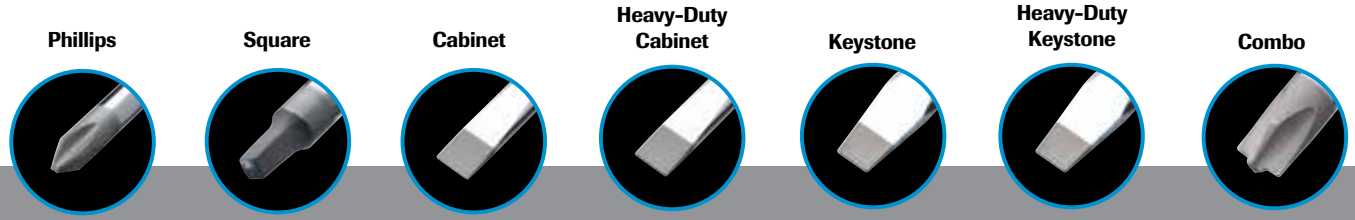
- Holds screw when collar is extended
- Non-magnetic screw-holding screwdriver

Description	Blade Length	Handle Length	Overall Length	Part No.
3/16 Slotted Grip-n-Screw™ Screwdriver	5-7/8 in.	3-3/4 in.	9-5/8 in.	**35-406**
#2 Phillips Grip-n-Screw™ Screwdriver	6-7/8 in.	4-15/16 in.	11-1/4 in.	**35-404**

Off-Set Screwdriver Set

- 1/4 in. x 1/4 in. Slotted tips and #1 Phillips x #2 Phillips tips
- Designed to tighten fasteners in hard to reach places

Description	Overall Length	Part No.
Off-Set Screwdriver Set	4 in.	**35-219**

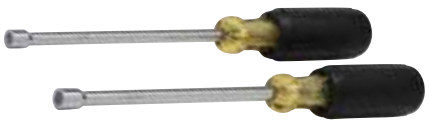


Quick-Change Screwdriver

- Patented Sure-Loc™ Quick Change chuck securely holds bits
- Built-in bit storage container in handle holds up to five extra insert bits
- Bits fit most standard multi-bit screwdrivers
- E-Z Spin™ high torque rotating flip cap

Description	Blade Length	Handle Length	Overall Length	Part No.
Quick Change Screwdriver (Driver only)	3-1/16 in.	4-3/16 in.	7-1/4 in.	**35-932**
33-Piece Quick Change Screwdriver Set - Quick Change Screwdriver and 32-Piece Tamper-Proof Bit Block	3-1/16 in.	4-3/16 in.	7-1/4 in.	**35-933**
33-Piece Quick Change Screwdriver Set - Quick Change Screwdriver and 32-Piece Standard Bit Block	3-1/16 in.	4-3/16 in.	7-1/4 in.	**35-934**
32-Piece Tamper-Proof Bit Block				**35-933TP**
32-Piece Standard Bit Block				**35-933STD**

2-Piece Hollow-Shaft Nutdriver Set



- Includes: 1/4 in. Nutdriver & 5/16 in. Nutdriver
- Long shanks useful in deep electrical boxes

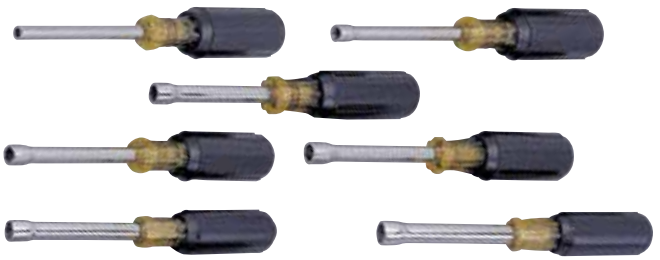
Description	Shank Length	Handle Length	Overall Length	Part No.
2-Piece Nutdriver Set	5-15/16 in.	4-5/16 in.	10-1/4 in.	**35-1302**

2-Piece Stubby Nutdriver Set

- Includes: 1/4 in. Nutdriver & 5/16 in. Nutdriver
- For use in tight spaces

Description	Blade Length	Handle Length	Overall Length	Part No.
2-Piece Nutdriver Stubby Set	1-1/2 in.	2-1/8 in.	3-5/8 in.	**35-1299**

7-Piece Nutdriver Set



- Set Includes: 3/16 in. 35-290, 1/4 in. 35-291, 5/16 in. 35-292, 11/32 in. 35-293, 3/8 in. 35-294, 7/16 in. 35-295 and 1/2 in. 35-296

Description	Part No.
7-Piece Nutdriver Set	**35-299**

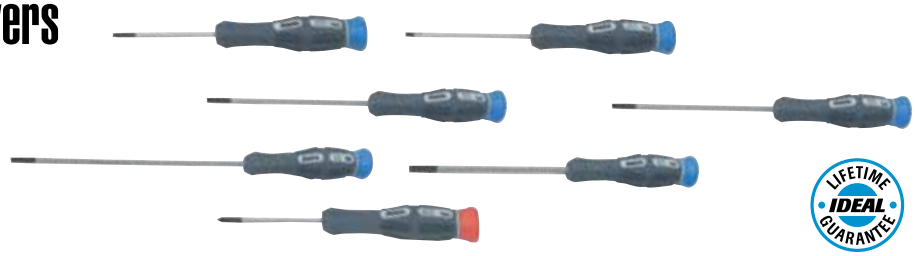
Nutmaster® Nutdrivers

- Model 35-292 fits tan Twister® Wire Connector and 35-295 fits gray Twister® Wire Connectors

Description	Shank Length	Handle Length	Overall Length	Part No.
3/16 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-290**
1/4 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-291**
5/16 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-292**
11/32 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-293**
3/8 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-294**
7/16 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-295**
1/2 in.	3 in.	4-5/16 in.	7-5/16 in.	**35-296**

Slim Electronics Screwdrivers

- Designed for maximum handling comfort when working in tight areas
- Tough, chrome vanadium steel shank
- Phosphate tip for long life
- Color-coded cap for easy identification



Description	Blade Length	Handle Length	Overall Length	Part No.
Cabinet, 3/32 in.	2-1/2 in.	3-9/16 in.	6-1/16 in.	**36-240**
Cabinet, 3/32 in.	3 in.	3-9/16 in.	6-9/16 in.	**36-241**
Cabinet, 1/8 in.	4 in.	3-9/16 in.	7-9/16 in.	**36-242**
Cabinet, 1/8 in.	6 in.	3-9/16 in.	9-9/16 in.	**36-243**
Cabinet, 5/32 in.	4 in.	3-9/16 in.	7-9/16 in.	**36-244**
Cabinet, 5/32 in.	6 in.	3-9/16 in.	9-9/16 in.	**36-245**
Phillips, #0	2-1/2 in.	3-9/16 in.	6-1/16 in.	**36-246**
7-Piece Set includes one each of 36-240 thru 36-246				**36-248**
4-Piece Set includes one each of 36-240, -241, -242, & -246				**36-249**

Western Forge's American-made hand tools include pliers, screwdrivers, adjustable wrenches, torque wrenches, screwdrivers, punches and chisels.

Its manufacturing plants in Colorado Springs are an American standard of premier metal craftsmanship, offering the latest in forging, heat treatment, handle extrusion, machining and plating operations.

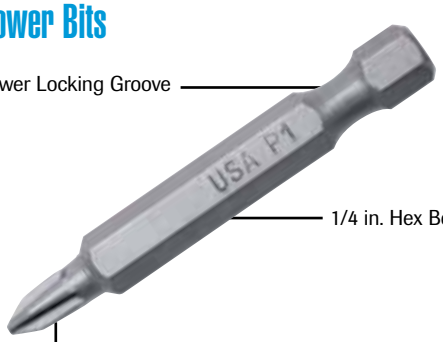
Industrial Screwdriver Bits & Accessories

- S2M tool steel, custom heat treated for strength and durability
- All tips are manufactured to tight tolerances to ensure accurate fit and full fastener engagement
- Insert bits have a retaining ring notch
- Power bits have a power locking groove
- 1/4 in. hex body
- Fit most standard multi-bit screwdrivers

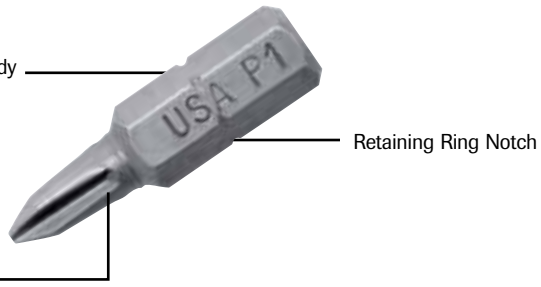
Made in U.S.A.

Designed for precision fit and lasting performance.

Power Bits



Insert Bits



Torx® is a registered trademark of Acument Intellectual Properties, LLC.

Combo Head™ Bits

- Patented design tip fits most Phillips screws

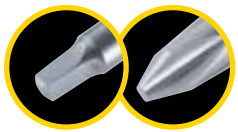
Description	Part No. (Carded)	Part No. (Bulk)
Combo Drive #2, 1 in. Insert Bit	**78-0105**	**78-0105-25**
Combo Drive #2, 2 in. Power Bit	**78-0106**	**78-0106-25**

Slotted Bits

- Insert bits have a retaining ring notch, power bits have a power-locking groove

Description	Part No. (Carded)	Part No. (Bulk)
Slotted 1/4 in., 1 in. Insert Bit	**78-0209**	—
Slotted 1/4 in., 2 in. Power Bit	**78-0210**	—
Slotted 1/8 in., 1 in. Insert Bit	**78-0211**	—
Slotted 1/8 in., 2 in. Power Bit	**78-0212**	—
Slotted 3/16 in., 1 in. Insert Bit	**78-0213**	**78-0213-25**
Slotted 3/16 in., 2 in. Power Bit	**78-0214**	**78-0214-25**
Slotted 7/32 in., 1 in. Insert Bit	—	**78-0215-25**
Slotted 7/32 in., 2 in. Power Bit	—	**78-0216-25**

Double-Ended Bits



Description	Part No. (Carded)	Part No. (Bulk)
DE Slotted 1/4 in. x #2 Phillips	**78-0102**	**78-0102-25**
DE Slotted 1/4 in. x #2 Square	**78-0103**	—
DE Square #2 Square x #2 Phillips	—	**78-0104-25**

Torx® Bits

- Manufactured to tight tolerances to ensure accurate fit and full fastener engagement

Description	Part No. (Carded)	Part No. (Bulk)
Torx® 20, 1 in. Insert Bit	**78-0226**	—
Torx® 25, 1 in. Insert Bit	**78-0227**	—
Torx® 27, 1 in. Insert Bit	**78-0228**	—
Torx® 30, 1 in. Insert Bit	**78-0229**	—
7 pc. Torx® Bit Set in Holder	**78-0100**	—

Torx® is a registered trademark of Acument Intellectual Properties, LLC.

Tamper-Proof Torx® Bits

Description	Part No. (Carded)	Part No. (Bulk)
TP Torx® T20, 1 in. Insert Bit	**78-0230**	—
TP Torx® T25, 1 in. Insert Bit	**78-0231**	—
TP Torx® T27, 1 in. Insert Bit	**78-0232**	—
TP Torx® T30, 1 in. Insert Bit	**78-0233**	—
7 pc. Tamper-Proof Torx® Bit Set in Holder	**78-0101**	—

Torx® is a registered trademark of Acument Intellectual Properties, LLC.

Phillips Bits

Description	Part No. (Carded)	Part No. (Bulk)
Phillips #1, 1 in. Insert Bit	**78-0200**	**78-0200-25**
Phillips #1, 2 in. Power Bit	**78-0201**	**78-0201-25**
Phillips #2, 1 in. Insert Bit	**78-0202**	**78-0202-25**
Phillips #2, 2 in. Power Bit	**78-0203**	**78-0203-25**
Phillips #2, 6 in. Power Bit	**78-0204**	—
Phillips #3, 1 in. Insert Bit	**78-0205**	**78-0205-25**
Phillips #3, 2 in. Power Bit	**78-0206**	**78-0206-25**

Square Bits

- All bits and accessories fit most standard multi-bit screwdrivers and power drills

Description	Part No. (Carded)	Part No. (Bulk)
Square #1, 1 in. Insert Bit	**78-0219**	**78-0219-25**
Square #1, 2 in. Power Bit	**78-0220**	**78-0220-25**
Square #2, 1 in. Insert Bit	**78-0221**	**78-0221-25**
Square #2, 2 in. Power Bit	**78-0222**	**78-0222-25**
Square #2, 6 in. Power Bit	**78-0223**	—
Square #3, 1 in. Insert Bit	**78-0224**	**78-0224-25**
Square #3, 2 in. Power Bit	**78-0225**	**78-0225-25**

Magnetic Nut Setter

- Variety of sizes for multiple applications

Description	Part No. (Carded)	Part No. (Bulk)
Magnetic Nut Setter, 1/4 in.	**78-0111**	**78-0111-10**
Magnetic Nut Setter, 3/8 in.	**78-0113**	**78-0113-10**
Magnetic Nut Setter, 5/16 in.	**78-0114**	**78-0114-10**
Magnetic Nut Setter 3 pk. 1/4 in., 3/8 in., 5/16 in.	**78-0112**	—

Quick Change Chuck

- Patented Sure-Loc™ tip clicks bit in place without pulling back collar

Description	Part No. (Carded)	Part No. (Bulk)
Quick Change Chuck, 3-3/4 in.	**78-0207**	—
Quick Change Chuck, 6 in. (5)	—	**78-0208-5**

Magnetic Bit Holder

- Slender extension with powerful magnet to grasp and hold bits

Description	Part No. (Carded)
Magnetic Bit Holder, 4 in.	**78-0107**
Magnetic Bit Holder, 6 in.	**78-0108**

Socket Adapter

Description	Part No. (Carded)	Part No. (Bulk)
Socket Adapter, 1 in. Insert Bit	**78-0217**	**78-0217-25**
Socket Adapter, 2 in. Power Bit	**78-0218**	—

2 ft. Wall Panel

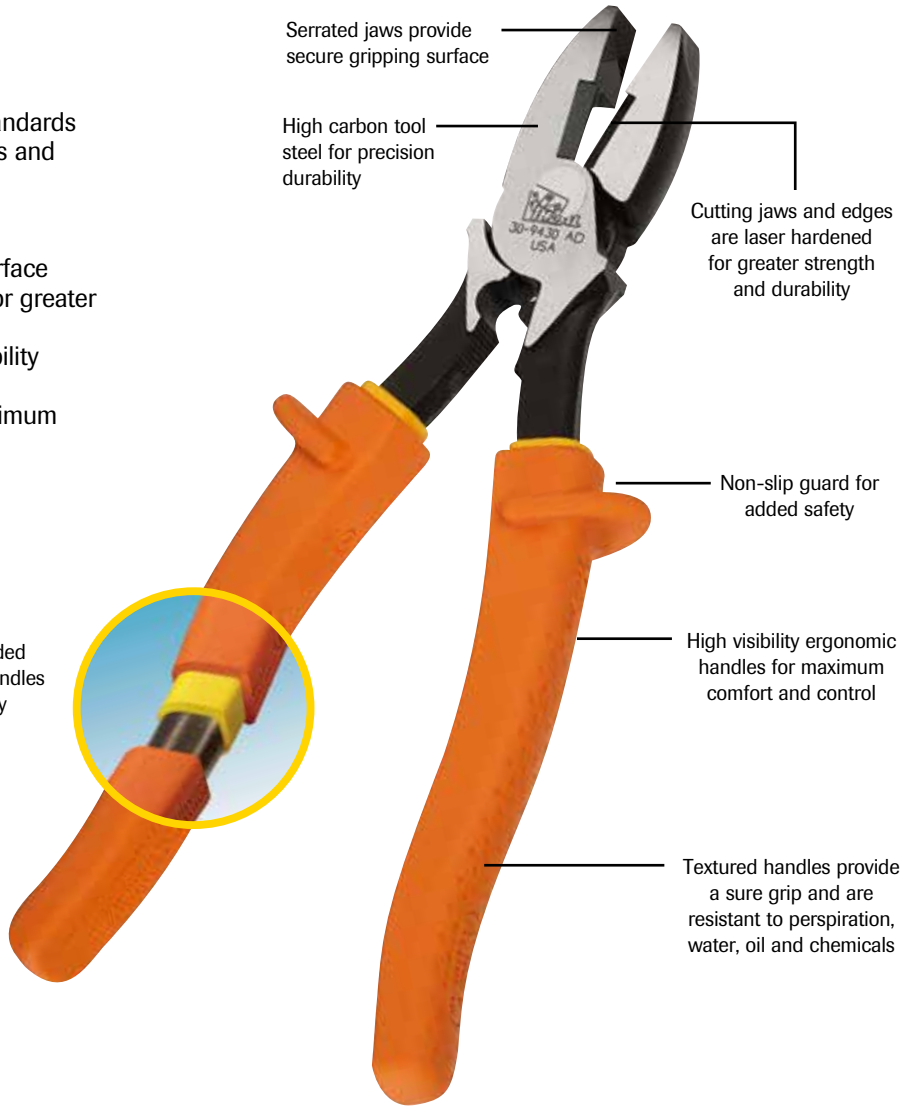
Grandstand Display

Fish Bowl Display

Insulated Tools

- Double insulated, 1,000V certified
- Meets ASTM F1505-01 and IEC 60900 standards
- Complies with OSHA 1910.335 regulations and NFPA 70E standards
- UL and VDE classified and certified (Pliers and Wire Strippers)
- Serrated jaws provide secure gripping surface
- Cutting jaws and edges laser hardened for greater strength and durability
- High carbon tool steel for precision durability
- Non-slip guard for added safety
- High visibility ergonomic handles for maximum comfort and control
- Textured handles provide a sure grip and are resistant to perspiration, water, oil and chemicals

CLASSIFIED UL
Pliers only



CLASSIFIED UL Our tools are the first to have successfully passed UL classification requirements. Recognized as the undisputed leader in product safety and certification, UL has developed rigorous safety standards for 1000V insulated tools. In order to carry the UL classified mark, tools must be tested by UL to met these standards.

Warning Whenever possible, always de-energize lines and equipment prior to working on or around them. 1000V insulated tools are designed only to reduce the chance of injury where the tool may make contact with an energized source. Work around energized circuits should only be done when absolutely necessary and only by qualified technicians. Property damage, personal injury or death may result if the following warnings are not heeded:

- Do not use any insulated tool if the insulation cracks, breaks or becomes damaged in any way. Destroy all dual-layer tools if the inner yellow layer shows through the orange outer layer.
- Do not touch the uninsulated portion of an insulated tool or any conductive object when either might contact an energized source.
- Tools must be kept clean and dry for proper insulating properties.
- Always inspect insulated tools before use.
- Use additional protection by wearing protective clothing and approved eye protection.
- Always use tools that are specifically designed for the task.
- These tools meet UL 22PP, ASTM F1505-01 and IEC 60900 standards for insulated tools.
- Always follow OSHA 1910 S and NFPA 70E safety requirements when doing electrical work.

Insulated Screwdrivers & Nutdrivers

IDEAL insulated screwdrivers and nutdrivers are VDE certified to 1000V AC. Each one is designed to meet ASTM F1505-01, EN, DIN and IEC 60 900 test standards.

- Tempered blades are finished with black oxide and super hardened for maximum quality
- Precision ground tips provide secure fit for less spin-out
- Meets OSHA requirements for insulated tools (29 CFR 1910)

Precision-ground tips provide secure fit for less spin-out

Molded-on insulation provides permanent bonding

Tempered chrome vanadium tool steel blades are super hardened for maximum quality

Cutting Jaws
Induction hardened cutting edges for precise cuts and long life.

Impact-Resistant
Designed for the most rugged job site conditions.

Safety Finger Guard
Reduces chance of accidental contact with exposed metal tool parts.

9-Piece Insulated Tool Kit

Description	Part No.
9-Piece Insulated Tool Kit (Case Included)	**35-9108**
Kit Includes:	
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
Insulated T®-Stripper Wire Stripper	**35-9120**
Slotted 7/32 in. x 5 in. Insulated Screwdriver	**35-9147**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**

Basic Insulated Tool Kit

Description	Part No.
Basic Insulated Tool Kit (Case Included)	**35-9100**
Kit Includes:	
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
Safe-T-Grip® Fuse Puller, Medium	**34-002**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
9-1/2 in. Insulated Cable Cutter	**35-9052**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Safety Lockout Padlock, Red	**44-916**
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**
Insulated T®-Stripper Wire Stripper	**45-9120**

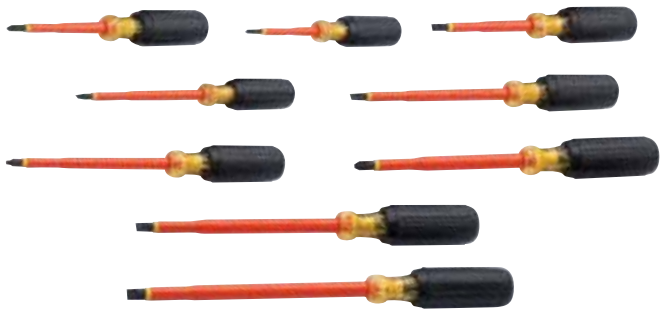
Standard Insulated Tool Kit

Description	Part No.
Standard Insulated Tool Kit (Case Included)	**35-9101**
Kit Includes:	
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
Safe-T-Grip® Fuse Puller, Medium	**34-002**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
9-1/2 in. Insulated Cable Cutter	**35-9052**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips#1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Insulated Skinning Knife	**35-9340**
10 in. Insulated Tongue & Groove Pliers	**35-9430**
Safety Lockout Padlock, Red	**44-916**
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**
Insulated T®-Stripper Wire Stripper	**45-9120**
VoltSensor™ Non-Contact Voltage Tester	**61-063**

Journeyman Insulated Tool Kit

Description	Part No.
Journeyman Insulated Tool Kit (Case Included)	**35-9102**
Kit Includes:	
9-3/4 in. Insulated Multi-Crimp Tool	**30-9429**
9-1/4 in. Insulated Lineman's Pliers	**30-9430**
Safe-T-Grip® Fuse Puller, Medium	**34-002**
8 in. Insulated Diagonal Cutting Pliers w/angled head	**35-9029**
8-1/2 in. Insulated Long-Nose Pliers	**35-9038**
9-1/2 in. Insulated Cable Cutter	**35-9052**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9196**
3/16 in. x 5 in. Insulated Nutdriver	**35-9290**
1/4 in. x 5 in. Insulated Nutdriver	**35-9291**
5/16 in. x 5 in. Insulated Nutdriver	**35-9292**
3/8 in. x 5 in. Insulated Nutdriver	**35-9294**
7/16 in. x 5 in. Insulated Nutdriver	**35-9295**
1/2 in. x 5 in. Insulated Nutdriver	**35-9296**
Insulated Skinning Knife	**35-9340**
10 in. Insulated Tongue & Groove Pliers	**35-9430**
Safety Lockout Padlock, Red	**44-916**
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**
Insulated T®-Stripper Wire Stripper	**45-9120**
VoltSensor™ Non-Contact Voltage Tester	**61-063**

9-Piece Insulated Screwdriver Set

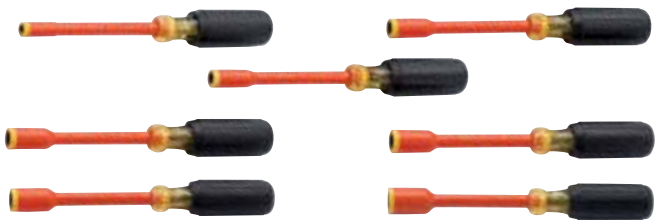


Description	Part No.
9-Piece Insulated Screwdriver Set (hard case included)	**35-9103**
Set Includes:	
Slotted 7/32 in. x 5 in. Insulated Screwdriver	**35-9147**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9196**
Square #0 x 4 in. Insulated Screwdriver	**35-9690**

2-Piece Insulated Screwdriver Set

Description	Part No.
2-Piece Insulated Set	**35-9305**
Set Includes:	
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**

7-Piece Insulated Nutdriver Set



Description	Part No.
7-Piece Insulated Nutdriver Set (hard case included)	**35-9104**
Set Includes:	
3/16 in. x 5 in. Insulated Nutdriver	**35-9290**
1/4 in. x 5 in. Insulated Nutdriver	**35-9291**
5/16 in. x 5 in. Insulated Nutdriver	**35-9292**
3/8 in. x 5 in. Insulated Nutdriver	**35-9294**
7/16 in. x 5 in. Insulated Nutdriver	**35-9295**
1/2 in. x 5 in. Insulated Nutdriver	**35-9296**
9/16 in. x 5 in. Insulated Nutdriver	**35-9297**

Insulated Tool Kit Cases

Description	Part No.
Soft Zipper Case for Basic Kit (35-9100 & 35-9108)	**35-9350**
Soft Zipper Case for Standard Kit (35-9101)	**35-9351**
Soft Zipper Case for Journeyman Kit (35-9102)	**35-9352**

Insulated Screwdrivers

Description	Part No.
Slotted 7/32 in. x 5 in. Insulated Screwdriver	**35-9147**
Slotted 3/23 in. x 3 in. Insulated Screwdriver	**35-9148**
Slotted 1/8 in. x 4 in. Insulated Screwdriver	**35-9149**
Slotted 1/4 in. x 4 in. Insulated Screwdriver	**35-9150**
Slotted 1/4 in. x 6 in. Insulated Screwdriver	**35-9151**
Slotted 5/16 in. x 7 in. Insulated Screwdriver	**35-9166**
Slotted 3/8 in. x 8 in. Insulated Screwdriver	**35-9168**
Phillips #0 x 2-3/8 in. Insulated Screwdriver	**35-9169**
Phillips #1 x 3-1/8 in. Insulated Screwdriver	**35-9170**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9172**
Phillips #1 x 3-3/16 in. Insulated Screwdriver	**35-9193**
Phillips #2 x 4 in. Insulated Screwdriver	**35-9194**
Phillips #3 x 6 in. Insulated Screwdriver	**35-9196**
Square #0 x 4 in. Insulated Screwdriver	**35-9690**
Square #1 x 6 in. Insulated Screwdriver	**35-9691**
Square #2 x 6 in. Insulated Screwdriver	**35-9693**
Square #3 x 6 in. Insulated Screwdriver	**35-9695**

Insulated Nutdrivers

Description	Part No.
3/16 in. x 5 in. Insulated Nutdriver	**35-9290**
1/4 in. x 5 in. Insulated Nutdriver	**35-9291**
5/16 in. x 5 in. Insulated Nutdriver	**35-9292**
11/32 in. x 5 in. Insulated Nutdriver	**35-9293**
3/8 in. x 5 in. Insulated Nutdriver	**35-9294**
7/16 in. x 5 in. Insulated Nutdriver	**35-9295**
1/2 in. x 5 in. Insulated Nutdriver	**35-9296**
9/16 in. x 5 in. Insulated Nutdriver	**35-9297**

Insulated Multi-Crimp Tool

Description	Part No.
9-3/4 in. Insulated Multi-Crimp Tool	30-9429

Insulated Cable Cutter

Description	Part No.
9-1/2 in. Insulated Cable Cutter	35-9052

Insulated Lineman's Pliers

Description	Part No.
9-1/4 in. Insulated Lineman's Pliers	30-9430

Insulated Tongue and Groove Pliers

Description	Part No.
10 in. Insulated Tongue and Groove Pliers	35-9430

Insulated Diagonal-Cutting Pliers

Description	Part No.
8 in. Insulated Diagonal Cutting Pliers w/angled head	35-9029

Insulated T®-Stripper Wire Stripper

Description	Part No.
Insulated T®-Stripper Wire Stripper	45-9120

Insulated Long-Nose Pliers

Description	Part No.
8-1/2 in. Insulated Long-Nose Pliers	35-9038

Insulated Skinning Knife

Description	Part No.
Insulated Electrician's Skinning Knife	35-9340

Safe-T-Grip® Fuse Pullers

34-001

34-002

34-003

- Maximum efficiency and convenience for removing or replacing cartridge-type fuses
- Three sizes handle fuses ranging from 0 to 600A
- Fully insulated, high-dielectric, glass-filled polypropylene construction
- Notched handles provide safe, no-slip grip
- Clearly marked amperage ranges
- Exceed MIL specifications

Description	Overall Length	Part No.
Small Puller for 250V, 9/32 in. to 1/2 in. dia. fuses	5 in.	**34-001**
Medium Puller for 0 to 100A/250V & 600V, 1/2 in. to 1 in. dia. fuses	7-1/2 in.	**34-002**
Large Puller for 31 to 600A/250V & 31 to 400A/600V, 3/4 in. to 2-1/2 in. dia. fuses	11-3/4 in.	**34-003**

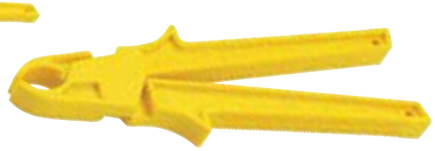
Fuse Puller & Test Light

- Convenient pocket-sized tool safely pulls cartridge fuses and checks electrical connections
- Test prods fit parallel and tandem slot receptacles
- Built-in resistors limit current flow to eliminate false indication
- For 9/16 in. to 1 in. fuses, 100A/250V and 60A/600V
- Test capacity from 100V to 600V AC/DC

Description	Part No.
Fuse Puller & Test Light	**34-012**

Fuse Pullers

34-015



34-016

- Molded of tough, high-impact nylon for strength
- No-slip gripping surface and protective finger stops for added safety

Description	Overall Length	Part No.
Small Puller for 0 to 30A/250V, 1/4 in. to 1/2 in. dia. fuses	5 in.	**34-015**
Large Puller for 0 to 100A/250V & 0 to 60A/600V, 9/16 in. to 1 in. dia. fuses	7-1/4 in.	**34-016**

Fuse Puller Cross Reference

Fuse Size	Current	Voltage	IDEAL	Bussmann	Littlefuse
Ferrule Type	**Amps**	**Volt a.c.**			
1/4 x 1-1/4	1/500 to 30	250	**34-015**	FP-A3	97023
13/32 x 1-1/2	1/10 to 30	250	**34-001, 34-015**	FP-2	MFP
9/16 x 2	1/10 to 30	250	**34-002, 34-012, 34-016**	FP-2	LPFP
13/16 x 3	35 to 60	250	**34-016, 34-003, 34-012**	FP-2	LPFP
Knife Blade	**Amps**	**Volt a.c.**			
1 x 5-7/8	70 to 100	250	**34-012, 34-002, 34-016**	FP-3	LPFP
1-1/2 x 7-1/8	110 to 200	250	**34-003**	FP-3	LPFP
2 x 8-5/8	225 to 400	250	**34-003**	FP-4	GFP
2-1/2 x 10-3/8	450 to 600	250	**34-003**	FP-4	GFP
Ferrule Type	**Amps**	**Volt a.c.**			
13/32 x 1-1/2	1/10 to 30	600	**34-001, 34-012, 34-016**	FP-2	MFP
3/4 x 5	1/10 to 30	600	**34-002**	FP-2	MFP
1 x 5-1/2	35 to 60	600	**34-012, 34-002, 34-016**	FP-3	MFP
Knife Blade	**Amps**	**Volt a.c.**			
1-1/4 x 7-1/8	70 to 100	600	**34-003**	FP-3	LPFP
1-3/4 x 9-5/8	110 to 200	600	**34-003**	FP-4	LPFP
2-1/2 x 11-5/8	225 to 400	600	**34-003**	FP-4	LPFP
3 x 13-3/8	450 to 600	600	**NONE**	NONE	NONE

Please visit our website at www.idealind.com for more safety products from IDEAL!

- **Insulated Tools**
- **Lockout/Tagout**
- **Fish Tapes**
- **Streetlight Kits**
- **Testers**

Tool Carriers/Pouches

Premium Leather Line
Top of the line tool carriers are handcrafted from top-grain cowhide and slow tanned in natural oils to enhance the leather's inherent strength. Each bag is hand waxed for lasting protection against stains and moisture and is warranted for life. Available in natural or black leather.

Standard Leather Line
Leather that stands up to the job like no other material, these tool carriers are constructed of top-grain, natural cowhide and tanned for added strength and durability. Color ages to a deep tan over the years.

Fabric Line
Durable, lightweight, portable tool totes in rugged nylon polyester provide the perfect tool storage. Convenient pockets mean easy access; inner compartments keep tools organized and safe when not in use.

Tuff-Tote® Ultimate Tool Carriers

35-975

35-975BLK

35-325

- 8 in. square tool carrier features 2 divided inside compartments with 6 screwdriver loops, 1 large center compartment, 4 outside pockets and 8 outside tool loops
- Exclusive leather-wrapped grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Unique stand-alone design keeps tools standing upright for easy identification and access
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Oil and moisture-resistant reinforced bottom

Description	Part No.
Premium Leather Carrier w/shoulder strap	**35-975**
Premium Black Leather Carrier w/shoulder strap	**35-975BLK**
Standard Leather Carrier w/shoulder strap	**35-325**

Tuff-Tote® Tool Carrier

- Convenient 6 in. x 8 in. tool carrier with 4 center screwdriver slots, 2 interior compartments, 2 divided outside pockets outside tool loops
- Exclusive leather grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Unique stand-alone design keeps tool standing upright for easy identification and access
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Oil and moisture-resistant reinforced bottom

Description	Part No.
Premium Leather Carrier w/shoulder strap	**35-969**

Tuff-Tote® Tool Pouches

35-950

35-950BLK

35-311

- 8-pocket, belt-mounted pouch features large utility compartment with 2 dividers and 6 screwdriver loops, 7 outside pockets, release snaps and tape chain
- Exclusive leather grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Tunnel belt loop accommodates belts up to 2-1/4 in. wide

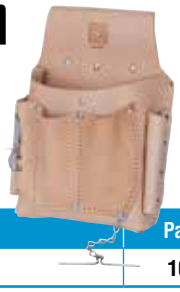
Description	Part No.
Premium Leather Pouch w/shoulder strap	**35-950**
Premium Black Pouch w/shoulder strap	**35-950BLK**
Standard Leather Pouch w/shoulder strap	**35-311**

Ergo Tool Pouch

- Compact ergonomic design for versatility and superior comfort
- Large tool holding capacity
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability

Description	Part No.
Standard Natural Leather Ergo Tool Pouch	**35-312**

Electrician's Tool Pouch



- Seven-pocket tool pouch
- Full length belt tunnel
- Chain tape lanyard

Description	Part No.
Standard Leather Electrician's Tool Pouch	**10-466**

Hip Holster Tool Pouch

- Compact, six-pocket holster
- Heavy-duty leather construction
- Riveted corners for long life
- Tape measure holder

Description	Part No.
Premium Hip Holster Tool Pouch	35-784BLK

Shoulder Straps

35-965

35-338

35-965BLK

- Nickel-plated hardware for long-term durability and corrosion resistance
- 2-in. wide shoulder pad for added comfort

Description	Part No.
Premium Leather Strap	35-965
Standard Leather Strap	35-338
Premium Black Leather Strap	35-965BLK

Belts

35-995

35-316

10-398

- Nickel-plated hardware for long-term durability and corrosion resistance

Description	Part No.
Leather Belt - 2 in. x 48 in.	35-995
Leather Belt - 1-3/4 in. x 46 in.	35-316
Web Belt	10-398

Supplies Apron

- Two pockets for connectors and fasteners, each 8 in. x 15 in.
- Natural duck construction

Description	Part No.
Supplies Apron	35-474

Pocket Pal® Tool Holster

- Protects pocket from sharp tools
- Doubles tool carrying capacity
- Can be worn in pocket or on belt

Description	Part No.
Pocket Pal® Tool Holster	35-505

Large Mouth Bags

- Top opens completely for easy access to large tools – reinforced to hold itself open
- Measures 9 in. wide x 12 in. deep with outside and inside pockets for convenient hand tool storage
- Rugged zipper closure helps prevent tool loss
- Removable shoulder strap
- Durable multi-ply construction

Description	Part No.
Large Mouth Bag - 13 in. long	35-410
Large Mouth Bag - 16 in. long	35-418
Large Mouth Bag - 18 in. long	35-427

Journeyman Electrician's Tote™ Tool Bag

- Compact and versatile design
- Carry as a hand-tote, shoulder-tote or tool-belt
- Includes removable shoulder strap and belt
- Durable multi-ply construction

Description	Part No.
Journeyman Electrician's Tote™ Tool Bag	35-462

Master Electrician's Tote™

- Spacious and durable design
- Organizes and displays tools for fast access
- Includes removable shoulder strap
- Durable multi-ply construction

Description	Part No.
Master Electrician's Tote™	**35-441**

Mechanic's Tool Bag

- Eight narrow inside pockets designed to hold small tools
- Two side pockets with closeable snaps for large tools or loose items
- Double inside liner and rigid bottom prevent bag distortion
- Durable nylon polyester construction

Description	Part No.
Mechanic's Tool Bag	**35-535**

Zipper Pouches

- Durable, water resistant material
- Heavy duty, self-repairing zippers

Description	Part No.
10-1/2 in. Zipper Pouch	**35-402**
12-1/2 in. Zipper Pouch	**35-403**

Divider Pouch™ Small Parts Bag

- Designed to provide perfect small parts storage – keeps parts separate and organized
- Six internally divided 5-in. deep pockets
- Convenient drawstring protects contents from spillage
- Convenient handle loop
- Sized to stack in 5-gallon buckets
- Durable nylon polyester construction

Note: Wire connectors sold separately.

Description	Part No.
Divider Pouch™ Small Parts Bag	**35-655**

17-Piece Master Electrician's Kit w/Tool Carrier

Description	Part No.
17-Piece Master Electrician's Kit	**35-809**
Kit Includes	
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
8-1/2 in. Long-Nose Pliers w/cutter	**35-3038**
9-1/2 in. Tongue & Groove Pliers	**35-3420**
9-1/2 in. Cable Cutter	**35-3052**
Kinetic™ Reflex™ T®-Stripper Wire Stripper	**45-915**
7-in-1 Twist-a-Nut™ Screwdriver	**35-908**
Phillips #1 x 3 in. Cushioned-Grip Screwdriver	**35-193**
Phillips #2 x 4 in. Cushioned-Grip Screwdriver	**35-194**
3/16 in. x 6 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 6 in. Cushioned-Grip Screw holding Slotted Screwdriver	**35-406**
Hawkbill Knife	**35-286**
Electrician's Hammer	**35-210**
25' Auto-Lock Tape Measure	**35-242**
Torpedo Level	**35-205**
Vol-Con® Voltage/Continuity Tester	**61-076**
Tuff-Tote® Premium Leather Tool Carrier	**35-975**

16-Piece Master Electrician's Kit w/Pouch

Description	Part No.
16-Piece Master Electrician's Kit	**35-800**
Kit Includes	
9-1/4 in. Lineman's Plier w/fish tape puller	**30-430**
8 in. Diagonal-Cutting Pliers w/angled head	**35-029**
8-1/2 in. Long-Nose Plier	**35-038**
9-1/2 in. Cable Cutter	**35-052**
3/16 in. x 6 in. Cushioned-Grip Screw holding Slotted Screwdriver	**35-083**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Electrician's Hammer	**35-210**
25' Auto-Lock Tape Measure	**35-242**
Electrician's Knife	**35-285**
Standard Leather Pouch w/shoulder strap	**35-311**
10-1/2 in. Tongue and Groove Plier	**35-430**
7-in-1 Twist-a-Nut™ Screwdriver	**35-908**
T®-Stripper Wire Stripper	**45-120**
Vol-Con® Voltage/Continuity Tester	**61-076**
Replacement Battery	**61-201**

16-Piece Master Electrician's Kit w/Large Mouth Bag

Description	Part No.
16-Piece Master Electrician's Kit	**35-808**
Kit Includes	
Combo Crimp/Strip Tool	**30-428**
Pocket Fuse Puller	**34-002**
9-1/2 in. Lineman's Plier w/New England nose, crimping die and fish tape puller	**30-430**
8-1/2 in. Long-Nose Pliers w/cutter	**35-038**
9-1/2 in. Cable Cutter	**35-052**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 6 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
#1 x 3 in. Cushioned-Grip Phillips Screwdriver	**35-193**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Electrician's Hammer	**35-210**
25' Auto-Lock Tape Measure	**35-242**
Ergonomic Hacksaw	**35-261**
Hawkbill Knife	**35-286**
10-1/2 in. Tongue and Groove Plier	**35-430**
Reflex™ T®-5 T®-Stripper Wire Stripper	**45-415**
18 in. Large Mouth Bag	**35-427**

13-Piece Journeyman Electrician's Kit w/Electrician's Tote

Description	Part No.
13-Piece Journeyman Electrician's Kit	**35-790**
Kit Includes	
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
Fuse Puller, Medium	**34-002**
8-1/2 in. Long-Nose Pliers w/cutter	**35-3038**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 4 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
#1 x 3 in. Cushioned-Grip Phillips Screwdriver	**35-193**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Torpedo Level	**35-205**
25' Auto-Lock Tape Measure	**35-242**
Hawkbill Knife	**35-286**
9-1/2 in. Tongue & Groove Plier	**35-3420**
Kinetic™ Reflex™ T®-Stripper Wire Stripper	**45-915**
Journeyman Electrician's Tote®	**35-462**

12-Piece Journeyman Electrician's Kit w/Tool Pouch

Description	Part No.
12-Piece Journeyman Electrician's Kit	**35-5805**
Kit Includes	
Web Belt	**10-398**
Electrician's Leather Tool Pouch	**10-466**
9-1/2 in. Lineman's Plier w/New England nose, crimping die and fish tape puller	**30-430**
8 in. Diagonal-Cutting Pliers	**35-028**
8-1/2 in. Long-Nose Plier	**35-038**
1/4 in. x 4 in. Cushioned-Grip Slotted round shank Screwdriver	**35-164**
3/16 in. x 4 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-184**
#1 x 3 in. Cushioned-Grip Phillips Screwdriver	**35-193**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
25' Auto-Lock Tape Measure	**35-242**
8-1/2 in. Tongue & Groove Pliers	**35-420**
Premium T®-5 T®-Stripper Wire Stripper	**45-120**

6-Piece Electrician's Holster Kit

Description	Part No.
6-Piece Electrician's Holster Kit	**35-794**
Kit Includes	
9-1/4 in. Lineman's Plier w/fish tape puller	**30-430**
25' Auto-Lock Tape Measure	**35-242**
Utility Knife	**35-300**
Pocket Pal® Tool Holster	**35-505**
7-in-1 Twist-a-Nut™ Screwdriver	**35-908**
T®-5 T®-Stripper Wire Stripper	**45-120**

4-Piece Electrician's Holster Kit

Description	Part No.
4-Piece Electrician's Holster Kit	**35-5799**
Kit Includes	
9-1/2 in. Lineman's Plier w/New England nose and crimping die	**30-3430**
Pocket Pal® Tool Holster	**35-505**
11-in-1 Screwdriver/Nutdriver	**35-910**
Premium T®-5 T®-Stripper Wire Stripper	**45-120**

5-Piece Electrician's Holster Kit

Description	Part No.
5-Piece Electrician's Holster Kit	**35-5792**
Kit Includes	
9-1/4 in. Lineman's Plier w/fish tape puller	**30-430**
3/16 in. x 6 in. Cushioned-Grip Slotted Cabinet Tip Screwdriver	**35-186**
#2 x 4 in. Cushioned-Grip Phillips Screwdriver	**35-194**
Pocket Pal® Tool Holster	**35-505**
Premium T®-5 T®-Stripper Wire Stripper	**45-120**

Cutting Supplies

Understanding an industry takes years of dedication and focus. At IDEAL Electrical, we are committed to delivering high quality, innovative products to professional electricians. Our power tool accessories are specifically designed with the professional electrician in mind. Experience less down time on the work site and get a superior cost-per-cut advantage with IDEAL.

Carbide-Tipped Hole Cutters
Sheet Metal
Stainless steel

Step Drills
Brass
Carbon Steel
Cast Iron
Stainless Steel

Bi-Metal Hole Saws
Metal
Plastics
Wood

Multi-Purpose Hole Saws
Composite Enclosures
Ceiling Tile
Cement Board
Wood

Auger Bits
Wood

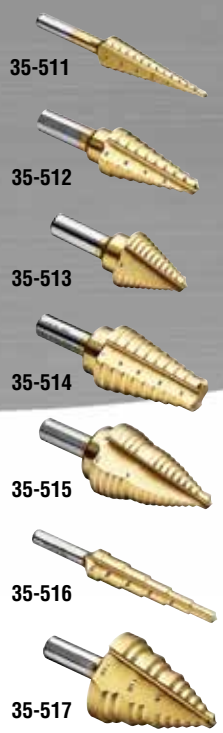
Wood Boring Bits
Wood

Reciprocating Blades
Metal
Ceramic Tile
Drywall
Fiberglass
General Purpose
Wood
Steel

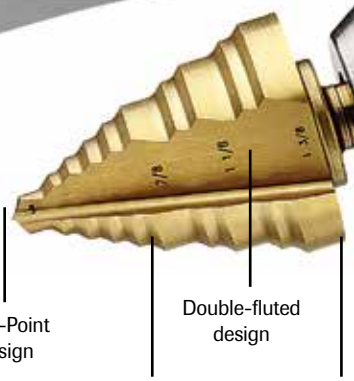
Flexible Drill Bits
Steel
Wood

Step Drill Bits

Cuts 1/4 in. thick Steel



Trust IDEAL step drill bits for precise, repetitive drilling through the toughest materials including brass, carbon steel, cast iron, stainless steel, and more. These tough and reliable tools are constructed with a rugged titanium nitrite exterior coating. Each step is gradually blended to ease stepping through hole sizes; reducing the need to keep changing drill bits, which speeds up the fabrication process. Improved Split-Point tip design eliminates the need for a starter hole or punch and delivers three times faster starts, saving valuable time. The double-fluted design provides balanced cuts and cooler operation.



BEST

GOOD

Drill Diameter Sizes (In.)	No. of Hole Sizes	Step Increments (In.)	Step Thickness (In.)	Shank Dia. (In.)	Part No.
1/8 to 1/2	13	1/32	1/8	5/16	**35-511**
1/4 to 3/4	9	1/16	1/8	3/8	**35-512**
1/4 to 7/8	11	1/16	1/16	3/8	**35-513**
1/2 to 1	8	1/16	1/8	3/8	**35-514***
1/4 to 1-1/8	16	1/16	1/16	3/8	**35-515**
3/16 to 1/2	6	1/16	3/8	5/16	**35-516**
1/4 to 1-3/8	10	1/32	1/16 to 1/4	3/8	**35-517**

*Requires pilot holes.

Electrician's Step Bit Kit

- Durable blow-molded case securely holds and protects bits
- Kit Includes: 1/8 to 1/2 in. 35-511, 1/4 to 7/8 in. 35-513, 1/4 to 1-1/8 in. 35-515 and 1/4 to 1-3/8 in. 35-517 Step Bits
- Kit provides a solution for every electrical hole size between 1/8 in. and 1-3/8 in.

Description	Part No.
Electrician's Step Bit Kit	**35-520**

Quick Change Step Bits

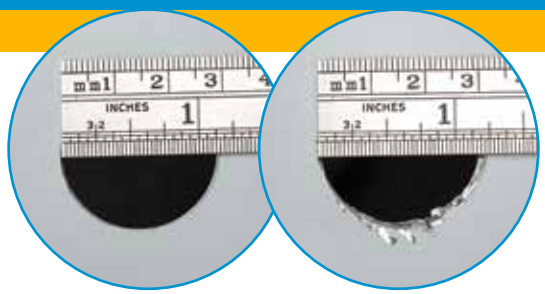
- Split-Point tip lasts longer and starts faster than competition
- High speed tool steel, double-tempered for superior tip life
- Double fluted and blended radius steps for smooth drilling
- 1/4" Quick change shank

Quick Change!

Drill Diameter Sizes (In.)	No. of Hole Sizes	Step Increments (In.)	Step Thickness (In.)	Shank Dia. (In.)	Part No.
1/8 to 1/2	13	1/16	1/8	1/4	**35-521**
1/4 to 7/8	11		1/16		**35-522**
1/4 to 1-1/8	16				**35-523**
3-Piece Quick-Change Step Bit Kit (35-521, 35-522, 35-523)					**35-524**

TKO™ Carbide-Tipped Hole Cutters

TKO™ Hole Cutters offer the most efficient and clean cutter replacement for traditional knockouts, by making smooth holes in a fraction of the time at a fraction of the cost. Specifically designed to cut sheet metal, TKO cutters will even cut stainless steel with fine grained, carbide tips. The innovative design includes the exclusive SmoothStart™ replaceable pilot drill, which guides the cutter to the surface, avoiding cutter damage and providing smoother holes. An integral overdrill flange prevents cutter penetration beyond the sheet metal. When it comes to quality, performance and durability, IDEAL is the professional's choice for carbide tipped hole cutters.



IDEAL TKO™ **Competitor**

IDEAL provides smooth, precise holes (holes cut with 1-1/8 in. cutters)

Hole Size	Conduit & Pipe Size	Part No.
3/4 in. (19mm)	—	**36-300**
7/8 in. (22mm)	1/2 in. (22mm) - push button	**36-301**
1 in. (25mm)	—	**36-302**
1-1/8 in. (29mm)	3/4 in. (19mm)	**36-303**
1-1/4 in. (32mm)	—	**36-304**
1-3/8 in. (35 mm)	1 in. (25mm)	**36-305**
1-7/32 in. (30mm)	1-7/32 in. (30mm) - push button	**36-313**
1-7/16 in. (37mm)	—	**36-306**
1-1/2 in. (38mm)	—	**36-307**
1-3/4 in. (44mm)	1-1/4 in. (32mm)	**36-308**
2 in. (51mm)	1-1/2 in. (38mm)	**36-309**
2-1/2 in. (64mm)	2 in. (50mm)	**36-310**
2-7/8 in. (73mm)	2-1/2 in. (64mm)	**36-315**
3-1/2 (89mm)	3 in. (76mm)	**36-316**
4 in. (102mm)	3-1/2 in. (89mm)	**36-317**
4-1/2 in. (114mm)	4 in. (102mm)	**36-318**

3/8 in. Shank on all hole cutters. Max. material thickness is 1/8 in.

SmoothStart™ Replacement Pilot Drill

- Guides cutter to surface providing smoother holes and cutter damage

Description	Diameter	Drill Depth	Overall Length	Part No.
SmoothStart™ Replacement Pilot Drill	1/4 in.	3/4 in.	2 in.	**36-312**

4-Piece TKO™ Carbide-Tipped Hole Cutter Kit

Description	Part No.
4-Piece Carbide Hole Cutter Kit	**36-311**
Kit Includes	**Part No.**
7/8 In. Hole Cutter	**36-301**
1-1/8 in. Hole Cutter	**36-303**
1-3/8 in. Hole Cutter	**36-305**
SmoothStart™ Pilot Bit	**36-312**
Carrying Case	—

Hex key size is 3mm.

8-Piece TKO™ Carbide-Tipped Hole Cutter Electrician's Kit

Description	Part No.
8-Piece Carbide Hole Cutter Kit	**36-314**
Kit Includes	**Part No.**
7/8 In. Hole Cutter	**36-301**
1-1/8 in. Hole Cutter	**36-303**
1-3/8 in. Hole Cutter	**36-305**
1-3/4 in. Hole Cutter	**36-308**
2-1/2 in. Hole Cutter	**36-309**
2-1/2 in. Hole Cutter	**36-310**
SmoothStart™ Pilot Bit	**36-312**
Carrying Case	—

Hex key size is 3mm.

BEST CHOICE FOR LONGER LIFE

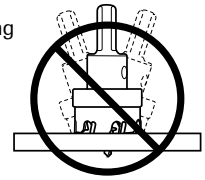
TKO™ Carbide-Tipped Hole Cutters

Carbide tips cut up to 1/8 in. thick steel and outperforms HSS cutters and bi-metal hole saws in sheet steel

Integrated arbor provides smooth, accurate holes

Integrated overdrill flange prevents penetration beyond the sheet metal

Ejection spring effortlessly ejects slug



DO NOT ROCK

Exclusive SmoothStart™ pilot drill guides cutter

Low RPM recommended for longer life.

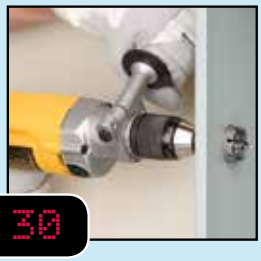
See how IDEAL TKO can save time...

Total time using the IDEAL TKO™

30 Seconds

Chuck Cutter

Drill hole & store

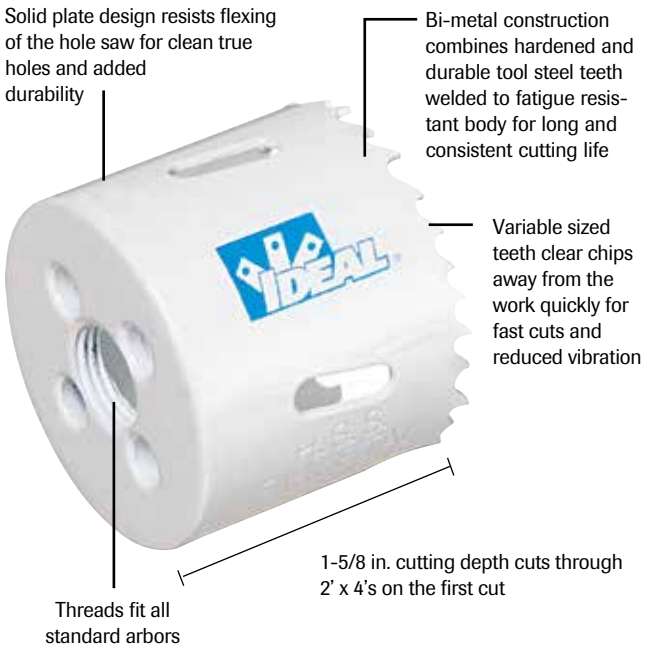


Total time using the competitors' knockout tool

More than 6 Minutes

IRONMAN™ Bi-Metal Hole Saws

- Thicker, flex-free backing plate for clean true holes and long tool life
- Variable pitch tooth geometry for fast cutting and reduced vibration
- Cuts all types of machinable metal including stainless steel, wood, nail embedded wood, plastic and fiberboard



Saw Diameter (In.)	Pipe Tap Size* (In.)	Pipe Entrance Size* (In.)	Use with Arbor No.	Part No.
9/16	–	–	35-391, 35-392 or 35-393	35-340
5/8	–	–		35-341
11/16	–	–		35-342
3/4	1/2	3/8		35-343
25/32	–	–		35-399
13/16	–	–		35-344
7/8	3/4	1/2		35-345
15/16	–	–		35-346
1	–	–		35-347
1-1/16	–	–		35-348
1-1/8	1	3/4		35-349
1-3/16	–	–		35-350
1-1/4	–	–	35-394, 35-536 or 35-537	35-351
1-5/16	–	–		35-352
1-3/8	–	1		35-353
1-7/16	–	–		35-354
1-1/2	1-1/4	–		35-355
1-9/16	–	–		35-356
1-5/8	–	–		35-357
1-1/16	–	–		35-358
1-3/4	1-1/2	1-1/4		35-359
1-13/16	–	–		35-360
1-7/8	–	–		35-361
2	–	1-1/2		35-362
2-1/16	–	–		35-363
2-1/8	–	–		35-364
2-1/4	2	–		35-365
2-5/16	–	–		35-366
2-3/8	–	–		35-367
2-1/2	–	2		35-368
2-9/16	–	–		35-369
2-5/8	2-1/2	–		35-370
2-3/4	–	–		35-371
2-7/8	–	–		35-372
3	–	2-1/2	35-394, 35-536, 35-537 or 35-538	35-373
3-1/8	–	–		35-374
3-1/4	3	–		35-375
3-3/8	–	–		35-376
3-1/2	–	–		35-377
3-5/8	–	3		35-378
3-3/4	3-1/2	–		35-379
3-7/8	–	–		35-380
4	–	–		35-381
4-1/8	–	3-1/2		35-382
4-1/4	4	–		35-383
4-3/8	–	–		35-384
4-1/2	–	4		35-385
4-3/4	4-1/2	–		35-386
5	–	–		35-387
5-1/2	–	–		35-388
5-3/4	–	–		35-389
6	–	–		35-390

*All pipe sizes listed in the Pipe Tap Size and Pipe Entrance Size columns are standard industry sizes. All pipes are sized by the nominal inside diameter.

IRONMAN™ Bi-Metal Hole Saw Kits

35-400
8-Pc. Electrician's Hole Saw Kit

35-401
14-Pc. Electrician's Hole Saw Kit

35-518
19-Pc. Electrician's Hole Saw Kit

Part No.	Hole Saws Included in Kits																		
	Hole Saws (in.)														Hole Saw Arbors				
	3/4 35-343	7/8 35-345	1 35-347	1-1/8 35-349	1-3/8 35-353	1-1/2 35-355	1-3/4 35-359	2 35-362	2-1/4 35-365	2-1/2 35-368	3 35-373	3-5/8 35-378	4-1/8 35-382	4-1/2 35-385	35-391	35-393	35-394	35-396 (Ext.)	Repl. Pilot Drill 35-397
35-400		•		•	•		•	•		•						•	•		
35-401		•		•	•		•	•		•	•	•	•	•	•	•	•	•	
35-518	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•

Replacement Pilot Drills for Hole Saw Arbors

- Split point pilot drills start on contact for faster penetration and less walking

Description	Part No.
4 in. x 1/4 in. – Fits 35-391, 35-393, 35-394 & 35-538 arbors	**35-397**
3-1/4 in. x 1/4 in. – Fits 35-392, 35-536 & 35-537 arbors	**35-398**

Arbor Extension

- Easily connects to IDEAL Hole Saw Arbors
- Extension adds up to 18 in.

Description	Part No.
12 in. Extension for 7/16 in. Arbors	**35-396**

Not for use with TKO™ Hole Cutters, Step Drills or Augers.

Hole Saw Arbors

Best Arbor for Tri-Bore Hole Saws!

35-391 35-392 35-393 35-394 35-536 35-537 35-538

- Durable steel construction for long-lasting performance
- Set-screw in body for easy replacement of the pilot drill
- Versatile design saves valuable time, no tools needed to change hole saws

Shank Size	Thread Size	Fits Hole Saw Sizes	Part No.
1/4 in. Round	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-391**
3/8 in. Hex	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-292**
7/16 in. Hex	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-393**
7/16 in. Hex	5/8 - 18 in.	1-1/4 - 6 in.	**35-394**
7/16 in. Hex	5/8 - 18 in.	1-1/4 - 6 in.	**35-536**
3/8 in. Hex	5/8 - 18 in.	1-1/4 - 6 in.	**35-537**
7/16 in. Hex	5/8 - 18 in.	1 - 6 in.	**35-538**

TRI-BORE™ Multi-Purpose Hole Saw

- Massive carbide tips designed to cut wood with nails, cement board, composite enclosures, ceiling tile and more!
- Faster than self-feed bits in wood and carbide grit in abrasive materials

Hole Size (in.)	Application	Part No.
1-3/8		**36-350**
2-1/8	1-1/2" Pipe and lock installation	**36-351**
2-1/4	1-1/2" Pipe with couplings	**36-352**
2-9/16	2" Pipe	**36-353**
3	2" Pipe with couplings	**36-354**
3-3/8		**36-355**
3-5/8	3" Pipe	**36-356**
4		**36-357**
4-1/4	3" Pipe with couplings, 4" dryer vent	**36-358**
4-1/8		**36-359**
4-3/8	Capri®, Halo®, Marco, Mini Juno	**36-360**
4-5/8	4" pipe	**36-361**
5-3/8	Capri®, Juno®, Lightolier, Prescolite, Progress	**36-362**
6-1/4	6" Duct	**36-363**
6-3/8	Capri®, Halo®	**36-364**
6-5/8	Juno® and Progress	**36-365**
6-7/8	Capri®, Lightolier, Lithonia, Prescolite, Progress	**36-366**

Hole Saw Arbor

- Tri-Bore™ pilot bits must be ordered separately.
- 35-393 for use with 1-3/8 in. Hole Saw (36-350)
- 35-394 for use with remaining sizes

35-393 **35-394**

Shank Size	Thread Size	Shank Size	Part No.
7/16 in. Hex	1/2 - 20 in.	9/16 - 1-3/16 in.	**35-393***
7/16 in. Hex	5/8 - 18 in.	1/2 in.	**35-394***

*Arbors include pilot bits for bi-metal hole saws. Tri-Bore™ pilot bits must be ordered separately.

Spade & Carbide Pilot Bits for Tri-Bore™ Hole Saws

- Deep-cup design on Tri-Bore™ Hole Saws require the use of a longer pilot bit.

Hole Size (in.)	Application	Part No.
Spade Bit	Wood boring	**36-367***
Carbide Pilot	Abrasive material boring	**36-368***

*For use with Tri-Bore™ Hole Saw Arbors 35-393 & 35-394

Adjustable Can Light Hole Saw

- Cuts drywall and ceiling tile
- Self-sharpening carbide-coated cutting blades
- Includes two dust shields to minimize clean up

Description	Part No.
Adjustable Can Light Hole Saw – 10 sizes from 2-1/2 in. to 7 in. in increments of 3/8 in.	**35-598**
Adjustable Can Light Hole Saw – 13 sizes from 6-1/4 in. to 10-3/8 in. in increments of 3/8 in.	**35-599**

Screw Point Flexible Drill Bits, Type B

- Fast and aggressive, self-starting bit
- Ultra-sharp ground threads provide increased pulling power through obstructions
- Designed for easy to tough wood drilling

Description	Shank (in.)	Part No.
3/8 in. x 54 in. Screw Point Flexible Bit	3/16	**90-082**
1/2 in. x 54 in. Screw Point Flexible Bit	3/16	**90-085**
9/16 in. x 54 in. Screw Point Flexible Bit	3/16	**90-088**
3/4 in. x 54 in. Screw Point Flexible Bit	1/4	**90-091**

Serrated Combination Flexible Drill Bits, Type C

- Fast and aggressive, self-starting bit
- Ultra-sharp ground threads provide increased pulling power through obstructions
- Designed for easy to tough wood and light metal drilling

Description	Shank (in.)	Part No.
1/4 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-063**
3/8 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-067**
1/2 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-070**
9/16 in. x 54 in. Serrated Combination Flexible Bit	3/16	**90-073**

Flexible Bit Extensions

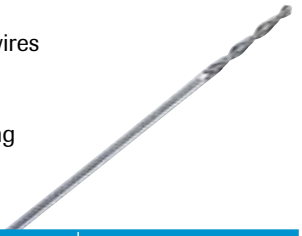
- Connect to chuck end of shaft to increase the length of the bit

Description	Shank (in.)	Part No.
3/16 in. x 36 in. Flexible Bit Extension	3/16	**90-170**
1/4 in. x 36 in. Flexible Bit Extension	1/4	**90-173**

Flexible Bit Placement Tool

Description	Part No.
Flexible Bit Placement Tool	**90-176**

Installer Bits



- Hole in fluted head for pulling wires through walls, ceiling and floors
- Flutes designed for quick chip removal – no clogging or binding
- Premium quality, extra-hard 52-100 carbon bearing steel

Description	Length	Part No.
Installer Bit - 1/4 in.	18 in.	**35-870**
Installer Bit - 3/8 in.	18 in.	**35-871**
Installer Bit - 1/2 in.	18 in.	**35-872**

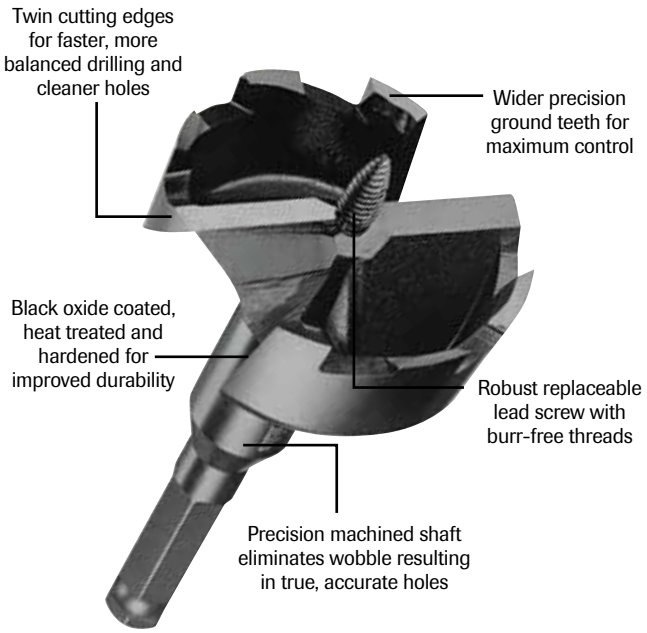
Power Spade Bits

- The most innovative and fastest spade bit
- Smooth and effortless drilling
- Max. operating speed 1500 RPM
- Available in a variety of sizes
- Offers less vibration than other bits

Description	Part No.
1/2 in.	**36-413**
5/8 in.	**36-415**
3/4 in.	**36-417**
7/8 in.	**36-419**
1 in.	**36-421**
1-1/8 in.	**36-422**
1-1/4 in.	**36-423**
4-Piece Kit with Pouch (5/8 in., 3/4 in., 7/8 in., 1 in.)	**36-432**

BUL-O-EYE™ Self Feed Wood Boring Bits

- Twin cutting edges for superior cutting speed and ultra clean holes
- Precision ground teeth provide clean and balanced cuts for maximum control with wider cutting surface
- Robust replaceable lead screw with burr-free threads that feed the bit through the wood at a consistent rate
- Precision machined shaft for bit concentricity to eliminate wobble and deliver a truer hole
- Black oxide coated, heat treated and hardened for added durability
- Quick-change shank for fast, secure change out



Description	Diameter	Entrance Size for Pipe & EMT	Part No.
1 in. Self-Feed Wood Boring Bit	1 in.	1/2 in.	**36-250**
1-1/8 in. Self-Feed Wood Boring Bit	1-1/8 in.	—	**36-251**
1-1/4 in. Self-Feed Wood Boring Bit	1-1/4 in.	3/4 in.	**36-252**
1-3/8 in. Self-Feed Wood Boring Bit	1-3/8 in.	1 in.	**36-253**
1-1/2 in. Self-Feed Wood Boring Bit	1-1/2 in.	—	**36-254**
1-3/4 in. Self-Feed Wood Boring Bit	1-3/4 in.	1-1/4 in.	**36-255**
2 in. Self-Feed Wood Boring Bit	2 in.	1-1/2 in.	**36-256**
2-1/8 in. Self-Feed Wood Boring Bit	2-1/8 in.	—	**36-257**
2-1/4 in. Self-Feed Wood Boring Bit	2-1/4 in.	—	**36-258**
2-9/16 in. Self-Feed Wood Boring Bit	2-9/16 in.	2 in.	**36-259**
3 in. Self-Feed Wood Boring Bit	3 in.	2-1/2 in.	**36-260**
3-5/8 in. Self-Feed Wood Boring Bit	3-5/8 in.	3 in.	**36-261**
4-5/8 in. Self-Feed Wood Boring Bit	4-5/8 in.	4 in.	**36-262**

Replacement Lead Screws

- Keeps self-feed bits running fast and true
- Easily replaced with hex wrench providing extended drill life and optimum cost-per-hole value

Description	Qty.	Part No.
Small replacement lead screws, fits bit sizes 1 in. - 2-9/16 in.	3/pack	**36-271**
Small replacement lead screws, fits bit sizes 3 in. - 4-5/8 in.	3/pack	**36-270**

Extension Bars

- Fits into hard-to-reach areas
- Compatible with IDEAL Auger Bits

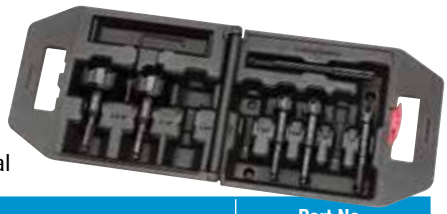
Description	Part No.
5-1/2 in. Extension Bar (includes Allen wrench)	**36-273**
18 in. Extension Bar (includes Allen wrench)	**35-819**

Sharpening File

- Keeps durable bits working like new
- High-grade sharpener hones dulled edges quickly and efficiently

Description	Part No.
Sharpening File	**36-272**

6-Piece BULZ-EYE™ Self Feed Wood Boring Bit Kit



- For the professional needing to drill multiple hole sizes in any wood material

Description	Part No.
6-Piece BULZ-EYE™ Self-Feed Wood Boring Bit Kit	**36-266**
Kit Includes	**Part No.**
1 in. Bit	**36-250**
1-1/4 in. Bit	**36-252**
1-3/8 in. Bit	**36-253**
2 in. Bit	**36-256**
2-9/16 in. Bit	**36-259**
5-1/2 in. Extension Bar	**36-273**
Carrying Case	—

9-Piece BULZ-EYE™ Self Feed Wood Boring Bit Kit

- For the professional needing to drill multiple hole sizes in any wood material

Description	Part No.
9-Piece BULZ-EYE™ Self-Feed Wood Boring Bit Kit	**36-269**
Kit Includes	**Part No.**
1 in. Bit	**36-250**
1-1/8 in. Bit	**36-251**
1-1/4 in. Bit	**36-252**
1-3/8 in. Bit	**36-253**
1-1/2 in. Bit	**36-254**
1-3/4 in. Bit	**36-255**
2-1/8 in. Bit	**36-257**
2-9/16 in. Bit	**36-259**
5-1/2 in. Extension Bar	**36-273**
Carrying Case	—

Mini™ Utility Bit Augers

- Designed to fit between wall studs when used with common drills
- Eliminates the need for expensive right angle drills

Bit Length = 4-3/4", Twist = 2-1/2", Shank = 7/16"	Hole Diameter	Part No.
5/8 in. Mini™ Auger	5/8 in.	**35-862**
3/4 in. Mini™ Auger	3/4 in.	**35-864**
7/8 in. Mini™ Auger	7/8 in.	**35-866**
1 in. Power Ship Auger	1 in.	**35-868**

Auger Bit Extension

- Dual locking screws
- Allen wrench included
- Compatible with Nailbiter™ and RESI-MASTER™ Ship Augers

Auger Bit Extensions, 18"; Six flats to fit drill chuck Description	Part No.
Auger Bit Extension for 7/16 in. shank	**35-819**

7-1/2" Nailbiter™ Premium Ship Auger Bits

- Dual-Helix construction with twin cutting edges for fast and smooth drilling action, even through nail-embedded timbers
- Full body, dual induction heat treatment ensures durability, minimizes warping and delivers long lasting performance
- Heavy-duty lead screw designed for quick gripping power, superior penetration and extra-long life
- Re-sharpenable for extended tool life
- 7/16 in. Shank

Description	Hole Diameter	Overall Length	Twist Length	Part No.
5/8 in. Power Ship Auger	5/8 in.	7-1/2 in.	5 in.	**35-810**
11/16 in. Power Ship Auger	11/16 in.	7-1/2 in.	5 in.	**35-811**
3/4 in. Power Ship Auger	3/4 in.	7-1/2 in.	5 in.	**35-812**
13/16 in. Power Ship Auger	13/16 in.	7-1/2 in.	5 in.	**35-813**
7/8 in. Power Ship Auger	7/8 in.	7-1/2 in.	5 in.	**35-814**
1 in. Power Ship Auger	1 in.	7-1/2 in.	5 in.	**35-815**
1-1/8 in. Power Ship Auger	1-1/8 in.	7-1/2 in.	5 in.	**35-816**
1-1/4 in. Power Ship Auger	1-1/4 in.	7-1/2 in.	5 in.	**35-817**

18" Nailbiter™ Premium Ship Auger Bits

Description	Hole Diameter	Overall Length	Twist Length	Part No.
1/2 in. Power Ship Auger	1/2 in.	18 in.	15 in.	**35-820**
5/8 in. Power Ship Auger	5/8 in.	18 in.	15 in.	**35-821**
11/16 in. Power Ship Auger	11/16 in.	18 in.	15 in.	**35-822**
3/4 in. Power Ship Auger	3/4 in.	18 in.	15 in.	**35-823**
13/16 in. Power Ship Auger	13/16 in.	18 in.	15 in.	**35-824**
7/8 in. Power Ship Auger	7/8 in.	18 in.	15 in.	**35-825**
15/16 in. Power Ship Auger	15/16 in.	18 in.	15 in.	**35-826**
1 in. Power Ship Auger	1 in.	18 in.	15 in.	**35-827**
1-1/8 in. Power Ship Auger	1-1/8 in.	18 in.	15 in.	**35-828**
1-1/4 in. Power Ship Auger	1-1/4 in.	18 in.	15 in.	**35-829**

7-1/2" RESI-MASTER™ Heavy-Duty Ship Augers

- 62° cutting angle reinforces the cutting edge and provides durability
- Hardened lead screw and cutting edge provide increased wear resistance and extended life
- Secondary relief angle evacuates wood chips quickly and prevents auger from jamming
- Oversized cutting head makes hole larger than body of bit for easy ejection from work piece
- 7/16 in. Shank

Description	Hole Diameter	Overall Length	Twist Length	Part No.
5/8 in. RESI-MASTER™ Auger	5/8 in.	7-1/2 in.	5 in.	**35-892**
11/16 in. RESI-MASTER™ Auger	11/16 in.	7-1/2 in.	5 in.	**35-730**
3/4 in. RESI-MASTER™ Auger	3/4 in.	7-1/2 in.	5 in.	**35-893**
13/16 in. RESI-MASTER™ Auger	13/16 in.	7-1/2 in.	5 in.	**35-731**
7/8 in. RESI-MASTER™Auger	7/8 in.	7-1/2 in.	5 in.	**35-896**
15/16 in. RESI-MASTER™ Auger	15/16 in.	7-1/2 in.	5 in.	**35-897**
1 in. RESI-MASTER™ Auger	1 in.	7-1/2 in.	5 in.	**35-898**
1-1/8 in. RESI-MASTER™ Auger	1-1/8 in.	7-1/2 in.	5 in.	**35-899**
1-1/4 in. RESI-MASTER™ Auger	1-1/4 in.	7-1/2 in.	5 in.	**35-732**

18" RESI-MASTER™ Heavy-Duty Ship Augers

Description	Hole Diameter	Overall Length	Twist Length	Part No.
1/2 in. RESI-MASTER™ Auger	1/2 in.	18 in.	15 in.	**35-726**
5/8 in. RESI-MASTER™ Auger	5/8 in.	18 in.	15 in.	**35-971**
11/16 in. RESI-MASTER™ Auger	11/16 in.	18 in.	15 in.	**35-727**
3/4 in. RESI-MASTER™ Auger	3/4 in.	18 in.	15 in.	**35-972**
13/16 in. RESI-MASTER™ Auger	13/16 in.	18 in.	15 in.	**35-728**
7/8 in. RESI-MASTER™ Auger	7/8 in.	18 in.	15 in.	**35-976**
15/16 in. RESI-MASTER™ Auger	15/16 in.	18 in.	15 in.	**35-977**
1 in. RESI-MASTER™ Auger	1 in.	18 in.	15 in.	**35-978**
1-1/8 in. RESI-MASTER™ Auger	1-1/8 in.	18 in.	15 in.	**35-979**
1-1/4 in. RESI-MASTER™ Auger	1-1/4 in.	18 in.	15 in.	**35-729**

Reciprocating Blades

- Bi-metal blades last up to ten times longer than carbon steel blades
- Flexible spring-back provides long blade life
- Super-hard, high speed steel teeth for a sharp, long-lasting cutting edge
- Shatterproof for tough applications
- Fits all reciprocating saws using 1/2 in. universal shank

L/W/TH (In.)	TPI	Material	Blade Back	Qty.	Application	Part No.
Metal Cutting						
6 x 3/4 x .035	14	Bi-metal	Straight	5	Pipe, structural steel, stainless steel: 3/32" - 1/4", Non-ferrous metal: 3/32" - 3/8"	**36-059**
4 x 3/4 x .035	18	Bi-metal	Straight	5	Structural steel, pipe, conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	**36-055**
6 x 3/4 x .035	18	Bi-metal	Straight	5	Structural steel, pipe, conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	**36-057**
8 x 3/4 x .035	18	Bi-metal	Straight	5	Structural steel, pipe, conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	**36-060**
6 x 3/4 x .035	24	Bi-metal	Straight	5	All metal less than 1/8" thick: Tubing conduit, trim	**36-058**
Heavy-Duty Metal Cutting						
6 x 3/4 x .050	18	Bi-metal	Straight	2	Heavy-duty blade for cutting structural steel, pipe, conduit, stainless steel: 1/16" to 3/16" thick	**36-085**
8 x 3/4 x .050	10/14	Bi-metal	Straight	2	Heavy-duty blade for cutting structural steel, pipe, conduit, stainless steel: 1/8" to 1/2" thick	**36-086**
12 x 3/4 x .050	10/14	Bi-metal	Taper	5	Heavy-duty blade for cutting structural steel, pipe, conduit, stainless steel: 1/8" to 1/2" thick	**36-087**
Wood w/Nails						
6 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	**36-065**
9 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	**36-066**
12 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	**36-067**
Demolition						
9 x 7/8 x .062	6	Bi-metal	Taper	2	Demolition work in nail-embedded wood, remodeling	**36-095**
9 x 7/8 x .062	10	Bi-metal	Taper	2	Demolition work in wood, metal, pipe and fire and rescue	**36-096**
General Purpose						
6 x 3/4 x .035	10	Bi-metal	Straight	5	Nail embedded wood, metal and non-ferrous metal composition materials & plastics 1/8" - 1/2"	**36-075**
Specialty Cutting						
8 x 3/4 x .050	Grit	Tung. Grit	Straight	2	Iron pipe, fiberglass, reinforced plastics, ceramic tile, stone, slate and brick.	**36-090**
3 x 5/16 x .035	18	Bi-metal	Scroll	5	Scroll cutting wood, cast aluminum and non-ferrous metals	**36-054**
Plaster/Drywall						
6 x 3/4 x .050	6	Bi-metal	Taper	2	For plaster, drywall, plaster board & lath. Bi-directional cutting	**36-088**

Long-Life Metal Cutting Reciprocating Blades

- Engineered to be the longest lasting, metal cutting blades available
- Long-life blades perform up to three times as many cuts as similar metal cutting blades
- 8% cobalt cutting edge for extreme durability
- Shatterproof bi-metal design
- Longer life for greater value

L/W/TH (In.)	TPI	Material	Blade Back	Qty.	Application	Part No.
6 x 3/4 x .035	18	Bi-metal	Straight	5	Long-Life blade for cutting structural steel, pipe, conduit, stainless steel, sheet metal: 1/6" - 3/16" thick	**36-043**
8 x 3/4 x .035	18	Bi-metal	Straight	5	Long-Life blade for cutting structural steel, pipe, conduit, stainless steel, sheet metal: 1/6" - 3/16" thick	**36-044**
6 x 1 x .042	14	Bi-metal	Straight	5	Long-Life blade for cutting rebar, barstock, angle iron and other heavy gauge metals: 1/8" and thicker	**36-046**
12 x 1 x .050	14	Bi-metal	Straight	5	Long-Life blade for cutting rebar, barstock, angle iron and other heavy gauge metals: 1/8" and thicker	**36-048**

Progressive Tooth Reciprocating Blades

- Specially designed for all purpose cutting
- Cut multiple materials without changing blades
- Tough bi-metal and HCS construction for long life.

L/W/TH (In.)	Material	Qty.	Application	Part No.
6 x 3/4 x .035	Bi-Metal	5	All metal, non-ferrous metal, sheet metal, pipe and other metal materials	**36-056**

Portable Band Saw Blades

- Bi-metal construction
- Fit all standard portable band saw machines
- For pipe, tubing and solids
- Cut any machinable metal, including conduit, angle iron, structural, rebar and stainless steel tubing

L/W/TH (In.)	TPI	Quantity	Part No.
44-7/8 x 1/2 x .020	10	3	**36-070**
44-7/8 x 1/2 x .020	14	3	**36-071**
44-7/8 x 1/2 x .020	18	3	**36-072**
44-7/8 x 1/2 x .020	24	3	**36-073**

Wire Management

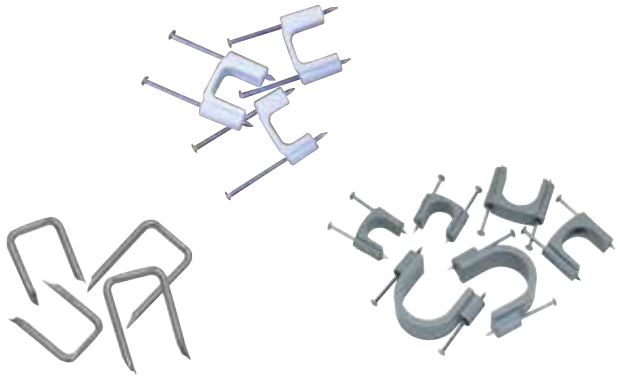
Cable Ties
- Tools
- Identification Ties
- Plenum, Powr-Tie™, Multi-Purpose
- Miniature, Standard, Heavy Duty
- Mounting Pads
- Screw Mounting Bases

Supplies
- Grommets
- Bushings
- Spacer Shims
- Anchor Kits

Staples
- Plastic Insulated
- Carbon Steel

Wire Markers
- Booklets
- Cards
- Dispenser

Switches
- Toggle
- Rocker
- Lever/Pull Chain
- Push-Button
- Rotary
- Door
- Indicator Lights



Cable Tie Numbering System

IT - 2 - S - MH - C - 0

IT	2	S	MH	CC	0
IT = IDEAL Powr-Tie™ Cable Ties	Size Approximate Bundle Diameter for ties	Tensile Strength M = Miniature (18 lbs.) I = Intermediate (40 lbs.) S = Standard (50 lbs.) LH = Light-Heavy Duty (120 lbs.) H = Heavy Duty (175 lbs.) EH = Extra Heavy-Duty (250 lbs.)	Style _ = Standard Tie MH = Mounting ID = Identification MB = Mounting Base LPMB = Low Profile Mounting Base MP = Mounting Pad CCL = Cable Clamp	Qty. Per Package L = 50 C = 100 D = 500 M = 1000	Color _ = Natural 0 = UV Black 8 = Gray 30 = Heat Stabilized Black 35 = Maroon 702 = Halar

Cable Tie Installation Tool

- Consistent, positive tension
- Flush cut-off leaves no projections to damage nearby wires or components
- Lightweight economy model for smaller jobs
- Heavy-duty model features rugged construction with comfortable, cushioned grips

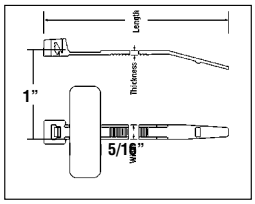
IT1MID-C

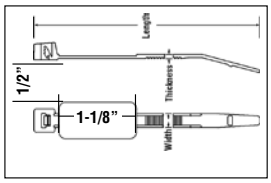
IT2SID-C & IT4SID-C

Description	Part No.
Economy – use w/standard & heavy-duty ties	**41-990**
Heavy-Duty – use w/standard & heavy-duty ties	**41-995**
Replacement Cutter Blade	**L-9148**
Replacement Cutter Bar	**K-5405**

Identification Ties

- Write-on surface
- Bundle and identify at the same time





Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Pad Size (H X L)	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	4.0 in./102mm	.100 in./2.54mm	.044 in./1.12mm	1/16 - 7/8 in.	18 lbs.	5/16 in. x 1 in.	21	AH-2	100	**IT1MID-C**
Natural Nylon	7.8 in./200mm	.181 in./4.59mm	.055 in./1.40mm	1/16 - 1-7/8 in.	50 lbs.	1-1/8 in. x 1/2 in.			100	**IT2SID-C**

Clamps

- Use to secure wires, cables, pipes, tubing and fiber optics
- Ultraviolet black nylon clamps available for internal and external use
- Use with #10 mounting screw

Description	Closed Diameter	Center to Center	Width	Thickness	Mounting Hole	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	.125 in./3.18mm	.343 in./8.71mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm	21	AH-2	100	**IT125CCL-C**
Natural Nylon	.250 in./6.35mm	.421 in./10.69mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm			100	**IT250CCL-C**
UV Black Nylon								100	**IT250CCL-C0**
Natural Nylon	.375 in./9.52mm	.500 in./12.70mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT375CCL2-C**
UV Black Nylon								100	**IT375CCL2-C0**
Natural Nylon	.500 in./12.70mm	.553 in./14.05mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT500CCL2-C**
Natural Nylon	.625 in./15.88mm	.625 in./15.88mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT625CCL2-C**
Natural Nylon	.750 in./19.05mm	.699 in./17.75mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT750CCL2-C**
Natural Nylon	1.000 in./25.40mm	.825 in./20.96mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm			100	**IT1000CCL2-C**

Plenum Cable Ties

- UL Listed nylon 6/6 cable ties are suitable for use in Air Handling Spaces (Plenum) in accordance with Section 300-22(C) & (D) of the National Electrical Code and Rules 12-010 (3), (4) and (5) and 12-020 of the Canadian Electrical Code, Part 1

Standard Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Burgundy Nylon	7.5 in./190mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 1-7/8 in.	50 lbs.	—	21	AH-2	100	**IT2S-C35**
Natural Nylon						MS3367-1-9			100	**IT2S-C**
Natural Nylon									1000	**IT2S-M**
UV Black Nylon						MS3367-1-0			100	**IT2S-C0**
UV Black Nylon									1000	**IT2S-M0**
Burgundy Nylon	11.2 in./284mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 3-1/16 in.	50 lbs.	—			100	**IT3S-C35**
Natural Nylon						MS3367-7-9			100	**IT3S-C**
Natural Nylon									500	**IT3S-D**
UV Black Nylon						MS3367-7-0			100	**IT3S-C0**
UV Black Nylon									500	**IT3S-D0**
Natural Nylon	14.5 in./368mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 4-1/8 in.	50 lbs.	MS3367-2-9			100	**IT4S-C**
Natural Nylon									500	**IT4S-D**
UV Black Nylon						MS3367-2-0			100	**IT4S-C0**
UV Black Nylon									500	**IT4S-D0**

Mounting Ties

Description	Length	Width	Strap Thickness	Max. Bundle	Tensile Strength	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	8.1 in./206mm	.178 in./4.52mm	.053 in./1.35mm	1/16 - 1-3/4 in.	50 lbs.	No. 10	21	AH-2	100	**IT2SMH-C**
Natural Nylon									1000	**IT2SMH-M**
UV Black Nylon									100	**IT2SMH-C0**

Powr-Tie™ Cable Ties

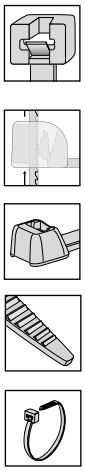
Quality Construction
- One-piece design for added strength
- Superior locking mechanism
- Exceeds industry tensile strength ratings

Low Insertion Force
- Tapered thin tip reduces initial friction
- Lowest insertion force with high tensile strength
- Reduces installation fatigue

No Burrs or Sharp Edges
- Smooth corners provide added safety
- Rounded edges eliminate insulation damage

Stepped Tail Grip for easier grabbing and tightening once engaged

Angled Tail
- Provides quicker initial insertion
- Lowers installation costs



Material Selection
- **RoHS Compliant**
- **Natural General Purpose 6/6 Nylon**
  - Suitable for most applications
  - Meets UL 94V-2 flammability ratings
  - 85°C/185°F working temperature
- **UV Black Nylon 6/6**
  - Suitable for most applications with continuous or extended exposure to outdoor elements
  - Weather-resistant grade, able to endure ultraviolet (UV) light
  - Meets UL 94V-2 flammability ratings
  - 85°C/185°F working temperature
- **Heat Stabilized Black Nylon 6/6**
  - Suitable for most applications with continuous or extended exposure to high temperatures
  - Meets UL standards for electrical applications
  - Meets UL 94V-2 flammability ratings
  - 125°C/257°F working temperature

Miniature (18 lb.) Natural & UV Black Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	4.0 in./102mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 7/8 in.	18 lbs.	MS3367-4-9	21	AH-2	100	**IT1M-C**
Natural Nylon									1000	**IT1M-M**
UV Black Nylon						MS3367-4-0			100	**IT1M-C0**
Natural Nylon	6.1 in./154mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 3-1/2 in.	18 lbs.	—			100	**IT1_5M-C**
UV Black Nylon									100	**IT1_5M-C0**
Natural Nylon	8.1 in./206mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 2-3/16 in.	18 lbs.	—			100	**IT2M-C**
Natural Nylon									1000	**IT2M-M**
UV Black Nylon									100	**IT2M-C0**

*IM, 1_5M & 2M Series

Intermediate (40 lb.) Natural & UV Black Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	5.7 in./145mm	.140 in./3.56mm	.049 in./1.24mm	1/16 - 1-7/16 in.	40 lbs.	MS3367-5-9	21	AH-2	100	**IT1_5I-C**
Natural Nylon									1000	**IT1_5I-M**
UV Black Nylon						MS3367-5-0			100	**IT1_5I-C0**
UV Black Nylon									1000	**IT1_5I-M0**
Natural Nylon	8.8 in./224mm	.140 in./3.56mm	.049 in./1.24mm	1/16 - 2-3/8 in.	40 lbs.	MS53367-5-9			100	**IT2I-C**
Natural Nylon									1000	**IT2I-M**
UV Black Nylon						MS53367-5-0			100	**IT2I-C0**
UV Black Nylon									1000	**IT2I-M0**
Natural Nylon	11.5 in./292mm	.142 in./3.60mm	.055 in./1.40mm	1/16 - 3-3/8 in.	40 lbs.	—			100	**IT3I-C**
UV Black Nylon									100	**IT3I-C0**
Natural Nylon	14.5 in./368mm	.142 in./3.60mm	.055 in./1.40mm	1/16 - 4 in.	40 lbs.	—			100	**IT4I-C**
UV Black Nylon									100	**IT4I-C0**

*IM, 1_5 & 2I Series

Standard (50 lb.) Natural & UV Black & Heat Stabilized Black Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	7.5 in./190mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 1-7/8 in.	50 lbs.	MS3367-1-9	21	AH-2	100	**IT2S-C**
Natural Nylon									1000	**IT2S-M**
UV Black Nylon						MS3367-1-0			100	**IT2S-C0**
UV Black Nylon									1000	**IT2S-M0**
Natural Nylon	11.2 in./284mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 3-1/16 in.	50 lbs.	MS3367-7-9			100	**IT3S-C**
Natural Nylon									500	**IT3S-D**
UV Black Nylon						MS3367-7-0			100	**IT3S-C0**
UV Black Nylon									500	**IT3S-D0**
Natural Nylon	14.5 in./368mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 4-1/8 in.	50 lbs.	MS3367-2-9			100	**IT4S-C**
Natural Nylon									500	**IT4S-D**
UV Black Nylon						MS3367-2-0			100	**IT4S-C0**
UV Black Nylon									500	**IT4S-D0**
Natural Nylon	17.0 in./432mm	.190 in./4.82mm	.053 in./1.34mm	1/16 - 4-3/4 in.	50 lbs.	—			100	**IT5S-C**
UV Black Nylon									100	**IT5S-C0**

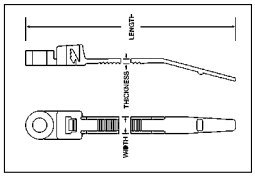
*2S, 3S & 4S Series
UL Listed Nylon 6/6 cable ties are suitable for use in Air Handling Spaces (Plenum) in accordance with Section 300-22(C) & (D) of the National Electrical Code and Rules 12-010 (3), (4) & (5) and 12-020 of the Canadian Electrical Code, Part 1.

Light Heavy-Duty, Heavy-Duty and Extra Heavy-Duty Natural, UV Black and Heat Stabilized Cable Ties

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	8.7/220.9mm	.300 in./7.62mm	.076 in./1.93mm	2-1/16 in.	120 lbs.	—	21	AH-2	100	**IT2LH-C**
UV Black Nylon									100	**IT2LH-C0**
Natural Nylon	15.1 in./384mm	.300 in./7.62mm	.075 in./1.90mm	3/16-4-1/16 in.	120 lbs.	MS3367-3-9			50	**IT4LH-L**
UV Black Nylon						MS3367-3-0			50	**IT4LH-L0**
Natural Nylon	17.8 in./451mm	.300 in./7.62mm	.075 in./1.90mm	3/16-5-1/4 in.	120 lbs.	—			50	**IT5LH-L**
UV Black Nylon									50	**IT5LH-L0**
Natural Nylon	24.2 in./614mm	.300 in./7.62mm	.075 in./1.90mm	3/16-7 in.	120 lbs.	—			50	**IT7LH-L**
UV Black Nylon									50	**IT7LH-L0**
Natural Nylon	25.3 in./642mm	.340 in./8.64mm	.090 in./2.29mm	3/16-7-3/16 in.	175 lbs.	MS3367-10-9			50	**IT7H-L**
UV Black Nylon						MS3367-10-0			50	**IT7H-L0**
Natural Nylon	37.1 in./942mm	.340 in./8.64mm	.090 in./2.29mm	3/16-11 in.	175 lbs.	MS3367-13-9			50	**IT11H-L**
UV Black Nylon						MS3367-13-0			50	**IT11H-L0**
Natural Nylon	47.8 in./ 1214mm	.340 in./8.64mm	.090 in./2.29mm	3/8-14-1/2 in.	175 lbs.	MS3367-16-9			50	**IT14H-L**
UV Black Nylon						MS3367-16-0			50	**IT14H-L0**
UV Black Nylon	22.8 in./579mm	.50 in./12.7mm	.080 in./2.03mm	3/16-6 in.	250 lbs.	—			100	**IT6EH-C0**

*4LH, 7H, 11H, 14H Series

Mounting Head, Natural & UV Black Cable Ties

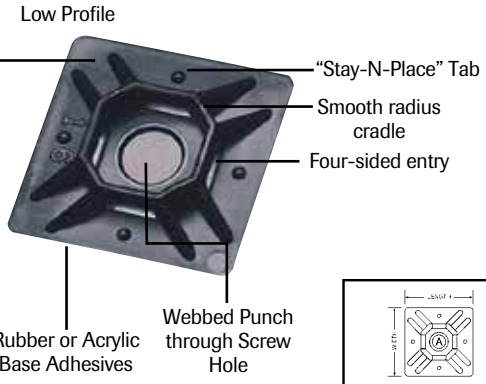


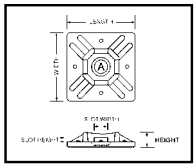
- Secures and positions wire bundles, cables, hoses, etc. to panels or other surfaces with one fastener to reduce time and cost
- Allows bundling before and after mounting

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	6.0 in./152mm	.140 in./3.55mm	.048 in./1.21mm	1/16 - 1-1/4 in.	30 lbs.	No. 8	21	AH-2	100	IT1_5IMH-C
UV Black Nylon									100	IT1_5IMH-C0
Natural Nylon	8.1 in./206mm	.178 in./4.52mm	.053 in./1.35mm	1/16 - 1-3/4 in.	50 lbs.	No. 10			100	IT2SMH-C
Natural Nylon									1000	IT2SMH-M
UV Black Nylon									100	IT2SMH-C0
Natural Nylon	11.8 in./300mm	.189 in./4.80mm	.050 in./1.27mm	1/16 - 3 in.	50 lbs.	No. 10			100	IT3SMH-C
UV Black Nylon									100	IT3SMH-C0
Natural Nylon	14.5 in./370mm	.189 in./4.80mm	.060 in./1.52mm	1/16 - 4 in.	50 lbs.	No. 10			100	IT4SMH-C
Natural Nylon	15.7 in./398mm	.300 in./7.62mm	.075 in./1.90mm	3/16 - 4-1/16 in.	120 lbs.	1/4 in.			100	IT4LHMH-C
UV Black Nylon									100	IT4LHMH-C0

*4LH Series; **2S Series
UL Listed Nylon 6/6 cable ties are suitable for use in air handling spaces in accordance with Section 300-22(C) & (D) of the National Electrical Code.

Mounting Pads

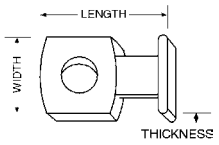




- Lead-N-Feature allows easy insertion for hard to reach applications
- Four-sided entry slots save time during placement orientation
- Smooth radius cradle eliminates possible damage to cable while providing stable support
- Webbed punch through screw hole allows maximum adhesive surface area, along with easy insertion of mechanical fasteners
- Low Profile is essential in confined spaces
- UL recognized, rubber adhesive positioning device

Description	Width	Height	Slot Height	Slot Width	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	.74 in./19mm	.19 in./4.8mm	.05 in./1.2mm	.20 in./5.1mm	No. 4	21	AH-2	100	IT750MP-C
UV Black Nylon								100	IT750MP-C0
Natural Nylon	.99 in./25mm	.20 in./5.0mm	.06 in./1.5mm	.20 in./5.1mm	No. 6			100	IT1000MP-C
UV Black Nylon								100	IT1000MP-C0

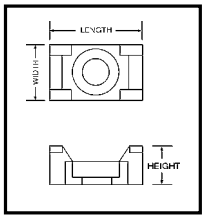
Screw Mounting Bases — Low Profile



- Perfect for confined space, control panels or other areas where space is limited

Description	Length	Width	Height	Slot Height	Slot Width	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Low Profile Mount	.750 in./19mm	.500 in./12.70mm	.120 in./3.04mm	.062 in./1.57mm	.180 in./4.57mm	No. 8	21	AH-2	100	IT1LPMB-C

Screw Mounting Bases – Standard



- Deep cradle design provides support for larger bundles and tubing
- Recessed screw hole allows cable ties to easily pass over screw head

Description	Length	Width	Height	Slot Height	Slot Width	Screw Size	UL Type	Plenum Approval	Qty./Bag	Part No.
Natural Nylon	.590 in./15mm	.370 in./9.40mm	.270 in./6.86mm	.062 in./1.59mm	.190 in./4.83mm	No. 6	21	AH-2	100	**IT1SMB-C**
UV Black Nylon									100	**IT1SMB-C0**
Natural Nylon	.870 in./22mm	.640 in./16.26mm	.380 in./9.65mm	.125 in./3.18mm	.300 in./7.62mm	1/4 in.			100	**IT2SMB-C**
UV Black Nylon									100	**IT2SMB-C0**

Multi-Purpose Cable Ties

CONSTRUCTION PRODUCTS BUCHANAN

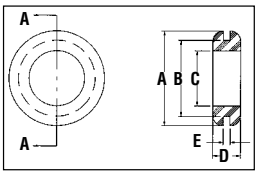
- General purpose cable tie for building and cable management
- UL recognized and Plenum rated

Size		Thickness x Width	Color	Tensile Strength (lbs.)	UL Type	Plenum Approval	Qty.	Part No.
Miniature	4 in.	.039 x .095	Natural	18	21	AH-2	100	B-4-18-9-C
			UL Black				100	B-4-18-0-C
Intermediate	6 in.	.047 x .142	Natural	40	—	—	100	B-6-40-9-C
			Natural		—	—	1,000	B-6-40-9-M
			UV Black		21	AH-2	100	B-6-40-0-C
	8 in.	.053 x .178	Burgundy	50	—	—	100	B-8-50-35-C
	11 in.				21	AH-2	100	B-11-50-35-C
Standard	8 in.	.057 x .181	Natural	50	—	—	100	B-8-50-9-C
			Natural		—	—	1,000	B-8-50-9-M
			UV Black		—	—	100	B-8-50-0-C
			UV Black		—	—	1,000	B-8-50-0-M
	11 in.		Natural		21	AH-2	100	B-11-50-9-C
			Natural		21	AH-2	500	B-11-50-9-D
			UV Black		21	AH-2	100	B-11-50-0-C
			UV Black		21	AH-2	500	B-11-50-0-D
	14 in.		Natural		21	AH-2	100	B-14-50-9-C
			Natural		21	AH-2	500	B-14-50-9-D
			UV Black		21	AH-2	100	B-14-50-0-C
			UV Black		21	AH-2	500	B-14-50-0-D
Heavy-Duty	14 in.	.066 x .299	Natural	120	21	AH-2	100	B-14-120-9-C
			UV Black				50	B-14-120-0-L
	24 in.		Natural	175			50	B-24-175-9-L
			UV Black				50	B-24-175-0-L
	36 in.		Natural				50	B-36-175-9-L
	48 in.		Natural				50	B-48-175-9-L
Mounting Ties	8 in.	.057 x .189	Natural	50	—	—	100	B-8-50MT-9-C
			UV Black		—	—	100	B-8-50MT-0-C
	14 in.	.053 x .178	Natural		21	AH-2	100	B-14-50MT-9-C
Mounting Pads	3/4 in. x 3/4 in.	.142 Max. Tie Width	Natural	N/A	—	—	100	BMP-750-9-C
	1 in. x 1 in.	.189 Max Tie Width	Natural	N/A	—	—	100	BMP-1000-9-C

Grommets

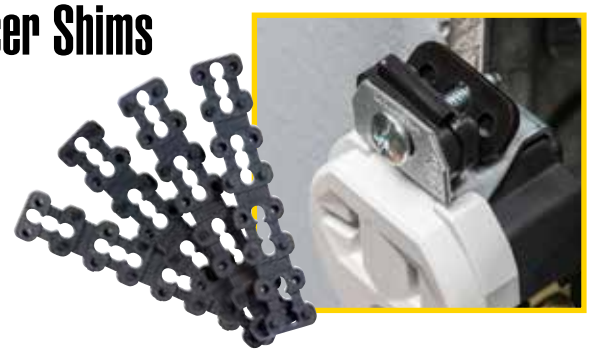
BUCHANAN CONSTRUCTION PRODUCTS

- Installs instantly! Flexible PVC grommets side slotted 1/16 in. for quick installation
- Snap into holes in electrical boxes, sheet metal, auto firewalls and more
- Prevents steel and other sharp edge chafing of wire insulation or cording
- Black, PVC, flexible, 60 durometer



Description	A	B	C	D	E	Qty.	Part No.
1/2" Grommets	55/64	.69	1/2	.25	1/16	25	**774113**
3/4" Grommets	15/64	1.0	3/4	.31	1/16	25	**774136**

Spacer Shims

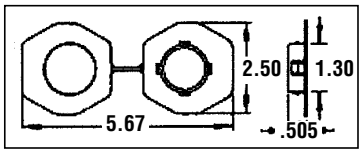


- Eliminates the need to cut plate screws for "GFCI" decorator devices when installing on tile, marble, etc.
- Supports loose outlets
- Prevents broken face plates
- Snaps over #6, #8, #10 screws

Description	Quantity	Part No.
Caterpillar	5	**772453**
Caterpillar	25	**172451L**
Caterpillar	500	**772451**

Universal Metal Stud Bushings

- Non-metallic stud bushing fits all HOLE configurations you are likely to encounter in pre-punched steel studs
- Long pulls of cable slide smoothly through the bushing, make a difficult job easier
- Protects wire without falling out of the hole



Description	Quantity	Part No.
Stud Bushing	25	**772271**

Flange-Type Plastic Anchor Kits

- Kit includes: Flange-type anchors, Slotted/Phillips head screws and masonry bit
- Convenient plastic storage container

Contents		Part No.
	100 #6-8-10 x 7/8 in. Flange-type anchors (yellow), 100 #8 x 1 in. combo-combo-head, sheet-metal screws & 1-3/16 in. masonry bit (carbide-tipped)	**90-051**
	100 #10-12 x 1 in. Flange-type anchors (red), 100 #10 x 1-1/4 in. combo-combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	**90-052**
	100 #10-12 x 1 in. Flange-type anchors (red), 100 #12 x 1 in. combo-combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	**90-053**
	40 #14-16 x 1-1/2 in. Flange-type anchors (white), 40 #14 x 1-1/2 in. combo-combo-head, sheet-metal screws & 1-5/4=16 in. masonry bit (carbide-tipped)	**90-054**

Plastic Insulated Staples

- Use with wider cable such as NM
- Plastic material is UV resistant
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

Description	Quantity	Part No.
1/2 in. Insulated Staple	50/Bag	**BPS2-50**
	100/Bag	**BPS2-1**
	225/Jar	**BPS2-JRL**
	400/Jar	**BPS2B-JR**
	500/Bag	**BPS2-5**
	5,000/Bucket	**BPS2-5M**
3/4 in. Insulated Staple	100/Bag	**BPS3-1**
	200/Jar	**BPS3-JRL**
	250/Bag	**BPS3-2**

Carbon Steel Staples

- Use with wider cable such as NM
- High-grade carbon steel construction
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion

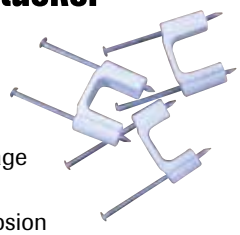
Description	Quantity	Part No.
1/2 in. x 1 in. Carbon Steel Staples	100/Box	**BCS1-1**
	500/Jar	**BCS1-JR**
	500/Box	**BCS1-5**
	5,000/Bucket	**BCS1-5M**
9/16 in. x 1-1/4 in. Carbon Steel Staples	100/Box	**BCS2-1**
	400/Jar	**BCS2-JR**
	500/Box	**BCS2-5**
	5,000/Bucket	**BCS2-5M**

Cable Stacker

- Perfect for centering multiple cables on 2 x 4 framing members in compliance with NEC 300.4.(2)
- Use with cable such as NM
- Plastic material is UV resistant

Description	Quantity	Part No.
Cable Stacker	15	**BPSTCKR-15**

Plastic Insulated Cable Stacker



- Use with wider cable such as NM
- Plastic material is UV resistant
- High-grade carbon steel construction
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

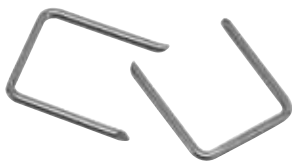
Description	Quantity	Part No.
1/2 in. 2 Cable Stacker	25/Bag	**BPS2/2-25**
	50/Bag	**BPS2/2-50**

Plastic Insulated Service Entrance Straps

- Use with service entrance cable and conduit
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

Description	Quantity	Part No.
#6 SER & 1/2 in. EMT Plastic Insulated Service Entrance Strap	50/Bag	**BSER6-50**
#6 & #8 SEU Plastic Insulated Service Entrance Strap	50/Bag	**BSEU6-50**
#2 SER & 3/4 in. EMT Plastic Insulated Service Entrance Strap	25/Bag	**BSER2-25**
#2 SEU Plastic Insulated Service Entrance Strap	25/Bag	**BSEU2-25**
4/0 SER Plastic Insulated Service Entrance Strap	5/Bag	**BSER4/0-5**
4/0 SEU Plastic Insulated Service Entrance Strap	5/Bag	**BSEU4/0-5**

Carbon Steel Service Entrance Staples



- Use with service entrance cable and conduit
- High-grade carbon steel construction
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion

Contents	Quantity	Part No.
1-5/16 in. x 3/4 in.	100/Box	**BMSE150-1**
1-1/2 in. x 1-1/6 in.	100/Box	**BMSE175-1**

Wire Marker Booklets

- Convenient pocket-size booklets
- Plastic, cloth construction for long-lasting durability
- Resists abrasion, moisture, dirt and oil
- Perforated 1/4 in. x 1-1/2 in. markers can be separated into half-length sizes
- Non-smear black legend ensures high visibility
- Self-sticking on wire and cable
- For applications above or below ground
- Specifications: Temperature Range: -40°F to 180°F (-40°C to 82°C)
  Adhesion: 45 oz./in. width ultimate

Legend Assortments	Quantity	Buchanan Part No.	IDEAL Part No.
0-9	45 Markers each	**775101**	**44-101**
A-Z, 0-15, +, –, /	10 Markers each	**775102**	**44-102**
1-48	10 Markers each	**775103**	**44-103**
46-90	10 Markers each	**775104**	**44-104**
1, 2, 3	150 Markers each	—	**44-105**
A, B, C	150 Markers each	—	**44-106**
A-Z	45 Markers each	—	**44-148****
T1, T2, T3	150 Markers each	—	**44-107**
L1, L2, L3	150 Markers each	—	**44-108**
1-15 16-90 A-Z +, –, /, 0	6 Markers each 4 Markers each 2 Markers each 2 Markers each	—	**44-109**
1, 2, 3 A, B, C T1, T2, T3 L1, L2, L3	45 Markers each 45 Markers each 30 Markers each 30 Markers each	—	**44-110**
+, –, AC, DC POS, NEG, GND NEUT SPARE, BLANK	45 Markers each 33 Markers each 27 Markers each 21 Markers each	—	**44-111***

Ten pages per booklet with each page bearing the legend assortment indicated. All booklets (except 44-111 & 45-148) contain 450 wire markers and 450 terminal markers.
*Booklet 44-111 includes 348 wire markers and 348 terminal markers.
**Booklet 44-148 contains 26 pages, one page of 45 markers per letter, 1170 total markers.

Wire Marker Dispenser

- Convenient pocket-size case holds ten wire marker rolls
- Dispenser tab holds tapes firmly in place – allows removal of proper tape length without waste
- Flip top for easy access and refill
- Built-in hook for hanging from belt or tool pouch
- High-quality adhesive and 3 mil. thickness provide long-lasting, low-profile application
- Each plastic reel holds Tyvek® tape
- Specifications: Temperature Range: -40°F to 180°F (-40°C to 82°C)
  Adhesion: 45 oz./in. width ultimate

Description	Part No.
Dispenser with 0-9 legend rolls	**42-301**
Refill pack with one each of 0-9 legend rolls	**42-399**

Tyvek® is a registered trademark of E. I. du Pont de Nemours and Company.

Write-On Marker Cards

- Use for developing personal identification systems
- Cloth write-on surface
- Accepts most writing instruments

Marker Size	Quantity	Part No.
5/8 in. x 1-1/2 in.	14/card	**44-753**

Write-On Marker Booklets

- Use for developing personal identification systems
- Surface accepts pen, pencil or rubber stamp
- Specification: Adhesion – .25 oz./in. ultimate width

Marker Size* (In.)	Markers per page	Pages per book	Part No.
1 x 2-1/2	6	10	**44-151**
1 x 5	3	10	**44-152**

*Write-on area for 2-1/2 in. markers is 3/4 in. x 1 in. Write-on area for 5 in. markers is 1 in. x 1 in.

Marking Pen

- Fast-drying, permanent ink will not smear
- Use on write-on marker cards and write-on cable-tie marker plates

Description	Part No.
Marking Pen with black ink	**41-697**

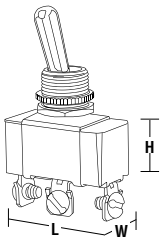
Load Center

- Contains common household legends – bedroom, living room, dryer, water heater, security system, etc.

Description	Part No.
Load Center Wire Marker Booklet	**44-154**

Standard & Heavy-Duty Toggle Switches

- Great for power tool and motor control switch applications
- Rugged long-wearing solid brass/nickel-plated bushings
- 1/2 in. diameter mounting hole
- Dielectric Strength: 1500V
- Mechanical Life: 100,000 cycles
- Operating Temperature: 32°F to 185°F (0°C to 85°C)
- DC Rating: Factory tested 100,000 cycles to 21 Amp 14.8 VDC

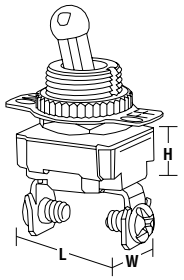


Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating: Amps 125 VAC	Rating: Amps 227 Vac	Rating: HP 125-250 VAC	Dimensions (L" x W" x H")	Part No.
	Toggle switch with On-Off Face-plate	SPST	On-Off	Screw	2	20	10	3/4	1.13 x .57 x .61	**774011**
				Spade						**774008**
				O-Ring/Screw						**774010**
	Toggle Switch		(On)-Off	Spade						**774093**
	Toggle Switch	SPDT	On-Off-On	Screw	3	20	10	3/4	1.13 x .57 x .61	**774013**
			On-Off-On	Spade						**774027**
			(On)-Off-(On)	Screw						**774009**
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	20	10	1-1/2	1.30 x .76 x .80	**774014**
			On-Off	Spade						**774005**
	Heavy-Duty Toggle Switch	DPDT	On-On	Screw	6	20	10	1-1/2	1.30 x .76 x .80	**774015**
										774015BK†
			On-Off-On	Screw						**774016**
			On-Off-On	Spade						**774003**
			(On)-Off-(On)	Screw						**774000**

( ) denotes momentary action †Bulk Package of 100 Note: All spade terminals are 1/4" (.250).

Medium & Light-Duty Toggle Switches

- Great for household appliances and equipment
- Bat toggle switch, 774007, is ideal for battery-powered equipment including trimmers and lawn mowers
- Wire leads are #18 AWG, 6 in. stripped wire
- 1/2 in. diameter mounting hole

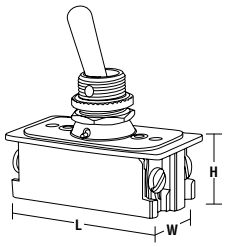


Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating	Dimensions (L" x W" x H")	Part No.
	Bat Toggle with On-Off Faceplate	SPST	On-Off	Screw	2	6 Amps 120 VAC, 3 Amps 240 VAC	.69 × .55 × .34	**774017**
			On-Off	Wire Leads	2	4 Amps 250VAC/DC, 8 Amps 125VAC/DC, 10 Amps 125 VAC, 1/3 HP 125 VAC	.98 × .64 × .62	**774018**
	Bat Toggle*		On-Term Ground	Spade	1	21 Amps 14 VDC	.69 × .55 × .34	**774007**
	Short Ball Toggle Switch	SPST	On-Off	Wire Leads	2	6 Amps 125 VAC, 3 Amps 250 VAC	.89 × .47 × .55	**774002**

*DC rating not CSA or RU listed.

Extra Heavy-Duty AC/DC Toggle Switches

- The switch that can handle your heavy-duty requirements
- Quick-make/quick-break type switches are ideal for DC voltage applications
- Perfect for industrial motor control, with its sturdy metal construction and stiff actuation force, withstands the abuses of virtually any application



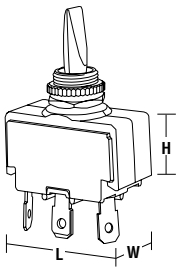
Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" x W" x H")	Part No.
						Amps 125 VAC	Amps 227 VAC	HP 125-250 VAC		
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	16	8	1	1.75 x .84 x .76	**774096**
						20	10	1-1/2	2.09 x 1.00 x .90	**774097**

Toggle Switch Accessories

- Neoprene covers great for outdoor and other environmentally tough conditions
- Covers screw onto toggle switches to protect from moisture, dust and dirt

Product	Description	Mounting	Dimensions	Quantity	Part No.
	Toggle Switch Cover	15/32 - 32 NS-2B	.93 Height x .62 Base Dia.	2	**774020**

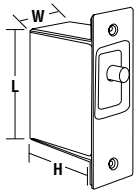
Double Insulated Plastic Toggle Switches



- Great for outdoor, marine/recreational equipment, automotive and weather resistant applications
- Double-insulated with an internal "O" ring design for moisture and dust resistance
- 1/2 in. diameter mounting hole

Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating		Dimensions (L" x W" x H")	Part No.
						Amps 125 VAC	Amps 250 VAC		
	Double Insulated, Plastic Toggle Switch	SPST	On-Off	Screw	2	20	10	1.37 × .76 × .94	**774019**

Door Switch



- Standard slide switch fits 9/16 in. x 7/8 in. opening
- Door switches are great for closets, turning the light on when the door is open and off when it is closed
- Door switch kit comes with metal box, cover plate and mounting hardware

Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Part No.
	AC/DC Door Switch Kit	White Button	SPST	Normally On-(Off)	Wire Leads	10 Amp 1/3 HP 125/250VAC	1.25 x 2.75 x 2.0	**774026K**

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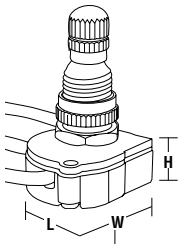
Rotary Switches

- Rotary switches are perfect for household appliances, ceiling fixtures and lamps
- Single or three-position switches available
- #18 AWG, 6 in. stripped wire leads



Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Part No.
	Rotary Switch	Brass Plated	SPST	On-Off	Wire Leads	6 Amp 125VAC, 3 Amp 250VAC	.97 x .80 x .39	**774061**
	3-Way Rotary Switch	Brass Plated	SPTT	Off-On(A)-On(B)-On(A+B)	Wire Leads	6 Amp 125VAC, 3 Amp 250VAC	.86 x 1.03 x .34	**774062**

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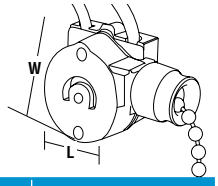
Lever & Pull Chain Switches

- Use for ceiling fixtures, lamps and fans
- Wire leads are #18 AWG, 6 in. stripped wire
- Push in connectors for #18 AWG wire
- 13/32 in. diameter mounting hole



Product	Description	Pull-Chain Color	Poles	Circuitry	Termination Type	Circuit	Rating			Dimensions (L" x W" x H")	Part No.
							Amps 125 VAC	Amps 250 VAC	Amps 125 V		
	All-Angle Lever Switch*	Nickel	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	—	1.50 x 1.28 x .50	**774035**
	Pull Chain	Nickel	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	3	.92 x .88 x .67	**774031**
	Pull Chain	Brass	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	3	.92 x .88 x .67	**774032**
	3-Speed Pull Chain*	Brass	SPTT	Off-On-On-On	Push-In	4 Pos - 4 Wire	6	3	—	1.43 x 1.25 x .73	**774034**
	3-Speed Pull Chain	Brass	SPTT	Off-On(A)-On(B)-On(A+B)	Wire Leads	4 Pos - 3 Wire	6	3	—	.87 x 1.05 x .65	**774037**

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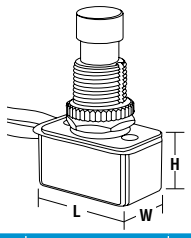
Push-Button Switches



- Great for household appliances, lamps and motor controls
- Available in normally open, normally closed and standard On-Off circuitry
- Wire leads are #18 AWG, 6 in. stripped wire
- 1/2 in. diameter mounting hole

Product	Description	Actuator	Poles	Circuitry	Termination Style	No. of Terminals	Ratings	Dimensions (L" x W" x H")	Part No.
	Momentary Contact Push-Button Switch	Black Plastic	SPST NO	(On)-Off	Screw	2	6 Amp 120 VAC, 3 Amp 240 VAC	.88 x .54 x .35	**774022**
	Maintained Contact Push-Button Switch	Black Plastic	SPST	On-Off	Wire Leads	2	8 Amp 125 VAC/DC, 4 Amp 250 VAC/DC, 10 Amp 125 VAC, 1/3 HP 125	.98 x .64 x .62	**774021**
	Momentary Contact Push-Button Switch**	Nickel Plated	SPST NO	(On)-Off	Screw	2	15 Amp 125 VAC, 10 Amp 250 VAC	1.38 x .58 x .60	**774085**

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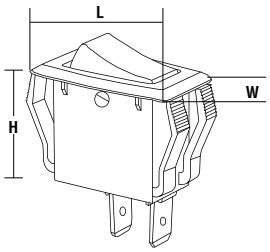
Appliance Rocker Switches



- Great for home appliances, computer equipment, automotive and industrial controls
- Appliance Rockers fit standard .55 in. × 1.12 in. panel cut outs
- Plain and lighted versions available
- Operating temperature: 32°F to 185°F (0°C to 85°C)

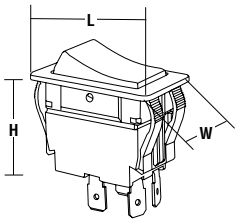
Product	Description	Rocker	Poles	Circuitry	Termination Style	No. of Terminals	Ratings	Dimensions (L" x W" x H")	Part No.
	Appliance Rocker Switch	Black	SPST	On-Off	Spade	2	16 Amp 1/3 HP 125 VAC, 10 Amp 1/2 HP 250 VAC	1.24 x .68 x .77	**774038**
	Appliance Rocker Switch	Red Lighted	SPST	On-Off	Spade	3*	16 Amp 1/3 HP 125 VAC, 10 Amp 1/2 HP 250 VAC	1.24 x .68 x .77	**774039**

*3rd terminal to power lighted rocker

c US

Full-Size Rocker Switches

- For commercial appliances, industrial controls, automotive and marine applications
- Moisture- and dust-resistant
- Suitable for low-voltage DC applications
- Recommended .830 in. x 1.450 in. mounting hole, .125 in. panel thickness
- Operating temperature: 32°F to 185°F (0°C to 85°C)



Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" x W" x H")	Part No.
						Amps 125 VAC	Amps 227 VAC	HP 110-250 VAC		
	Black Rocker Switch	SPST	On-Off	Spade	2	20	15	2	1.70 x .97 x 1.09	**774045**
	Black Rocker Switch	DPDT	On-Off-On	Spade	6	20	15	2	1.70 x .97 x 1.09	**774040BK†**
	Red Lighted Rocker Switch***	DPST	On-Off	Spade	4	15	10*	3/4**	1.70 x .97 x 1.09	**774056**

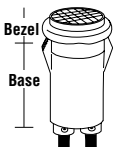
*Amps 250 VAC **HP 125-250VAC †Bulk package of 25

Indicator Light Part No. System

Series	Voltage	Color	Mounting Diameter Lens Style	Terminators
77	5 - 14V	1 - Red	1 - 1/2 in. Raised	1 - 6 in. Wire Leads
	6 - 28V	2 - Green	2 - 1/2 in. Flush	2 - .187 in. Spade
	7 - 125V	3 - Amber	3 - 5/16 in. Flush	—
	8 - 250V	4 - Blue	—	—
	—	5 - Clear	—	—

Flush Indicator Lights

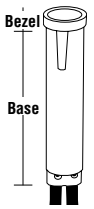
- Nylon body with flush transparent polycarbonate lens and stainless steel bezel, 94V-2 flammability rating
- 6 in. wire leads, 1/2 in. mounting diameter
- Lamp voltage is AC/DC
- Operating Temperature: Nylon Body: 140°C
  Polycarbonate lens: 135°C
  Low Temperature: -40°



Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs.)	Lamp Type	Termination Style	Height (Base" x Bezel")	Part No.
	Flush Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10	**777121***
	Flush Indicator Light	Green	125V	1/3	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10	**777221**
	Flush Indicator Light	Amber	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10	**777321**

*VDE Certified

Miniature Indicator Lights

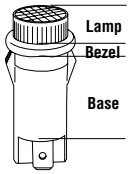


- Nylon body with flush transparent polycarbonate lens
- 6 in. wire leads
- 5/16 in. mounting diameter
- Lamp voltage is AC/DC

Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs.)	Lamp Type	Termination Style	Height (Base" x Bezel")	Part No.
	Miniature Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6 in. Wire Leads	1.43 × .13	**777131**
		Green	125V	1/3	2mA Max.	15,000	Neon	6 in. Wire Leads	1.43 × .13	**777231**
		Amber	125V	1/3	2mA Max.	25,000	Neon	6 in. Wire Leads	1.43 × .13	**777331**
										777331BK†

†Bulk Package of 100

Raised Indicator Lights



- Nylon body with raised transparent polycarbonate lens and stainless steel bezel, 94V-2 flammability rating
- 1/2 in. mounting diameter
- Lamp voltage is AC/DC
- Operating Temperature: Nylon Body: 140°C Low Temp -40°C
  Polycarbonate lens: 135°C

Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs.)	Lamp Type	Termination Style	Height (Base" x Bezel")	Part No.
	Raised Indicator Light	Red	14V	1.2	.08	50,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**775111***
		Red	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**776111***
		Green	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**776211***
		Amber	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	**776311***
		Red	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	**777111***
		Green	125V	1/3	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10 x .20	**777211***
		Amber	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	**777311***
		Red	250V	1/2	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	**778111***
		Green	250V	1/2	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10 x .20	**778211***
	Raised Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	.187" Spade	1.09 x .10 x .20	**777112**
										777112BK†
		Green	125V	1/3	2mA Max.	15,000	Neon	.187" Spade	1.09 x .10 x .20	**777212**
										777212BK†

*VDE certified †Bulk Package of 100

Heat Shrink & Splice Kits

- Easy to install underground splice kits to help save time and money
- Protects cable during storage with watertight seal provided by IDEAL End Caps

Thermo-Shrink® UF Splice Kits

- Direct burial rated, UV resistant
- 14/3 with and without ground through 8/3 without ground, UF cable range
- Stretcher kit repairs a 7 in. to 10 in. section damaged or destroyed by a trencher
- 600V Maximum, 105°C rating
- Meets the requirements of the 2002 NEC Code 110-14(b) and UL486D
- One wire per fitting

E123896

Description	Part No.
UF Splice Kit - 14-8 AWG, Tubing 1.1 in. x 8 in.	**46-400**
UF Stretcher Kit* - 14-8 AWG, Tubing 1.1 in. x 18 in.	**46-410**

*Stretcher kit connector is 11.5 in.

Thermo-Shrink® Al/Cu Splice Kits

- Direct burial rated, underground splice kits
- Heavy-wall heat shrink tubing with adhesive liner provides complete insulation and protection
- Connector can be used for aluminum and/or copper cable
- Meets the requirements of the 2005 NEC Code 110-14(B)
- 600V maximum, 105°C rating
- UV resistant

Description	Part No.
Underground Splice Kit – 8 to 4 AWG, Tubing 3/4 in. x 6 in.	**46-401**
Underground Splice Kit – 4 AWG to 1/0, Tubing 1.1 in. x 8 in.	**46-402**
Underground Splice Kit – 1/0 to 250 KCMIL, Tubing 1-1/2 in. x 12 in.	**46-403**

Thermo-Shrink® Self-Sealing UF Splice Kit

- Fully waterproof, submersible and re-enterable to make future changes or repairs
- Meets the requirements of the 2002 NEC Code 110-14 (b) and UL486D
- Accommodates 14 to 10 AWG wire range
- 600V Maximum, 105°C rating

Description	Part No.
Self Sealing UF Splice Kit	**46-411**

Thermo-Shrink® Copper Butt Splice Kits

- UL Listed
- UV resistant
- Provides a fully-insulated butt splice
- 600V Maximum, 105°C rating
- Not rated for direct burial

Description	Part No.
Butt Splice Kit – Copper 14-8 AWG	**46-404**
Butt Splice Kit – Copper 8-2 AWG	**46-405**

Thermo-Shrink® Heat Shrink Kit

Description	Part No.
Thermo-Shrink® Heat Shrink Kit	**46-007**
Kit Includes	**Part No.**
HEAT ELITE PRO™ Heat Gun	**46-203**
3/64 in. Heat Shrinkable Tubing (4 ft. disk)	**46-600**
1/16 in. Heat Shrinkable Tubing (4 ft. disk)	**46-601**
3/32 in. Heat Shrinkable Tubing (4 ft. disk)	**46-602**
1/8 in. Heat Shrinkable Tubing (4 ft. disk)	**46-603**
3/16 in. Heat Shrinkable Tubing (4 ft. disk)	**46-604**
1/4 in. Heat Shrinkable Tubing (4 ft. disk)	**46-605**
5/16 in. Heat Shrinkable Tubing (4 ft. disk)	**46-606**
3/8 in. Heat Shrinkable Tubing (4 ft. disk)	**46-607**
1/2 in. Heat Shrinkable Tubing (4 ft. disk)	**46-608**
3/4 in. Heat Shrinkable Tubing (4 ft. disk)	**46-609**
1 in. Heat Shrinkable Tubing (4 ft. disk)	**46-610**
Small Deflector, 1-1/4 in. diameter	**46-941**
Premium T®-Cutter Wire Cutter	**45-123**

Thermo-Shrink® Thin-Wall Heat Shrinkable Tubing

- Polyolefin material electrically insulates and protects in-line components, disconnect terminals and splices with its high strength and excellent resilience
- Use to bundle wires for very flexible light-duty harnesses
- Highly flame-retardant and flexible; resistant to common fluids and solvents
- Meets UL 486D 125°C VW-1 600V; Material: No PBB's, PBBE's, conforms to ROHS
- 2:1 shrink ratio; Minimum shrink temperature: 70°C; Operating temperature: -55°C to +125°C
- RoHS compliant
- UV resistant

Normal Size (in.)	Expanded I.D. (Min.)	Nominal Recovered I.D. (Max.)	Recovered Wall Thickness +/- 10%	Cable Range AWG*	Length (Pkg.)	Part No.
3/64	0.063"/1.6mm	0.024"/0.6mm	0.013"/0.33mm	22-18	4 ft. (Disk)	**46-600**
1/16	0.079"/2.0mm	0.031"/0.8mm	0.014"/0.36mm	16	4 ft. (Disk)	**46-601**
3/32	0.122"/3.1mm	0.047"/1.2mm	0.017"/0.44mm	14-12	4 ft. (Disk)	**46-602**
1/8	0.146"/3.7mm	0.063"/1.6mm	0.017"/0.44mm	24-20	6 in. (Bag)	**46-310**
					4 ft. (Disk)	**46-603**
					1,000 ft. (Spool)	**46-312**
3/16	0.205"/5.2mm	0.094"/2.4mm	0.020"/0.50mm	20-14	6 in. (Bag)	**46-313**
					4 ft. (Disk)	**46-604**
					1,000 ft. (Spool)	**46-315**
1/4	0.268"/6.8mm	0.126"/3.2mm	0.022"/0.56mm	14-8	6 in. (Bag)	**46-316**
					4 ft. (Disk)	**46-605**
					500 ft. (Spool)	**46-318**
5/16	0.346"/8.8mm	0.157"/4.0mm	0.022"/0.56mm	10-6	4 ft. (Disk)	**46-606**
3/8	0.421"/10.7mm	0.185"/4.7mm	0.022"/0.56mm	8-4	6 in. (Bag)	**46-319**
					4 ft. (Disk)	**46-607**
					200 ft. (Spool)	**46-321**
1/2	0.539"/13.7mm	0.252"/6.4mm	0.026"/0.65mm	4-1	6 in. (Bag)	**46-322**
					4 ft. (Disk)	**46-608**
					200 ft. (Spool)	**46-324**
3/4	0.807"/20.5mm	0.374"/9.5mm	0.027"/0.69mm	2-250 MCM	6 in. (Bag)	**46-325**
					4 ft. (Disk)	**46-609**
					200 ft. (Spool)	**46-327**
1	1.043"/26.5mm	0.500"/12.7mm	0.031"/0.80mm	2/0-500 MCM	6 in. (Bag)	**46-328**
					4 ft. (Disk)	**46-610**
					100 ft. (Spool)	**46-330**

*Reference only - Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

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Specifications

Property	Test Method	Typical Data
Tensile strength	ASTM D 638	14MPa
Elongation at break	ASTM D 638	600%
Elongation after aging at 175°C for 168 hours	UL 224	350%
Flammability	UL 224 VW-1	Pass
Heat shock (250°C/4 hours)	UL 224	No cracking
Cold bend test (-55°C/4 hours)	UL 224	No cracking
Dielectric strength	ASTM D 150	20KV/mm
Volume resistance	ASTM D 876	1014Ωcm
Copper corrosion	UL 224	Pass
Chemical resistance	UL 224	Pass
Longitudinal shrinkage	UL 224	0±5%
Eccentricity	UL 224	30%

Thermo-Shrink® Heavy-Wall Heat Shrinkable Tubing

- TS-46 irradiated cross-linked polyolefin with 3:1 standard shrink ratio
- Adhesive liner provides complete insulation and protection to electrical splices in above-grade, underground or underwater applications
- Maximum flame retardant
- Meets UL 486D, CSA C22.2 No. 198.2, ANSI C119.1, Western Underground Guides Nos. 2.4, 2.5, MIL-DTL-23053/15, IEEE 383 Vertical Flame Test, ANSI C37.20.2, ICEA S-19-8 and NEMA insulation thickness requirements
- Rated for 600V, 90°C continuous use

Model	Expanded I.D. (Min.) (In.)	Recovered I.D. (Max.) (In.)	Nominal Recovered Wall Thickness (In.)	Cable Range*	Length (In.)	Cat. No.
TS-46-400	.400	.130	.070	12-8 AWG	6	**46-343**
					9	**46-344**
					48	**46-346**
TS-46-750	.750	.220	.090	6-2/0 AWG	6	**46-347**
					9	**46-348**
					48	**46-350**
TS-46-1100	1.100	.350	.120	1/0-3/0 AWG	6	**46-351**
					9	**46-352**
					48	**46-354**
TS-46-1500	1.500	.470	.160	2/0 AWG-350 KCMIL	9	**46-356**
					12	**46-357**
					48	**46-358**
TS-46-2000	2.000	.630	.160	250-500 KCMIL	9	**46-369**
					18	**46-371**
					48	**46-372**

*Reference only. Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

UL LISTED CSA®

Specifications

Properties	Heavy Wall
Shrink Temperatures	120°C to 250°C (200°C recommended)
Continuous Operating Temperature	-55°C to 110°C
Tensile Strength (PSI)	2,100 PSI min.
Ultimate Elongation	600% min.
Secant Modulus @ 2% Strain	25,000 PSI max.
Specific Gravity	1.20 max.
Heat Aging, 168 hrs. @ 175°C Tensile Strength Elongation	500%
Heat Shock, 4 hrs. @ 225°C	No cracks, flowing or dripping
Flammability	Self-extinguishing
Low Temperature Brittle Point	-55°C
Volume Resistivity	1013ohm-cm min.
Dielectric Strength	500V/mil (20kV/min.)
Corrosive Effect	Non-corrosive
Solvent Resistance 24 hrs. Immersion per MIL-DTL-23053	Good to excellent
Water Absorption	0.5%
Fungus Resistance	No growth
Longitudinal Change, 3 min.	+1%/-10%

All values are typical performance data and are not to be used as design data.

Thermo-Shrink® Medium-Wall Heat Shrinkable Tubing End Caps

- Creates a watertight seal to protect ends of power and control cords
- Protects against oxidation, ozone, UV radiation, etc.
- Coated with hot melt adhesive to ensure environment seal
- Fits easily over end of cable
- Protect power cables up to 1000V and telecommunication cable
- Recommended for both open air and underground power distribution cables with PVC, lead or XLPE sheaths
- Thermally stabilized cross-linked polylefin, coated with specially designed hot melt adhesive
- UV resistant

Expanded I.D. (Min.)	Recovered I.D. (Max.)	Recovered Wall Thickness +/-10%	Cable Dia. Range*	Length	Part No.
0.55"/14mm	0.18"/4.5mm	0.079"/2.0mm	0.20"/5mm - 0.47"/12mm	1.77"/ 45mm	**46-381**
0.98"/25mm	0.31"/8mm	0.091"/2.3mm	0.39"/10mm - 0.71"/18mm	2.76"/ 70mm	**46-382**
1.38"/35mm	0.59"/15mm	0.118"/3.0mm	0.67"/17mm - 1.18"/30mm	3.35"/ 85mm	**46-383**
2.95"/75mm	1.38"/35mm	0.138"/3.5mm	1.77"/45mm - 2.76"/70mm	5.12"/ 130mm	**46-384**

*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

Specifications

Property	Test Method	Typical Data
Operating Temperature	IEC 216	-55°C to +110°C
Tensile Strength	ASTM D 638	>14 MPa
Elongation at break	ASTM D 638	>400%
Density	ASTM D 792	1.05g/cm3
Elongation of break after again	150°C, 168 hrs.	>300%
Dielectric strength	IEC 243	>15KV/mm
Volume resistance	IEC 93	1014Ωcm

Heat Elite Heat Gun Kit

- Temperature range: 660°-930°F (300°-500°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use

Description	Part No.
Heat Elite Heat Gun Kit, 1200 Watts	**46-202**
Kit Includes	**Part No.**
Heat Elite Heat Gun, 1200 Watts	**46-202**
Small Deflector, 1-1/4 in. diameter	**46-941**
Wide-Slot Adapter	**45-954**

HEAT ELITE PRO™ Heat Gun Kit

- Temperature range: 180°F - 1020°F (80° - 550°C)
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use
- LCD display with memory functions
- Temperature and airflow adjustments
- Stand-by mode to minimize the energy consumption
- Ceramic heating element ensures long-term coil performance

Description	Part No.
HEAT ELITE PRO™ Heat Gun Kit, 1500 Watts	**46-203**
Kit Includes	**Part No.**
HEAT ELITE PRO™ Heat Gun, 1500 Watts	**46-203**
Small Deflector	**46-941**
Reduction Adapter	**46-950**
Wide-Slot Adapter	**46-954**

Heat Elite Plus LCD Heat Gun Kit

- Temperature range: 180° - 1200°F (80° - 650°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomic distribution of weight
- Comfortable non-slip handle for ease of use
- Infinite temperature adjustment

Description	Part No.
Heat Elite Plus LCD Heat Gun Kit, 1500 Watts	**46-204**
Kit Includes	**Part No.**
Heat Elite Plus LSD Heat Gun, 1500 Watts	**46-204**
Small Deflector	**46-941**
Welding Adapter	**46-952**
Solder Reflector Adapter	**46-953**
Overlap Adapter	**46-955**
Pressure Roller	**46-956**

Heat Gun Accessories

46-941 **46-950** **46-951** **46-954** **46-956**

46-952 **46-953** **46-955**

Description	For Use With:	Part No.
Small Deflector, 1-1/4 in. diameter	46-202, 46-203, 46-204	**46-941**
Reduction Adapter	46-203, 46-204	**46-950**
Glass Protection Adapter	46-202, 46-203, 46-204	**46-951**
Welding Adapter	46-203, 46-204	**46-952**
Solder Reflector Adapter	46-204	**46-953**
Wide-Slot Adapter	46-202, 46-203, 46-204	**46-954**
Overlap Adapter	46-203, 46-204	**46-955**
Pressure Roller	46-204	**46-956**

Lockout/Tagout

Your Safety is our #1 concern.

A leader in personal safety for professional electricians, IDEAL Safety, Health and Environment products comply with ASTM requirements and OSHA regulations.

Every day we are protecting lives with the products we provide from 1000 volt insulated tools to Lockout/Tagout equipment, Clamp Meters, S-Class® Fish Tapes, specialty connectors and more!

IDEAL continuously works on methods and equipment that provide the maximum in performance to assure your safety and health while delivering better environment solutions that leave a small footprint.

Training...essential in keeping you safe whatever the job.

The proper use of materials and tools can mean the difference to your personal safety and health. IDEAL provides state-of-the-art training to give you the best methods and utilization of this equipment through hands-on demonstrations, peer discussions and on-site applications.

Training consists of several proven methods
- Lockout/Tagout Safety and Procedures
- Arc Flash Safety and 1000V Insulated Tools
- Test and Measurement Equipment and procedures

For more details on available training programs, contact your IDEAL sales representative.

Starter Lockout/Tagout Kit

- A starter selection of the lockout/tagout devices every electrician/maintenance person needs
- Small nylon zipper pouch features belt loops and d-rings for easy attachment to belts, tool pouches, tool carts and more

Description		Part No.
Starter Lockout/Tagout Kit		**44-973**
Kit Includes	**Qty.**	**Part No.**
Universal Multi-Pole Lockout	1	**44-783**
1 in. Safety Lockout Hasp	1	**44-800**
Universal 277V Breaker/Single-Pole Lockout	1	**44-809**
110V Plug Lockout	1	**44-818**
Striped Lockout Tags – Do Not Operate	2	**44-849**
3/4 in. Shackle Red Padlock	1	**44-906**
Zipper Pouch	1	**IA-3240**

Quantities listed in kit description are for individual pieces, not carded packages.

Basic Lockout/Tagout Kit

- A great selection of the most popular lockout/tagout devices
- Small nylon zipper pouch features belt loops and d-rings for easy attachment to belts, tool pouches, tool carts and more

Description		Part No.
Basic Lockout/Tagout Kit		**44-970**
Kit Includes	**Qty.**	**Part No.**
Universal Multi-Pole Breaker Lockout	1	**44-783**
Wall Switch Lockout	1	**44-789**
1 in. Safety Lockout Hasp	1	**44-800**
480/600V Breaker Lockout	1	**44-807**
Universal 277V Breaker Lockout/Single Pole	1	**44-809**
Hinged Single-Pole Breaker Lockouts	2	**44-810**
110V Plug Lockout	1	**44-818**
Striped Lockout Tags – Do Not Operate	5	**44-849**
3/4 in. Red Padlock	1	**44-906**
Zipper Pouch	1	**IA-3240**

Quantities listed in kit description are for individual pieces, not carded packages.

Standard Lockout/Tagout Kit

- Excellent selection of lockout/tagout devices, tags and locks for maintenance workers or contractors
- Small nylon zipper pouch features belt loops and d-rings for easy attachment to belts, tool pouches, tool carts and more

Description		Part No.
Standard Lockout/Tagout Kit		**44-971**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	3	**44-810**
Universal 277V Breaker Lockouts/Single Pole	2	**44-809**
480/600V Breaker Lockout	1	**44-807**
Wall Switch Lockout	1	**44-789**
110V Small Plug Lockout	1	**44-818**
2 in. Shackle Red Padlocks	2	**44-907**
1 in. Safety Lockout Hasps	2	**44-800**
Lockout Tags – Do Not Operate	5	**44-848**
Striped Lockout Tags – Do Not Operate	5	**44-849**
Cleat for 277V Breaker Lockout	1	**44-785**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Universal Multi-Pole Breaker Lockouts	2	**44-783**
Zipper Pouch	1	**IA-3240**

Quantities listed in kit description are for individual pieces, not carded packages.

Job Site Lockout/Tagout Kit

- Perfect kit for individual workers; padlocks keyed-alike for worker convenience
- Excellent selection of lockout/tagout devices, tags and keyed-alike padlocks for most applications

Description		Part No.
Job Site Lockout/Tagout Kit		**44-979**
Kit Includes	**Qty.**	**Part No.**
Circuit Breaker Lockouts - tall and wide toggles	2	**44-956**
Circuit Breaker Lockouts - standard single and double toggles	3	**44-957**
Circuit Breaker Lockout Padlock	1	**—**
Red Lockout Padlocks	3	**44-916****
1 in. Safety Lockout Hasp	1	**44-800**
Red Labeled Lockout	1	**44-791***
Universal Wall Switch Lockout	1	**44-772**
Lockout Tags - Do Not Operate (striped)	12	**44-833***
Tool Box*** (12 in. x 6 in. x 6 in.)	1	**IA-3241**

*Master Lock® equivalent.
**Reference part number is keyed-different, keyed-alike and master-keyed products can be special ordered by contacting IDEAL Customer Service.
***Tool box color may vary.

Master Lock® is a registered trademark of Master Lock Company LLC.

Plant Facility Lockout/Tagout Kit

- Ideal for plant facility personnel to keep all lockout/tagout devices in one convenient place
- Polypropylene plastic tool box resists oil and chemicals

Description		Part No.
Plant Facility Lockout/Tagout Kit		**44-972**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	5	**44-810**
Universal 277V Breaker/Single Pole Lockouts	3	**44-809**
480/600V Breaker Lockout	1	**44-807**
Wall Switch Lockouts	2	**44-789**
110V Plug Lockout	1	**44-818**
1 in. Safety Lockout Hasps	3	**44-800**
Red Labeled Lockout	1	**44-791**
220/550V Plug Lockout	1	**44-819**
Striped Lockout Tags – Do Not Operate	10	**44-849**
Fuse Blockout	1	**44-815**
Fuse Blockout	1	**K-7349**
Gate Valve Lockout	1	**44-824**
Cleat for 277V Breaker Lockout	1	**44-785**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Universal Multi-Pole Breaker Lockouts	3	**44-783**
Tool Box* (12 in. x 6 in. x 6 in.)	1	**IA-3241**

Quantities listed in kit description are for individual pieces, not carded packages.
*Tool box color may vary.

Industrial Lockout/Tagout Kit

- An industrial selection of lockout/tagout devices
- Polypropylene plastic tool box resists oil and chemicals

Description		Part No.
Industrial Lockout/Tagout Kit		**44-974**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	3	**44-810**
Universal 277V Breaker/Single Pole Lockouts	2	**44-809**
480/600V Breaker Lockout	1	**44-807**
Wall Switch Lockout	1	**44-789**
110V Small Plug Lockout	1	**44-818**
Ball Valve Lockout	1	**44-820**
1 in. Safety Lockout Hasps	2	**44-800**
Red Labeled Lockout	1	**44-791**
220/550V Plug Lockout	1	**44-819**
Striped Lockout Tags – Do Not Operate	10	**44-849**
Fuse Blockout	1	**44-815**
Fuse Blockout	1	**K-7349**
Gate Valve Lockout	1	**44-824**
Cleat for 277V Breaker Lockout	1	**44-785**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Red Lockout Padlocks	4	**44-916**
Universal Multi-Pole Breaker Lockouts	2	**44-783**
Tool Box* (12 in. x 6 in. x 6 in.)	1	**IA-3241**

Quantities listed in kit description are for individual pieces, not carded packages.
*Tool Box color may vary.

Group Lock Box

- Helps ensure maximum security for complex work team situations
- Allows up to 13 individuals to personally lock the closed box
- Heavy-duty steel construction resists unauthorized entry and job-site abuse
- Compact 8-3/4 in. x 3-1/2 in. x 6 in. design

Description	Part No.
Group Lock Box	**44-804**

Personal Lockout/Tagout Pouch Kit

- Easy to carry, zippered pouch holds a worker's personal padlocks and other small devices

Description		Part No.
Personal Lockout/Tagout Pouch Kit		**44-969**
Kit Includes	**Qty.**	**Part No.**
1 in. Safety Lockout Hasp	1	**44-800**
Lockout Tags	12	**44-833***
Red Safety Padlocks - Keyed Alike	3	**44-916****
Personal Lockout Pouch	1	—

*Master Lock® equivalent.

**Keyed alike and master keyed padlocks can be special ordered by contacting IDEAL Customer Service.

Master Lock® is a registered trademark of Master Lock Company LLC.

Industrial Lockout/Tagout Station

- Large Lockout/Tagout Station can be wall mounted or easily transported
- All metal, lockable cabinets come with two adjustable shelves
- Lockout safety tips are conveniently located inside of door for frequent reminders of proper lockout procedures

Description		Part No.
Industrial Lockout/Tagout Station (16" H x 16" W x 6" D)		**44-975**
Kit Includes	**Qty.**	**Part No.**
Hinged Single-Pole Breaker Lockouts	2	**44-810**
Universal Single-Pole Breaker Lockouts	2	**44-809**
Cleat for Universal Single-Pole Lockouts	2	**44-785**
Universal Multi-Pole Breaker Lockouts	2	**44-783**
480/600V Breaker Lockout	1	**44-807**
Cleat for 480/600V Breaker Lockout	1	**44-786**
Wall Switch Lockout	1	**44-789**
1 in. Safety Lockout Hasps	3	**44-800**
Red Safety Padlocks	4	**44-916**
100V Small Plug Lockout	1	**44-818**
220/550V Plug Lockout	1	**44-819**
Lockout Tags – Do Not Operate	10	**44-849**
Gate Valve Lockout - 1 in. to 2-1/2 in.	1	**44-824**
Gate Valve Lockout - 2-1/2 in. to 5 in.	1	**44-825**
Ball Valve Lockout	1	**44-820**
Pneumatic Lockout	1	**44-774**
Cabinet	1	**IA-4989**

Quantities listed in kit description are for individual pieces, not carded packages.
*Tool Box color may vary.

Lock Stations

44-778

44-806

- Resilient polycarbonate material provides twice the heat resistance and quadruple the impact strength of typical stations
- Lockable cover prevents loss of valuable safety products and innovative hinge holds cover open for easy product selection

Description		Part No.
Four-Lock Station Kit		**44-778**
Kit Includes	**Qty.**	**Part No.**
Four-Lock Station Board	1	—
Safety Padlocks, Red	4	**44-916**
Heavy-Duty Lockout Tags	12	—
1 in. Safety Lockout Hasps	2	**44-800**

Description		Part No.
Ten-Lock Station Kit		**44-806**
Kit Includes	**Qty.**	**Part No.**
Ten-Lock Station Board	1	**44-805**
Safety Padlocks, Red	10	**44-916**
Heavy-Duty Lockout Tags	24	—
1 in. Safety Lockout Hasps	2	**44-800**

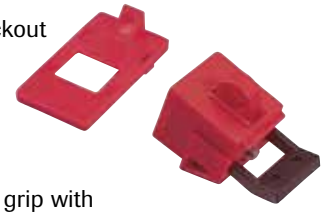
Hinged Single-Pole Breaker Lockouts

- Hinged single-pole lockout with locking post design, locks lever in off position to isolate and prevent breaker use
- Ideal for applications where panel closure is preferred

Description	Quantity	Part No.
Hinged Single-Pole Breaker Lockouts	3	**44-810**
Hinged Single-Pole Breaker Lockouts	100	**44-1810**

Universal 120/277V Breaker Lockouts

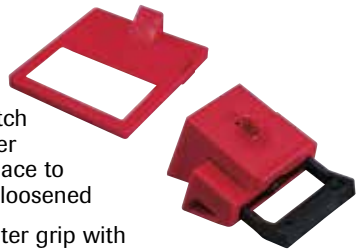
- Use thumbscrew to clamp lockout securely on to switch tongue, then pull cover over thumbscrew and lock in place to prevent clamp from being loosened
- Blade design provides tighter grip with less torque on thumbscrew



Description	Quantity	Part No.
Single-Breaker Lockouts	3	**44-809**
Cleat for Single-Pole Breaker Lockouts	3	**44-785**
Single-Pole Breaker Lockouts	50	**44-1809**

480/600V Single/Multi-Pole Breaker Lockouts

- Use thumbscrew to clamp lockout securely on to switch tongue, then pull cover over thumbscrew and lock in place to prevent clamp from being loosened
- Blade design provides tighter grip with less torque on thumbscrew



Description	Quantity	Part No.
480/600V Single/ Multi-Pole Lockout	1	**44-807**
480/600V Single/Multi-Pole Lockouts	50	**44-1807**
Cleat for 480/600V Single/Multi-Pole Lockout	2	**44-786**

Large Breaker Lockout

- Designed to lockout large 480/600V breaker switches up to 2-1/2 in. wide and 7/8 in. thick
- Easy to install – no tools required

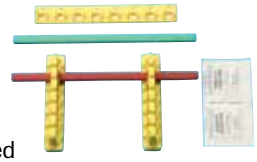
Description	Quantity	Part No.
Large Breaker Lockout	1	**44-823**

Multi-Pole Breaker Lockout

- Works with most major multi-pole breakers with tie-bar type switches including GE, ITE Sylvania, Challenger, Bryant, Westinghouse, Square D (2/3 poles) and General Switch Co.
- Easy to install – thumbscrew secures and locks tie bar in place; no cable ties or tools required

Description	Quantity	Part No.
Multi-Pole Breaker Lockout	1	**44-783**

Oversized Circuit Breaker Lockout System



- Unique Lockout system for over-sized 480/600V Circuit Breakers
- System can be permanently installed into an electrical panel putting all lockout items at the point of need
- Easy installation of adhesive mounting rails – no tools required
- Pegs in mounting rails mate with holes in locking arms for security of arm when lock is in place
- Red arms lock off, green arms lock on

Description	Quantity	Part No.
Oversized Circuit Breaker System	1	**44-822**

Circuit Breaker Lockouts

44-957

44-956

- Attaches securely to breaker with simple thumb turn and clamping handle
- 44-956 is designed for breakers with wide or tall toggles
- 44-957 fits standard height and tie-bar toggles
- The narrow profile permits side-by-side breaker lockout

Description	Part No.
Circuit Breaker Lockout	**44-956**
Circuit Breaker Lockout	**44-957**

Plug Lockouts

44-819

- Accommodates a variety of electrical plug and cord sizes to prevent accidental connection or disconnection
- Durable plastic body resists wear, chemicals and job-site abuse
- Accommodates cable ties or padlocks (with up to 3/8 in. shackles)

Description	Size (in.)	Part No.
Plug Lockouts - 100V	2 x 2 x 3-1/2	**44-818**
Plug Lockouts - 220/550V	3-1/4 x 3-1/4 x 7	**44-819**

Circuit Breaker Lockout System

- Covers most 120V - 277V breakers
- Works on wide range of breakers, including single- and multi-pole configurations

44-764 Clamp-on

44-768 Snap-on

- Makes use of unique lock rail system, providing the following benefits:
  - Allows panel door to be closed even when lockouts are in place
  - Accommodates multiple locks, facilitating group lockout activity without hasps
  - Keeps weight off the breakers, protecting delicate electrical components from damage
  - Positions locks and tags outside the panel, making sure lockout activity is clearly visible to anyone in the area
- Technical Information
  - Lockout devices constructed of high-impact Isoplast polymers
  - Cables are 2 ft. in length
  - Lock rails made of durable isoplast polymers with acrylic adhesive backing
- **Snap-on** – For use on Square D NQO and other breakers that have a hole in the switch tongue. Just align pins with hole and snap closed. Pins prevent switch from being thrown.
- **Clamp-on** – For use on breakers that do not have a hole in the switch tongue, including multiple breakers with tie bars. Turn thumb-screw to clamp lockout securely onto switch, then snap the cover closed to prevent thumb wheel from being loosened.

Description	Quantity	Part No.
Snap-on lockout for Square D NQO and other breakers with a hole in the switch tongue	1	**44-768**
Clamp-on lockout for breakers without hole in the switch tongue, including multi-pole breakers with tie bars	1	**44-764**
4 in. Lock Rail with seven lock loops	1	**44-769**

Plug Lockouts

- Plug lockout, 44-792 works with high and low voltage plugs up to 3 in. in diameter and 5-1/2 in. in length, up to 1-1/4 in. cord diameter
- Plug lockout, 44-973 works with 110V/220V plugs up to 1-3/4 in. in diameter and 2-1/2 in. in length, up to a 1/2 in. cord diameter

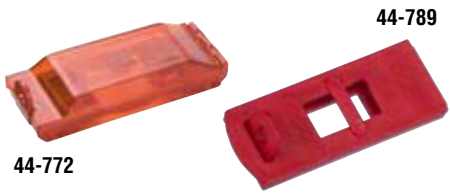
Description	Part No.
Plug Lockout	**44-792**
Plug Lockout	**44-793**

Electric Plug Lockout

- Slides over cord prongs and locks in place to prevent cord from being plugged into an outlet
- Cannot be removed without key
- Works on any 2- or 3-prong plug

Description	Part No.
Electric Plug Lockout	**44-782**

Wall Switch Lockouts

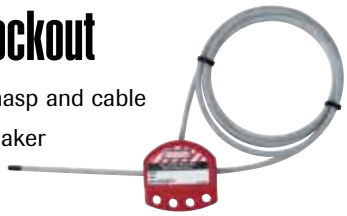


- Universal Wall Switch Lockout locks out both toggle and Decora® wall switches
- Universal design assures switch is locked on or off. Hinges open for unobstructed normal switch operation
- Standard wall switch lockout fits most wall-mounted single or three-way electrical switches

Description	Quantity	Part No.
Universal Wall Switch	1	**44-772**
Standard Wall Switch	1	**44-789**

Decora® is a registered trademark of Leviton Manufacturing Co., Inc.

Adjustable Cable Lockout



- Infinitely adjustable safety hasp and cable
- Ideal for multiple circuit breaker panels and side-by-side gate valve lockouts
- Feed the cable end through the points to be locked out, then back through the lockout body. Cinch it tight to remove any slack with the patented locking feature.
- Tough, flexible multi-stranded 6 ft. 1/4 in. dia. steel cable is insulated with a clear vinyl coating
- Tough, lightweight, dielectric thermoplastic body withstands chemicals; performs effectively in extreme conditions
- Up to four workers can apply their personal safety locks
- Complete with high-visibility, re-usable, write-on safety labels (English, French & Spanish). Identify the responsible person, then erase for the next job.

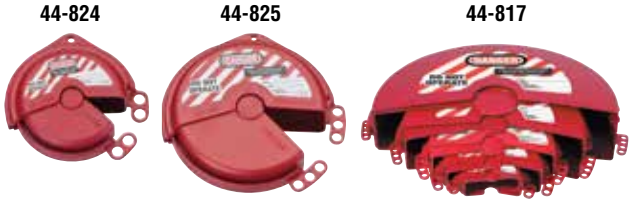
Description	Part No.
Adjustable Cable Lockout	**44-808**

Cable Lockout

- Unique hasp lockout device accepts up to six 9/32 in. padlocks and comes with a 6 ft. plastic-coated steel cable

Description	Part No.
Cable Lockout, 6 ft. cable	**44-829**

Gate Valve Lockouts



- Unique patent pending rotating design allows for easier installation in confined space applications
- Each size rotates into itself and nests within the next larger size to save space in storage
- Up to four workers can apply their personal safety locks
- Complete with high-visibility permanent safety labels (English, French & Spanish) that can be written on to identify the responsible person, then erased for the next job
- Tough, lightweight, dielectric thermoplastic bodies withstand chemicals and perform effectively in extreme conditions, temperature range: -50°F (-46°C) to +350°F (177°C)

Valve Size	Quantity	Part No.
1 in. to 3 in.	1	**44-824**
2 in. to 5 in.	1	**44-825**
Set of five sizes (1 in. to 13 in.)	1	**44-817**

Ball Valve Lockout Devices

- Best available method for locking out ball valves
- Patented design fits most major brand ball valves
- Designed to lock in off position only
- Complies with OSHA lockout standard

44-847

Valve Size	Max. Shackle Length	Material	Part No.
1/2 to 1-1/4 in.	—	Polypropylene	**44-846**
1-1/4 to 3	—	Polypropylene	**44-847**
1/4 to 1 (not shown)	9/32 in.	Nylon	**44-820**
1-1/4 to 3 (not shown)	9/32 in.	Heavy Steel	**44-821**

Steel Padlocks

- Rustproofed, steel case with nickel-plated shackle withstands abuse and environmental hazards
- Includes two keys
- 1-1/2 in. wide lock with 9/32 in. shackle diameter
- Keyed-alike and Master Lock® Keyed locks available by special order

Bumper Color	3/4 In. Shackle Clearance Part No.	2 In. Shackle Clearance Part No.
Blue	**44-900**	**44-901**
Red	**44-906**	**44-907**

Master Lock® is a registered trademark of Master Lock Company LLC.

Safety Lockout Padlocks w/Key Retention

- Dedicated safety lockout device reduces confusion with other locks
- Complies with OSHA's "1-key, 1-lock"
- Non-conductive, lightweight body; four colors for easy identification
- Key retention ensures keys do not get lost while not in use and that padlocks are not left untouched
- 1-1/2 in. shackle clearance; 1-1/2 in. wide lock with 1/4 in. shackle
- Keyed-alike, Master Lock® Keyed locks, 2nd key, additional colors and engraving available by special order

Bumper Color	Part No.
Blue	**44-912**
Black	**44-914**
Red	**44-916**
Yellow	**44-918**

Master Lock® is a registered trademark of Master Lock Company LLC.

Lock Labels

- Easy identification of employees' locks
- Write-on, vinyl labels with peel-off adhesive backing
- Polyester over laminate protects label

Description	Quantity	Part No.
Lock Labels	8 labels	**44-898**

Safety Lockout Hasps

- Allow up to six workers to lock out a single energy source
- Rustproofed, plated and vinyl-coated
- Labeled hasps feature anodized aluminum alloy construction for long-term durability
- Permanent "Do Not Operate" labels accept pens, pencils and permanent markers

Description	Jaw Diameter	Quantity	Part No.
Safety Lockout Hasp	1 in.	3	**44-800**
Safety Lockout Hasp	1-1/2 in.	2	**44-801**
Labeled Safety Lockout Hasp – Do Not Operate, Blue	—	1	**44-790**
Labeled Safety Lockout Hasp – Do Not Operate, Red	—	1	**44-791**
Labeled Safety Lockout Hasp – Do Not Operate, Red	—	50	**44-1791**

Heavy-Duty Lockout Tags

44-833

44-832

44-830

- High-visibility lettering
- Laminated plastic tags have non-fade legends, resist corrosive and harsh environmental conditions grommet
- Vinyl tags are silk screened with a 7/8 in. metal grommet; fastener included
- Exceeds OSHA's 50-lb. pullout requirement
- Matte finish for easy writing surface

Description	Type	Quantity	Part No.
Heavy-Duty Lockout Tag – Do Not Operate	Heavy-Duty Laminated	5/card	**44-830**
	Heavy-Duty Laminated	100/box	**44-1830**
	Economy Vinyl	25/bag	**44-848**
Heavy-Duty Lockout Tag – Do Not Operate - Electricians at Work	Heavy-Duty Laminated	5/card	**44-832**
	Economy Vinyl	25/bag	**44-843**
Heavy-Duty Lockout Tag – Do Not Operate - (red striped background)	Heavy-Duty Laminated	5/card	**44-833**
	Heavy-Duty Laminated	100/box	**44-1833**
	Economy Vinyl	25/bag	**44-849**

Bilingual Lockout Tags

- Spanish/English tags provide extra safety and information in bilingual situations
- High-visibility lettering
- Laminated vinyl tags with non-fade legends resist corrosive and harsh environmental conditions
- Write-on tag with 7/8 in. grommet can be padlocked to device to help prevent unauthorized removal

Description	Quantity	Part No.
Bilingual Lockout Tags – Do Not Operate (striped)	5	**44-841**

Flash Protection Labels and Signs

National Electric Code 110.16 Flash Protection: ***Switchboards, panel boards, industrial control panels and motor control centers,*** in other than dwelling occupancies, that are likely to require examination, adjustment, servicing or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing or maintenance of the equipment.

Description	Type	Size	Quantity	Part No.
NEC Arc Flash, Warning	Self-Sticking Polyester	3-1/2 in. x 5 in.	5	**44-892**
NEC Arc Flash, Warning		3-1/2 in. x 5 in.	100	**44-892BK**
NEC Arc Flash, Warning		5 in. x 7 in.	5	**44-893**
NEC Arc Flash, Warning		5 in. x 7 in.	5	**44-894**
NEC Arc Flash, Danger		4 in. x 6 in.	5	**44-895**
NEC Arc Flash, Warning		7 in. x 10 in.	1	**44-896**

Lockout Signs

- Resistant to both chemicals and abrasion – protected graphics for indoor and outdoor use

Legend	Material	Size (In.)	Part No.
Lockout Sign – OSHA Regulation 36 in. clearance	Self-sticking polyester	3-1/2 x 10	**44-877**
Lockout Sign – OSHA Regulation (Bilingual) 36 in. clearance	Self-sticking polyester	7 x 10	**44-878**
Lockout Sign – Danger-Breakers Locked Out	Magnetic	5 x 7	**44-890**

Safety Signs

- Resistant to both chemicals & abrasion – protected graphics for indoor & outdoor use

Legend	Material	Size (In.)	Part No.
Safety Sign – Danger–High Voltage	Fiberglass	10 x 14	**44-862**
Safety Sign – Danger–High Voltage	Self-Sticking Polyester	7 x 10	**44-863**
Safety Sign – Danger–High Voltage–Keep Out	Fiberglass	10 x 14	**44-880**
Safety Sign – Danger–High Voltage–Keep Out	Self-Sticking Polyester	7 x 10	**44-881**
Safety Sign – Danger–High Voltage–Spanish	Self-Sticking Polyester	7 x 10	**44-865**

Voltage & Conduit Markers

44-289

44-299

44-410

- Identify junction boxes, switches, circuit breakers, raceways, pipe and fuse boxes
- Non-conductive for user safety
- High-adhesion properties with easy removal
- Vinyl-impregnated cloth construction for long-lasting durability
- Resist abrasion, moisture, dirt and oil
- Non-smear, black legend on bright orange background for high visibility
- Specifications: Temperature Range: -40°F to 180°F (-40°C to 82°C)
  Adhesion: 45 oz./in. width ultimate

Description	Large Part No. (2-1/4 in. x 9 in.) 1/card	Medium Part No. (1-1/8 in. x 4-1/2 in.) 4/card	Small Part No. (2-1/4 in. x 1/2 in.) 18/card
120/208V	**44-295**	**44-296**	–
277/480V	**44-298**	**44-299**	–
120V	–	**44-353**	–
208V	–	**44-355**	–
240V	–	**44-358**	–
277V	–	–	**44-410**
480V	**44-314**	**44-364**	–
Danger	**44-289**	–	–
High Voltage	**44-292**	–	–

Detectable Underground Tapes

42-201

42-252

- Solid aluminum foil core tapes for protection, location and identification of underground utility installations
- Meets or exceeds industry standards including the American Public Works Association (APWA) color code
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink

Description	Color	Size	Part No.
Detectable Underground Tape – Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	**42-201**
Detectable Underground Tape – Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	**42-251**
Detectable Underground Tape – Caution Buried Fiber Optic Line Below	Orange	6 in. x 1,000 ft.	**42-252**

Specifications:		
Property	**Method**	**Value**
Thickness	ASTMD2103	5.0 Mils
Elongation	ASTMD882-75B	80%
Composition	IDEAL Specs.	Bottom Layer PE; Top layer PET; Foil industry standard
Tensile Strength	ASTMD882	32 lbs./in. (15,000 PSI)

Non-Detectable Underground Tapes

42-102

42-103

42-104

42-151

- For protection, location and identification of underground utility installations
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink
- Recommended Burial Depth: 3 in. Tape - 4 to 6 in.
  6 in. Tape – less than 12 in.

Description	Color	Size	Part No.
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	**42-101**
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Yellow	3 in. x 1,000 ft.	**42-102**
Non-Detectable Underground Tape – Caution Buried Telephone Line Below	Orange	3 in. x 1,000 ft.	**42-103**
Non-Detectable Underground Tape – Caution Buried Fiber Optic Line Below	Orange	3 in x 1,000 ft.	**42-104**
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	**42-151**
Non-Detectable Underground Tape – Caution Buried Electric Line Below	Yellow	6 in. x 1,000 ft.	**42-152**

Specifications:		
Property	**Method**	**Value**
Thickness	ASTMD2103	4.0 Mils
Elongation	ASTMD882-75B	500%
Composition	IDEAL Specs.	LDPE
Tensile Strength	ASTMD882	2,750 PSI

Barricade Tapes

42-002

42-051

42-003

- High-visibility safety yellow or red polyethylene construction with bold black letters
- Meets OSHA specifications Section 1010.144 for marking physical hazards

Description	Color	Size	Thickness	Part No.
Barricade Tape – Caution	Yellow	3 in. x 1,000 ft.	4.0 Mils	**42-001**
Barricade Tape – Caution Do Not Enter	Yellow	3 in. x 1,000 ft.	4.0 Mils	**42-002**
Barricade Tape – Caution High Voltage	Yellow	3 in. x 1,000 ft.	4.0 Mils	**42-003**
Barricade Tape – Danger High Voltage	Red	3 in. x 1,000 ft.	4.0 Mils	**42-051**
Barricade Tape – Danger High Voltage Keep Out	Red	3 in. x 1,000 ft.	4.0 Mils	**42-052**
Barricade Tape – Caution Do Not Enter	Yellow	3 in. x 1,000 ft.	2.0 Mils	**42-012**

Specifications:		
Property	**Method**	**Value**
Elongation	ASTMD882-75B	≥ 400%
Composition	IDEAL Specs.	LDPE
Tensile Strength	ASTMD882	2,350 PSI TD; 1,893 PSI MD

Python™ Adjustable Locking Cable

Python™ Adjustable Locking Cable secures anything within its grasp. The only locking cable that is right length for your application. This patented product holds flexible steel cable tight at any position

- Infinite Locking Positions – Patented lock holds cable tight from 1 ft. (30cm) to 6 ft. (1.8m)
- Application Flexibility – Interchangeable cables
- Keyed Alike Convenience – Rekeyable cylinder
- Cut Resistance – 3/8 in. (10mm), 100% steel braided cable
- Weather Tough – Rust resistant aluminum lock body
- Scratch Resistant – Vinyl cable sleeve and lock body bumper

Other Applications: Bikes, lawn furniture, lawn mowers, job sites, canoes, boats, skis, snowboards, generators, pickup truck cargo, spare tire locks and much more.

Description	Part No.
Master Lock® Python™ Kit with 6 ft. Cable-keyed different	**44-990**
Master Lock® Python™ Kit with 6 ft. Cable-keyed alike*	**44-991**
12 ft. (3.7m) x 3/8 in. (10mm) Cable for Python™ Lock*	**44-992**

*Special order through Customer Service.

Master Lock® is a registered trademark of Master Lock Company LLC.
Python™ is a trademark of Master Lock Company LLC.

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Airpax		Airpax	1		■	■						
American Switch		C	1		■						■	■
Bryant		BR	1	■	■							■
Challenger		C	1	■	■							■
Challenger	Type C	C	2-3							■		■
Challenger	Same as W DK	CDK					■					
Challenger		LM	1		■							■
Challenger		NEJ	1-2		■	■						■
Crouse Hinds		MP	2							■		
Cutler Hammer		BA	1		■							■
Cutler Hammer		CH	2-3							■		■
Cutler Hammer		CH2	4							■		■
Cutler Hammer		CHB	3							■		■
Cutler Hammer	Quicklag	BAB	1	■	■							■
Cutler Hammer	Quicklag	BAB	2-3							■		
Cutler Hammer	BR	BD	1	■	■							■
Cutler Hammer	BR	BR	1	■	■							■
Cutler Hammer	BR	BR	2-3							■		■
Cutler Hammer	BR	BRH	1	■	■							■
Cutler Hammer	BR	BRH	2-3							■		■
Cutler Hammer	BR	BRHH	2							■		■
Cutler Hammer	CH	CH	1	■	■						■	■
Cutler Hammer	CH	CH	2-3							■		■
Cutler Hammer	CH	CH2	4							■		■
Cutler Hammer	CH	CHB	1	■	■						■	■
Cutler Hammer	CH	CHB	2-3							■		■
Cutler Hammer	K-Frame	CHKD	2-3				■		■			
Cutler Hammer	L-Frame	CHLD	2-4						■			
Cutler Hammer	M-Frame	CHMDL	2-3				■	■				
Cutler Hammer	N-Frame	CHND	2-4	■	■						■	■
Cutler Hammer	CH	CHP	1							■		■
Cutler Hammer	CH	CHP	2-3	■	■						■	■
Cutler Hammer	CH	CHQ	1							■		■
Cutler Hammer	CH	CHQ	2							■		■
Cutler Hammer	CH	CHSW	2-3				■					
Cutler Hammer	K-Frame	CKD	2-3	■	■						■	■
Cutler Hammer	CL	CL	1							■		■
Cutler Hammer	CL	CL	2						■			
Cutler Hammer	L-Frame	CLD	2-4						■			
Cutler Hammer	CL	CLR	1-2						■			
Cutler Hammer	M-Frame	CMDL	2-3				■	■				
Cutler Hammer	N-Frame	CND	2-4				■	■				
Cutler Hammer	N-Frame	CNDC	2-4		■							■
Cutler Hammer	CH	CSR	1				■					
Cutler Hammer	K-Frame	DK	2-3		■							■
Cutler Hammer	E125-Frame	E125B			■							■
Cutler Hammer	E125-Frame	E125E			■							■
Cutler Hammer	E125-Frame	E125H			■							■
Cutler Hammer	E125-Frame	E125S			■							■
Cutler Hammer	F-Frame	ED	2-4		■							■
Cutler Hammer	F-Frame	EDC	2-4		■							■
Cutler Hammer	F-Frame	EDH	2-4		■							■
Cutler Hammer	E125-Frame	EFH	1-4		■							■
Cutler Hammer	E125-Frame	EGB	1-4		■							■
Cutler Hammer	E125-Frame	EGE	1-4		■							■
Cutler Hammer	E125-Frame	EGS	1-4		■							■
Cutler Hammer		EHC			■							■

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				Standard Breaker Lockouts								EZ Panel Loc™	
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Cutler Hammer	F-Frame	EHD	1-4		■							■
Cutler Hammer	Tri Pac Cur. Lim	FB	2-3		■	■						■
Cutler Hammer		FC			■							■
Cutler Hammer	F-Frame	FD	1-4		■							■
Cutler Hammer	F-Frame	FDB	2-4		■							■
Cutler-Hammer	F-Frame	FDC	2-4		■							■
Cutler-Hammer	F-Frame	FS	2-3									■
Cutler-Hammer	G-Frame	GB	1-3		■							■
Cutler-Hammer	G-Frame	GC	1-3		■							■
Cutler Hammer		FC			■							■
Cutler Hammer	F-Frame	FD	1-4		■							■
Cutler Hammer	F-Frame	FDB	2-4		■							■
Cutler Hammer	F-Frame	FDC	2-4		■							■
Cutler Hammer	F-Frame	FS	2-3									■
Cutler Hammer	G-Frame	GB	1-3		■							■
Cutler Hammer	G-Frame	GC	1-3		■							■
Cutler Hammer	Tri Pac Cur. Lim	FB	2-3		■	■						■
Cutler Hammer		FC			■							■
Cutler Hammer	F-Frame	FD	1-4		■							■
Cutler Hammer	F-Frame	FDB	2-4		■							■
Cutler Hammer	F-Frame	FDC	2-4		■							■
Cutler Hammer	F-Frame	FS	2-3		■							■
Cutler Hammer	G-Frame	GB	1-3		■							■
Cutler Hammer	G-Frame	GC	1-3		■							■
Cutler Hammer	G-Frame	GD	1-3		■							■
Cutler Hammer	G-Frame	GHB	1-3		■							■
Cutler Hammer	G-Frame	GHBGFEP	1		■							■
Cutler Hammer	G-Frame	GHC	1-3		■							■
Cutler Hammer	G-Frame	GHCGFEP	1		■							■
Cutler Hammer	Quicklag	HBAW	1	■	■							■
Cutler Hammer	Quicklag	HBAW	2-3							■		
Cutler Hammer	Quicklag	HBAX	1	■	■							■
Cutler Hammer	Quicklag	HBAX	2-3							■		
Cutler Hammer		HFD	1-4		■							■
Cutler Hammer	G-Frame	HGHB	1		■							■
Cutler Hammer	G-Frame	HGHC	1		■							■
Cutler Hammer		HJD	2-4				■					
Cutler Hammer	K-Frame	HKD	2-4				■					
Cutler Hammer	L-Frame	HLD	2-4						■			
Cutler Hammer	L-Frame	HMCP	3						■			
Cutler Hammer	J-Frame	HMCP	3				■					
Cutler Hammer	K-Frame	HMCP	3				■					
Cutler Hammer	L-Frame	HMCP	3						■			
Cutler Hammer	F-Frame	HMCP	3-4		■							
Cutler Hammer	M-Frame	HMDL	2-3						■			
Cutler Hammer	M-Frame	HMDLB	2-3						■			
Cutler Hammer	N-Frame	HND	2-4				■	■				
Cutler Hammer	Quicklag Type P	HQP	1	■	■							■
Cutler Hammer	Quicklag Type P	HQP	2							■		
Cutler Hammer	J-Frame	JD	2-4				■					
Cutler Hammer	J-Frame	JDB	2-3				■					
Cutler Hammer	J-Frame	JDC	2-4				■					
Cutler Hammer	K-Frame	KD	2-4				■					
Cutler Hammer	K-Frame	KDB	2-4				■					
Cutler Hammer	K-Frame	KDC	2-4				■					
Cutler Hammer	Tri Pac Cur. Lim	LA	2-3				■					
Cutler Hammer	L-Frame	LD	2-4						■			

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				Standard Breaker Lockouts								EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Cutler Hammer	L-Frame	LDB	2-3									
Cutler Hammer	L-Frame	LDC	2-4									
Cutler Hammer		LH	3									
Cutler Hammer		LHB	3									
Cutler Hammer	Type CC	LJ										
Cutler Hammer		MA	2-3									
Cutler Hammer		MC	2-3									
Cutler Hammer	M-Frame	MD	2-3									
Cutler Hammer	M-Frame	MDL	2-3									
Cutler Hammer	M-Frame	MDS	2-3									
Cutler Hammer	Tri Pac Cur. Lim	NB	2-3									
Cutler Hammer	N-Frame	ND	2-4									
Cutler Hammer	N-Frame	NDC	2-4									
Cutler Hammer	N-Frame	OPTIM	3									
Cutler Hammer	Tri Pac Cur. Lim	PB	2-3									
Cutler Hammer	Quicklag	QBGF	1									
Cutler Hammer	Quicklag	QBGF	2									
Cutler Hammer	Quicklag	QBGFEP	1									
Cutler Hammer	Quicklag	QBGFEP	2									
Cutler Hammer	Quicklag	QBHGF	1									
Cutler Hammer	Quicklag	QBHGFEP	1									
Cutler Hammer	Quicklag	QBHW	1									
Cutler Hammer	Quicklag	QBHW	2-3									
Cutler Hammer	Quicklag Type P	QC	1									
Cutler Hammer	Quicklag Type P	QC	2-3									
Cutler Hammer	Quicklag Type P	QCD	1									
Cutler Hammer	Quicklag Type P	QCD	2-3									
Cutler Hammer	Quicklag	QCGF	1									
Cutler Hammer	Quicklag	QCGFEP	1									
Cutler Hammer	Quicklag	QCHGF	1									
Cutler Hammer	Quicklag	QCHGFEP	1									
Cutler Hammer	Quicklag	QCHW	1									
Cutler Hammer	Quicklag	QCHW	2-3									
Cutler Hammer	Quicklag	QHCW	1									
Cutler Hammer	Quicklag	QHCW	2-3									
Cutler Hammer	Quicklag	QHCX	1									
Cutler Hammer	Quicklag	QHCX	2-3									
Cutler Hammer	Quicklag	QHPW	1									
Cutler Hammer	Quicklag	QHPW	2-3									
Cutler Hammer	Quicklag	QHPX	1									
Cutler Hammer	Quicklag	QHPX	2-3									
Cutler Hammer	Ground Fault	QPGF	1									
Cutler Hammer		QPGF	2									
Cutler Hammer	Ground Fault	QPGFEP	1									
Cutler Hammer		QPGFEP	2									
Cutler-Hammer	Ground Fault	QPHGF	1									
Cutler-Hammer	Ground Fault	QPHGFEP	1									
Cutler-Hammer	Quicklag	QPHW	1									
Cutler-Hammer	Quicklag	QPHW	2-3									
Fed. Pacific Elec.		BAB	1									
Fed. Pacific Elec.		NA-single	3									
Fed. Pacific Elec.		NA-tie bar	2									
Fed. Pacific Elec.		NB	1									
Fed. Pacific Elec.		NBH GFI	1									
Fed. Pacific Elec.		NE/NEF										
Fed. Pacific Elec.		NEJ										
Fed. Pacific Elec.		NFJ										

				IDEAL									
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Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Fed. Pacific Elec.		NJJ					■					
Fed. Pacific Elec.		NJL					■					
Fed. Pacific Elec.		NM					■					
Fed. Pacific Elec.		NP-single	1		■							■
Frank Adams	FA Quicklag	P	1		■							■
General Electric	Type C	HQC	3		■							■
General Electric	SE150	SED	2-3		■							■
General Electric	SE150	SEH	2-3		■							■
General Electric	SE150	SEL	2-3		■							■
General Electric	SE150	SEP	2-3		■							■
General Electric	SF250	SFH	2-3		■							■
General Electric	SF250	SFL	2-3		■							■
General Electric	SF250	SFP	2-3		■							■
General Electric	Tri Break	TB1			■	■						■
General Electric	Tri Break	TB4			■	■						■
General Electric	Tri Break	TB6			■	■						■
General Electric	Tri Break	TB8			■	■						■
General Electric	Mag Break	TBC4			■	■						■
General Electric	Mag Break	TBC6			■	■						■
General Electric	Mag Break	TBC8			■	■						■
General Electric	E150	TE	1-3		■	■						■
General Electric	E150	TEB	1-3		■	■						■
General Electric	E150	TED	1-3		■	■						■
General Electric		TEF	1-3		■	■						■
General Electric	E150	TEL	3		■	■						■
General Electric	Mag Break	TEML	3		■	■						■
General Electric	E150	TEY	1-3		■							■
General Electric	E150	TF	1-3		■							■
General Electric	Mag Break	TFC	3		■							■
General Electric	F225	TFJ	2-3				■					
General Electric	F225	TFK	2-3				■					
General Electric	F225	TFL	3				■					
General Electric	Like TED	THED	1-3		■	■						■
General Electric	Like TED	THEF			■	■						■
General Electric	F225	THFK	2-3				■					
General Electric	Q Line	THHQB	2-3							■		■
General Electric	Q Line	THHQB-A	1	■	■							■
General Electric	Q Line	THHQB-S	1		■							■
General Electric	Q Line	THHQC	1-3							■		■
General Electric	Q Line	THHQC-A	1	■	■							■
General Electric	Q Line	THHQC-S	1		■							■
General Electric	Q Line	THHQL	2-3							■		■
General Electric	Q Line	THHQL-A	1	■	■							■
General Electric	Q Line	THHQL-S	1		■							■
General Electric	J600	THJK4	2-3				■	■				
General Electric	J600	THJK6	2-3				■	■				
General Electric	K1200	THKM12	2-3						■			
General Electric	K1200	THKM8	2-3						■			
General Electric	THLC Current Limiting	THLC1	3		■							
General Electric	Q Line	THQB	2-3							■		■
General Electric	Q Line	THQB-A	1	■	■							■
General Electric	Q Line	THQB-S	1		■							■
General Electric	Q Line	THQC	2-3							■		■
General Electric	Q Line	THQC-A	1	■	■							■
General Electric	Q Line	THQC-AL	2-3							■		■
General Electric	Q Line	THQC-S	1		■							■

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
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General Electric	Q Line	THQD	2-3		■		■					■
General Electric	Q Line	THQDBL	3									■
General Electric	Q Line	THQL	2-3							■		■
General Electric	Q Line	THQL-A	1	■	■							■
General Electric	Q Line	THQL-S	1		■							■
General Electric		TJ4	3				■					
General Electric	Mag Break	TJC			■		■					■
General Electric	TJD432400WL	TJD	2-3				■	■				
General Electric	J600	TJJ	2-3				■	■				
General Electric	J600	TJK4	2-3				■	■				
General Electric	TJK636F000	TJK6	2-3				■	■				
General Electric	TJS3604S	TJS					■	■				
General Electric	MicroVersaTrip	TK4V	3				■					
General Electric	Mag Break	TKC	3		■	■						■
General Electric	TKM4365000	TKM4							■			
General Electric	K1200	TKM8	2-3						■			
General Electric		TKMA8	3						■			
General Electric	Q Line	TQB	2-3							■		■
General Electric	Q-Line	TQB-A	1	■	■							■
General Electric	Q-Line	TQB-S	1		■							■
General Electric	Q Line	TQC	2-3							■		■
General Electric		TQC-A	1	■	■							■
General Electric		TQC-S	1		■							■
General Electric	Q Line	TQD	2-3		■							
General Electric	Q Line	TQL-A	1	■	■							■
General Electric	Q Line	TQL-S	1		■							■
Heinemann		LB	1		■	■						
Heinemann		LF	1		■	■						
Heinemann		LJ	1		■	■						
Merlin Gerin	400 Amp series	CJ	3				■	■				
Siemens ITE		BL	1	■	■							■
Siemens ITE		BL	2-3							■		■
Siemens ITE		BL	1		■						■	■
Siemens ITE		BL	2-3							■		■
Siemens ITE		BLF-GFI	2							■		■
Siemens ITE		BLH	1	■	■							■
Siemens ITE		BLH	2-3							■		■
Siemens ITE		BQ	1	■	■							■
Siemens ITE		BQ	2-3							■		■
Siemens ITE		BQCH	1-3		■							■
Siemens ITE		BQD	3		■							■
Siemens ITE		BQD	1-3		■							■
Siemens ITE		BQD6	1-3		■							■
Siemens ITE		BQH	1	■	■							■
Siemens ITE		BQH	2-3							■		■
Siemens ITE		CED6	2-3		■							■
Siemens ITE		CFD6	2-3				■	■				
Siemens ITE		CFD6-ETI	2-3				■	■				
Siemens ITE		CJ3					■					
Siemens ITE		CJD6	2-3				■					
Siemens ITE		CJD6-ETI	2-3				■					
Siemens ITE		CLF	2				■	■				
Siemens ITE		CMD6	3						■			
Siemens ITE		CMD6-ETI	3						■			
Siemens ITE		CND6	3						■			
Siemens ITE		CPD6	3						■			
Siemens ITE		CQD	1-3		■	■						■
Siemens ITE		E2			■							■
Siemens ITE		E4	1		■							■

				IDEAL									
				Standard Breaker Lockouts								EZ Panel Loc™	
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Siemens ITE		ED2	1-3		■							■
Siemens ITE		ED4	1-3		■							■
Siemens ITE		ED6	1-3		■							■
Siemens ITE		ED6-ETI	3		■							■
Siemens ITE		EE3			■	■						■
Siemens ITE		EH3			■	■						■
Siemens ITE		EQP	4							■		■
Siemens ITE		EQT QF										
Siemens ITE	F-Frame	ET			■	■						■
Siemens ITE		FD6A	2-3			■	■	■				
Siemens ITE		FJ2-B	2-3		■	■	■	■				
Siemens ITE		FJ3	2				■					
Siemens ITE		FJ6	2				■	■				
Siemens ITE		FXD6A	2-3				■	■				
Siemens ITE		FXD6-ETI	2-3				■	■				
Siemens ITE		GF	1		■							■
Siemens ITE		HBL	1	■	■							■
Siemens ITE		HBL	2-3							■		■
Siemens ITE		HBQ	1	■	■							■
Siemens ITE		HBQ	2-3							■		■
Siemens ITE		HE4			■							■
Siemens ITE		HED4	1-3		■							■
Siemens ITE		HED6	2-3		■							■
Siemens ITE		HFD6	2-3				■	■				
Siemens ITE		HFXD6	2-3				■	■				
Siemens ITE		HHED6	2-3		■							■
Siemens ITE		HHFD6	2-3				■	■				
Siemens ITE		HHJD6	2-3				■					
Siemens ITE		HHJXD6	2-3				■					
Siemens ITE		HJD6	2-3				■					
Siemens ITE		HJD6-A	2-3				■					
Siemens ITE		HJXD6	2-3				■					
Siemens ITE		HJXD6-A	2-3				■					
Siemens ITE		HMD6	2-3						■			
Siemens ITE		HMXD6	2-3						■			
Siemens ITE		HND6	2-3						■			
Siemens ITE		HNXD6	2-3						■			
Siemens ITE		HPD6	3						■			
Siemens ITE		HPXD6	3						■			
Siemens ITE		HQJ2-H	3		■							■
Siemens ITE		HQP	1	■	■							■
Siemens ITE		HQP	2-3							■		■
Siemens ITE		HQPP	1	■	■							■
Siemens ITE		HQPP	2-3							■		■
Siemens ITE		HQPPH	2							■		■
Siemens ITE		HRD6	3						■			
Siemens ITE		HRXD6	3						■			
Siemens ITE		JD6-A	2-3				■					
Siemens ITE		JJ3					■					
Siemens ITE		JL3	3				■					
Siemens ITE		JXD2-A	2-3				■					
Siemens ITE		JXD6-A	2-3				■					
Siemens ITE		LL3					■					
Siemens ITE		MD6	2-3						■			
Siemens ITE		MXD6	2-3						■			
Siemens ITE		MXD6-ETI	2-3						■			
Siemens ITE		ND6	2-3						■			
Siemens ITE		NXD6	2-3						■			
Siemens ITE		PD6	3						■			
Siemens ITE		PXD6	3						■			
Siemens ITE		QJ2	2-3		■	■						■
Siemens ITE		QJ2-H	2-3		■	■						■
Siemens ITE		QJH2	2-3		■	■						■
Siemens ITE		QP	1	■	■							■
Siemens ITE		QP	2-3							■		■
Siemens ITE		QP1	1		■							■

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Siemens ITE		QPH	1	■	■							■
Siemens ITE		QPH	4							■		■
Siemens ITE		QPH	2-3							■		■
Siemens ITE		QPP	1	■	■							■
Siemens ITE		QPP	2-3							■		■
Siemens ITE		QPPH	1	■	■							■
Siemens ITE		QPPH	2-3							■		■
Siemens ITE		RD6	3						■			
Siemens ITE		RXD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SCMD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SCND6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SHMD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SHND6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SMD6	3						■			
Siemens ITE	Solid State Trip Ckt. Bkr.	SND6	3						■			
Simplex		NX	3				■	■				
Square D		EDB	1-3		■							■
Square D		EGB	1-3		■							■
Square D		EH4	1-3		■							■
Square D		EHB	1-3		■							■
Square D		EHB	2-3							■		■
Square D		EJB	1-3		■							■
Square D		EZ	3						■			
Square D	100 Amp Frame	FA	1-3		■	■						
Square D	100 Amp Frame	FAL	1-3		■	■						
Square D	100 Amp Frame	FC	3		■	■						
Square D	100 Amp Frame	FCL	2-3		■	■						
Square D	FDA 34040	FDA			■							■
Square D	100 Amp Frame	FH	1-3		■	■						
Square D	100 Amp Frame	FHL	1-3		■	■						
Square D	100 Amp Frame	FHL-DC	3		■	■						
Square D	100 Amp Frame	FI	3		■	■						
Square D	100 Amp Frame	FIL	3		■	■						
Square D	100 Amp Frame	FY	1		■	■						
Square D	Mag Gard	GJL	3		■	■						
Square D	250 Amp Frame	KA	2-3		■	■						
Square D		KAL	2-3		■	■						
Square D		KAP					■					
Square D	250 Amp Frame	KC	2-3		■	■						
Square D		KCL	2-3		■	■						
Square D	250 Amp Frame	KH	2-3		■	■						
Square D		KHL	3		■	■						
Square D	250 Amp Frame	KI	2-3		■	■						
Square D	250 Amp Frame	KIL	2-3		■	■						
Square D	400 Amp Frame	LA	2-3				■	■				
Square D		LAL	2-3				■	■	■			
Square D	400 Amp Frame	LH	2-3				■	■				
Square D		LHL	3				■	■	■			
Square D		LHP					■	■	■			
Square D		MA	3						■			
Square D	1000 Amp Frame	MA	2-3				■	■				
Square D		MAL	3						■			
Square D	1000 Amp Frame	MH	2-3				■	■				
Square D		MHL	2-3						■			
Square D		ML-1	3				■	■				
Square D		ML-3	3						■			
Square D	250 Amp Frame	Q1B	2-3		■							■
Square D	250 Amp Frame	Q1L	2-3		■							■
Square D	250 Amp Frame	Q2	2-3		■	■						
Square D	250 Amp Frame	Q2H	2-3		■	■						
Square D	250 Amp Frame	Q2L	2-3		■	■						

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Square D	250 Amp Frame	Q2MT	2-3		■	■						
Square D	400 Amp Frame	Q4	2-3				■	■				
Square D	400 Amp Frame	Q4L	2-3				■	■				
Square D	QO	QO	1								■	
Square D	QO	QO	2-3	■	■						■	■
Square D	QO	QOB	1								■	
Square D	QO	QOB	2-3	■	■						■	■
Square D	QO	QOB-H	2								■	
Square D	QO	QOB-VH	1	■	■						■	
Square D	QO	QOB-VH	2-3							■		
Square D	QO	QO-H	2								■	
Square D	Main Circuit Breaker QO	QOM1-VH	2		■							■
Square D	Main Circuit Breaker QO	QOM2-VH	2		■							■
Square D	QO	QO-SWN	2-3	■	■						■	■
Square D	DIN Rail Mnt QO	QOU	1								■	
Square D	DIN Rail Mnt QO	QOU	2-3		■						■	■
Square D	DIN Rail Mnt QO	QOU w/tie	2-3							■		■
Square D	QO	QO-VH	1								■	
Square D	QO	QO-VH	2-3	■	■						■	■
Square D	DIN Rail Mount	QYU	1								■	
Square D	2500 Amp Frame	RG	2-4									
Square D	2500 Amp Frame	RJ	2-4									
Square D	2500 Amp Frame	RL	2-4									
Square D		Y1					■					
Sylvania GTE		QC	2							■		■
Sylvania GTE		Type C	2							■		■
T&B		F Frame	1-3		■							■
Westinghouse		BA	1		■							■
Westinghouse		BA	2-3		■							■
Westinghouse		BA	2-3							■		
Westinghouse		BA	1	■	■							■
Westinghouse		BAB	1	■	■							■
Westinghouse		BR	1	■	■							■
Westinghouse		BR	2-3							■		■
Westinghouse		BRH	2-3							■		
Westinghouse		CA			■	■						
Westinghouse		DA					■					
Westinghouse		DK					■					
Westinghouse		EB	1-3		■	■						■
Westinghouse		ED			■							■
Westinghouse		EH	1-3		■							■
Westinghouse		EHB	1-3		■	■						
Westinghouse		EHD	1-3		■							■
Westinghouse		FA	3		■	■						■
Westinghouse		FB	2-3		■	■						■
Westinghouse		FD	1-4		■							■
Westinghouse		FDB	2-4		■							■
Westinghouse		FDC	2-4		■							■
Westinghouse	For Fire Protect.	FP	3				■	■				
Westinghouse		GB	1-3		■							■
Westinghouse		GBH	1-3		■							■
Westinghouse		GHB	1-3		■							■
Westinghouse		GR	3				■					
Westinghouse		HBAW	1	■	■							■
Westinghouse		HBAX	1	■	■							■
Westinghouse		HCA	3		■	■						■
Westinghouse		HFB	1-3		■	■						■
Westinghouse		HFD	1-4		■							■
Westinghouse		HKD	3				■					
Westinghouse		HLA					■					
Westinghouse		HLB					■					
Westinghouse		HMC					■					
Westinghouse		HMCP			■	■						■
Westinghouse		HNC							■			
Westinghouse		HQNP	3		■							■

				IDEAL								
				Standard Breaker Lockouts							EZ Panel Loc™	
Mfg.	Breaker Classification	Breaker Type	# of Poles	1-Pole Snap-On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	Cleat for #65396 44-785	480/600V Clamp On (no hole) 44-807	Cleat for #65397 44-786	Oversize 480/660V 44-823	Multi-pole w/ tie bar 44-783	Snap On (SQD QO) 44-768	Clamp On (universal) 44-764
Westinghouse		HQP	1									
Westinghouse		JA										
Westinghouse		JD	2-4									
Westinghouse		KA	3									
Westinghouse		KB										
Westinghouse		LA	3									
Westinghouse		LB										
Westinghouse		LBB	3									
Westinghouse		LH										
Westinghouse		MA	2-3									
Westinghouse		MC	2-3									
Westinghouse		MCC	2-3									
Westinghouse		MCPO	3									
Westinghouse		NB										
Westinghouse		P	3									
Westinghouse		QBHW	1									
Westinghouse		QC	1									
Westinghouse	Quicklag C	QC	3									
Westinghouse		QCHQ	1									
Westinghouse		QHCW	1									
Westinghouse		QHCX	1									
Westinghouse		QHPW	1									
Westinghouse		QPHW	1									
Westinghouse		Quicklag P										
Westinghouse		RE										
Westinghouse		RH	3									
Westinghouse		WPHX	1									
Zinsco		HQB	3									
Zinsco		QB	1									
Zinsco		QCB	2									
Zinsco		Type Q	1									
Zinsco		Type T	1									

Commutator Maintenance

How to Select Resurfacer Grade

Small Motor and Pocket Resurfacers

Grade code letters designate the following grade combinations:

A Medium/Finish
B Coarse/Finish
D Finish/Polish
H Medium/Polish

All Other Resurfacers

Resurfacers for commutators and copper-alloy slip rings are made in four grades:

C Coarse—fast cutting
M Medium—for general use, high mica, small ridges and burns
F Finish—for use after the three grades above, for periodic application and for removing small burns and ridges immediately after their appearance
P Polish—very fine grade (220 aggregate grain) for burnish finish

For all resurfacers, specify grade by adding the appropriate letter as a suffix to the catalog number. (Example: 80-475M for medium grade.)

How to Select Resurfacer Size

Size is always written length x width x thickness (working face area x depth of stone). For handle types, the handle is mounted parallel to the first dimension. Always use a resurfacer with the largest face possible (length x width). Thickness should be governed by clearance around commutator or ring.

Commutator Resurfacers

The resurfacer should have a width of approximately 3/4 the length of the commutator bar and as long as will conveniently go between the brush riggings. For periodic application, three or four sizes are generally sufficient. After determining approximate dimensions, select nearest standard size and type.

Slip Ring Resurfacers

When space permits, use a resurfacer about 1 in. wider than the face width of the ring. Length should be at least three times greater than the longest flat spot to bridge over and ensure a true ring.

Small Motor-Type Resurfacer

- Different grades of stone on each end
- 10 in. handle
- For use on small fractional horsepower motors

Description	Size (In.)	Grades	Part No.
Small Motor-Type Resurfacer	3/4 x 1/2 x 3/8	A, B, D	**80-012***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Tool-Type Resurfacers

- For use in lathe-turning device
- Two resurfacers required for each grinder

Description	Size (In.)	Grades	Part No.
Tool-Type Resurfacer	1 x 1-1/2 x 6-1/2	C, M, F	**80-454***
Tool-Type Resurfacer	1 x 2 x 8	C, M, F	**80-461***
Tool-Type Resurfacer	2 x 2 x 8	C, M, F	**80-475***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Pencil-Type Resurfacer

- For use on fans, signal motors, auto generators, locomotive headlight motors and other fractional horsepower motors

Description	Size (In.)	Grades	Part No.
Pencil-Type Resurfacer	5/8 x 3/8 x 6	C, M, F, P	**80-075***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Tramway-Handle Resurfacers

- Handle shaped to ensure secure grip
- 10-1/2 in. handle permanently mounted at 45° angle

Description	Size (In.)	Grades	Part No.
Tramway-Handle Resurfacer	2 x 1-1/2 x 2	M, F	**80-255***
Tramway-Handle Resurfacer	2 x 2 x 2	C, M, F	**80-265***

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

Commutator Smoothie® Resurfacing Tool

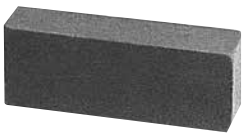
- Designed to smooth commutators of auto generators, starting motors and other similar equipment
- 8-1/2 in. plastic handle with a 5/16 in. x 7/8 in. x 11/16 in. resurfacer on each end
- Features one polish-grade and one finish-grade resurfacer
- Bent handle reaches into any motor frame
- Non-conductive for user safety

Description	Part No.
Commutator Smoothie® Resurfacing Tool	**80-033**

Please allow 4-5 weeks for delivery.

Powr-Polish™ Flexible Abrasives

- Fine-grain, non-dusting abrasive held together by a flexible bond
- Serves as both commutator cleaner and burnisher
- Removes dirt and grease—imparts super-finished surface
- Non-conductive and non-loading



Description	Size (In.)	Part No.
Powr-Polish™ Flexible Abrasive	3/8 x 1/2 x 5	**82-001**
	3/8 x 3/4 x 5	**82-002**
	5/8 x 1 x 5	**82-003**
	1 x 2 x 5	**82-004**
	1 x 4 x 5	**82-005**
	1/8 x 1 x 5	**82-006**

Please allow 4-5 weeks for delivery.

Brush Seater & Commutator Cleaners

- Gentle acting abrasive for seating carbon brushes and cleaning commutators and slip rings
- Soft, loosely bound grain produces a scouring effect when held against commutator
- Will not remove or scratch copper
- Self-cleaning
- Available in soft(S), medium(M) and hard(H) grades

Description	Size (In.)	Grades	Part No.
Brush Seater & Commutator Cleaner	1/4 x 1/4 x 4-3/4	M, H	**23-001***
	1/2 x 1/4 x 4-3/4	M, H	**23-002***
	3/8 x 3/8 x 4-3/4	M	**23-003***
	1/2 x 3/8 x 4-3/4	M, H	**23-004***
	1/2 x 1/2 x 4-3/4	M	**23-005***
	5/8 x 1/2 x 4-3/4	M	**23-006***
	3/4 x 1/2 x 4-3/4	S, M, H	**23-007***
	1-1/8 x 5/8 x 4-3/4	S, M, H	**23-008***
	1/2 x 1 x 4-3/4	S, M	**23-027***
	1 x 1 x 4-3/4	—	**23-035S**
	2 x 1 x 4-3/4	—	**23-036S**
	3 x 2 x 6	—	**23-041S**
	3 x 2 x 8	—	**23-042S**

*Add grade letter suffix to Part No. Please allow 4-5 weeks for delivery.

AEROSPACE

Stripmaster® & Stripmaster® Lite Wire Strippers
Blades C-5
Accessories C-6
Replacement Parts C-6

Custom Stripmaster® Wire Strippers
Blades C-7

Custom Stripmaster® Lite Wire Strippers
Blades C-8
Replacement Parts C-9

Pneumatic Wire Strippers
Accessories C-11

Aerospace

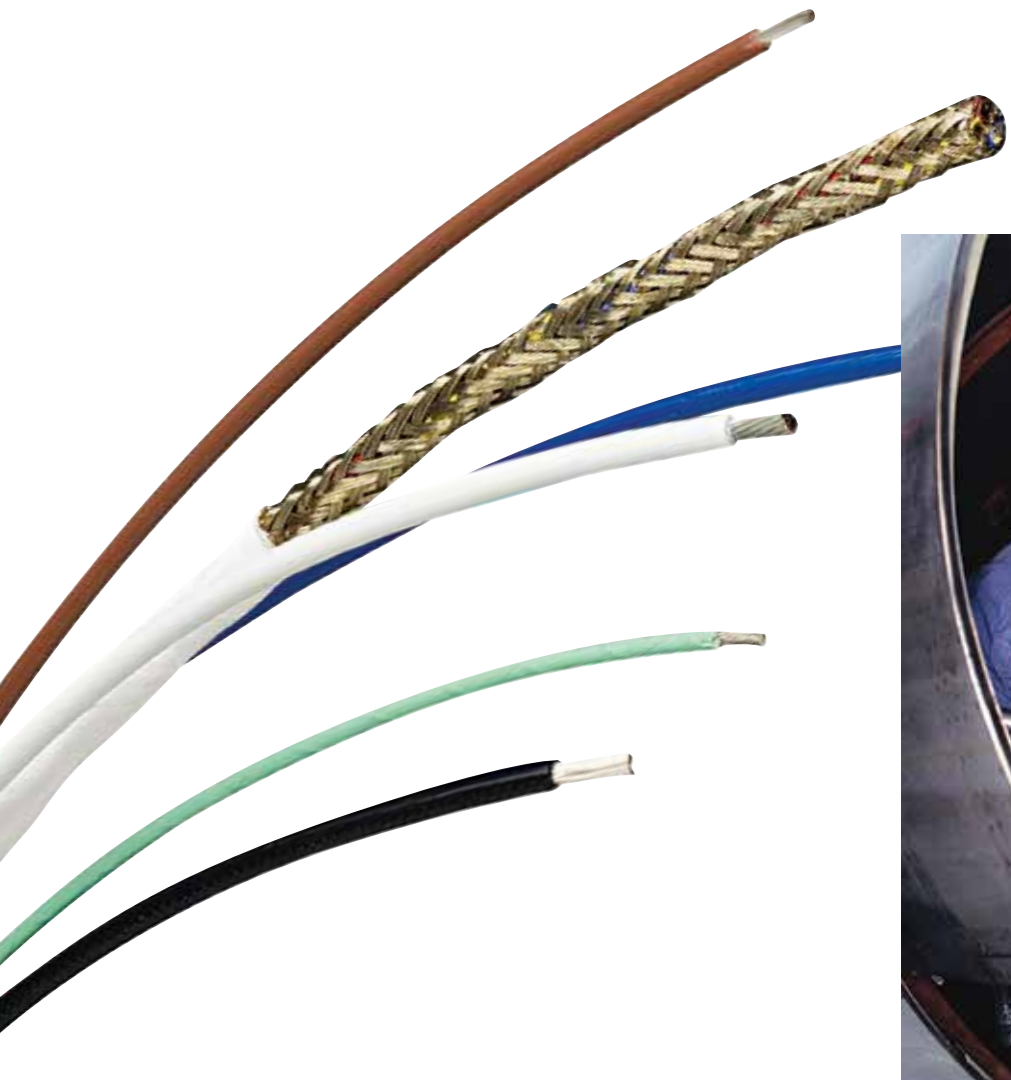
Every aspect of the aerospace industry demands precision and accuracy. That includes wire processing - our area of expertise at IDEAL. Working with both wire manufacturers and aerospace engineers, we develop unique blades with tight tolerances that strip wire accurately and dependably.

Wire Stripping Basics

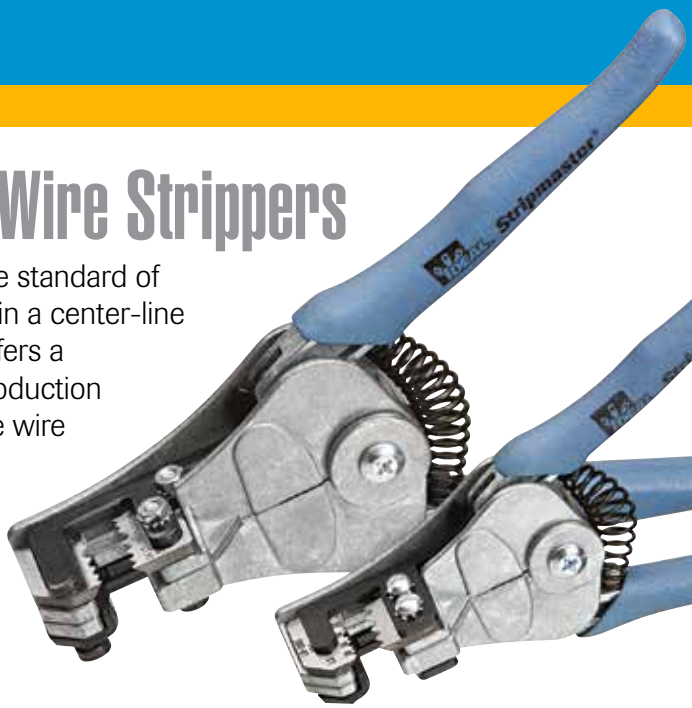
There are two basic levels of wire stripping—precision and non-precision. The first type, precision wire stripping, is employed where extreme reliability and critical tolerances must be achieved. Aircraft, computers, aerospace, missiles, radar guidance systems, and communications systems are examples of applications where precision wire stripping is required. In many cases, the military standard is called for and meeting that standard is rigidly enforced and calls for the highest quality precision wire stripping.

The second, non-precision stripping, is used in the manufacturing of lighting fixtures, electrical appliances, automotive harnesses, etc. This requires wire strips that assure product reliability and are obtained at a relatively low cost.

For each type of wire stripping and production requirement, the best tool and/or method to get the job done right must be determined, and IDEAL Electrical is there to assist with free wire analysis.



Stripmaster® & Stripmaster® Lite Wire Strippers

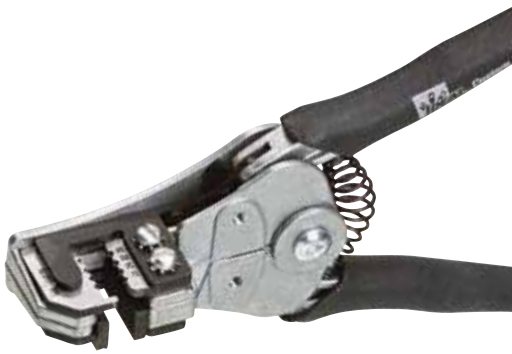


The versatile Stripmaster®/Stripmaster® Lite Wire Strippers are the standard of the industry. They incorporate a gripper that firmly holds the wire in a center-line position with the stripping hole. The lever action of the stripper offers a mechanical advantage that makes stripping easier. This aids in production applications and reduces operator fatigue. One squeeze strips the wire clean, up to a full 7/8 in. (22mm). The jaws are automatically held open to allow removal of the wire without damaging its end. This stripper virtually eliminates all nicking, cutting or fraying on non-precision wire.

Custom Stripmaster® Wire Strippers

The Custom Stripmaster® Wire Stripper has set the industry standard in hand-held, precision wire stripping. It provides fast, accurate wire stripping with its one-step, squeeze-action stripping and unique precision blade design. This light-weight wire stripper, made from sturdy die-cast zinc, is designed for maximum mobility and high productivity in all types of non-precision and precision stripping applications. The Custom Stripmaster® Wire Stripper offers extra leverage with its spring-action mechanical design for reduced operator effort. It can be customized with your choice of gripper pads and blade sets to match your wire stripping requirements. The comfort grip handles are color-coded to identify the best tool for the application. Red handles are used for larger wire (10–14 AWG) and black handles are used for smaller wire (16–30 AWG). The blades and grippers installed in the tool are specific to the application. Optional short-stop latch and transparent wire stop increases tool versatility and insures consistent strip lengths.

Custom Stripmaster® Lite Wire Strippers



The Custom Stripmaster® Lite Wire Stripper marks the beginning of a new era of light-weight, precision wire strippers designed specifically for improved operator comfort. It utilizes the same type of precision die-blade construction and features an optional short-stop latch and transparent wire stop. Built of sturdy die-cast zinc, this compact stripper weighs 50% less than its full-sized counterparts, and will impress you with both its ease of operation and durable performance.

Stripmaster® & Stripmaster® Lite Wire Strippers

- One-step stripping enhances productivity
- Precision-ground, knife-type blades provide clean, accurate stripping
- Sturdy die-cast zinc frame provides long-term durability
- Stripmaster® Lite designed for smaller hands – 3/4 the size of the standard Stripmaster®
- 90-day warranty

Stripmaster® Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter in Inches (mm)													Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blades Part No.
Wire Size AWG															
6	8	10	12	14	16	18	20	22	24	26	28	30			
	0.159 (4.0)	.141 (3.6)	.106 (2.7)										L-4419	L-5620	45-090
		.144 (3.6)	.105 (2.7)	.085 (2.2)	.073 (1.8)	.073 (1.8)							L-4420	L-5620	45-091
		.144 (3.6)	.113 (2.9)	.090 (2.3)	.072 (1.8)	.061 (1.5)	.048 (1.2)	.048 (1.2)					L-4421	L-5620	45-092 or 45-292*
				.090 (2.3)	.072 (1.8)	.061 (1.5)	.039 (1.0)	.039 (1.0)					L-4422	L-5620	45-093
.230 (2.3)	.198 (5.0)	*This tool has a custom steel frame & custom step grippers.*											L-4453	LB-1091	45-096
					.072 (1.8)	.061 (1.5)	.048 (1.2)	.039 (1.0)	.032 (0.8)	.026 (0.7)			L-4994	L-5620	45-097
							.048 (1.2)	.039 (1.0)	.032 (0.8)	.026 (0.7)	.021 (0.5)	.016 (0.4)	L-5361	L-5620	45-098
	.198 (5.0)	.167 (4.2)			.062 (1.6)	.055 (1.4)							L-8763	L-5620	45-099

* Blister Card Tolerances ±.001"

Stripmaster® Lite Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter Inches (mm)										Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blades Part No.
Wire Size AWG												
12	14	16	18	20	22	24	26	28	30			
		.072 (1.8)	.061 (1.5)	.048 (1.2)	.039 (1.0)					LB-1001	LB-1421	45-671
						.032 (0.8)	.026 (0.7)	.021 (0.5)	.016 (0.4)	LB-1002	LB-1421	45-672
.113 (209)	.090 (2.3)	.072 (1.8)	.061 (1.5)	All stranded wire						LB-1003	LB-1421	45-673
.096 (2.4)	.085 (2.2)	.073 (1.9)	.061 (1.5)	12 & 14 Solid Wire, 16 & 18 Stranded Wire						LB-1004	LB-1421	45-674

Tolerances ±.001"

Stripmaster® Wire Strippers and Knife-Type Blades for Metric Wire

Specifications — Stripping Hole Diameter (mm)														Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blades Part No.
Wire Size mm²																
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5	2.5	4	6	8	10			
												4.3	5.0	L-4419M	LA-2358	45-090-341
						1.3	1.6	1.9	2.4	3	3.6			L-4421M	LA-2358	45-092-341 or 45-292-341*
0.6	0.7	0.8	0.9	1.0	1.1									L-5361M	LA-2358	45-098-341

*Blister Card Tolerances ±.025mm

Stripmaster® Lite Wire Strippers

Stripmaster® Lite Wire Strippers and Knife-Type Blades for Metric Wire

Specifications — Stripping Hole Diameter (mm) Wire Size mm²									Replacement Blades (Pair) Part No.	Replacement Frame Part No.	Tool w/Blade Part No.
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5			
				1.0	1.1	1.3	1.6	1.9	**LB-1001M**	**H-2909**	**45-671-341**
0.6	0.7	0.8	0.9						**LB-1002M**	**H-2909**	**45-672-341**

Coax Stripmaster® Wire Strippers & Blades

Description	Repl. Blade Part No.	Tool w/Blade Part No.
Coax Stripmaster® for RG-6	**LB-740**	**45-262**
Coax Stripmaster® for RG-58	**LB-742**	**45-264**
Coax Stripmaster® for RG-59	**LB-743**	**45-265**
Coax Stripmaster® for RG-6 QuadShield	**LA-3953**	**45-282**

Coaxial Cables: two-step strip for termination, jacket and dielectric.

Stripmaster® Wire Strippers with Rectangular Holes

Description	Replacement Blades (Pair) Part No.	Tool w/Blade Part No.
For Flat Telephone Cable (.060 in. or 1.52mm)	**LB-1155**	**N/A**
For European Flat Lamp Cord	**L-8762**	**45-089**
For SP-SPT Lamp Cord	**L-4452**	**45-095***

*Also strips 2- and 3-conductor low-voltage wire used in E.E. and Touchplate remote control wiring system.

Optional Accessories

- Wire Stop provides uniform stripping length, range = 3/32" to 3/4"
- Short stop latches protect wire strands by limiting stripping stroke to 5/32 in. and retain slug until wire is ready for terminating.

Description	Part No.
Transparent Adjustable Wire Stop (for Stripmaster® Wire Strippers)	**L-5270**
Transparent Adjustable Wire Stop (for Stripmaster® Lite Wire Strippers)	**LB-1195**
Transparent Adjustable Wire Stop (for Metric Stripmaster® Wire Strippers)	**45-2019**
Short Stop Latch for Custom & Customer Steel Stripmaster® Wire Strippers	**L-5269**
Short Stop Latch for Custom Stripmaster® Lite Wire Strippers	**LB-1194**

Replacement Parts

Description	Part No.
Replacement Frame for Stripmaster® Wire Strippers	**L-5620**
Replacement Frame for Stripmaster® Lite Wire Strippers	**LB-1421**
Replacement Moveable Gripper for Stripmaster® Wire Strippers	**L-1953**
Replacement Moveable Gripper for Stripmaster® Lite Wire Strippers	**K-6603**

FREE APPLICATION ENGINEERING SERVICE AVAILABLE. CONTACT IDEAL ELECTRICAL FOR COMPLETE INFORMATION AT 1-800-324-9571 OR DOWNLOAD APPLICATION AT WWW.IDEALIND.COM.

Custom Stripmaster® Wire Strippers

- Strips 30 - 10 AWG solid or stranded wire
- Mil-spec die-type blades allow precision stripping
- Inner cutting hole sized to conductor and counter-bored holes sized to insulation
- Replaceable grippers
- Optional short stop-latch and transparent wire stop
- Cushioned, comfort grip handles
- Engineering service and made-to-order blades available. Contact factory for complete product and blade number listing.
- 90-day Warranty

Die-Type Blades

Specifications – Cutting Hole Diameter / Counterbore Diameter in Inches

Wire Size AWG											Blade Only Part No.	Stripper Part No.
10	12	14	16	18	20	22	24	26	28	30		
For MIL16878 Type E (600V)												
.119/.136	.096/.113	.076/.0935									**L-5559**	**45-176**
			.061/.081	.052/.070	.042/.0595	.034/.052	.028/.043	.023/0.39			**L-5560**	**45-177**
								.023/.039	.019/.035	.016/.032	**L-5561**	**45-178**
For MIL16878 Type EE (1000V)												
.119/.144	.096/.125	.076/.104									**L-5562**	**45-173**
			.061/.089	.052/.0735	.042/.067	.034/.0595	.028/.055	.023/.0465			**L-5563**	**45-174**
								.023/.0465	.019/.043	.016/.042	**L-5564**	**45-175**
For Other Misc. Insulations												
.116/.154	.0937/.136	.076/.113									**L-5210**	**45-170**
			.062/.096	.052/.086	.042/.073	.035/.0635	.0292/.0595	.022./052			**L-5211**	**45-171**
								.024/.043	.020/.040	.016/.037	**L-5436**	**45-172**
Other Thin Insulations												
							Three identical holes			.012./020	**L-7625**	**45-179**
				Solid Wires			.024/.033	.018/.025	.014/.023	.012/.019	**L-9300**	**45-169**

Tolerances: Cutter Dia.: ± .001; Counter-bore Dia.: ± .002. The 45-170 Series is a Custom Stripmaster® Wire Stripper frame without the short stop latch and wire stop.

Custom Steel Stripmaster® Wire Strippers and Special Flat-Blades for Ribbon and Multi-Conductor Cable

Description	Blade Gap vertical height	Blade Only Part No.	Frame & Blade Part No.
Custom Steel frame only	N/A	N/A	**LB-1091**
Flat blade for 26 AWG (.40mm dia.) multi-conductor	.022 in.	**LB-1151**	**45-890**
Flat blade for 24 AWG (.00mm dia.) multi-conductor	.030 in.	**LB-1152**	**45-891**
Flat blade for 22 AWG (.64mm dia.) multi-conductor	.038 in.	**LB-1153**	**45-892**
Flat blade for 20 AWG (.00mm dia.) multi-conductor	.050 in.	**LB-1154**	**45-893**
Flat blade for 18 AWG (1.02mm dia.) multi-conductor	.060 in.	**LB-1155**	**45-894**
Flat blade for 16 AWG (1.29mm dia.) multi-conductor	.075 in.	**LB-1156**	**45-895**

Custom Stripmaster® Lite Wire Strippers

- Custom Stripmaster® Lite is 3/4's the size of Custom Stripmaster® Wire Stripper and strips 16 - 30 AWG solid or stranded wire
- Custom Stripmaster® Lite requires one-third less hand pressure for each strip actuation
- Engineering Service and made-to-order blades available. Contact factory for complete product and blade number listing.

Die-type Blades

Specifications – Cutting Hole Diameter / Counterbore Diameter in Inches

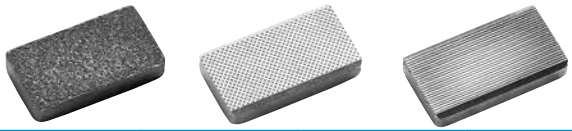
16	18	20	22	24	26	28	30	Blade Only Part No.	Stripper Part No.
For MIL16878 Type E (600V)									
.061/.081	.052/.070	.042/.0595	.034/.052					**LB-918**	**45-638**
		.042/.0595	.034/.052	.028/.043	.023/.039			**LB-919**	**45-639**
				.028/.043	.023/.039	.019/.035	.016/.032	**LB-920**	**45-640**
For MIL16878 Type EE (1000V)									
.061./089	.052./0785	.042./067	.034/.0595					**LB-915**	**45-635**
		.042./067	.034/.0595	.028/.055	.023/.0465			**LB-916**	**45-636**
				.028/.055	.023/.0465	.019/.043	.016./042	**LB-917**	**45-637**
For Other Misc. Insulations									
.062./096	.052./086	.042./073	.035/.0635					**LB-912**	**45-632**
		.042./073	.035/.0635	.0292/.0595	.022/.052			**LB-913**	**45-633**
				.0292/.0595	.024/.043	.020/.040	.016/.037	**LB-914**	**45-634**
Other Thin Insulations									
							.012/.020	**LB-921**	**45-641**
				.024/.033	.018/.025	.014/.023	.012/.019	**LB-911**	**45-631**

Tolerances: Cutter Dia.: ± .001; Counter-bore Dia.: ± .002.

Custom Steel Stripmaster® Wire Strippers & Special Flat-Blades for Ribbon and Multi-Conductor Cable

Description	Blade Gap vertical height	Blade Only Part No.	Frame & Blade Part No.
Custom Steel frame only	—	—	**LB-1091**
Flat blade for 26 AWG (.40mm dia.) multi-conductor	.022 in.	**LB-1151**	**45-890**
Flat blade for 24 AWG (.00mm dia.) multi-conductor	.030 in.	**LB-1152**	**45-891**
Flat blade for 22 AWG (.64mm dia.) multi-conductor	.038 in.	**LB-1153**	**45-892**
Flat blade for 20 AWG (.00mm dia.) multi-conductor	.050 in.	**LB-1154**	**45-893**
Flat blade for 18 AWG (1.02mm dia.) multi-conductor	.060 in.	**LB-1155**	**45-894**
Flat blade for 16 AWG (1.29mm dia.) multi-conductor	.075 in.	**LB-1156**	**45-895**

Replacement Gripper Pads



For Custom Stripmaster® and Custom Steel Stripmaster® Wire Strippers			
Surface Type	**Gripper Set* Part No.**	**Movable Gripper Part No.**	**Stationary Gripper Part No. (Thickness)**
Grit**	**LB-197**	**L-5212**	**L-5215** (.129 in.)
Grit**	**LB-198**	**L-5212**	**L-5217** (.156 in.)
File‡	**LB-721**	**LB-718**	**LB-719** (.129 in.)
File‡	**LB-722**	**LB-718**	**LB-720** (.156 in.)
Parallel	**LB-730**	**LB-727**	**LB-728** (.129 in.)
Parallel	**LB-731**	**LB-727**	**LB-729** (.156 in.)
For Custom Stripmaster® Lite Wire Strippers			
Surface Type	**Gripper Set* Part No.**	**Movable Gripper Part No.**	**Stationary Gripper Part No. (Thickness)**
Grit**	**LB-1188**	**LB-882**	**LB-883** (.109 in.)
File‡	**LB-1189**	**LB-1184**	**LB-1185** (.109 in.)
Parallel	**LB-1190**	**LB-1186**	**LB-1187** (.109 in.)

* Gripper Set includes one movable gripper and one stationary gripper.
** Grit pads are standard for most Custom Stripmaster® and Custom Stripmaster® Lite products.
‡ For use on hard-to-grip surfaces.
Gripper pad selection depends on insulation type and user preference.
Note: For 10-14 AWG, use .129 in. stationary gripper. For 16-30 AWG, use .156 in. gripper.

Replacement Frame Assemblies with Grit Grippers

For Custom Stripmaster® Wire Strippers	Part No.
Frame only, 10-14 AWG	**L-5616**
Frame only, 16-30 AWG	**L-5617**
Frame only, 10-14 AWG, Wire Stop and Latch	**L-5618**
Frame only, 16-30 AWG, Wire Stop and Latch	**L-5619**
Frame only, 10-14 AWG, internal spring (see note)	**L-9039**
Frame only, 16-30 AWG, internal spring (see note)	**L-9038**

Note: Frames with internal springs allow additional blade penetration pressure for difficult and multi-layered insulation types.

For Custom Stripmaster® Lite Wire Strippers	Part No.
Frame only	**LB-895**
Frame only, Wire Stop and Latch	**LB-896**

For Custom Steel Stripmaster® Wire Strippers	Part No.
Frame only, 10-14 AWG	**LB-1091**
Frame only, 16-30 AWG	**LB-1092**
Frame only, 10-14 AWG, internal spring (see note)	**LB-1090**
Frame only, 16-30 AWG, internal spring (see note)	**LB-1089**

Note: Frames with internal springs allow additional blade penetration pressure for difficult and multi-layered insulation types.

Pneumatic Wire Strippers

- Hand-held pneumatic powered wire strippers for various single wire conductors
- Interchangeable blade offers versatility using either the Custom Stripmaster® Die-Type blade series for Mil-Spec wire stripping applications or the standard Stripmaster® Knife-Type blade series for general purpose wire stripping
- Rotating stripping head for ease of left-hand or right-hand operation
- Adjustable Speed Control allows the operator to regulate the speed of the stripping operation
- In-line stripping reduces potential blade contact with conductors

Technical Information

		45-2530	45-600	45-650
Strip Lengths	Minimum:	1/8 in.		
	Maximum:	1/2 in.		
Dimensions	Length:	6-5/8 in.	7-7/8 in.	8-7/8 in.
	Width:	2 in. dia.	1-1/2 in. dia.	1-7/8 in. dia.
	Height:	2-5/8 in.	2-1/2 in.	2-5/8 in.
	Weight:	1.75 lb.	1.65 lb.	2.32 lb.
Air Requirements (5CFM/Cycle)		.002	.002	.004
PSI Requirements		80-120 PSI	80-120 PSI	95-120 PSI
Air Hose Length		9 ft.		
Warranty		1-Year Limited		

Rotating Stripping Head

Standard Pneumatic Wire Stripper

- Uses Custom Stripmaster® and standard Stripmaster® 16-30 AWG blades
- Blades sold separately
- Refer to specification charts for Stripmaster® and Custom Stripmaster® blade selection
- For Mil-Spec blades not referenced in this catalog, refer to the Aerospace Catalog or take advantage of our free Applications Engineering service for wire evaluation

Description	Part No.
Standard Pneumatic Wire Stripper	**45-2530**

Lite Pneumatic Wire Stripper

- Uses Custom Stripmaster® Lite and standard Stripmaster® Lite 16-30 AWG blades
- Blades sold separately
- Refer to specification charts for Stripmaster® Lite and Custom Stripmaster® Lite blade selection
- For Mil-Spec blades not referenced in this catalog, refer to the Aerospace Catalog or take advantage of our free Applications Engineering service for wire evaluation

Description	Part No.
Lite Pneumatic Wire Stripper	**45-600**

Heavy-Duty Pneumatic Wire Stripper

- Uses Custom Stripmaster® and standard Stripmaster® 10-30 AWG blades
- Blades sold separately
- Refer to specification charts for Stripmaster® and Custom Stripmaster® blade selection
- For Mil-Spec blades not referenced in this catalog, refer to the Aerospace Catalog or take advantage of our free Applications Engineering service for wire evaluation

Description	Part No.
Heavy-Duty Pneumatic Wire Stripper	**45-650**

Pneumatic Wire Stripper Accessories

Description	Part No.
Wire Stop (45-2530 & 45-650)	**L-5270**
Wire Stop (45-600)	**LB-1195**
Air Regulator (45-2530, 45-650 & 45-600)	**45-906**

FREE Application Engineering Service

Whatever your particular wire or cable preparation challenge, we're ready to assist you with practical solutions. Simply send us at least five feet of your wire or cable and complete the questionnaire below. Copy this form and mail to:

IDEAL INDUSTRIES, INC.
Precision Tool Lab
Attn: Wire Stripping Applications Analysis
1101 Park Avenue; Sycamore, Illinois 60178

We'll quickly recommend a practical stripping or cutting solution designed to meet your needs. Remember, this is a free service that we're eager to provide whenever you need it.

For immediate assistance, call our Industrial Support Line at 800-324-9571 or e-mail industrial@idealindustries.com.

Wire Stripping Recommendations

Completion of this information is a request for recommended tools or equipment only and does not place the individual or the company inquiring under any obligation to purchase. This is a free service of IDEAL INDUSTRIES, INC., Sycamore, Illinois.

Please enclose at least **five feet of your wire or cable** and answer the following questions to expedite a reply for your particular application.

1. **Method Preference:**
   - **A. Hand Type**
   - **B. Production Strippers**
     1. **45-930 STP Stripping System**
     2. **45-950 Stripmaster® Model 950 Wire Stripper**
2. **Stripping Tolerance:**
   - **A. Precision**
   - **B. Non-Precision**
3. **Present Method:** _____
4. **Type of Insulation:** _____

Customer Information

Please enclose business card or complete the following:

Name _____

Title _____

Company _____

Street _____

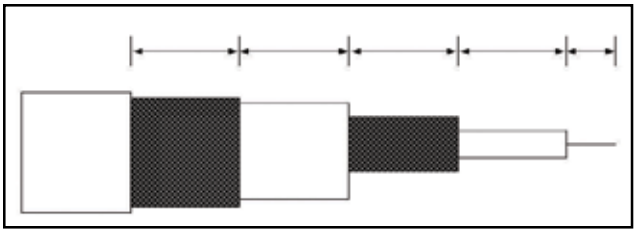
City _____ State _____ Zip _____

Phone _____ Fax _____

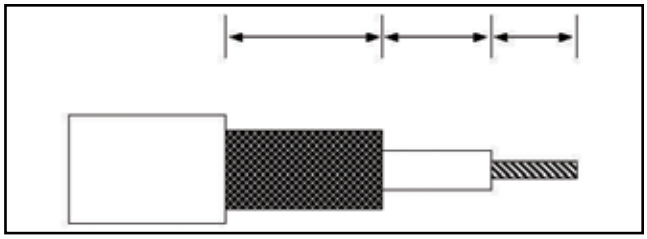
E-mail _____

5. **Wire Gauge:** _____
6. **MIL-Spec:** _____
7. **Number of Strips per Day:** _____

Triaxial Cable



Coax Cable



5. **Remarks:** _____

Test & Measurement

Circuit Tracers D-4

Clamp Meters D-7

Branch Circuit Analysis and Testing
- Circuit Analyzer D-11
- Circuit Breaker Finder D-12
- Multimeters D-13
- Voltage Testers D-14
- Receptacle Testers D-14
- Non-Contact Voltage Testers D-14

Specialty Testers
- Ground Resistance Meters D-15
- Insulation Testers D-15
- Light Meter D-15
- Phase & Rotation Testers D-15

Accessories
- Adapters D-16
- Thermocouples D-16
- Carrying Cases D-17

Test & Measurement

IDEAL has been in the Electrical Test and Measurement Business for over 80 years. Throughout that time we have remained dedicated to providing the professional electrician with the tools and support required to safely and efficiently verify and analyze electrical systems and equipment. So, whether you are conducting routine measurements, testing installed devices, checking branch circuit integrity, locating breakers, tracing wires, or verifying grounding integrity, IDEAL has the tools to help you get the job done safely and efficiently.

NEW
Refined Performance

SureTrace™ Circuit Tracers

IDEAL, a leader in Circuit Tracing technology, has released the latest generation of circuit tracers with refinements in performance, ease-of-use and safety.

Performance

- Four defined ranges let you quickly select the proper sensitivity for your job
- Easy-to-replace AA batteries

Ease-of-Use

- Super-bright OLED display (61-957 and 61-959) indicates a numeric value between 0 and 99, providing a quick and easy way to determine received signal strength
- Audible indication with variable tone assists in locating signal source
- Peak detection provides instantaneous signal strength feedback
- SureTrace™ Circuit Tracers feature the only rotating display in the industry. Regardless of the receiver orientation, the display automatically adjusts itself to a vertical position for easy reading.

Exclusive Rotating Display

Safety

- Designed for durability and safety
- CAT III 600V
- High energy fuse

Features

- Can be used on circuits 0-600V AC/DC
- Identifies breakers and fuses
- Pinpoints opens and shorts
- Traces wires behind walls

CertainCircuit™

After the correct breaker has been identified and tripped, the transmitter senses the loss of power and sends a different signal back to the receiver at the panel to give the user confidence that the right circuit has been de-energized.

Energized **De-energized**

Pinpoints Opens & Shorts

Traces behind walls

Traces on de-energized circuits

Inductive Clamp

SureTrace™ Circuit Tracers

- Receiver display rotates automatically for easy viewing
- Identifies breakers and fuses with CertainCircuit™ detection
- Pinpoints opens and shorts
- Traces wires
- "0-99" display of signal strength
- Audible indication intensifies in tone/pitch with signal strength
- Works on energized or de-energized circuits (0 - 600V AC/DC)
- Four sensitivity levels
- Peak reading bar graph
- 2-year warranty

Description	Part No.
Receiver with super-bright OLED Rotating Display (in 90° increments) – Kit includes Transmitter TR-955, Receiver RC-959, Lead Set TL-956, Inductive Clamp IC-958, Battery Pack BP-958 & Strap 61-565, Hard Carrying Case C-959, Batteries and Instruction Manual	**61-959**
Receiver with super-bright OLED Rotating Display (in 90° increments) – Kit includes Transmitter TR-955, Receiver RC-959, Lead Set TL-956, Hard Carrying Case C-957, Batteries and Instruction Manual	**61-957**
Receiver with Rotating LED Display (in 180° increments) – Kit includes Transmitter TR-955, Receiver RC-955, Lead Set TL-956, Hard Carrying Case C-955, Batteries and Instruction Manual	**61-955**

Kit Components	61-959	61-957	61-955
Transmitter	**TR-955**	**TR-955**	**TR-955**
Receiver	**RC-959**	**RC-959**	**RC-955**
Tracer Test Lead Set	**TL-956**	**TL-956**	**TL-956**
Inductive Clamp	**IC-958**	—	—
Battery Pack & Strap (61-565)	**BP-958**	—	—
Hard Carrying Case	**C-959**	**C-957**	**C-955**
Batteries	•	•	•
Instruction Manual	•	•	•
Battery Pack Strap	**61-565**	—	—

Notes:
- Circuit breaker identification is not possible using the inductive clamp. Connect directly to the H-N for breaker or fuse identification.
- The inductive clamp is intended for use on de-energized closed loop circuits, low voltage conductors, or live circuits up to 120V AC with less than 5 Amps of current flowing.
- All instruction manuals are included and are available on-line.

RC-959 Receiver

- Super-bright OLED display
- Rotating display (in 90° increments)
- Displays 0-99 numeric signal strength
- Four sensitivity levels
- CertainCircuit™ detection
- Peak reading bar graph
- Audible indication (variable pitch/ tone)
- Displays Battery life remaining
- Supplied with 3 AA batteries

Description	Part No.
Receiver	**RC-959**

TR-955 Transmitter

- Rated for use on circuits from 0 to 600V AC/DC
- Works on de-energized circuits
- Can be used on GFCI protected circuits
- Indicates presence of AC/DC voltage
- Low battery indicator
- Supplied with 4 AA batteries

Description	Part No.
Transmitter	**TR-955**

Inductive Clamp & Battery Pack

- Induces a signal in a conductor
- 1 in. jaw opening/6 ft. cord
- Works on de-energized circuits and energized circuits up to 5A, also low voltage wiring and metal conduit
- Powered solely by a separate battery pack (supplied with 8 C-cell batteries)
- Battery pack has magnetic strap for hanging in panels

Description	Part No.
Inductive Clamp	**IC-958**
Battery Pack	**BP-958**

Included in 61-659 kit only.

RC-955 Receiver

- Red LED display (suitable for indoor lighting conditions)
- Rotating display (in 180° increments)
- Displays 0-99 numeric signal strength
- Four sensitivity levels
- CertainCircuit™ detection
- Peak reading bar graph
- Audible indication (variable pitch/tone)
- Displays battery life remaining
- Supplied with 3 AA batteries

Description	Part No.
Receiver	**RC-955**

Accessories

TL-956 Lead Adapter Kit

CR-959

Replacement Parts	Part No.
Cradle for Receiver (threaded for use on standard extension pole)	**CR-959**
Fuse (for TR-955 Transmitter) - Contact Technical Services for information/availability	**F-956**
Lead/Adapter Kit (contains items 1 through 6 below)	**TL-956**
1. 3 ft. Lead Adapters for Transmitter (set of 2)	—
2. 25 ft. Lead Adapter for Transmitter	—
3. Alligator Clips for Lead Adapters (set of 2)	—
4. Blade Prongs for Lead Adapters (set of 2)	—
5. Prong for Lead Adapters	—
6. Outlet Plug Adapter for Transmitter	—

TightSight™ Clamp Meters

Problem: Have you ever had to measure the circuit current in a confined, dimly lit and hard to reach location?

Solution: **IDEAL TightSight™ Clamp Meter!** This meter allows the user to safely and easily view current measurements with the exclusive second TightSight® display.

Safety

- Patented TightSight™ display lets you easily view readings while keeping your head at a safe distance from the panel – no more need to twist the meter or risk pulling on an energized conductor
- Easy-to-read backlit display with large numbers and icons so you can always see the correct reading
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Electronic overload protection on all ranges
- Supplied with test leads complying with UL 61010-031

Productivity

- Read instantaneous values while clamped instead of holding the reading, unclamping, moving and then viewing
- Hook tip for easier wire separation and tapered jaws for reaching into tight spaces
- Help troubleshoot with min and max value readings over a period, i.e. nuisance tripping and power supply fluctuations
- True RMS provides accurate readings of non-sinusoidal voltages and currents
- Broad current range from 0 to 1000 amps (61-770 series) covers multiple applications
- Large jaw diameter for cables up to 2" (51mm) in diameter (770 series only)

Value

- Includes carrying case and test leads with alligator clips
- Full AC/DC capabilities: the Tightsight™ is equally adaptable for both AC and DC current measurement requirements – such as solar, public transportation, and battery backup applications (Models 61-765 & 61-775)
- Calibration services available
- 2-year warranty

VISIT CLAMP-METER.COM FOR MORE INFORMATION.

c UL us

CAT IV 600V

CAT III 1000V

TightSight™ 1000A Clamp Meters

- TightSight™ second display
- Tapered jaws with hook tip
- True RMS current and voltage
- AC/DC Voltage
- Audible continuity
- High frequency rejection*
- Peak hold
- Max/min hold
- Data hold
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Selectable auto power off
- Backlit display
- Low battery indicator

** Reads accurately on noisy electrical circuits.*

Description	Part No.
1000A AC Clamp Meter	**61-773**
1000A AC/DC Clamp Meter	**61-775**

Includes: Carrying Case and Test Leads w/Alligator Clip.

TightSight™ 660A Clamp Meters

- TightSight™ bottom display
- Tapered jaws with hook tip
- True RMS current and voltage
- AC/DC Voltage
- Audible continuity
- High frequency rejection*
- Peak hold
- Max/min hold
- Data hold
- Selectable audible and visual alerts when potentially hazardous voltages are detected at the probe terminals
- Selectable auto power off
- Backlit display
- Low battery indicator

** Reads accurately on noisy electrical circuits.*

Description	Part No.
660A AC Clamp Meter	**61-763**
660A AC/DC Clamp Meter	**61-765**

Includes: Carrying Case and Test Leads w/Alligator Clip.

Specifications	Range & Resolution				Accuracy
	61-773	61-775	61-763	61-765	
AC Current	0.0-999.9A		0.0-660.0A		2.0%
DC Current	—	0.0-999.9A	—	0.0-660.0A	2.0%
AC Voltage	0.0-750.0V				1.0%
DC Voltage	0.0-999.9V				1.0%
Resistance	0.0-999.9Ω				1.5%
Capacitance	0.0-999.9µF				5.0%
Continuity	0.0-999.9Ω				Audible @ <30Ω
Frequency (clamp head or test leads)	20.0-400.0Hz				0.5%
Jaw Size	2" (51mm)		1.42" (36mm)		—

Accessories	Part No.
Test Leads w/Large Alligator Clips	**TL-770**
Nylon Carrying Case (for 61-763 & 61-765)	**C-760**
Nylon Carrying Case (for 61-773 & 61-775)	**C-770**

c UL us CAT IV 600V CAT III 1000V

Clamp-Pro™ Clamp Meters 600 Amp (740 Series)

- Measures up to 600A AC
- Non-contact voltage indicator (70V-600VAC)
- Audible continuity
- Tapered jaws with hook tip
- Auto/manual ranging
- Data hold
- Auto power off
- Low battery indicator

Description	Part No.
600A AC Clamp Meter	**61-744**
600A AC Clamp Meter w/TRMS	**61-746**

Includes: Carrying Case and Test Leads.

Specifications	Range & Resolution	Accuracy
AC Current	40.00/400.0/600A	1.7%
AC Voltage	400.0/600 V	1.2%
DC Voltage	400.0/600 V	0.5%
Resistance	400.0/4.000k/ 40.00k 400.0k/4.000M/40.00M Ω	1.0%

Jaw opening is 1.25" (32mm).

4-in-1 Test Tool

- 200AAC current capability
- Non-contact voltage (40-600VAC)
- Visual, audible and tactile (shaker) indication of high AC/DC voltage at terminals
- Clean voltage indicator
- Max hold
- Audible continuity
- Low battery indication
- Integral lead storage
- Auto power off
- Ergonomic hourglass shape
- Compact clamp head

Description	Part No.
4-in-1 Test Tool w/TRMS, Backlight	**61-704**

Includes: Carrying Case and Silicone Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	2000m/200.0/750 V	1.2%
DC Voltage	2000m/200.0/1000 V	0.5%
AC Current	200A	3.0%
Resistance	200.0/200.0k Ω	1.0%
Capacitance	200.0µ F	3.0%

Jaw opening is 1.3" (33mm).

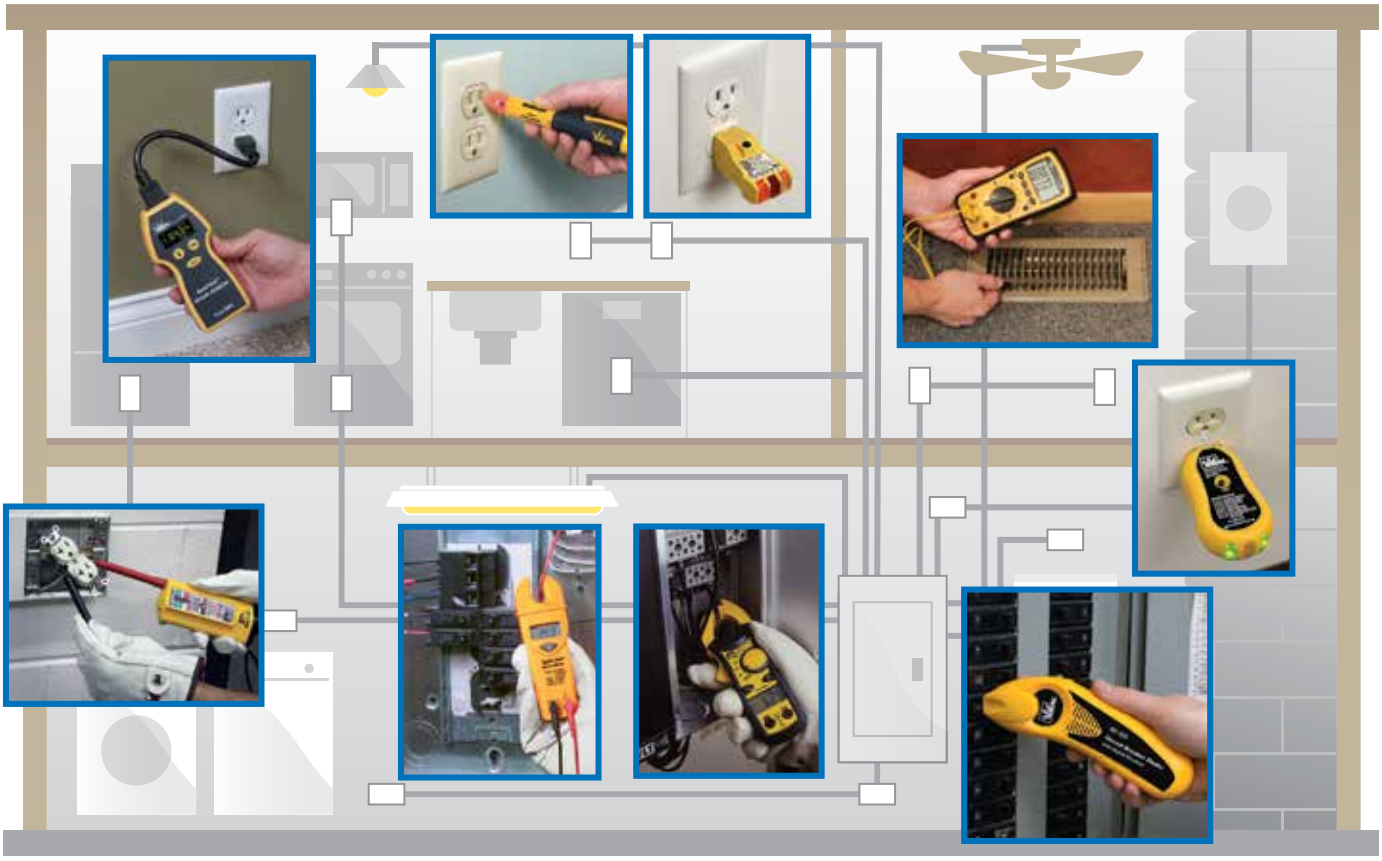
Clamp Meter Selection Guide

CLAMP METER SELECTION GUIDE	700	740 Series		760 Series		770 Series	
	61-704	61-744	61-746	61-763	61-765	61-773	61-775
MEASUREMENT FUNCTIONS							
AC Voltage	•	•	•	•	•	•	•
DC Voltage	•	•	•	•	•	•	•
AC Current	•	•	•	•	•	•	•
DC Current					•		•
Resistance	•	•	•	•	•	•	•
Audible Continuity	•	•	•	•	•	•	•
Diode Test	•						
Capacitance	•			•	•	•	•
Frequency				•	•	•	•
FEATURES							
Display Type (Digital)	D	D	D	D	D	D	D
AC Current Capacity - Amps	200	600	600	660	660	1000	1000
DC Current Capacity - Amps					660		1000
True RMS	•		•	•	•	•	•
Auto Ranging	•						
Auto/Manual Ranging		•	•	•	•	•	•
Data Hold		•	•	•	•	•	•
Max Hold	•						
Peak Hold				•	•	•	•
Min/Max				•	•	•	•
DCA Zero					•		•
Auto Power Off	•	•	•	•	•	•	•
Non-Contact Voltage Indication	•	•	•				
Harmonics Indicator	•						
Vibration Mode	•						
Backlight	•			•	•	•	•
Low Battery Indication	•	•	•	•	•	•	•
High Voltage Warning	•			•	•	•	•
Overload Protection on all Ranges	•	•	•	•	•	•	•
Conductor Size – Inches (mm)	1.3" (33)	1.5" (38)	1.5" (38)	1.4" (36)	1.4" (36)	2.0" (51)	2.0" (51)
Warranty (years)	2	2	2	2	2	2	2
CERTIFICATIONS							
UL 61010 Listed	•	•	•	•	•	•	•
Category Safety Rating	III	III	III	IV	IV	IV	IV

Branch Circuit Analysis and Testing

Proper wiring is crucial to ensure safety and performance of Branch circuits. From a safety perspective, shock hazards and fires are mainly due to poor installation or failure of protective devices, such as GFCIs. From a performance perspective, electrical equipment and high-tech devices are found everywhere in residential and commercial buildings. They require reliable power to operate and function properly and to ensure their longevity.

IDEAL has a long history of providing the professional electrician with the tools and knowledge required to safely and efficiently verify and analyze Branch Circuits. So, whether you are; conducting routine measurements, testing installed devices or the integrity of a Branch Circuit, locating a breaker, or tracing wires, IDEAL has the tools for the job.



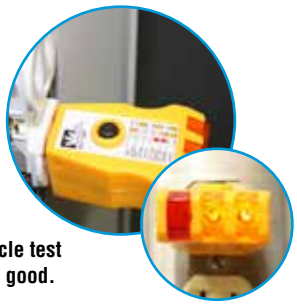
SureTest® Circuit Analyzer

Have wiring issues ever required you to remove multiple outlet covers and pull outlets out of their boxes to look for a problem? Have you ever suspected that wiring integrity is the issue but your meter shows 120 volts and your receptacle tester indicates wiring is correct?

The SureTest® Circuit Analyzer from IDEAL is a comprehensive branch circuit analyzer that allows you to "look behind the walls" to find wiring problems, saving you time and money while letting you get the job done with safety and confidence.

SureTest Circuit Analyzer finds many of the toughest problems:

Bootleg Grounds have been fooling inspectors for years when checking circuits for integrity. Receptacle (Plug) testers test for voltage and can't identify this improper wiring condition. Bootleg grounds set up the potential for dangerous undetected fault conditions.

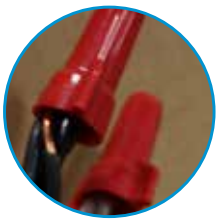


Traditional receptacle test indicates circuit is good.

Solution: The SureTest® by IDEAL can't be fooled, its advanced processing software gives it the capability to quickly identify bootleg grounds within 15 ft. of the outlet being tested.

IDEAL SureTest™ clearly identifies a fault with the ground.

Improper Installations can result in electrical fire hazards, personal shock hazards. and premature equipment failure.



Improper solid wire connection.

Improper stranded wire connection.

Improperly torqued circuit breaker lugs.

Solution: The SureTest® measures and displays individual Line Impedance giving the electrician/inspector valuable insight as to whether a particular conductor is the problem due perhaps to faulty splicing, overly long conductor runs, or undersized wire gauge.

Excessive voltage drop in a circuit can cause lights to flicker or burn dimly, heaters to heat poorly, and motors to run hotter than normal and burn out. It also causes overheating of components, often resulting in expensive damage or fire.

Solution: SureTest® measures the line voltage under simulated load conditions. Results are displayed for 12A, 15A, and 20A loads.

- Measures voltage drop under load*
- Hot, neutral, and ground conductor impedances
- Estimates Load on Line (ELL) up to 15A
- Tests GFCIs and EPDs for proper operation
- Super-bright OLED display
- True RMS
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Tests without disturbing sensitive loads
- Verifies isolated grounds (with 61-176 adapter)
- 2-year warranty

**12A, 15A, 20A load tests*

Description	Part No.
SureTest® Circuit Analyzer	**61-164**

Includes: Carrying Case and Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	85.0 - 265.0 VAC	1.0%
Frequency	45.0 - 65.0 Hz	1.0%
Impedance	0.00 - 3.00 Ω	5.0%
Ground-Neutral Voltage	0.0 - 24.0 VAC	2.0%
% Voltage Drop 12A, 15A, 20A load tests	0.1% - 50.0%	5.0%
GFCI Test Current/Time	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%

Accessories	Part No.
Ground Continuity Adapter	**61-175**
Isolated Ground Adapter	**61-176**
Alligator Clip Adapter	**61-183**
1' Extension Cord	**61-182**
Nylon Carrying Case	**61-179**

Circuit Breaker Finder w/GFCI Receptacle Testing and Non-Contact Voltage Sensing

Locating breakers is often a two person job, one turning off breakers, the other waiting to see when a specific circuit is de-energized. It is frequently done by trial and error, or even by dangerously grounding a wire to the box to trip a breaker.

When locating breakers becomes needlessly time consuming and short cuts are taken, nobody wins. It was with this challenge in mind that IDEAL developed the Digital Circuit Breaker Finder.

The patented 61-534 Digital Circuit Breaker Finder from IDEAL makes locating breakers in AC circuits quick and easy. No need to interrupt the supply - simply plug the transmitter into an outlet, then two quick passes of the receiver over the breakers will reveal the associated breaker with clear audible and visual indicators. The 61-534 Digital Circuit Breaker Finder enables safer and more reliable working by taking the guesswork out of circuit identification.

The IDEAL 61-534 Circuit Breaker Finder provides three testers in one device. The receiver identifies breakers by detecting a signal applied to the branch circuit by the transmitter, and additionally incorporates a non-contact voltage sensing function. The transmitter also works as a GFCI receptacle tester, allowing you to verify AC is present in an outlet and to detect nearly all common improper wiring conditions. So you get the functionality of a circuit breaker finder, a non-contact voltage tester, and a GFCI receptacle tester in one versatile tool.

Features & Specifications

Transmitter

- Triple function - acts as a Signal Transmitter, Polarity Indicator and GFCI Receptacle Tester
- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot in 3 wire, AC circuits
- 3-pin plug format allows direct connection to standard NEMA 5 15R receptacles
- Power Supply: Line powered (115-250VAC)
- Supply Frequency: 47-63Hz
- Weight: 50g approx.
- Pulse Amplitude: 18A approx. @ 120V
- Pulse Rate: 4mS every 17ms (@ 60Hz)
- Power Consumption: 200mW max. @ 120VAC

c UL us

Receiver

- Dual function - acts as a Non-Contact Voltage Tester and Breaker Finder
- Ergonomic Bent Tip Design w/ flat surface to support correct receiver orientation when scanning the panel
- Visual and audible indicators
- Low battery detect
- Auto Power off (after 10 mins of no activity)
- Power Supply: 9V Alkaline Battery
- Weight: 85g (without battery)

System

- Warranty: 2-years (limited)
- Certification: UL 1436
- Use Environment: Cat II 300V
- Operating Temperature: 32 to 122°F (0 to 50°C)

Description	Part No.
Circuit Breaker Finder w/Digital Receiver & GFCI Circuit Tester	**61-534**

Split-Jaw™ Smart Meter

- Measures
  - 0.9-200AAC
  - 1.3-750VAC
  - 2.1-1000VDC
  - 0.0-9999Ω
- Audible continuity
- Data hold
- Integral lead storage
- Replaceable test leads
- Auto power off
- Low battery indication
- Test leads UL 61010-031 compliant
- 2-year warranty

c UL us CAT IV 600V CAT III 1000V

Description	Part No.
Split-Jaw™ Smart Meter	**61-096**

Includes: Test Leads.

Specifications	Range & Resolution	Accuracy
AC Voltage	1.3 - 750 V	1.5%
DC Voltage	1.8 - 1000 V 0.6 - 1000 V	1.0%
AC Current	0.6 - 200.0A	3.0%
Resistance	0 - 2000 Ω	1.0%

*Note: Jaw opening is 0.6 in. (16mm) - up to 1/0 copper cable.

486 Commercial-Grade Multimeter

- Voltage
- Current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Data hold
- Min/max/relative modes
- Backlight
- True RMS
- Auto AC/DC voltage detect w/ low impedance (Auto - VLoZ)
- Analog bar graph
- Non-contact voltage detection
- Peak hold
- Low battery indication
- Auto power off
- Limited 2-year warranty

Description	Part No.
Digital Multimeter w/peak hold, temperature, includes thermocouple	**61-486**

Includes: Test Leads & Carrying Case.

Specifications	Range & Resolution	Accuracy
AC Voltage	6.000/60.00/600.0/1000.0 V	0.80%
AC mV	600.0 mV	1.2%
DC Voltage	6.000/60.00/600.0/1000.0 V	0.08%
DC mV	60.00/600.0 mV	
AC Current	60.00m/600.0m/6.000/10.00A	1.2%
DC Current	60.00m/600.0m/6.000/10.00A	0.80%
Resistance	600.0/6.000k/60.00k/600.0k/ 6.000M/40.00M Ω	0.80%
Capacitance	1nF to 10mF	0.1%
Frequency	99.9 to 100.0k Hz	0.1%
Temperature	-40°F to 752°F (-40°C to 400°C)	1.0%

340 Series Test-Pro® Multimeters

- Voltage
- Current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Data hold
- Min/max/relative modes
- Backlight
- Low battery indication
- Auto power off
- Limited 2-year warranty

61-342

Description	Part No.
Test-Pro® Multimeter w/TRMS	**61-342**
Test-Pro® Multimeter	**61-340**

Includes: Test Leads and Thermocouple.

Specifications	Range & Resolution	Accuracy
AC Voltage	4.000/40.00/400.0/600 V	1.5%
DC Voltage	400.0m/4.000/40.00/400.0/600 V	0.5%
Current	400.0µ/4000µ/40.00m/400.0m/4.000/10.00A AC/DC	1.5%
Resistance	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	1.0%
Capacitance	40.00n/400.0n/4.000µ/ 40.00µ/400.0µ F	3.0%
Frequency	10.000/100.00/1.000k/10.00k/100.0k/1.000M/4.000M Hz	0.3%
Temperature	-4° F to 1382° F (-20° C to 750° C)	3.0%

Accessories	For Use with	Part No.
Nylon Carrying Case	61-340, 61-342	**C-290**
Test Leads w/Alligator Clips, Standard	61-340, 61-342, 61-486	**TL-495**
Test Leads w/Larger Alligator Clip	61-340, 61-342, 61-486	**TL-770**
Test Leads with Alligator Clips, Premium	61-340, 61-342, 61-486	**TL-795**
Beaded K-type Thermocouple*	61-340, 61-342, 61-486	**61-461**
Thermocouple Adapter*	61-340, 61-342, 61-486	**61-465**
Replacement Thermocouple	61-486	**TC-486**

*Note: K-type thermocouple plugs into digital multimeter voltage jacks with 61-465 voltage.

Solenoid Voltage Testers

- Extremely rugged and reliable
- Vibrates when AC voltage is present
- Indicates AC/DC voltage level
- Replaceable leads with shielded probe tips (UL 61010-031 compliant)
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- 2-year warranty

Description	Part No.
Vol-Con® Voltage/Continuity Tester, 5-600V AC/DC	61-076
Vol-Test® Voltage Tester, 100-600V AC/DC	61-065
Nylon Carrying Case	C-90
Standard Test Leads (for use with 61-076 & 61-065)	61-070
Resistor Fused Leads (for use with 61-076 & 61-065)	61-072

Includes: Standard Test Leads.

E-Z Check® Circuit Tester

- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot in 3-wire, 120VAC circuits
- Simulates ground fault for testing GFCIs (61-051 only)
- No-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough, impact-resistant case
- 2-year warranty

Description	Part No.
E-Z Check® Plus GFCI Circuit Tester	61-051
E-Z Check® Circuit Tester	61-035

Receptacle Tester

- Tests for correct wiring in 3-wire receptacles
- For use on 120VAC circuits
- 1-year warranty

Description	Part No.
GFCI Receptacle Tester	61-501

Vol-Con® Elite Digital Voltage Tester

- Tests for AC Voltage from 24-600VAC and DC Voltage from 6-220VDC
- Visual and audible warning
- Audible continuity
- Non-contact voltage indication (40-600VAC)
- Low impedance to eliminate ghost voltages
- Low battery indicator
- Replaceable silicone test leads (UL 61010-031 compliant)
- Integral lead storage
- 2-year warranty

Description	Part No.
Vol-Con® Elite Digital Voltage Tester w/vibration mode	61-092
Nylon Carrying Case	C-90
Silicone Test Leads	TL-102

Includes: Silicone Test Leads.

VoltAware™ Non-Contact Voltage Tester

- Indicates presence of voltage from 40-1000VAC
- Visual indication of voltage; green LED shows unit is active, flashing red indicates live voltage
- Selectable audible indication of voltage
- Sleek, compact design
- Auto shut-off to conserve battery life after ten minutes
- Low battery detector and easy battery (2 AAA included) replacement
- 2-year warranty

Description	Part No.
VoltAware™ Non-Contact Voltage Tester	61-025

VoltSensor™ Non-Contact Voltage Tester

- Tests for voltage from 40-600VAC
- Audible and visual indication
- 1-year warranty

Description	Part No.
Volt-Sensor™ Non-Contact Voltage Tester	61-063

Ground Resistance Meters

- Auto ranging
- Auto power off
- Hard case included
- 2-year warranty

61-796

CAT III 300V

61-920

CAT IV 300V

Description	Part No.
Ground Resistance Clamp Meter	61-920
3-Pole Ground Resistance Tester (includes TL-796 lead set kit)	61-796
Earth Resistance Lead Set Kit (not shown)	TL-796

Specifications	Range & Resolution	Accuracy	Range & Resolution	Accuracy
	61-920		61-796	
Ground Resistance	0/120/1200 Ω	1.5%	20.00/200.0/ 2000 Ω	2.0%
Ground Leakage Current	100m/1000m/ 15/30 A	2.0%	—	—

3-Phase Sequence Tester

- For use from 120 to 600VAC
- Color-coded insulators
- Shock resistant housing
- Easy to read
- 2-year warranty

Description	Part No.
3-Phase Sequence Tester	61-520

Includes Carrying Case.

3-Phase/Motor Rotation Tester

- Identifies three-phase sequence
- Indicates motor rotation
- Checks for open phases
- For use up to 600VAC
- 2-year warranty

CAT III 300V

Description	Part No.
3-Phase/Motor Rotation Tester	61-521
Test Lead Set	TL-521

Includes Carrying Case.

Insulation Testers

- Checks new installations for damaged insulation
- Checks existing installations and motor windings for breakdowns in insulation
- 2-year warranty

61-797

61-795

c UL us

CAT IV 600V

Description	Part No.
Insulation Meter w/PI, DAR, Remote Probe - Includes Test Lead and Carrying Case	61-797
Remote Probe Test Leads (61-797)	TL-797RP
Insulation Tester - Includes Test Leads and Carrying Case	61-795
Test Leads w/Alligator Clips, Premium (for 61-795 & 61-797)	TL-795
Test Leads w/Alligator Clips, Standard (for 61-795 & 61-797)	TL-495

Specifications	Range & Resolution	
	61-797	61-795
Test Voltage	50/100/250/500/1000 VDC	250/500/1000 VDC
Voltage AC/DC	0.1-600.0 V	0.1-600.0 V
Continuity	—	0.01-20.0 Ω
Resistance	—	0-200.0Ω
Insulation Resistance	Up to 20G Ω	Up to 4000M Ω
Earth-Bond Resistance	0.01 Ω to 40.00k Ω	0.01 Ω to 19.99 Ω

Digital Light Meter

- Responds to all visible light sources
- Measures in four ranges up to 20,000 Foot Candles or 200,000 Lux
- +/- 3% basic accuracy
- Data hold mode
- Max reading mode
- Auto zero adjustment
- Low battery indication
- Auto power off
- Remote sensor with 59 in. (1.5m) cable
- 2-year warranty

CE

Description	Part No.
Digital Light Meter	61-686

Includes Carrying Case.

Accessories & Replacement Parts

Ground Continuity Adapter

- Verifies cabinet or equipment chassis has been properly bonded to system ground

Description	Part No.
Ground Continuity Adapter for 61-164 Circuit Analyzer	61-175

Isolated Ground Adapter

- Verifies receptacle is isolated from system ground and bonded to other devices on the branch circuit

Description	Part No.
Isolated Ground Adapter for 61-164 Circuit Analyzer	61-176

Extension Cord

Description	Part No.
1' Extension Cord for 61-164 Circuit Analyzer	61-182

Alligator Clip Adapter

- Allows SureTest® Circuit Analyzer to analyze non-outlet based circuit for branch circuit safety and performance

Description	Part No.
Alligator Clip Adapter for 61-164 Circuit Analyzer	61-183

Magnetic Strap

- Frees up hands to help work safely
- Fits 480/340 Series Multimeters

Description	Part No.
Magnetic Strap	61-565

Thermocouple

61-461

61-465

- Measures up to 275°F
- K-type thermocouple plugs into digital multimeter voltage jacks with 61-465 adapter

Description	Part No.
Beaded K-type Thermocouple	61-461
Thermocouple Adapter	61-465
Replacement Thermocouple for 61-486 Digital Multimeter	TC-486

Test Leads

Description	Category Rating	Part No.
Test Leads		TL-95
Silicone Test Leads	CATIII 1000V CATIV 600V	TL-102
Test Leads w/alligator clips (standard)		TL-495
Test Lead Set		TL-521
Premium Test Leads w/alligator clips	CATIII 1000V CATIV 600V	TL-770
Test Leads w/alligator clips (premium)		TL-795
Earth Resistance Lead Set		TL-796
Remote Probe Test Lead		TL-797RP
Test Lead Set		TL-956
Standard Test Leads (for use with 61-076 & 61-075)		61-070
Resistor Fused Test Leads (for use with 61-076 & 61-075)		61-072

Carrying Case Selection Guide

61-179

C-90

C-290

C-700

Selection Guide	VOLTAGE TESTERS				160	340		480	700	740		760		770	
	61-065	61-076	61-092	61-096	61-164	61-340	61-342	61-486	61-704	61-744	61-746	61-763	61-765	61-773	61-775
61-179 Nylon Carrying Case					•										
C-90 Nylon Carrying Case	•	•	•	•						•	•				
C-290 Nylon Carrying Case						•	•	•							
C-700 Nylon Carrying Case									•						
C-760 Nylon Carrying Case												•	•		
C-770 Nylon Carrying Case														•	•

Replacement Parts Selection Guide

Selection Guide			060	070	090		340		480	500	700	740		760		770		790			900		
			61-065	61-076	61-092	61-096	61-340	61-342	61-486	61-521	61-704	61-744	61-746	61-763	61-765	61-773	61-775	61-795	61-796	61-797	61-955	61-957	61-959
FUSES																							
F-105	1A (600V)	10.3 x 35mm																•					
F-340	0.5A (500V)	6.35 x 32mm					•	•															
F-341	10A (1000V)	10 x 38mm					•	•															
F-497	440mA (1000V)	10 x 35mm							•														
F-498	11A (1000V)	10 x 38mm							•														
F-797	315mA (1000V)	5 x 32mm																		•			
BATTERIES																							
—	1.5V (AAA)											•	•					•		•			
—	9V					•	•	•	•		•			•	•	•	•						
TEST LEADS																							
TL-796	Earth Resistance Lead Set																		•				
TL-797RP	Remote Probe Test Lead																			•			
61-072	Resistor Fused Test Leads		•	•																			
TL-102	Silicone Test Leads				•						•												
61-070	Standard Test Leads		•	•																			
TL-770	Test Leads w/larger Alligator Clips						•	•	•			•	•	•	•	•	•						
TL-95	Test Leads					•																	
TL-495	Test Leads w/Alligator Clips (Standard)						•	•	•									•		•			
TL-521	Test Lead Set									•													
TL-795	Test Leads w/Alligator Clips (Premium)						•	•	•									•		•			
TL-956	Test Lead Set																				•	•	•

Safety in the Field

IEC (International Electrotechnical Commission) Category Ratings

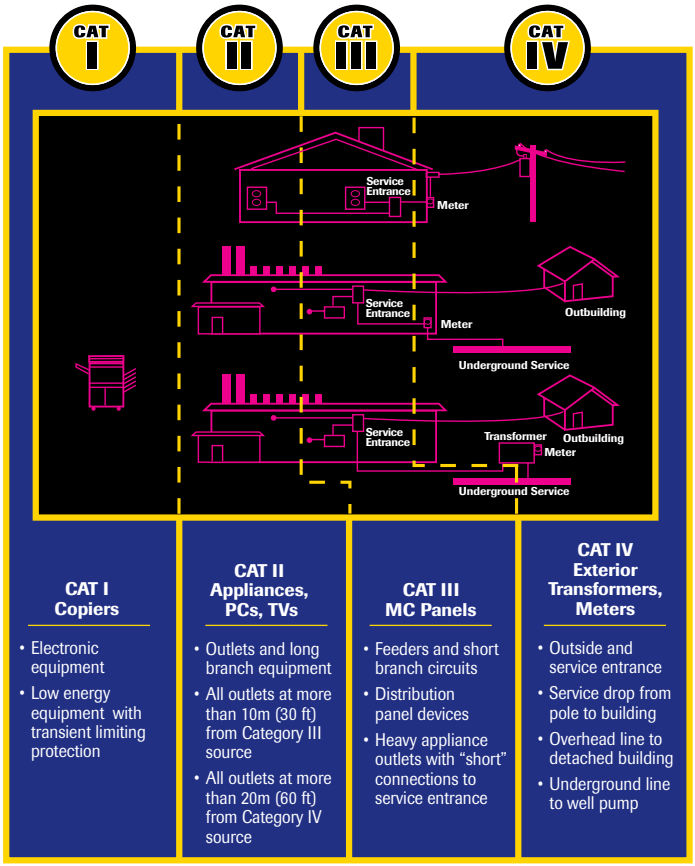
Category I – The signal level for telecommunications, electronic and other low-energy equipment with transient limiting protection. Peak impulse transient range is 600-4,000 volts with 30 ohm source.

Category II – The local level for fixed and non-fixed powered devices including appliances, lighting and portable equipment. Outlets located more than 30 feet from CAT III sources and 60 feet from CAT IV sources. Peak impulse transient range is from 600-6,000 volts with a 12 ohm source.

Category III – The distribution level for fixed primary feeders or branch circuits. Circuits that are separated from CAT IV sources by at least one level of transformer isolation. Peak impulse transient range is 600-8,000 volts with a 2 ohm source.

Category IV – The primary supply level for the highest levels of transient over voltage. Includes the utility service both outside and at the service entrance, service drop from the pole to the building, overhead line to remote buildings, and underground line to a well pump. Peak impulse transient range is 600-12,000 volts with less than a 1 ohm source.

Visit www.idealind.com for more technical product details, application support, white papers, videos and software.



DataComm

Testers

SignalTEK® II Transmission Testers E-3
SecuriTEST® PRO CCTV/Security Tester E-3
VDV II Cable Verifiers E-3
TraceTone® Tone Generator & Amplifier Probe Tester E-4
LinkMaster™ Tester E-4

Compression Tools/Connectors

OmniSeal™ Pro XL Compression Tool E-5
LinearX® Pro Compression Tool E-5
Compression Connectors E-6

Tools

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Enhance existing technologies and provide a foundation for tomorrow

IDEAL DataComm provides installation and testing solutions for twisted pair, coax and fiber based applications. Designed for the professional, IDEAL tools, testers and connectivity products offer an integrated approach to cut, strip, terminate and test a wide variety of low-voltage applications. Combined with our technical expertise, product training and customer support, this integrated approach ensures that your total cost of ownership is minimized.

SignalTEK® II Ethernet Data Transmission Testers

- If you install or maintain data cabling, SignalTEK® CT & SignalTEK® NT allow you to generate PDF test reports that prove installed links run at Gigabit Ethernet transmission rates.
- For installers, this means having a cost-effective way to demonstrate that the cabling was installed correctly and is capable of supporting Ethernet applications. By proving real world performance, SignalTEK® CT confirms a professional job - reducing the risk of call backs.
- SignalTEK® NT tests cable as well as active Ethernet networks by transmitting simulated web, VoIP, IP video and IP CCTV data through the LAN, stress-testing both the network equipment and the cable. SignalTEK® NT will also test fiber optic cable and connect to live fiber optic LANs with optional SFP (small form-factor pluggable) modules.
- SignalTEK® gives network installers and owners the assurance that installed cabling will support bandwidth hungry services like VoIP, IP CCTV and video streaming at full gigabit speeds without dropping data packets as required by the IEEE 802.3ab Ethernet standard.

Description	Part No.
SignalTEK® CT Transmission Tester	**R156004**
SignalTEK® NT Transmission Tester	**R156003**

VDV II Voice, Data and Video Cable Verifier

The new VDV II Series are easy to use cable testers that check the integrity of copper cables commonly found in domestic, commercial or industrial voice, data or video installations, including telephone wiring, data network and video/security cabling.

- **Accurate** – Advanced TDR (Time Domain Reflectometry) measures cable length and provides distance to fault information (Pro model)
- **Fast** – Identifies wiring errors instantly and displays the results all on one screen (all models)
- **Intelligent** – Quickly determines which media service is running over cables, such as ISDN, PBX and PoE (Pro model)

SecuriTEST® PRO CCTV/Security Tester

SecuriTEST® PRO is the most versatile all-in-one installation and troubleshooting tool for the CCTV professional. CCTV installers often need to carry a variety of testing tools to complete their work. SecuriTEST® PRO combines the most needed tools in one easy-to-carry package. Since all connections (video/communications/DMM) attach to a single unit, SecuriTEST® PRO eliminates the need to juggle several devices while on a ladder or lift, making working conditions safer and increasing productivity.

- IRE video level and sync tests
- Sound level test through integrated speaker and on screen level indicator
- High capacity lithium ion battery
- Support for additional PTZ protocols
- Carrying case included
- **Seven Essential CCTV Tools** - Combines a CCTV video tester, PTZ camera controller, Digital Multimeter, UTP cable tester, video test pattern generator, PTZ protocol analyzer and camera programmer in a single compact package.
- **Save Time & Money** - Test, aim, focus and program cameras when working alone. Save time by not having to walk back to the control center to verify functionality of each camera.
- **Compact Design** - Combines all the most needed security tools in a lightweight easy-to-carry unit. Sharp, bright 2.5 in. (6.3 cm) color LCD screen with on-screen displays for PTZ control/diagnostics and DMM readouts.
- **PTZ Protocol Analyzer** - Compatible with 20+ PTZ protocols to test and program cameras in the field. Decodes and identifies output from PTZ console to aid in troubleshooting.

Description	Part No.
SecuriTEST® PRO CCTV/Security Tester only	**33-892**
Replacement Lithium Polymer (LiPo) Battery	**33-892-BP**

Description	Part No.
VDV II Cable Verifier includes: Tester, remote, battery and user's guide	**R158000**
VDV II Plus Cable Verifier includes: Tester, remote, battery, user's guide, cables, adapters and carrying case	**R158002**
VDV II Pro Cable Verifier includes: Tester, remote, battery, user's guide, cables, adapters and carrying case	**R158003**
RJ-45 Remote Units (12) - #1 - #12	**158050**
RJ-45 Identifiers (24) - #1 - #24	**158051**
Coax Remote Units (12) - #1 - #12	**158053**

VISIT WWW.VDVII.COM FOR MORE INFORMATION ON THE **VDV II.**

Test-Tone-Trace Kit

- Kit includes the VDV (33-856), Amplifier Probe (62-164), carrying case and accessories
- Tests and traces coax, twisted pair and telephone cables

Description	Part No.
Test-Tone-Trace Kit	33-866

VDV MultiMedia Cable Tester

All in one tester for installers working with voice, data and video applications.

- **Voice** – tests 2 or 3 pair, 6-position RJ-11/12 phone cables for wiremap/ continuity.
- **Data** – tests 8 position 8 contact CAT 3/5e/6/6a shielded and unshielded cable testing for wiremap/continuity to TIA 568A/B standards
- **Video** – tests coax cable for opens and shorts via F-connector interface
- Wiremap tests for opens, shorts, miswires, reversals and split pairs.
- LCD display with "PASS or ERROR" indicator displayed after each test
- Internal tone generator: Tone by pin/pair/entire cable with four different tones making fault isolation easier
- Main remote stores in base of tester

Description	Part No.
VDV MultiMedia Cable Tester	33-856
Replacement Remote	IA-5516

LinkMaster™ Tester

LED based tester for wiremapping CAT 3/5e/6/6a twisted pair cabling.

- Wiremap for opens, shorts, reversal, miswire and split pair
- Tests by pair: 1/2, 3/6, 4/5, 7/8
- Tests shielded and unshielded RJ-45 cabling
- Debug feature cycles through errors one at a time

Description	Part No.
LinkMaster™ Tester and Remote	62-200

MiniTracker™ PRO Tester

- Coax cable mapper and tracer with eight remotes
- LEDs identify remote number, opens and shorts
- Built in Tone Generator
- Includes carrying case with tester and remote storage

Description	Part No.
MiniTracker™ PRO Tester	62-1202

PRO Amplifier Probe and Tone Generator Kit

Amplifier Probe

- Identifies and traces wire or cables within a group
- Adjustable volume knob
- Detects and audibly amplifies analog tone generation
- Compatible with analog tone generators

Tone Generator

- Emits three tone patterns
- F-Connector & RJ-11/12 interface for toning twisted pair and copper cables
- Includes alligator clips for toning de-energized copper cables
- Auto-off after three hours of non-use

Description	Part No.
Amplifier Probe & Tone Generator Kit - includes 62-164, 62-160, Lead Set, Cable Assembly	33-864
Amplifier Probe	62-164
Amplifier Probe Replacement Tip	LA-4145
Tone Generator	62-160

TRACETone® Tone Generator & Amplifier Probe Tester

- Economical solution for tracing copper low-voltage cabling
- Two selectable tone styles and adjustable volume control
- RJ-11 Alligator Clip, RJ-11 Cable Assembly included

Description	Part No.
TRACETone® Tester	62-140

OmniSeal™ PRO XL Compression Tool

Made in U.S.A. of U.S. and Global Components

- Connects BNC, F-Type, RG11-F, RCA, 90°/Right Angle and Mini Coax compression connectors on coaxial cable
- Compresses ALL IDEAL compression connectors
- Fast and reliable solution to home theater, CATV, satellite systems and security applications
- Permanent connection so your connector never comes loose.
- Universal design with spin knob and adjustable post height works with most non-IDEAL compression connectors

Description	Part No.
OmniSeal™ PRO XL Compression Tool	30-793

LinearX®3 Compression Tool

Made in U.S.A. of U.S. and Global Components

INCLUDES 4 WeatherProof™ Connectors

- Compresses F/BNC/RCA connectors
- Adjustable post for different length/style connectors
- Linear stroke for consistent compression results & easy operation
- Durable & rugged zinc die-cast body with protective powder coated paint finish
- Includes four RTQ™ XR™ RG-6 Weatherproof F-Compression Connectors

Description	Part No.
LinearX®3 F/BNC/RCA Compression Tool (Adjustable) with four RTQ™ XR™ F-Connectors	33-632

VISIT WWW.IDEALIND.COM FOR CONNECTOR AND TOOL COMPATIBILITY.

Compression Connectors

RTQ™ XR™ Reg/Tri/Quad & Plenum F-Connectors
- Fits 60% regular, tri-shield and quad shield cables
- Nickel-plated, brass-construction for superior corrosion resistance
- Designed for use in satellite and cable TV installations
- Weatherproof for indoor and outdoor use
- Use 30-793 or LinearX® Compression Tools

RG-11 RTQ™ InSITE™ F-Connectors
- Fits 60% regular and quad shield RG-11 cables
- Plenum cable version also available
- Use 30-793 Compression Tool for termination
- Standard 1/4" x 1/4" cable prep. Use 45-111 Coax Stripper

InSITE™ BNC Connectors
- Clear 360° window for confident cable insertions
- Nickel-plated, brass-construction for superior corrosion resistance
- Moisture-inhibiting design
- Use 30-793 or 33-632 Compression Tool
- 75 Ohm nominal impedance
- Gold-plated pin contact area
- Available in straight, 90° and plenum versions

OmniCONN™ F-Connectors
- Non corrosive nickel plated brass body and polycarbonate bushing
- Nylon adapter sleeve and o-ring provide double protection for a watertight seal
- Free spinning hex nut for ease of installation onto all 7/16 ports
- 75 ohm nominal impedance
- Two-piece pre-assembled connectors

NJX™ Connectors
- 75 ohm nominal impedance
- Bandwidth up to 3 GHZ
- Compatible with all IDEAL Compression Tools
- Compact body size
- RG-6 and RG-6 Quad versions

TLC™ Connectors
- No compression tool required
- 75 ohm nominal impedance
- Bandwidth up to 3 GHZ
- Compact body size
- RG-6 and RG-6 Quad versions

Compression Connectors

Type		Image	Series/Model #	Cable Type	Center Conductor	Dielectric Diameter	Jacket Diameter	Quantity	Part No.
BNC	RG-59		InSITE™ Model #59BNCIS	RG-59	23-18 AWG Solid .023" - .040"	.142" - .148"	.230" - .250"	Card of 4	**92-704**
								Card of 15	**89-047**
								Jar of 35	**89-5047**
								Bulk 1,000	**89-1047**
			InSITE™ 90° Model #59BNCRAIS	RG-59	23-18 AWG Solid .023" - .040"	.142" - .148"	.230" - .250"	Card of 5	**92-693**
			InSITE™ Model #59PLBNCIS	RG-59 Plenum	23-18 AWG Solid .023" - .040"	.134" - 140"	.193" - 224"	Card of 15	**89-049**
	RG-6		InSITE™ RTQ™ Model #6BNCISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	23-18 AWG Solid .023" - .040"	.168" - 183"	.226" - 305"	Card of 4	**92-705**
								Card of 15	**89-048**
								Jar of 35	**89-5048**
			InSITE™ 90° Model #6BNCRAISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	23-18 AWG Solid .023" - .040"	.168" - 183"	.226" - 305"	Card of 5	**92-695**
F	RG-6		RTQ™ XR™ Model #6FRTQXR	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	N/A	.168" - .183"	.226" - .310"	Card of 10	**92-651**
								Jar of 50	**92-650**
								Jar of 100	**92-656**
								Bulk 1,000	**92-659**
			InSITE™ RTQ™ 90° Model #6FRAISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	23-18 AWG Solid .023" - .040"	.168" - 183"	.226" - 305"	Card of 5	**92-691**
			NJX™ Model #6FNJX	RG-6	N/A	.175" - .183"	.254" - .278"	Card of 10	**89-040**
			NJX™ Model #6QFNJX	RG-6 Quad	N/A	.175" - .183"	.275" - .305"	Card of 10	**89-041**
			TLC™ Model #6FTLC	RG-6	N/A	.175" - .183"	.254" - .278"	Card of 10	**85-068**
								Card of 50	**85-168**
			TLC™ Model #6QFTLC	RG-6 Quad	N/A	.175" - .183"	.275"- .305"	Card of 50	**85-178**
			OmniConn™ Model #6FOC	RG-6	N/A	.175" - .183"	.260" - .280"	Jar of 50	**89-044**
								Bulk 1,000	**89-1544**
			OmniConn™ Model #6QFOC	RG-6 Quad	N/A	.175" - .183"	.270" - .295"	Jar of 50	**89-045**
	RG-59		RTQ™ Model #59FRTQ	RG-59/59Q RTQ™	N/A	.142" - .148"	.230" - .270"	Card of 10	**92-611**
								Jar of 50	**92-610**
	RG-11		RTQ™ Model #11FISRTQ	RG-11 RTQ™ RG-11 Quad	18-14 AWG Solid .040" - .066"	.280" - .285"	.390" - .416"	Card of 10	**89-211**
								Bulk 500	**89-1211**
			Cable Specific Model #11PLFIS	RG-11/11Q Plenum	18-14 AWG Solid .040" - .066"	.270" - .280"	.340" - .356"	Card of 10	**92-212**
RCA	RG-59		RTQ™ Model #59RCARTQ	RG-59/59QRTQ™	20-18 AWG Solid .029" - .040"	.142" - .148"	.230" - .270"	Jar of 35	**89-570**
	RG-6		RTQ™ Model #6RCARTQ	RG-6/6Q RTQ™	20-18 AWG Solid .029" - .040"	.175" - .183"	.267" - .305"	Jar of 35	**89-580**

Compression Connectors

Visit www.idealind.com/products/datacomm for Compression Connector Installation Instructions.

Crimpmaster™ Ratcheting Crimp Tool

- Ratcheting tool frame ensures full crimp cycle
- Provides a consistent crimp every time
- Dies change quickly and easily with a screwdriver
- Tool frame works with all IDEAL Crimpmaster™ Die Sets
- Cushioned, comfort-grip handles

Description	Part No.
Crimpmaster™ Crimp Frame Tool (Die set not included)	**30-506**
Replacement Screws	**LB-1284**

Crimpmaster™ Tools and Die Sets

30-556 **Die only**
RJ-11 Crimp Tool for two, four or six-position modular plugs

30-559 **Tool w/die 30-522**
RJ-45 CAT 5/5e Eight-position Crimp Tool for keyed or non-keyed modular plugs. Not for Cat 6

30-560 **Tool w/die 30-521**
RJ-45 Eight-position Crimp Tool for AMP® RJ-45 modular plugs

30-573 **Tool w/die 30-481**
Cambridge CP-88, CP-89 BNC/TNC coax connectors with RG-58, RG-59/RG-62 AU cables (Hex 0.305 (7.75mm), 0.068 (1.73mm), 0.228 (5.79mm)

30-576 **Die only**
RG-174, Mini 59 BNC/TNC Connectors (Hex, 0.178 (4.52mm), 0.128 (3.25mm), 0.068 (1.73mm)

30-577 **Tool w/die 30-482**
N-Series and RG-8/11 Connectors (Hex, 0.429 (10.90mm), 0.100 (2.54mm), 0.080 (2.03mm)

30-578 **Tool w/die 30-483**
RG-59, RG-6, and 8281 50 and 75 OHM cables (Hex, 0.324 (8.23mm), 0.255 (6.48mm), 0.068 (1.73mm), 0.042 (1.07mm)

30-581 **Tool w/die 30-502**
RG-58, RG-59/62, BNC/TNC Coax Connectors (Hex, 0.255 (6.48mm), 0.213 (5.41mm), 0.068 (1.73mm)

30-582 **Tool w/die 30-503**
F-type CATV RG-59, RG-6 Connectors (Hex, 0.350 (8.89mm), 0.320 (8.13mm), 0.255 6.48mm)

30-587 **Die only**
RG-58, RG-174 and G-8218 for both 50 and 75 ohm cables (Hex 0.213 (5.41mm), 0.178 (4.52mm), 0.068 (1.73mm), 0.042 (1.07mm)

30-591 **Die only**
Plenum and Non-Plenum Thinwire Cables RG-58 and 59 (Hex, 0.213 (5.41mm), 0.190 (4.83mm), 0.068 (1.73mm), 0.042 (1.07mm)

30-593 **Die only**
Mini UHF and BNC/TNC 5 cavity (Hex, 0.052 (1.32mm), 0.068 (1.73mm), 0.100 (2.54mm), 0.213 (5.41mm), 0.255 (6.48mm)

30-572 **Die only**
16-26 AWG (1.31mm² - .128mm²) miniature insulated rings, spade and butt splices

30-579 **Tool w/die 30-500**
22-10 AWG (.324mm² - 5.261mm²) insulated terminals/ color coded nests

30-580 **Die only**
22-8 AWG (.3mm² - 8mm²)
non-insulated terminals

30-586 **Die only**
22-12 AWG (.324mm² - 3.31mm²)
Non Insulated Open Barrel Connectors, Commercial Type

30-594 **Die only**
Fully Insulated quick disconnect terminals with thinner wire barrels 22-10 AWG (.324mm² - 5.261mm²)

30-599 **Die only**
30-18 AWG (.205mm² - 2.08mm²) Open Barrel Pins and Sockets

Crimp-on F-Connectors

Nickel plated brass connectors designed for indoor coax terminations for video and other RF applications

- RG-59, RG-6, RG-6 Quad versions are available
- All versions require a hex crimp to secure cable to connector
- 1/4"x 1/4"cable prep for all models
- Crimp with 30-503 Crimpmaster™ Ratcheting Crimp tool
- Hex crimp sizes: RG-59 and RG-6, .320" cavity. RG-6 Quad, .350" cavity

Description	Quantity	Part No.	Quantity	Part No.
RG-6 F Crimp-on Coax Connector	Card of 10	**85-037**	Card of 50	**85-017**
RG-6 F Quad Crimp Connector	Card of 10	**85-057**	—	—
RG-59 F Crimp-on Coax Connector	Card of 10	**85-036**	—	—

Twist-On F-Connectors

- After cable is 1/4 in. x 1/4 in. stripped, simply twist on connector
- No termination tool required
- Available in two styles, RG-6 and RG-59

Description	Quantity	Part No.
F-Type RG-6 Twist-On Connector	Card of 10	**85-053**
	Card of 50	**85-039**
F-Type RG-59 Twist-On Connector	Card of 4	**84-018**
	Card of 10	**85-035**

Connector Installation and Removal Tool

- Patented design works on BNC and F connectors
- Works on compression and hex connectors
- Comfort grip handle aids in installing and removing connectors on coax cable
- F-post for aid in cable to connector assembly

Description	Part No.
F & BNC Coax Connector Tool - 8 in. length	**35-046**

Coax Strip & Crimp Tool

- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals
- Cushioned, comfort-grip handles

Description	Part No.
Coax Strip & Crimp Tool	**30-433**

F-Type Adapters & Terminators

- Nickel-plated brass construction
- For 75Ω applications

Description	Quantity	Part No.
3GHz F-Splice Adapter, high bandwidth, for standard and high definition applications, <0.25dB insertion loss, >25dB return loss	Card of 4	**85-339**
	Card of 10	**85-340**
Female to RCA Male Adapter – converts female F-connectors to male RCA connectors	Card of 2	**85-936**
RCA Female-to-Female Adapter	Card of 2	**85-937**
Coax Cable F-Terminators - for all open ports on coax wall plates and splitters	Card of 4	**85-073**
90° F-Adapter - F-female to F-male coax adapter	Card of 2	**85-070**
BNC Female to BNC Female Adapter	Card of 2	**85-075**
	Card of 10	**92-817P**

Impact Punchdown Tool

- Insert and cut cable terminations effortlessly
- Adjustable high/low actuation setting accommodates termination requirements
- Turn-Lock™ Style blade holding design
- Impact-absorbing cushioned grip reduces operator stress for high volume installers

Description	Part No.
Punchmaster™ II Punchdown Tool w/full 110 & 66 blades	35-485

Punchdown Tool Blades

Removable Blades	Part No.
110 Turn-Lock™ blade	35-495
66 Turn-Lock™ blade	35-497
110/66 combo blade w/cutting edges	35-407
Krone® blade	35-478
Bix® blade	35-479

Bix® is a registered trademark of Nortel. Krone® is a registered trademark of Krone, Inc.

Ratchet Telemaster™ Modular Plug Crimping Tool

- Heavy-duty version of the 30-496 Telemaster™ tool requires less user hand force
- Ratchet ensures full cycle crimping every time
- Crimps RJ-45 (8P8C) and RJ-11/12 (6P6C/6P4C) modular plugs
- Multi-function tool also cuts UTP/STP and strips CAT 5e/6 cable jacket and flat cable jackets
- Black oxide coated steel frame with cushioned handles for strength and comfort

Description	Part No.
Ratchet Telemaster™	30-696
Replacement Cut & Strip Blade Set	LA-4102

Telemaster™ Modular Plug Crimping Tool

- Crimps RJ-45 (8P8C) and RJ-11/12 (6P6C/6P4C) modular plugs
- Multi-function tool also cuts UTP/STP and strips round CAT 5e/6 cable jacket
- Black oxide coated steel frame with cushioned handles for strength and comfort

Description	Replacement Blade	Kit Part No.	Tool Only Part No.
Telemaster™ Crimping Tool RJ-45 and RJ-11/12	LB-1747	33-700*	30-496

*Kit includes 10 each, RJ-45 8P8C, RJ-11 6P6C and RJ-11 6P4C modular plugs.

Data/Voice Crimp Tool Kit

- Compact design is 2/3 the size of traditional crimp tools
- Crimps RJ-45 (8P8C) and RJ-11/12 (6P6C/6P4C) modular plugs
- One tool assembly process – cut, strip and crimp connectors on to CAT 3/5e/6 cables
- Black oxide coated steel core with spring loaded handle and locking feature

Description	Part No.
Data/Voice Crimp Tool Kit includes ten RJ-11 (6P6C) and ten RJ-45 connectors	33-396

Probe Pic & Spudger

- For isolating conductors and removing terminated wires from voice and data IDC contacts

Description	Part No.
Probe Pic & Spudger	35-473

Telephone/Data Cable Splice and Repair Kit

- All in one specialty tool for crimping UR/UY/UB IDC splice connectors
- Features a parallel crimping surface to prevent damage to connectors during crimping process
- Two stripping holes for 22 to 24 AWG (phone/twisted pair) cables
- Cutter for cable and conductor trimming
- Plier nose for pulling and sorting wires in a box

Description	Part No.
Kinetic® Super Wire Stripper/Crimper Kit – includes 25 IDC connectors (UR-I, 3-Wire Butt Splice)	**33-719**

Insulation Displacement Connectors

85-925/86-925

85-950

85-900

IDC connectors create fast splice and tap connections on solid copper wires. Designed for low voltage telecommunication cables.

- Moisture-resistant sealant protects wires from corrosion
- Use with solid copper single-conductor wire
- Use 33-719 tool for proper crimping force and crimping angle

Description	Quantity	Part No.
UR-I, 3-Wire Butt Splice IDC	25	**85-925**
UR-I, 3-Wire Butt Splice IDC	100	**86-925**
UY-I, 2-Wire Butt Splice IDC	25	**85-950**
UB-I, 2-Wire Tap Splice IDC	25	**85-900**
IDC Combo Pack – includes 10 UR, 10 UY and 5 UB	25	**85-960**

CAT 5e RJ-45/RJ-11 Modular Plugs

- Plugs support the latest cable system performance categories when installed in compliance with appropriate standards and methods
- Plugs work with 24 AWG solid or stranded conductors and round or flat cables.
- 50 micron gold contacts

Description	Quantity	Part No.
CAT 5e 8-Position 8-Contact, RJ-45	10	**85-147**
	25	**85-346**
	50	**85-396**
	100	**86-396**
6-Position 6-Contact, RJ-11 (RJ-12)	25	**85-345**
6-Position 4-Contact, RJ-11	25	**85-344**

CAT 6 RJ-45 Modular Plugs

- Three-piece design provides easy installation and optimal performance
- Crimps with a standard RJ-45 crimp tool
- 50 micron gold contacts, 8-position, 8-contact
- Suitable for solid or stranded conductors 23-24 AWG
- Not compatible with Crimpmaster™ RJ-45 Die Set

Description	Quantity	Part No.
CAT 6 RJ-45 Modular Plugs	25	**85-366**

Compatible with IDEAL 30-696, 30-496 and 33-396 Modular Plug Crimp Tools.

Strain Relief Boots for Modular Plugs

- Prevents broken connector tabs and snagging while extending connector life
- Minimizes cable bends that can reduce data speed and result in data loss
- Dampens cable movement and vibrations that can result in premature connector failure
- For CAT5e and CAT6 RJ-45 modular plugs

Description	Quantity	Part No.
Strain Relief Boots for Modular Plugs	25	**85-380**
15 Strain Relief Boots and 15 8P8C RJ-45 CAT5e Modular Plugs	15	**85-379**

Ringer™ Adjustable Blade Strippers

- Four models cover cable diameters up to 9/16 in.
- All models include two adjustable depth blades and one adjustable round slitting blade
- Common uses are for fiber jackets, mini-coax prep, twisted pair cables and other specialty copper cables where standard stripping products are not available
- Replacement blades available for all models

Description	Typical RG Cables	Replacement Blade*	Part No.
Cable Stripper, up to 1/8 in. (3.2mm) O.D (Gray)	RG-174, RG-187	**L-9225**	**45-162**
Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D. (Blue)	Mini Coax RG-58,CB	**L-9225**	**45-163**
Big Blue Cable Stripper, 1/4 in. (6.4mm) to 9/16 in. (14.3mm) O.D. (Blue)	RG-11, RG-8	**L-9226**	**45-164**
Cable Stripper, 3/16 in. (4.8mm) to 5/16 in. (8mm) O.D. (Black)	RG-59/6, UTP Cable	**L-9225**	**45-165**

*A set of blades consists of three straight blades and one round blade.

Economy UTP Cable Stripper

- Strips Cat 3, 5, 5e & 6 cables
- One-step stripping

Description	Part No.
Economy UTP Cable Stripper	**45-167**

PrepPRO® Coax/UTP Cable Stripper

- Auto adjusting blade depth for 6/6Quad/59 coax cable
- Strips RG-59/6 Plenum cables
- 1/4" x 1/4" coax preparation
- Replaceable blade cartridges
- CAT5e/6 jacket stripping
- Spring loaded for consistent cutting force

Description	Part No.
PrepPRO® Coax/UTP Cable Stripper	**45-605**
Replacement Coax Cartridge	**45-6051**
Replacement UTP/STP Jacket Cartridge	**45-6052**

RG-11 Coax Stripper

- For use with IDEAL RG-11 compression connectors (89-211, 89-1211), provides 1/4 in. x 1/4 in. strip
- Fixed blade depth

Description	Part No.
RG-11 Coax Stripper for Compression Connectors	**45-111**

Adjustable Blade Coax Strippers

- Two and three blade models for prepping coax cables
- Adjustable blade depth (hex wrench included in handle) for fine calibration to any cable jacket thickness and overall diameter.
- All blades are spaced approximately ¼" apart for compatibility with traditional compression or crimp connectors requiring a ¼" x ¼" cable preparation.
- Blades can be adjusted to a no-cut position for most size cables when only a single blade is needed.
- Slider bar offers fast variation in blade depth without need for adjusting the individual hex screws.

Description	Replacement Blade	Part No.
Coax Stripper - 2 Step (Blue cartridge)	**45-524**	**45-526**
Coax Stripper - 3 Step (Black cartridge)	**45-522**	**45-520**

Coax Stripmaster® Wire Strippers

- Provides variable stripping lengths
- Knife-type blades feature multiple hole diameters sized for two step removal of outer jacket insulation and center conductor

Description	Replacement Blade	Part No.
Coax Stripmaster® for RG-6 Coax Cable	**LB-740**	**45-262**
Coax Stripmaster® for RG-59 Coax Cable	**LB-743**	**45-265**
Coax Stripmaster® for RG-6 Quad Shield Coax Cable	**LA-3953**	**45-282**

Round Cable Slitting & Ringing Tool

- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 1.75 in. O.D.
- Blade adjusts for jacket thicknesses up to .125 in.
- Spare blade in handle base

Description	Replacement Blade*	Part No.
Round Cable Slitting and Ringing Tool	**LB-1748**	**45-144**

*2/package

Data T®-Cutter

- Cuts any round copper cable and helps maintain cable geometry
- Compact size is smaller and lighter than traditional 9" cable cutters
- Steel reinforced center conductors can be trimmed with bolt cutting holes
- Locking latch keeps tool closed in pouch

Description	Part No.
Data T®-Cutter	**45-074**

Electrician's Scissors

- Designed for use in telephone and electrical service applications
- Cut up to 16 AWG solid and 12 AWG stranded wire
- Serrated surface on back blade edge cleans wire
- Stripping notches strip 19 and 23 AWG wire
- Chrome over nickel plating

Description	Part No.
Electrician's Scissors w/stripping notches	**35-088**

Cable Splicing Kit

- Kit designed for use in telephone and electrical service applications
- High carbon steel blade in Splicing Knife remains sharp and cuts easily through many insulation types
- Kit includes Scissors 35-088, Splicing Knife 35-1091 and Leather Holder

Description	Part No.
Cable Splicing Kit	**35-093**
Cable Splicing Knife (only)	**35-1091**

2.4 GHz Satellite & Digital TV Splitters

- Designed for easy mounting over cable
- All ports are F female connectors, 75Ω
- Two grounding screws eliminate the need for grounding block
- All ports power pass

Description	Part No.
2-Way, 5MHz - 2.4GHz	**85-332**
3-Way, 5MHz - 2.4GHz	**85-333**
4-Way, 5MHz - 2.4GHz	**85-334**

1 GHz Cable TV/General Purpose Splitters

- Nickel-plated housing, soldered back
- High-performance Printed Circuit Board design

Description	Part No.
High Performance Cable Splitter, 5MHz-1GHz, 2-Way	**85-132**
High Performance Cable Splitter, 5MHz-1GHz, 3-Way	**85-133**
High Performance Cable Splitter, 5MHz-1GHz, 4-Way	**85-134**

Use terminators (85-073) on all unused ports for optimal performance.

Master Series Network Service Kit

- Kit allows user to cut, strip, terminate and test data cables. Use for Cat 5e, Cat 6 and voice installations.

Description		Part No.
Master Series Network Service Kit		**33-706**
Kit Includes:	**Qty.**	**Part No.**
Ratchet Telemaster™	1	**30-696**
Punchmaster™ II w/110 & 66 Blades	1	**35-485**
Probe Pic and Spudger	1	**35-473**
UTP/STP Stripper	1	**45-165**
Cable Splicing Kit	1	**35-098**
LinkMaster™ Tester	1	**62-200**
7-in-1 Twist-a-Nut™ Screwdriver	1	**35-908**
PRO Amplifier Probe & Tone Generator Kit	1	**33-864**
Kinetic Super™ Wire Stripper/Crimper	1	**45-719**
8-Position RJ-45 Modular Plugs	50	**85-396**
Large Mouth Bag, 13 in.	1	**35-410**

Pro XL Compression Hip Kit

- Cut, strip and terminate in one handy professional tool kit.
- For F/BNC/RCA compression

Description		Part No.
Pro XL Compression Hip Kit		**33-793**
Kit Includes:	**Qty.**	**Part No.**
OmniSeal™ Pro XL Compression Tool	1	**30-793**
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
Pouch with Belt Clip	1	—

RF Coax Crimp & Compression Kit

- Professional kit for security and cable/satellite installers to crimp or compress F and BNC coax connectors. Multiple die sets offer a wide range of connectors to terminate.

Description		Part No.
RF Coax Crimp & Compression Kit		**33-410**
Kit Includes:	**Qty.**	**Part No.**
OmniSeal™ PRO XL Compression Tool	1	**30-793**
Ratchet Crimp Tool	1	**30-503**
2-Step Adjustable Coax Stripper	1	**45-526**
3-Step Adjustable Coax Stripper	1	**45-520**
Replacement Cassette	1	**45-523**
Data T®-Cutter	1	**45-074**
58/59 BNC/TNC Die Set	1	**30-581**
RG-59 Cambridge-type Die Set	1	**30-573**
RG-174 Mini-59 Die Set	1	**30-576**
RG-6 RTQ™ Compression F-Connector	50	**92-650**
Mechanic's Bag	1	**35-535**

LinearX®3 Hip Kit

- Cut, strip and terminate F/BNC/RCA connectors in one handy starter tool kit.

Description		Part No.
LinearX®3 Hip Kit		**33-622**
Kit Includes:	**Qty.**	**Part No.**
LinearX®3 Compression Tool	1	**33-632**
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
Pouch with Belt Clip	1	—

Pro Compression Starter Kit

- Service kit includes both F and BNC connectors as well as professional tools to cut, strip and terminate coax cables. Designed for security and cable/satellite installation.

Description		Part No.
Service Compression Kit		**33-639**
Kit Includes:	**Qty.**	**Part No.**
OmniSeal™ PRO XL Compression Tool	1	**30-793**
PrepPRO® Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
RTQ™ XR RG-6 F Compression Connectors	25	**92-650**
RG-59 InSITE™ BNC Compression Connectors	10	**89-047**
RG-6 InSITE™ BNC Compression Connectors	5	**89-048**
RG-59 Plenum InSITE™ BNC Compression Connectors	5	**89-049**
RG-6 90° F Compression Connectors	3	**92-691**
RG-59 90° BNC Compression Connectors	3	**92-693**
3GHz F-81 Splice Adapters	3	**85-340**
BNC Adapters	3	**85-592**

Economy Compression Kit

- Starter kit includes the tools and connectors to cut, strip and terminate coax cables.
- For use with F Connectors

Description		Part No.
Economy Compression Kit		**33-620**
Kit Includes:	**Qty.**	**Part No.**
LinearX®3 Compression Tool	1	**33-632**
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	**45-605**
Data T®-Cutter	1	**45-074**
RG-59 RTQ™ Compression Connectors	10	**92-610**
RG-6 RTQ™ XR™ Compression Connectors	30	**92-650**

Technician's Service Kit

- Kit includes tools to install twisted pair cable on blocks and data jacks.

Description		Part No.
Technician's Service Kit		**33-505**
Kit Includes:	**Qty.**	**Part No.**
Electrician's Scissors w/Stripping Notches	1	**35-088**
Probe Pic & Spudger	1	**35-473**
Punchmaster™ Punchdown Tool w/110 & 66 Blades	1	**35-485**
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	1	**35-908**
UTP/STP Stripper	1	**45-165**
Nylon case	1	**62-205**

RJ-45/11 Four, Six & Eight-Position Combination TelCom Termination Kit

- TelCom Kit is designed for the user who will terminate RJ-11 and RJ-45 twisted pair cables.

Description		Part No.
TelCom Termination Kit		**33-704**
Description	**Qty.**	**Part No.**
Telemaster™ for RJ-11/RJ-45 Plugs	1	**30-496**
6P4C RJ-11 Modular Plugs	15	**85-344**
6P6C RJ-11 Modular Plugs	15	**85-345**
8P8C RJ-45 CAT 5e Modular Plugs	15	**85-346**

RJ-45 Termination Kit

- Suited for the user who will cut and terminate RJ-45 Modular Plugs.

Description		Part No.
RJ-45 Termination Kit		**33-750**
Description	**Qty.**	**Part No.**
Telemaster™ for RJ-11/RJ-45 Plugs	1	**30-496**
UTP/Coax Stripper	1	**45-165**
8-Position RJ-45 CAT5e Modular Plugs	50	**85-346**

Telemaster™ Crimp Kit

Description		Part No.
Telemaster™ Crimp Kit		**33-700**
Description	**Qty.**	**Part No.**
Telemaster™ for RJ-11 (1, 2, 3 pair) and RJ-45 Plugs	1	**30-496**
CAT 5e 8-Position, 8-Contact RJ-45 Modular Plugs	10	**85-346**
6-Position RJ-11 Modular Plugs	10	**85-345**
6-Position, 4-Contact RJ-11 Modular Plugs	10	**85-344**

PRO Network/Telco Installer Kit

- Kit allows user to terminate modular plugs as well as data blocks or jacks.

Description	Part No.
PRO Network/Telco Installer Kit	**33-506**

Description	Qty.	Part No.
Ratchet Telemaster™	1	**30-696**
Punchmaster™ II 110 & 66 Blades	1	**35-485**
Probe Pic and Spudger	1	**35-473**
UTP/STP Stripper	1	**45-165**
Electrician's Scissors w/Stripper Notches	1	**35-088**
8-Position RJ-45 Modular Plugs	50	**85-396**
Mechanic's Bag	1	**35-535**

Visual Fault Finder

Laser light source used to locate breaks, faulty splices and crimps

- 2.5mm Universal Adapter for all ST®, SC and FC connectors
- Useful over a distance of 5km (3 miles)
- Two AA batteries (included) provide over 30 hours of continuous use
- Slim, pocket-sized tool in rugged solid aluminum body
- Nylon carrying case with belt loop included

Description	Part No.
Visual Fault Finder	**VFF5**

Note: ST® is a registered trademark of AT&T.

FiberMASTER™ Fiber Optic Test Kit

- **Fiber Optic Power Meter & Light Source** – Four wavelength power meter for multimode and single mode testing, and 850nm multimode LED light source.
- **Calibration Function** – Stores reference power level for quick dB loss measurements eliminating the need to manually calculate loss.
- **Save Time and Money** – Power meter features 2.5mm universal and FC adapters, light source includes ST®, SC and FC adapters to test the most common interfaces.
- **Ready for FTTx** – 1490nm measurement wavelength for use with nearly all single mode Fiber-To-The-Home applications.
- **Designed for the Field** – Unique "docking" light source and easy three-button operation make this the perfect fiber tester for use in the field.

Description	Part No.
Power meter with 850NM fiber light source	**33-928**
Power meter with four wavelength MM/SM light source	**33-931**

Note: ST® is a registered trademark of AT&T.

MiniLite-Strip™ Optical Fiber Stripper

- Small strip notch engineered and precision-ground to strip 900 micron or 250 micron buffer coatings from 125 micron fiber
- Larger round strip notch machined to remove the 3mm outer jacket
- Strip notches pre-set and locked, no field adjustment necessary

Description	Part No.
MiniLite-Strip™ Optical Fiber Stripper	**45-352**

Stripmaster® Ribbon Fiber Jacket Stripper

- Removes jacket from Ribbon Fiber without damage to the Kevlar® strength member of the Ribbon Fiber

Description	Part No.
Stripmaster® Wire Stripper Frame only	**L-5620**
Blade-set for use with Corning® Plenum and Riser Ribbon Fiber Cable	**LB-1152**
Blade-set for use with Corning® "Fanout" Ribbon Cable	**LB-1153**

Note: Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company. Corning® is a registered trademark of Corning, Inc.

Frame and blade set sold separately.

Serrated Kevlar® Cutter

- Superior quality high-carbon stainless steel with molybdenum and vanadium provides hard, razor-sharp edges
- Breaker notch cuts jacket and breaks fiberglass in one step
- Textured cushioned-grip handles
- Designed to cut up to 3mm fiber cables

Description	Part No.
Serrated Cutter w/Breaker Notch (Patent pending)	**45-344**

Note: Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company.

DualScribe™ Double-Ended Fiber Optic Scribes

- Three professional quality blade styles to choose from to meet your specific needs – Ruby, Sapphire, Carbide
- 30° single bevel – DualScribe™ reversible blade doubles tool life
- Soft non-slip grip provides precise control during scribing
- Clear safety cap protects the blades from damage when not in use

Description	Part No.
Ruby Blade Fiber Optic Scribe (Red Handle)	**45-357**
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