



**IDEAL Full-Line Catalog**





You know the craft inside and out. You're never finished with the job until it meets your standards. You take **pride** in the way you go about day-to-day business, and that means only using equipment that can hold up its end of the bargain. We understand that kind of pride. Every day IDEAL considers the needs of electricians and the result is a line of products worthy of a professional.



The tools and instruments you use say a lot about the quality of work you do. You know what it takes to succeed in today's modern electrical world and IDEAL fills those needs with high-quality, innovative solutions. We realize there's a bond between a professional and his equipment that can't be broken by the latest gimmick. That's why this catalog is filled with thoughtfully designed **products** you can depend on for years.



Every IDEAL product is designed to deliver superior **performance**. That means they're built to be easy-to-use, they're built to last and, most importantly, they're built with your safety in mind. One day, one job at a time, IDEAL products are there to help you perform at the highest level.



## Wire Termination

Twist-On Wire Connectors	A-2
PowerPlug™ Luminaire Disconnects	A-11
Push-In Wire Connectors	A-13
Pigtail & Grounding Connectors	A-14
Crimp Terminals & Splices	A-17
Terminal Strips	A-24
Crimp Connectors & Set Screw Connectors	A-28
Mechanical Connectors	A-30
BUCHANAN Wire Connectors	A-36
BUCHANAN B-TAP® & Streetlight Kits	A-40
BUCHANAN Terminal Blocks	A-44

A

## Wire Installation

Fish Tapes & Accessories	B-2
Fishing Poles	B-7
Wire Pulling Lubricants & Accessories	B-8
Conduit Benders	B-13
Pulling Supplies	B-15

B

## Tools and Totes

Wire Strippers	C-2
Pliers	C-8
Screwdrivers	C-16
Cable Cutters	C-22
Crimp Tools	C-23
Miscellaneous Hand Tools	C-24
Hand Tool Kits	C-26
Tool Carriers	C-28
Insulated Hand Tools	C-32
Cutting & Holmaking Tools	C-36

C

## Stripmaster® Wire Strippers

Stripmaster® Wire Strippers	D-2
Custom Stripmaster® Wire Strippers	D-4

D

## Wire Management

Cable Ties	E-2
Cable Staples	E-10
Heat Shrink	E-12
Heat Guns	E-15
Wire Markers	E-16
Switches	E-18
Commutator Maintenance	E-30

E

## Test and Measurement

Digital Multimeters	F-2
Clamp Meters	F-9
Circuit Tracers	F-16
Insulation & Earth Testers	F-19
Power Quality Meters	F-20
SureTest® Circuit Analyzers	F-23
Circuit Breaker Finders	F-24
Electrical Testers	F-28
Specialty Testers	F-30
Accessories	F-31

F

## DataComm Equipment

Testers	G-2
Tools	G-10
Strippers	G-14
Connectors	G-18
Kits	G-24
Fiber Optic	G-30

G

## Safety

Lockout/Tagout Products	H-2
Signs	H-13
Safety Tapes	H-14

H

CERTIFIED  
ISO 9001:2000





### **BULZ-EYE™ Wood Boring Bits**

Twin cutting edges, 50% wider surface, heat treated for added durability



### **PowerPlug™ Luminaire Disconnects**

Replace ballasts easily and safely with simple two-piece, push-in design



### **SureTest® Open/Closed Circuit Tracer**

A new level of safety, performance and ease-of-use for wire tracing



### **Compression Connectors**

Easy to install, nickel-plated brass body



### **FiberMASTER™ Fiber Optic Test Kit**

Designed for the field, stores reference power level for quick dB loss measurement



### **Volt-Guard™ Fish Tape**

The finest blend of strength and flexibility



### **Coax Hip Kit**

The all-in-one professional coax termination kit





**WeatherProof™ and UnderGround™  
Wire Connectors**

Designed specifically for damp, wet  
or underground electrical connections

**SecuriTEST™ PRO  
CCTV/Security Tester**  
Seven essential CCTV tools  
in a single compact package

**Lil' Ripper Stripper™**  
Rips ROMEX®, outer jacket cleanly and  
quickly, strips inner conduit wires

**Voltage Performance  
Monitor (VPM)**

Real-time TRMS  
voltage, frequency and  
harmonics monitoring

**PowerBlade™  
Cable Cutter**

Fits almost any  
drill, heavy-duty  
gears and specially  
hardened blades

**Velocity™ Cable  
Pulling Lubricant**

Superior cling and  
maximum friction  
reduction works with  
all popular cable types

**Twister® LT, Twister® and Twister® PRO  
Wire Connectors**

Designed to provide comfort and performance  
for stronger, more secure connections

**SureTest® Circuit Analyzer**  
Arc fault tester, high accuracies,  
ground to neutral voltage

**Combine need and ingenuity.  
The result is innovation.**



# Connectors designed for every application



## **Wire-Nut® Wire Connectors**

The original twist-on wire connector features a positive-grip design for easy installation. Five color-coded models cover hundreds of wire combinations from 22 through 8 AWG. The fixed square-wire spring provides a secure connection that won't relax over time.

## **Wing-Nut® Wire Connectors**

The next step in IDEAL wire connector innovation. Three models accommodate a wide range of circuit and fixture wiring combinations from 18 through 6 AWG. Built-in, contoured wings provide extra leverage on maximum wire combinations. And the live-action spring expands to accept a broader range of wire shapes and sizes.



## **Twister® Wire Connectors**

The industry's premier wire connector. Just two models accommodate the majority of common wiring configurations from 22 through 6 AWG. The ribbed cap provides a secure grip and swept wings offer extra leverage. A patented square-wire spring provides safe, secure connections.

## **Twister® Al/Cu Wire Connectors**

The only aluminum-to-copper twist-on wire connector. Specially formulated compound reduces corrosion build-up on aluminum conductors for better conductivity and cooler connections. UL Listed and CSA Certified for aluminum-to-copper connections.



## **Twister® DB Plus™ Wire Connectors**

The smallest wet location/direct burial wire connector. Offers the widest range of wire combinations from 20 through 12 AWG. Features non-hardening sealant to ensure safe and moisture-free connections. UL Listed and CSA Certified for underground and wet locations.

## **B-CAP® Wire Connectors**

Contoured Classic Fins™ provide a secure grip for extra torque. Three models cover a full range of wire sizes from 22 through 6 AWG. The square-wire spring locks onto conductor for fast, secure connections. Compact size allows easy handling and installation.





**A**

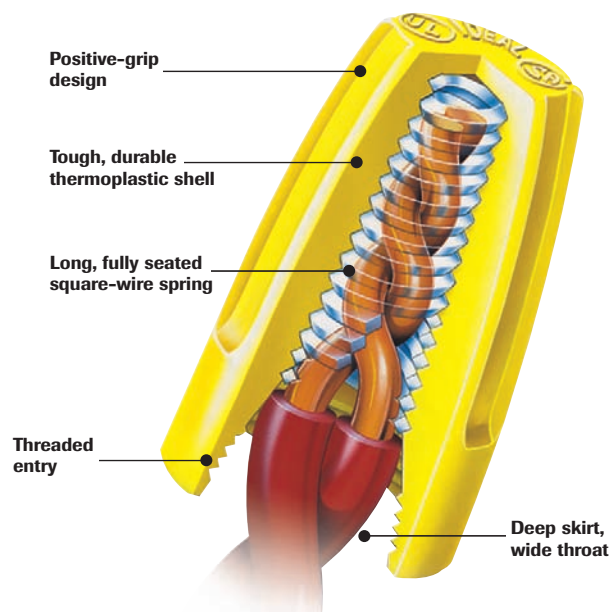
# ***Wire Termination***





# Wire-Nut® Wire Connectors

- Five color-coded models cover a full range of wire sizes from 22 - 8 AWG
  - Fixed, square-wire spring creates its own threads – maintains a secure positive grip that will not relax over time
  - No pre-twisting required – positive grip design provides fast, easy installation
  - Deep, wide skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
  - Reusable for easy circuit changes and additions
  - Tough, UL94V-2 flame-retardant shell rated at 105°C (221°F)
  - UL Listed to 486C and CSA certified to C22.2 #188; comply with Federal Specification W-S-610E
  - Classified in accordance with IEC Publications 998-2 and 998-2-4
- 
- The image shows two RJ45 modular connectors. The one on the left is grey and the one on the right is blue. Both have a square-shaped body with a small tab on top and a wider skirt at the bottom. They are connected to twisted-pair cables.



### Dimensions $\left(\frac{\text{Inches}}{\text{mm}}\right)$

Model	A	B	C	D	E
71B®	$\frac{11/64}{4.5}$	$\frac{1/4}{6.5}$	$\frac{21/64}{8}$	$\frac{11/64}{4.5}$	$\frac{37/64}{15}$
72B®	$\frac{11/64}{4.5}$	$\frac{5/16}{8}$	$\frac{25/64}{10}$	$\frac{3/16}{5}$	$\frac{45/64}{18}$
73B®	$\frac{11/64}{4.5}$	$\frac{11/32}{9}$	$\frac{7/16}{11}$	$\frac{11/32}{9}$	$\frac{55/64}{22}$
74B®	$\frac{17/64}{7}$	$\frac{7/16}{11}$	$\frac{35/64}{14}$	$\frac{5/16}{8}$	$\frac{61/64}{24}$
76B®	$\frac{9/32}{7}$	$\frac{1/2}{13}$	$\frac{19/32}{15}$	$\frac{3/8}{10}$	$\frac{1-1/16}{27}$

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
71B®	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	<b>30-071</b>
				Carton of 1,000	<b>30-171</b>
				Keg of 25,000 (loose pack)	<b>30-271</b>
				Barrel of 150,000	<b>30-871</b>
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	<b>30-072</b>
				Carton of 1,000	<b>30-172</b>
				Keg of 10,000 (loose pack)	<b>30-272</b>
				Barrel of 85,000	<b>30-872</b>
73B®	Orange	600V* 22 to 14 AWG Min. 1 #18 & 1 #20 Max. 4 #16 & 1 #20	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Box of 100	<b>30-073</b>
				Jar of 300	<b>30-073J</b>
				Carton of 1,000	<b>30-173</b>
				Keg of 5,000 (10 bags, 500 ea.)	<b>30-273</b>
				Keg of 10,000 (loose pack)	<b>30-673</b>
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	Barrel of 50,000	<b>30-873</b>
				Box of 100	<b>30-074</b>
				Jar of 175	<b>30-074J</b>
				Carton of 1,000	<b>30-174</b>
				Keg of 5,000 (10 bags, 500 ea.)	<b>30-274</b>
76B®	Red	600V* 18 to 10 AWG Min. 2 #14 Max. 4 #12	600V* ,75mm² to 6,0mm² Min. 2-2,5mm² Max. 2-4,0mm²	Keg of 10,000 (loose pack)	<b>30-674</b>
				Barrel of 35,000	<b>30-874</b>
				Box of 100	<b>30-076</b>
				Carton of 1,000	<b>30-176</b>
				Keg of 2,500 (10 bags, 250 ea.)	<b>30-276</b>
				Barrel of 15,000	<b>30-876</b>

\*1,000V maximum in fixtures and signs



## High Temperature Wire-Nut® Wire Connectors

All of the Wire-Nut® Wire Connector features plus:

- Black, thermoplastic shell specially designed to withstand the extreme heat build-up commonly found in high-wattage light fixtures and signs. UL Listed to 150°C (302°F)
- Four models to cover wire ranges from 22 through 12 AWG

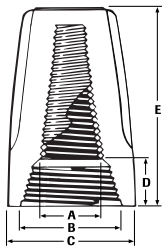


Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
71B®	Black	300V 22 to 16 AWG Min. 2 #22 Str Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² Max. 2-1,5mm²	Carton of 1,000	<b>30-151</b>
				Keg of 25,000 (loose pack)	<b>30-251</b>
72B®	Black	300V 22 to 14 AWG Min. 2 #22 Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Carton of 1,000	<b>30-152</b>
				Keg of 10,000 (loose pack)	<b>30-252</b>
73B®	Black	600V* 22 to 14 AWG Min. 1 #18 w/1 #20 Max. 4 #16 & 1 #20	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Carton of 1,000	<b>30-153</b>
				Keg of 10,000 (loose pack)	<b>30-253</b>
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	<b>30-059</b>
				Carton of 1,000	<b>30-159</b>
				Keg of 5,000 (loose pack)	<b>30-259</b>

\*1,000V maximum in fixtures and signs



### Dimensions (Inches mm)

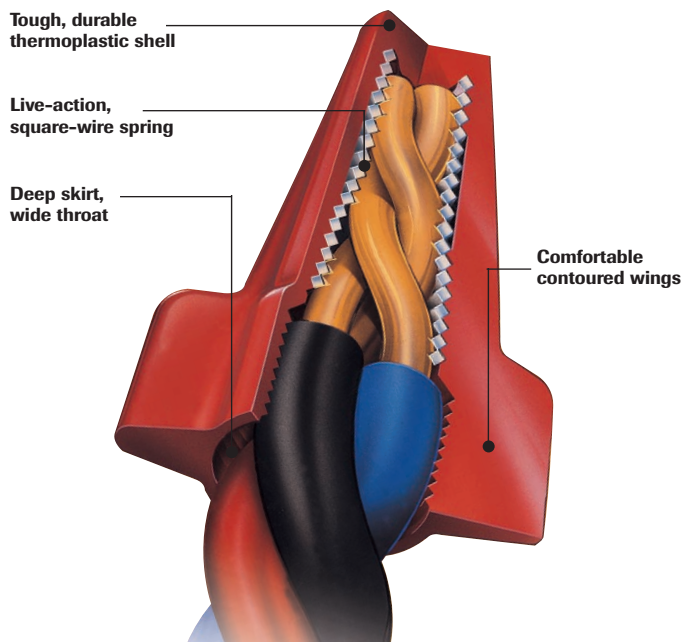


Model	A	B	C	D	E
71B® Black	5/32 4	1/4 6.5	21/64 8	13/64 5	37/64 15
72B® Black	13/64 5	5/16 8	25/64 10	15/64 6	45/64 18
73B® Black	13/64 5	23/64 9	7/16 11	3/8 9.5	55/64 22
59B™ Black	13/64 5	13/32 10	31/64 12	37/64 14.5	1-1/16 27

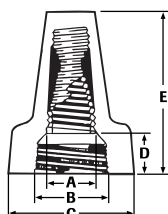


## Wing-Nut® Wire Connectors

- Three color-coded models cover a full range of wire sizes from 18 through 6 AWG
- Specially designed contoured wings provide a secure grip for extra leverage on maximum wire combinations
- Live-action spring expands to accept wire shape and size with no pre-twisting required
- Square-wire spring threads directly onto conductors for fast, secure connections
- Deep skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Easily removed for repeat usage on same size or larger wire combinations
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E
- Classified in accordance with IEC Publications 998-2 and 998-2-4



Dimensions (Inches/mm)



Model	A	B	C	D	E
451®	15/64 6	11/32 9	11/16 18	5/16 8	1-1/64 26
452®	21/64 8.5	15/32 12	15/16 24	5/16 8	1-15/64 31.5
454®	7/16 11	5/8 16	1-3/16 30	13/32 10.5	1-15/32 37.5
92®	21/64 8.5	13/32 10.5	29/32 23	9/32 10	1-5/32 30

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
451®	Yellow	600V* 18 thru 10 AWG Min. 2 #18 Max. 4 #10	600V* ,75mm² to 6,0mm² Min. 2-,75mm² Max. 3-4,0mm²	Box of 100	<b>30-451</b>
				Jar of 225	<b>30-451J</b>
				Jar of 500	<b>30-651J</b>
				Carton of 1,000	<b>30-551</b>
				Keg of 5,000 (10 bags, 500 ea.)	<b>30-651</b>
452®	Red	600V* 18 thru 8 AWG <b>Min. 2 #18</b> <b>Max. 4 #10</b>	600V* ,75mm² to 10,0mm² Min. 2-,75mm² Max. 4-6,0mm²	Barrel of 35,000	<b>30-851</b>
				Box of 100	<b>30-452</b>
				Jar of 300	<b>30-452J</b>
				Jar of 500	<b>30-652J</b>
				Carton of 1,000	<b>30-552</b>
454®	Blue	600V* 14 thru 6 AWG Min. 3 #12 Max. 1 #6 & 2 #8	600V* 2,5mm² to 16,0mm² Min. 3-4,0mm² Max. 2-16,0mm² w/1-4,0mm²	Keg of 5,000 (10 bags, 500 ea.)	<b>30-652</b>
				Barrel of 25,000	<b>30-852</b>
				Box of 50	<b>30-454</b>
				Keg of 2,500 (25 bags, 100 ea.)	<b>30-654</b>

\*1,000V maximum in fixtures and signs

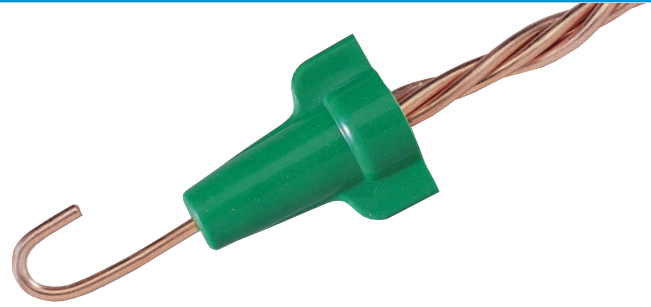
Model	Wire Combinations	2 #18	2 #14	3 #12	5 #12	4 #10	5 #10
451 Yellow	Min 2 #18			Max 3 #12			
452 Red	Min 2 #18					Max 4 #10	
454 Blue				Min 3 #12			Max 1 #6 & 2 #8





## Greenie® Grounding Connector

- Designed for making ground connections and bonding non-metallic sheathed cable
- Contoured wings for maximum leverage
- Live-action, square-wire spring provides superior grounding connections
- Tough, UL 94V-2 flame-retardant shell
- UL Listed to 467 and CSA Certified to C22.2 #188; complies with Federal Specification W-S-610E



Model	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
92®	14 thru 10 AWG Min. 2 #14 Max. 3 #12 & 1 #14	2,5mm² to 6,0mm² Min. 2-2,5mm² Max. 3-4,0mm² w/1-2,5mm²	Box of 100	<b>30-092</b>
			Jar of 150	<b>30-092J</b>
			Carton of 1,000	<b>30-192</b>
			Keg of 5,000 (10 bags, 500 ea.)	<b>30-292</b>



**Greenie® Grounding Connector fully meets the intent of the N.E.C. and specifically aids in compliance with the following:**

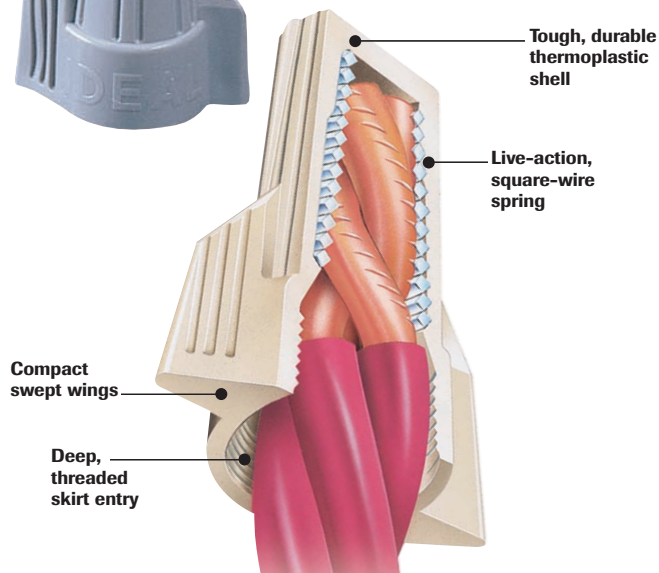
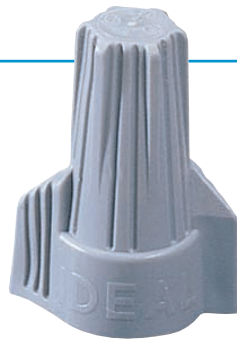
### ARTICLE 250: GROUNDING

- 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



## Twister® Wire Connectors

- Exceptional wire-range capacity — three models handle wire combinations from as small as 22 AWG to as large as 6 AWG
- Ribbed cap provides a secure grip and fast fingertip starts
- Swept wings offer extra leverage and less effort for large wire combinations
- Hexagonal shape accommodates standard nutdriver for tool installation
- Live-action, square-wire spring locks onto wire for safe, secure connections
- Deep skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E
- Classified in accordance with IEC Publications 998-2 and 998-2-4



Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
340°	Lt. Blue	600V* 22 thru 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
				Bag of 500	30-640
				Jar of 500	30-640J
				Barrel of 35,000	30-840
341°	Tan	600V* 22 thru 8 AWG Min. 3 #22 Max. 3 #10	600V* ,34mm² to 10,0mm² Min. 3-,34mm² Max. 3-6,0mm²	Box of 50	30-141
				Box of 100	30-341
				Jar of 400	30-441J
				Jar of 750	30-341J
				Carton of 1,000	30-541
				Keg of 5,000 (10 bags, 500 ea.)	30-641
342°	Gray	600V* 18 thru 8 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	Barrel of 25,000	30-841
				Box of 25	30-142
				Box of 50	30-342
				Keg of 2,500 (10 bags, 250 ea.)	30-642

\*1,000V maximum in fixtures and signs

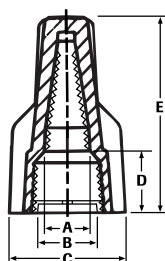


Cu/Cu  
Only



EN 60-998-2-4

Combination	2#22	3#22	3#14	3 #12	3#10	2#8 w/2#12
Cir Mil Area	1,280 (.65mm²)	1,920 (.97mm²)	12,330 (6.24mm²)	19,590 (9.93mm²)	31,140 (15.78mm²)	46,080 (23mm²)
340°						
341°						
342°						



### Dimensions (Inches/mm)

Model	A	B	C	D	E
340° Lt. Blue	5/16 7.8	3/8 9.5	39/64 15.2	27/64 10.6	63/64 24.9
341° Tan	17/64 7	29/64 11.5	23/32 18	23/64 9	1-1/8 28.5
342° Gray	3/8 9.5	9/16 20	1.0 25.5	13/32 10.5	1-19/64 33



## Twister<sup>®</sup> PRO Wire Connector


- SureGrip™ overmolding provides better grip for improved leverage and more torque
- Comfortable swept wings designed to help reduce hand fatigue
- Expanding square-wire spring provides a secure connection every time
- Better grip and more leverage for faster connections with less effort



Molded vertical grooves provide maximum grip

Patented swept-wing SureGrip™ design

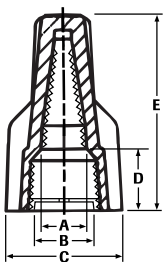
Exceptional wire range and capacity  
- Min. 2 #18  
- Max. 4 #10

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
344	Red/Gray	 600V* 22 to 8 AWG Min. 2 #18 Max. 4 #10	600V* ,34mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 2-,75mm <sup>2</sup> Max. 4-6,0mm <sup>2</sup>	Jar of 250	30-244J
				Jar of 500	30-644J
				Keg of 2,500 (10 Bags of 250)	30-644

\*1,000V maximum in fixtures and signs



Combination	Min. 2 #18	4 #14	5 #12	Max. 4 #10
344 <sup>®</sup>				



### Dimensions (Inches mm)

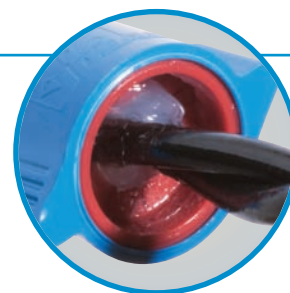
Model	A	B	C	D	E
344 Red/Gray	11/32 8.8	1/2 12.7	15/16 23.5	7/16 10.7	1-1/4 31.8



## WeatherProof™ and UnderGround™ Wire Connectors

- Silicone-based sealant protects against moisture and corrosion
- UL Listed to 486D for use in damp/wet locations or direct burial
- Easy to apply, pre-filled twist-on wire connectors
- Handles wire sizes from #20 to #6 copper conductors

The silicone-based sealant protects electrical connections against harsh conditions, eliminating the need for heat-shrink or excessive taping.



**WeatherProof™** — suitable for interior and exterior electrical connections exposed to rain or damp conditions.



**UnderGround™** — suitable for use in a wide variety of direct burial and wet location electrical connections.



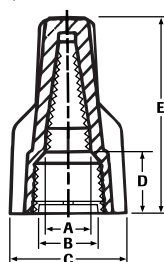
### WeatherProof™ Wire Connectors

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
61	Blue/Orange	600V* 22 to 14 AWG Min. 2 #20 Max. 2 #14	600V* ,34mm <sup>2</sup> to 4,0mm <sup>2</sup> Min. 2-,5mm <sup>2</sup> Max. 2-2,5mm <sup>2</sup>	Card of 6	<b>30-061</b>
				Card of 25	<b>30-161</b>
				Box of 100	<b>30-261</b>
				Box of 1,000	<b>30-361</b>
62	Blue/Red	600V* 18 to 8 AWG Min. 2 #18 Max. 3 #10	600V* ,75mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 2-,75mm <sup>2</sup> Max. 3-6,0mm <sup>2</sup>	Card of 5	<b>30-062</b>
				Card of 20	<b>30-162</b>
				Box of 100	<b>30-262</b>
				Box of 1,000	<b>30-362</b>
63	Blue/Dk. Blue	600V* 16 to 6 AWG Min. 2 #14 Max. 2 #8 & 1 #10	600V* 1,5mm <sup>2</sup> to 16,0mm <sup>2</sup> Min. 2-2,5mm <sup>2</sup> Max. 2-10,0mm <sup>2</sup> w/1-6,0mm <sup>2</sup>	Card of 3	<b>30-063</b>
				Card of 15	<b>30-163</b>
				Box of 100	<b>30-263</b>
				Box of 1,000	<b>30-363</b>

### UnderGround™ Wire Connectors

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
60	Blue/Blue	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 Max. 1 #10 & 2 #12	600V* ,5mm² to 6,0mm² Min. 1-,5mm² w/1-,75mm² Max. 1-6,0mm² w/2-4,0mm²	Card of 2	30-060
				Card of 10	30-760
				Box of 100	30-260
				Box of 1,000	30-360
	Yellow			Card of 10 (yellow)	30-760Y
				Box of 25 (yellow)	30-160Y
				Box of 1,000 (yellow)	30-360Y
				Box of 2,500 (yellow)	30-560Y
64	Blue/Dk. Blue	600V* 18 to 8 AWG Min. 2 #18 Max. 3 #10	600V* ,75mm to 10,0mm² Min. 2-,75mm² Max. 3-6,0mm²	Card of 2	30-064
				Card of 10	30-764
				Box of 50	30-264
				Box of 1,000	30-364
	Yellow			Box of 25 (yellow)	30-164Y

\*1,000V maximum in fixtures and signs



### Dimensions (Inches/mm)

Model	A	B	C	D	E
61	3/16 (4,8)	5/16 (7,9)	21/32 (16,7)	13/32 (10,3)	29/32 (23,0)
62	9/32 (7,1)	1/2 (12,7)	15/16 (23,8)	19/32 (15,1)	1-11/32 (34,1)
63	3/8 (9,5)	19/32 (15,1)	1-1/16 (27,0)	23/32 (18,3)	1-19/32 (40,5)
60	9/32 (7,1)	17/32 (13,5)	41/64 (16,2)	55/64 (22,0)	1-21/32 (42,0)
64	9/32 (7,1)	19/32 (15,1)	29/32 (23,0)	1-1/8 (28,6)	2-1/32 (51,6)



Cu/Cu Only



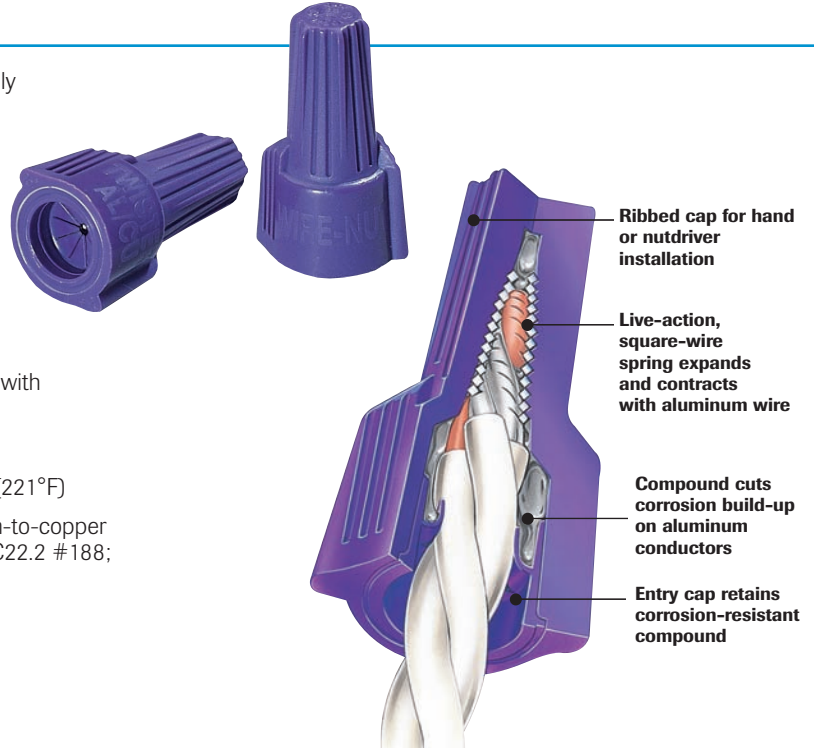
### WARNING:

1. One time use only. Do not reuse.
2. Wiring must comply with all applicable electrical codes.
3. For use on copper wire only. Do not use on aluminum wire.
4. Not for use in continuous submersion applications.



## Twister® Al/Cu Wire Connector

- Only aluminum-to-copper twist-on connector specifically designed to guarantee a secure connection while preventing aluminum corrosion
- Specially formulated corrosion-resistant compound cuts and penetrates corrosion build-up on aluminum conductors for increased conductivity and cooler connections
- Compact, one-piece design features ribbed cap, 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
- Deep skirt provides maximum dielectric strength
- 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; complies with Federal Specification W-S-610E
- UL Listed to 467 for grounding and bonding

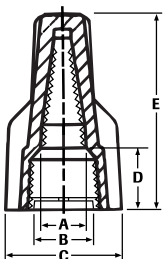


Model	Color	Wire Combinations	Quantity	Cat. No.
65	Purple	1 #10 Al solid w/1 or 2 #10 Cu solid 1 #10 Al w/1 or 2 #12 Cu 2 #10 Al solid w/1 #12 Cu 1 #10 Al w/1 or 2 #14 Cu 2 #10 Al solid w/1 #14 Cu 2 #12 Al solid w/1 #10 Cu 1 #12 Al solid w/1 or 2 #10 Cu 1 #12 Al stranded w/1 or 2 #10 Cu solid	Card of 2	30-065
		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 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 lighting fixtures



Wire Connector  
also listed as  
grounding equipment



Dimensions (Inches/mm)

Model	A	B	C	D	E
65	17/64 7	13/32 10.5	13/16 21	35/64 14	1-11/32 34

### 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.
4. Contact IDEAL for complete wire combination listing.



## Wire-Nut® Wire Connector Sockets

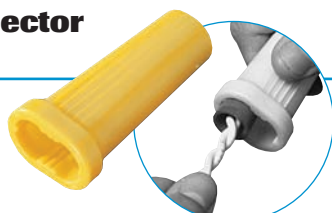
- Speeds installation of Wire-Nut® Wire Connectors
- Fit any pneumatic or electric tool with a 1/4 in. chuck or drive socket



For Connector Model	Cat. No.
71B®, 71B® Black, 72B® & 72B® Black	30-903
73B® & 73B® Black	30-904
59B™	30-905
74B®, 76B® & 59B™	30-906

## Wire-Nut® Wire Connector Wrench

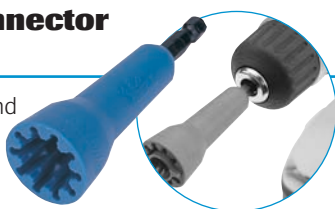
- Speeds installation of Wire-Nut® Wire Connectors
- Excellent leverage helps reduce fatigue



For Connector Model	Cat. No.
73B®, 74B® & 76B®	H-632

## 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



For Connector Model	Cat. No.
Wire-Nut®, Wing-Nut®, Twister®, B-CAP® and WingTwist™	30-902

## 7-in-1 Twist-a-Nut™ Screwdriver

- Facilitate installation of connectors
- Universal Wire-Nut® Wrench in handle
- Accepts most twist-on connectors



Description	Cat. No.
7-in-1 Twist-a-Nut™	35-908

## 9-in-1 Ratch-a-Nut™ Screwdriver

- Ratcheting wire connector wrench speeds installation of Wire Connectors
- Premium screwdriver ratchet mechanism can handle high torque without fatigue



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

## Ratch Wrench

- Speeds installation of B-CAP® Wire Connectors
- Either end accepts 1/4-in. drive for tight-spot wire splicing



For Connector Model	Cat. No.
B1, B2 & B4	BR-5

## High-Speed Wire Connector Chuck

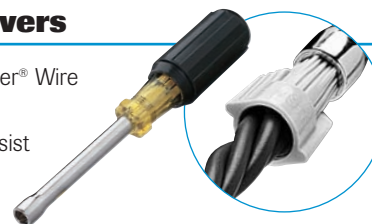
- Cordless screwdriver adapter for installing B-CAP® Wire Connectors



For Connector Model	Cat. No.
B1, B2 & B4	HSC-1

## Nutmaster® Nutdrivers

- Speeds installation of Twister® Wire Connectors
- Nickel/chrome plated to resist rust and corrosion
- Cushioned rubber grip



For Connector Model	Cat. No.
341®, 5/16 in. Driver	35-292
342®, 7/16 in. Driver	35-295

## Twist-a-Nut™ Pro Electrician's Screwdrivers

- Convenient Wire-Nut® Wrench in end of handle
- Wire-looping hole in handle
- Vapor-blasted tip prevents plate chipping
- Tough, chrome vanadium steel shank
- Precision ground tip provides secure fit in screw slot



For Connector Model	Cat. No.
#2 x 6in. Robertson	30-330
1/4 in. x 4 in. Slotted	30-331
#2 x 4 in. Phillips	30-332
1/4 in. x 6 in. Slotted Cabinet Tip	30-333



# Wire Termination

## powerplug™ Luminaire Disconnect

- Meets new NEC and CEC code changes for non-residential fluorescent luminaires
- Perfect for OEM new lighting installation or retrofit lighting applications
- Meets UL and CSA finger-probe safety requirements
- Allows safe disconnect of hot and neutral ballast wiring
- #12 - #18 wire range
- 2-wire model for 1-ballast fixtures
- 3-wire model for dimming and switching fixtures

Wire Connectors

3/8" strip length indicator

Both models fit through 1/2" knockout

Disconnects safely, "touch-safe" per UL 2459

Color-coded ends:  
White = Ballast Side  
Orange = Line Side

Black markings indicate hot circuit

3-Wire version allows for switching and dimming applications

Patented IDEAL push-in technology quickly locks wires in place

Model	Color	Electrical Rating	Wire Range	Line Side	Ballast Side	Quantity	Cat. No.
102 2-Wire	Orange	6 Amps/600 Volts Max.	Solid	#12 - #18		Card of 25	<b>30-372</b>
			Stranded	#12 - #14 (≤19 str.)		Jar of 75	<b>30-382J</b>
			Stranded Tin-Bonded	#12 - #14 (≤19 str.)		Jar of 150	<b>30-352J</b>
				#16 (≤26 str.) #18 (≤16 str.)		Box of 1,000	<b>30-102</b>
103 3-Wire	Orange	6 Amps/600 Volts Max.	Solid	#12 - #18	#18	Card of 20	<b>30-383</b>
			Stranded	#12 - #14 (≤19 str.)	None	Jar of 50	<b>30-383J</b>
			Stranded Tin-Bonded	#12 - #14 (≤19 str.)	#18 (≤16 str.)	Jar of 100	<b>30-353J</b>
				#16 (≤26 str.) #18 (≤16 str.)		Box of 1,000	<b>30-103</b>

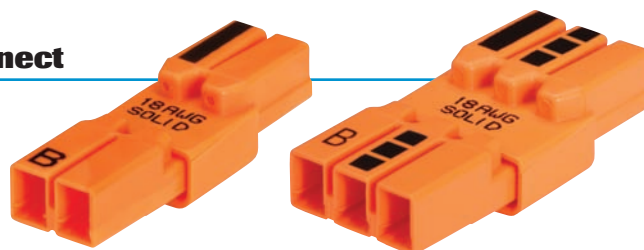
\*1,000V maximum in fixtures and signs





## powerplug™ Luminaire Disconnect

- Meets new NEC and CEC code changes for non-residential fluorescent luminaires
- Perfect for OEM new lighting installation or retrofit lighting applications
- Meets UL and CSA finger-probe safety requirements
- Allows safe disconnect of hot and neutral ballast wiring
- #18 wire
- 2-wire model for 1-ballast fixtures
- 3-wire model for dimming and switching fixtures



Pieces pull apart safely and easily

Low-profile design

Both 2-pole and 3-pole designs fit through 1/2" knockout

Both halves pass UL 2459 and CSA 182.3 finger probe requirements

Patented IDEAL push-in technology quickly locks wires in place

Model	Color	Electrical Rating	Wire Range	Line Side	Ballast Side	Quantity	Cat. No.
182 2-Wire	Orange	—	Solid	#18		Box of 100	<b>30-082</b>
			Stranded Tin-Bonded	#18 (≤16 str.)		Box of 2,500	<b>30-682</b>
183 3-Wire	Orange	3 Amps 120V 1.3 Amps 277V 1 Amp 347V 0.75 Amps 480V 0.60 Amps 600V	Solid	#18		Box of 100	<b>30-083</b>
			Stranded Tin-Bonded	#18 (≤16 str.)		Box of 2,500	<b>30-683</b>

\*1,000V maximum in fixtures and signs





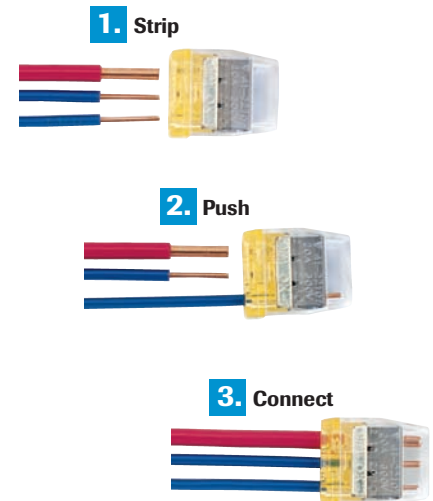
## In-Sure™ Push-In Wire Connectors

- No-twist connection reduces repetitive motion fatigue
- Low insertion force for fast and easy connections
- Compact size makes installation easy
- Clear shell gives visual verification of connection
- UL Listed to 486C and CSA Certified to C22.2 #188
- UL 467 Listed for grounding and bonding applications
- Accepts the following copper wire sizes
  - **Solid**  
#20 - #12 solid
  - **Stranded**  
#16 - #14 (≤19 str.)  
#18 (≤7 str.)
  - **Stranded (Tin Bonded)**  
#14 - #12 (≤19 str.)  
#16 (≤26 str.)  
#18 (≤16 str.)



Model	Color	Ports	Length		Width		Height		Quantity	Cat. No.
			In.	mm	In.	mm	In.	mm		
84	Red	2	.355	9.02	.434	11.02	.729	18.52	Box of 100	30-084
									Jar of 300	30-084J
									Box of 1,000	30-184
									Box of 5,000	30-684
85	Orange	3	.355	9.02	.591	15.01	.729	18.52	Box of 100	30-085
									Jar of 250	30-085J
									Box of 1,000	30-185
									Box of 5,000	30-685
86	Yellow	4	.355	9.02	.748	18.99	.729	18.52	Box of 100	30-086
									Jar of 200	30-086J
									Box of 1,000	30-186
									Box of 4,000	30-686
87	Gray	5	.355	9.02	.907	23.03	.729	18.52	Box of 50	30-087
									Jar of 150	30-087J
									Box of 1,000	30-187
									Box of 5,000	30-687
88	Blue	6 Stacked	.607	15.42	.603	15.32	.729	18.52	Box of 50	30-088
									Jar of 100	30-088J
									Box of 1,000	30-188
									Box of 5,000	30-688
90	Black	8	.355	9.02	1.38	35.03	.717	18.21	Box of 50	30-090
									Jar of 100	30-090J
									Box of 1,000	30-190
									Box of 2,000	30-690

**Installation as easy  
as 1-2-3...**



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





## Term-a-Nut® Pigtail Wire Connectors

- Ultra-flexible 6-in. lead allows for easy positioning in outlet box – reduces stress on device, wires and connection
- Wide range of wire combinations – #18 through #12 solid or stranded conductors
- Brass adapter for strong, conductive transition from spring to lead wire
- Brass-alloy terminals with locking tabs for fast, efficient device connection
- UL 486A and UL 486C Listed and tested to CSA standard C22.2 #65 and C22.2 #188
- Wire Range: Red/Green Shell – Min. 2 #18 w/1 #14, Max. 4 #12



Shell Color	Wire Color	Terminal End	Quantity	Cat. No.
Red	White	#10 fork	25	<b>30-3170</b>
Red	White	#10 fork	10	<b>30-3370</b>
Red	Black	#10 fork	25	<b>30-3171</b>
Red	Black	#10 fork	10	<b>30-3371</b>
Red	White	Stripped end	25	<b>30-3172</b>
Red	Black	Stripped end	25	<b>30-3173</b>
Green	Green	#10 fork	25	<b>30-3180</b>
Green	Green	#10 fork	10	<b>30-3380</b>
MultiPak*	White/Black/Green	#10 fork	9	<b>30-3181</b>

\*Includes 3 red shells w/white wire, 3 red shells w/black wire, and 3 green shells w/green wire.



**Cu/Cu Only**

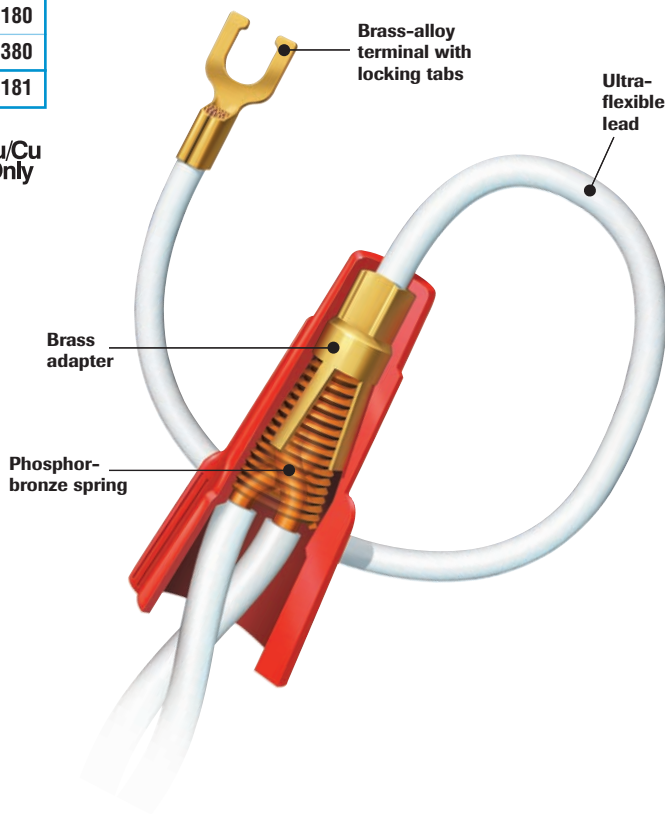
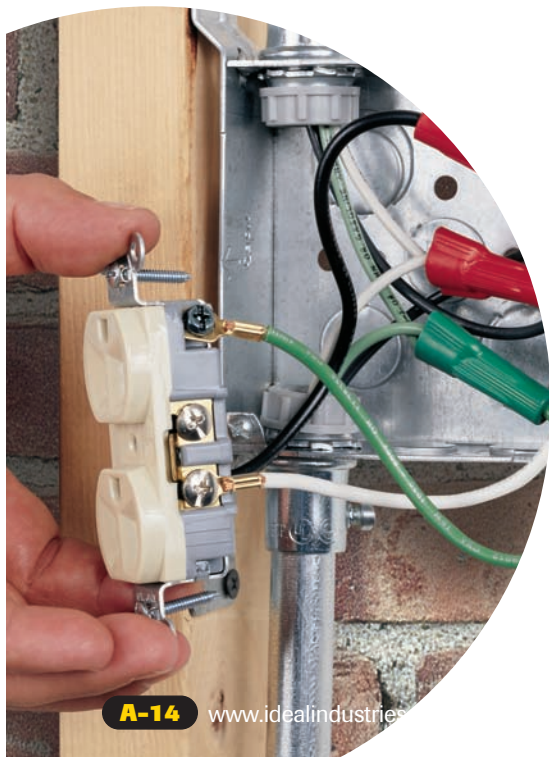
## Pigtail Wire Connectors

- Ultra-flexible 8-in. lead allows for easy positioning in outlet box – reduces stress on device, wires and connection
- Brass-alloy terminals with locking tabs for fast, efficient device connection



Description	Wire Color	Quantity	Cat. No.
12 AWG stranded 8 in. w/#10 fork & stripped end	Black	Bag of 25	<b>30-3471</b>
12 AWG stranded 8 in. w/#10 fork & stripped end	White	Bag of 25	<b>30-3470</b>
12 AWG stranded 8 in. w/#10 fork & stripped end	Green	Bag of 25	<b>30-3480</b>

Custom tails available. Contact your IDEAL Sales Representative for further information.





## Grounding Connectors

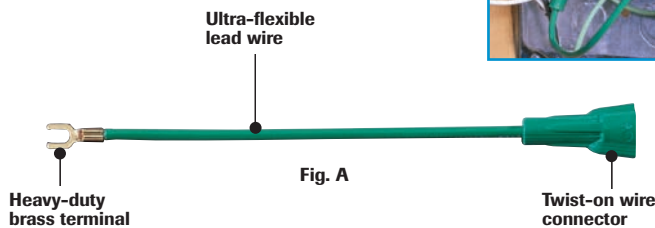
- Term-a-Nut® grounding connectors address specific requirements for grounding to steel outlet boxes and wiring multiple devices
- UL Listed to UL486C and UL467 (grounding and bonding)



Term-a-Nut® Grounding Connectors	Quantity	Cat. No.	Fig.
Term-a-Nut® Grounding Connector, 12 AWG stranded, 6 in. tail w/#10 fork	Bag of 10	30-3380	A
Term-a-Nut® Grounding Connector, 12 AWG stranded, 6 in. tail w/#10 fork	Bag of 25	30-3180	A
Term-a-Nut® Grounding Connector, 12 AWG stranded, 6 in. tail w/#10 fork	Box of 100	30-3280	A
Term-a-Nut® Grounding Connector, 12 AWG stranded, 6 in. tail w/#10 fork	Box of 250	30-3680	A
Term-a-Nut® Grounding Connector, 12 AWG stranded w/#10 ring & ground screw	Bag of 25	30-3182	B
Term-a-Nut® Grounding Connector, 12 AWG stranded w/#10 ring & ground screw and 6 in. jumper w/#10 fork	Bag of 10	30-3386	C

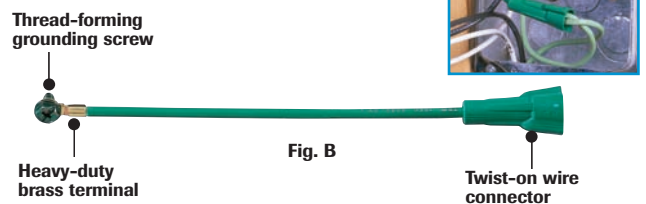
### Term-a-Nut® Grounding Connector

Connects multiple grounding conductors to a device.



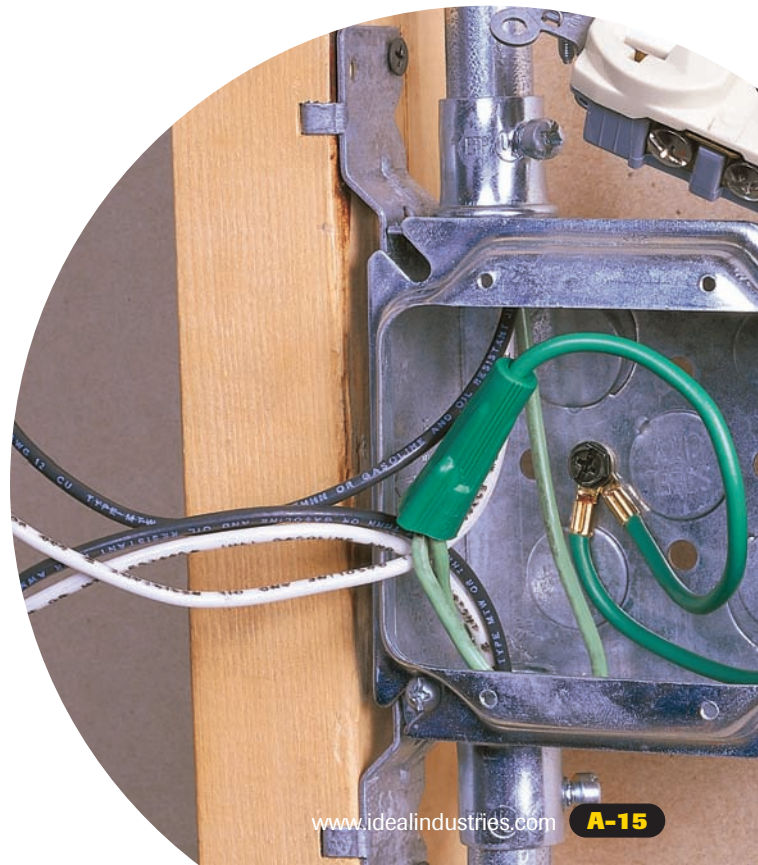
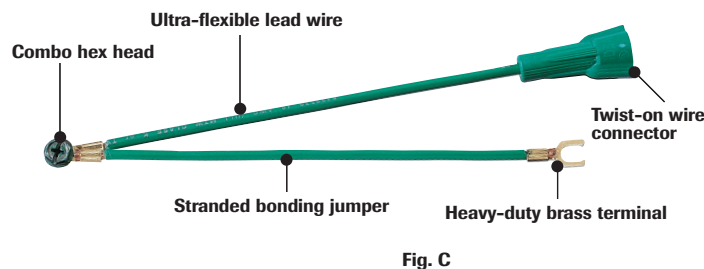
### Term-a-Nut® Grounding Connector

Bonds the box to the grounding conductors.



### Term-a-Nut® Grounding Connector

Connects grounding conductors to a device's grounding screw, connects grounding conductors to the mounting box and bonds the device to the box.

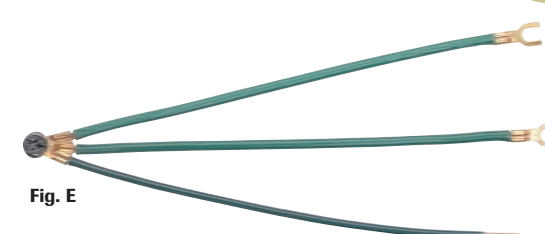
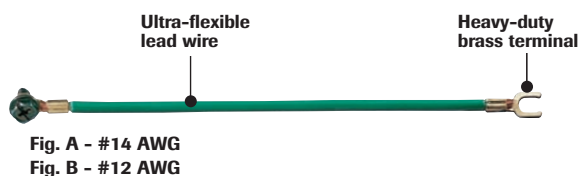




## Grounding Accessories

- Solid and stranded pigtail lead wires are convenient for device grounding applications
- Grounding screws offer a unique thread-forming, hole-finding feature plus combination hex, Phillips, slotted and Robertson head

### Grounding Tails - Stranded Wire



Stranded Wire Grounding Tails	Quantity	Cat. No.	Fig.
14 AWG stranded, 7-3/4 in. tail w/#10 fork & 10 ring and ground screw	Bag of 25	30-3183	A
12 AWG stranded, 7-3/4 in. tail w/#10 fork & 10 ring and ground screw	Bag of 25	30-3184	B
12 AWG stranded, 7-3/4 in. tail w/#10 fork & 10 ring and ground screw	Bundle of 100	30-3284	B
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	Bundle of 25	30-3286	—
12 AWG stranded, 2-wire tail joined w/#10 ring and ground screw, one stripped-end tail and one 10 fork tail	Bag of 25	30-3287	C
12 AWG stranded, 2-wire tail joined w/#10 ring and ground screw and two #10 fork tails	Bag of 25	30-3288	D
12 AWG stranded, 3-wire tail joined w/#10 ring and ground screw, one stripped-end tail and two 10 fork tails	Bag of 25	30-3289	E
12 AWG stranded, 7-3/4 in. tail w/#10 fork and #10 ring and ground screw	Plastic Box of 50	30-3385	B

Custom tails available. Contact your IDEAL Sales Representative for further information.

### Grounding Tails - Solid Wire

Fig. A

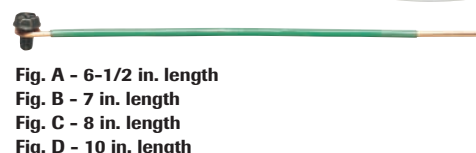


Fig. E

Solid Wire Grounding Tails	Quantity	Cat. No.	Fig.
Pail-o-Tails™ 12 AWG solid, 6.5 in. tail w/loop & ground screw and stripped end	Pail of 500 (Bundles of 100)	30-3365	A
14 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Box of 50	30-3390	E
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Box of 50	30-3392	C
12 AWG solid, 10 in. tail w/loop & ground screw and stripped end	Bundle of 50	30-3394	D
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Plastic box of 100	30-3399	C
12 AWG solid, 7 in. tail w/loop & ground screw and stripped end	Bag of 50	30-3407	B
12 AWG solid, 10 in. tail w/loop & ground screw and stripped end	Bag of 50	30-3410	D
12 AWG solid, 8 in. tail w/loop & ground screw and stripped end	Bundle of 50	30-3496	C

### Grounding Accessories

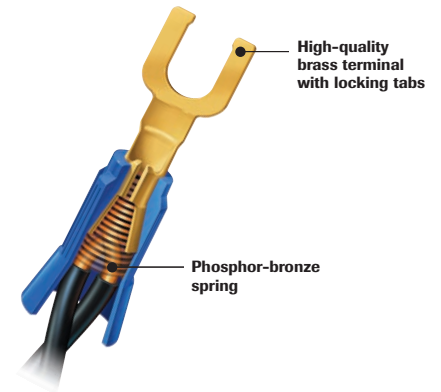


Grounding Accessories	Qty.	Cat. No.	Fig.
Ground Screw, thread-forming, hole-finding tip combination hex, Phillips, slotted and Robertson head	Pack of 50	30-3194	A
Ground Screw, thread-forming, hole-finding tip combination hex, Phillips, slotted and Robertson head	Bag of 100	30-3294	A
Grounding clip - accepts 10, 12 or 14 AWG Wire	Pack of 100	30-3395	B
Ground Screw, thread-forming, hole-finding tip combination hex, Phillips, slotted and Robertson head	Jar of 400	30-3494	A



## Term-a-Nut® Terminal Wire Connectors

- No tools required – installs quickly without crimping – easily removed for quick changes
- Use with single or multiple wires – solid and/or stranded 22 to 12 AWG
- Highly conductive brass terminal and phosphor-bronze spring for maximum conductivity and smooth performance
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486A and UL 486C Listed and tested to CSA C22.2 #65 and C22.2 #188



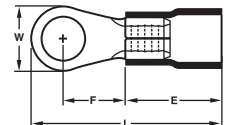
Terminal Configurations	Qty./Clamshell	Cat. No.
#10 fork	25	30-3004
#8 fork	25	30-3014
.250 in. disconnect	25	30-3006
#10 ring	25	30-3012
#8 ring	25	30-3010
Assortment	40/kit*	30-3901

\*Kit contains 8 each: 30-3004, 30-3014, 30-3006, 30-3012 and 30-3010.



## Crimp Terminals-Rings, Forks, Disconnects and Splices

- 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
- Color-coded insulation and wire range stamped on terminal for easy identification



## Vinyl Insulated Ring Terminals

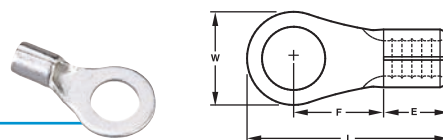
Wire Range (AWG)	Wire Range (mm²)	Stud Size (Inches)	Stud Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	W	E	F	L	W	E	F				
22 – 18	0.5 – 1.0	6	3.7	.157	4.0	.764	.260	.394	.248	19.4	6.6	10.0	6.3	25	83-2121	—	—
		8	4.3			.819	.315	.394	.276	20.8	8.0	10.0	7.0	25	83-2131	—	—
		10	5.3			.819	.315	.394	.276	20.8	8.0	10.0	7.0	25	83-2141	—	—
		1/4	6.4			1.055	.457	.394	.433	26.8	11.6	10.0	11.0	25	83-2151	—	—
16 – 14	1.5 – 2.5	6	3.7	.177	4.5	.764	.260	.394	.248	19.4	6.6	10.0	6.3	25	83-2221	—	—
		8	4.3			.858	.335	.394	.307	21.8	8.5	10.0	7.8	25	83-2231	—	—
		10	5.3			.858	.374	.394	.287	21.8	9.5	10.0	7.3	25	83-2241	1,000	84-2241
		1/4	6.4			1.055	.472	.394	.433	26.8	12.0	10.0	11.0	25	83-2251	—	—
12 – 10	4.0 – 6.0	8	4.3	.248	6.3	1.047	.374	.512	.358	26.6	9.5	13.0	9.1	25	83-2331	—	—
		10	5.3			1.047	.374	.512	.358	26.6	9.5	13.0	9.1	25	83-2341	1,000	84-2341
		1/4	6.4			1.167	.472	.512	.413	29.5	12.0	13.0	10.5	25	83-2351	—	—
		5/16	8.4			1.339	.591	.512	.531	34.0	15.0	13.0	13.5	25	83-2361	—	—
		3/8	10.5			1.339	.591	.512	.531	34.0	15.0	13.0	13.5	25	83-2371	—	—

75° C/600 Volts max.





## Non-Insulated Ring Terminals



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Dimensions (Inches)*				Dimensions (mm)**				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
				L	W	E	F	L	W	E	F				
22 - 18	0.5 - 1.0	8 10	4.3 5.3	.622	.315	.189	.276	15.8	8.0	4.8	7.0	25	<b>83-0131</b>	—	—
				.622	.315	.189	.276	15.8	8.0	4.8	7.0	25	<b>83-0141</b>	—	—
16 - 14	1.5 - 2.5	6	3.7	.567	.260	.189	.248	14.4	6.6	4.8	6.3	25	<b>83-0221</b>	—	—
		8	4.3	.661	.335	.189	.307	16.8	8.5	4.8	7.8	25	<b>83-0231</b>	—	—
		10	5.3	.661	.374	.189	.287	16.8	9.5	4.8	7.3	25	<b>83-0241</b>	1,000	<b>84-0241</b>
12 - 10	4.0 - 6.0	8	4.3	.772	.374	.236	.358	19.6	9.5	6.0	9.1	25	<b>83-0331</b>	—	—
		10	5.3	.772	.374	.236	.358	19.6	9.5	6.0	9.1	25	<b>83-0341</b>	1,000	<b>84-0341</b>
		1/4	6.4	.886	.472	.236	.413	22.5	12.0	6.0	10.5	25	<b>83-0351</b>	—	—
8	8.0	10	5.3	.937	.472	.337	.366	23.8	12.0	8.5	9.3	25	<b>83-0421</b>	—	—
		1/4	6.4	.937	.472	.337	.366	23.8	12.0	8.5	9.3	25	<b>83-0431</b>	—	—
		5/16	8.4	1.161	.591	.337	.543	29.8	15.0	8.5	13.8	25	<b>83-0441</b>	—	—
		3/8	10.5	1.161	.591	.337	.543	29.8	15.0	8.5	13.8	25	<b>83-0451</b>	—	—
6	14.0	10	5.3	1.173	.472	.413	.524	29.8	12.0	10.5	13.3	20	<b>83-0511</b>	—	—
		1/4	6.4	1.173	.472	.413	.524	29.8	12.0	10.5	13.3	20	<b>83-0521</b>	—	—
		5/16	8.4	1.280	.630	.413	.559	32.5	16.0	10.5	14.2	20	<b>83-0531</b>	—	—
		3/8	10.5	1.280	.630	.413	.559	32.5	16.0	10.5	14.2	20	<b>83-0541</b>	—	—
4	22.0	1/4	6.4	1.319	.650	.472	.531	33.5	16.5	12.0	13.5	20	<b>83-0611</b>	—	—
		5/16	8.4	1.319	.650	.472	.531	33.5	16.5	12.0	13.5	20	<b>83-0621</b>	—	—
		3/8	10.5	1.319	.650	.472	.531	33.5	16.5	12.0	13.5	20	<b>83-0631</b>	—	—

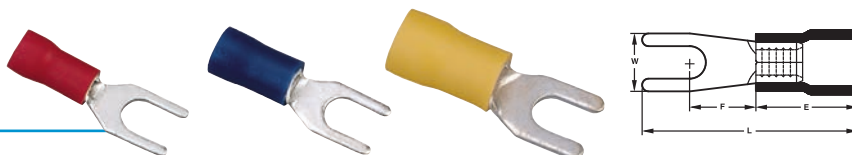
105°C/600 Volts max.

\*Plus or minus .020 in.

\*\*Plus or minus .50 in.



## Vinyl Insulated Spade Terminals



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	W	E	F	L	W	E	F				
22 - 18	0.5 - 1.0	6	3.7	.157	4.0	.827	.252	.394	.256	21.0	6.4	10.0	6.5	25	<b>83-7111</b>	1,000	<b>84-7111</b>
		8	4.3			.827	.283	.394	.256	21.0	7.2	10.0	6.5	25	<b>83-7121</b>	—	—
		10	5.3			.827	.374	.394	.256	21.0	9.5	10.0	6.5	25	<b>83-7131</b>	—	—
16 - 14	1.5 - 2.5	6	3.7	.177	4.5	.827	.236	.394	.256	21.0	6.0	10.0	6.5	25	<b>83-7151</b>	—	—
		8	4.3			.827	.283	.394	.256	21.0	7.2	10.0	6.5	25	<b>83-7161</b>	1,000	<b>84-7161</b>
		10	5.3			.827	.366	.394	.256	21.0	9.3	10.0	6.5	25	<b>83-7171</b>	1,000	<b>84-7171</b>
12 - 10	4.0 - 6.0	6	3.7	.248	6.3	1.004	.327	.512	.276	25.5	8.3	13.0	7.0	25	<b>83-7201</b>	—	—
		8	4.3			1.004	.283	.512	.357	25.5	9.0	13.0	7.0	25	<b>83-7211</b>	—	—
		10	5.3			1.004	.283	.512	.354	25.5	9.0	13.0	7.0	25	<b>83-7221</b>	500	<b>84-7221</b>
		1/4	6.4			1.240	.472	.512	.472	31.5	12.0	13.0	12.0	25	<b>83-7231</b>	—	—

75° C/600 Volts max.



## Crimp Tools



**#30-518 Tool w/die**  
**#30-519 Replacement die**

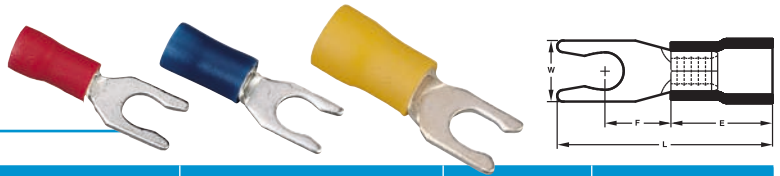
**#83-005**

**#88-843**

*Insulated and Non-Insulated Terminals, Splices and Disconnects (#22 - #10 AWG) are UL Listed when used with IDEAL Crimp Tool #30-518 (Replacement Die #30-519). Non-Insulated Ring Terminals (#8 - #4 AWG) are UL Listed when used with IDEAL Crimp Tool #83-005 or #88-843. Non-Insulated Disconnects, Splices and Vinyl Insulated Parallel Splices (#22 - #10 AWG) are not UL Listed; recommended IDEAL Crimp Tool #30-518. Non-Insulated Splices (#8 - #4 AWG) are not UL Listed, recommended IDEAL Crimp Tool #83-005 or #88-843.*



## Vinyl Insulated Snap Spade Terminals

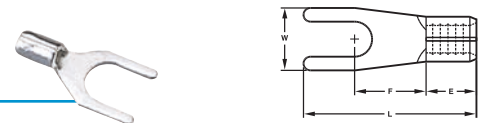


Wire Range (AWG)	Wire Range (mm²)	Stud Size (Inches)	Stud Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
						L	W	E	F	L	W	E	F		
22 – 18	0.5 – 1.0	6	3.7	.134	4.0	.827	.252	.394	.256	21.0	6.4	10.0	6.5	25	83-7011
		8	4.3			.827	.283	.394	.256	21.0	7.2	10.0	6.5	25	83-7021
		10	5.3			.827	.319	.394	.256	21.0	8.1	10.0	6.5	25	83-7031
16 – 14	1.5 – 2.5	6	3.7	.161	4.5	.827	.236	.394	.256	21.0	6.0	10.0	6.5	25	83-7051
		8	4.3			.827	.319	.394	.256	21.0	8.1	10.0	6.5	25	83-7061
		10	5.3			.827	.319	.394	.256	21.0	8.1	10.0	6.5	25	83-7071
12 – 10	4.0 – 6.0	8	4.3	.248	6.3	.992	.327	.512	.276	25.2	8.3	13.0	7.0	25	83-7081
		10	5.3			.992	.354	.512	.276	25.2	9.0	13.0	7.0	25	83-7091
		1/4	6.4			1.240	.472	.512	.472	31.5	12.0	13.0	12.0	25	83-7101

75° C/600 Volts max.



## Non-Insulated Spade Terminals



Wire Range (AWG)	Wire Range (mm²)	Stud Size (Inches)	Stud Size (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
				L	W	E	F	L	W	E	F				
22 – 18	0.5 – 1.0	6	3.7	.630	.252	.189	.256	16.0	6.4	4.8	6.5	25	83-6111	—	—
		8	4.3	.630	.283	.189	.256	16.0	7.2	4.8	6.5	25	83-6121		
		10	5.3	.630	.319	.189	.256	16.0	8.1	4.8	6.5	25	83-6131		
16 – 14	1.5 – 2.5	8	4.3	.630	.283	.189	.256	16.0	7.2	4.8	6.5	25	83-6161	1,000	84-6171
		10	5.3	.630	.366	.189	.256	16.0	9.3	4.8	6.5	25	83-6171		
		1/4	6.4	.965	.472	.236	.472	24.5	12.0	6.0	12.0	25	83-6231		
12 – 10	4.0 – 6.0	8	4.3	.728	.354	.236	.276	18.5	9.0	6.0	7.0	25	83-6211	—	—
		10	5.3	.728	.354	.236	.276	18.5	9.0	6.0	7.0	25	83-6221		
		1/4	6.4	.965	.472	.236	.472	24.5	12.0	6.0	12.0	25	83-6231		

105° C/600 Volts max.



## Vinyl Insulated Multi-Stack Disconnects



Wire Range (AWG)	Wire Range (mm²)	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)						Dimensions (mm)						Ctn. Qty.	Cat. No.
						L	B	W	F	W1	F1	L	B	W	F	W1	F1		
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.886	.413	.260	.315	.250	.323	22.5	10.5	6.6	8.0	6.35	8.2	25	83-9611
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.886	.413	.260	.315	.250	.323	22.5	10.5	6.6	8.0	6.35	8.2	25	83-9621
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.945	.512	.260	.315	.250	.323	22.5	13.0	6.6	8.0	6.35	8.2	25	83-9631

75° C/300 Volts max.





## Vinyl Insulated Female Disconnects



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	L				
22 – 18	0.5 – 1.0	.110 x .020	2.8 x 0.5	.150	3.8	.728	.413	.126	.256	18.5	10.5	3.2	6.5	25	<b>83-9511</b>	—	—
16 – 14	1.5 – 2.5	.110 x .020	2.8 x 0.5	.185	4.7	.748	.413	.126	.256	19.0	10.5	3.2	6.5	25	<b>83-9521</b>	—	—
22 – 18	0.5 – 1.0	.187 x .020	4.75 x 0.5	.150	3.8	.764	.413	.197	.252	19.4	10.5	5.0	6.4	25	<b>83-9541</b>	—	—
16 – 14	1.5 – 2.5	.187 x .020	4.75 x 0.5	.185	4.7	.764	.413	.197	.252	19.4	10.5	5.0	6.4	25	<b>83-9551</b>	—	—
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.819	.413	.260	.287	20.8	10.5	6.6	7.3	25	<b>83-9571</b>	—	—
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.819	.413	.260	.287	20.8	10.5	6.6	7.3	25	<b>83-9581</b>	500	<b>84-9581</b>
14 – 12	2.5 – 4.0	.250 x .032	6.35 x 0.8	.244	6.2	.917	.512	.260	.287	23.3	13.0	6.6	7.3	25	<b>83-9591</b>	—	—
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.917	.512	.260	.287	23.3	13.0	6.6	7.3	25	<b>83-9601</b>	—	—

75° C/300 Volts max.



## Vinyl Insulated Male Disconnects

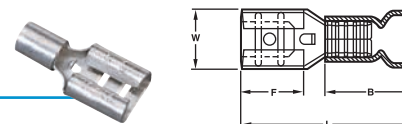


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.858	.413	.250	.303	21.8	10.5	6.35	7.7	25	<b>83-9971</b>
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.858	.413	.250	.303	21.8	10.5	6.35	7.7	25	<b>83-9981</b>
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.945	.512	.250	.303	24.0	13.0	6.35	7.7	25	<b>83-9991</b>

75° C/300 Volts max.



## Non-Insulated Female Disconnects

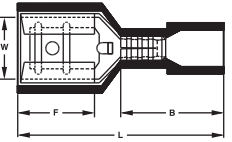


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.110 x .020	2.8 x 0.5	.630	.189	.126	.256	16.0	4.8	3.2	6.5	25	<b>83-9411</b>
16 – 14	1.5 – 2.5	.110 x .020	2.8 x 0.5	.630	.189	.126	.256	16.0	4.8	3.2	6.5	25	<b>83-9421</b>
22 – 18	0.5 – 1.25	.187 x .020	4.75 x 0.5	.630	.189	.197	.252	16.0	4.8	5.0	6.4	25	<b>83-9441</b>
16 – 14	1.5 – 2.5	.187 x .020	4.75 x 0.5	.630	.189	.197	.252	16.0	4.8	5.0	6.4	25	<b>83-9451</b>
22 – 18	0.5 – 1.25	.250 x .032	6.35 x 0.8	.630	.189	.260	.287	16.0	4.8	6.6	7.3	25	<b>83-9471</b>
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.630	.189	.260	.287	16.0	4.8	6.6	7.3	25	<b>83-9481</b>
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.728	.236	.260	.287	18.5	6.0	6.6	7.3	25	<b>83-9501</b>

105° C/300 Volts max.



## Nylon Fully-Insulated Female Disconnects

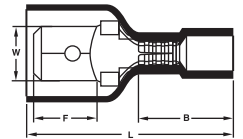
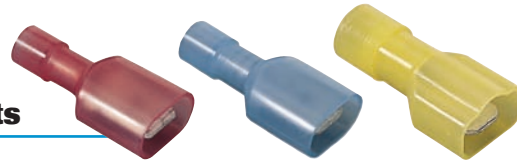


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	L				
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.866	.433	.260	.287	22.0	11.0	6.6	7.3	25	83-9771	—	—
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.866	.433	.260	.287	22.0	11.0	6.6	7.3	25	83-9781	1,000	84-9781
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.945	.512	.260	.287	24.0	13.0	6.6	7.3	25	83-9791	500	84-9791

105° C/300 Volts max.



## Nylon Fully-Insulated Male Disconnects

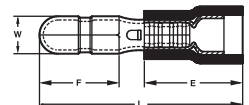


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.906	.433	.250	.303	23.0	11.0	6.35	7.7	25	83-9911
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.945	.433	.250	.303	24.0	11.0	6.35	7.7	25	83-9921
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.984	.512	.250	.303	25.0	13.0	6.35	7.7	25	83-9931

105° C/300 Volts max.



## Vinyl Insulated Bullet Disconnects

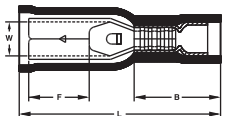
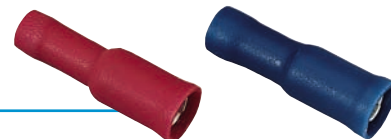


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.150	3.8	.846	.413	.157	.335	21.5	10.5	4.0	8.5	25	83-8001
16 – 14	1.5 – 2.5	.185	4.7	.846	.413	.157	.335	21.5	10.5	4.0	8.5	25	83-8011

75° C/300 Volts max.



## Vinyl Fully-Insulated Receptacle Disconnects



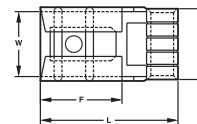
Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.150	3.8	.917	.413	.153	.287	23.3	10.5	3.9	7.3	25	83-8101
16 – 14	1.5 – 2.5	.185	4.7	.917	.413	.153	.287	23.3	10.5	3.9	7.3	25	83-8111

75° C/300 Volts max.





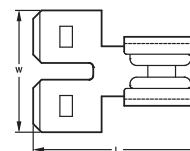
## Non-Insulated Flag Female Disconnect



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.551	.291	.260	.299	14.0	7.4	6.6	7.6	25	<b>83-9401</b>

105° C/300 Volts max.

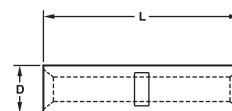
## Disconnect Adapter – Male to Female (2-1)



Tab Size (Inches)	Tab Size (mm <sup>2</sup> )	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.
		L	W	L	W		
.250 x .032	6.35 x 0.8	.551	.260	14.0	6.6	25	<b>83-9801</b>

105° C/300 Volts max.

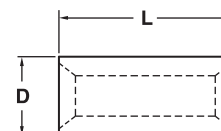
## Non-Insulated Butt Splices



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
		L	D	L	D				
22 – 18	0.5 – 1.0	.591	.130	15.0	3.3	25	<b>83-9001</b>	—	—
16 – 14	1.5 – 2.5	.591	.154	15.0	3.9	25	<b>83-9011</b>	—	<b>84-9011</b>
12 – 10	4.0 – 6.0	.591	.213	15.0	5.4	25	<b>83-9021</b>	500	<b>84-9021</b>
8	8.0	.827	.276	21.0	7.0	25	<b>83-9031</b>	250	<b>84-9031</b>
6	14.0	1.024	.350	26.0	8.9	20	<b>83-9041</b>	—	—
4	22.0	1.142	.445	29.0	11.3	20	<b>83-9051</b>	—	—

105° C/600 Volts max.

## Non-Insulated Parallel Splices



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
		L	D	L	D				
22 – 18	0.5 – 1.0	.315	.130	8.0	3.3	25	<b>83-9071</b>	—	—
16 – 14	1.5 – 2.5	.315	.154	8.0	3.9	25	<b>83-9081</b>	1,000	<b>84-9081</b>
12 – 10	4.0 – 6.0	.335	.213	8.5	5.4	25	<b>83-9091</b>	—	<b>84-9091</b>

105° C/600 Volts max.



## Vinyl Insulated Butt Splices



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
				L	D	L	D				
22 – 18	0.5 – 1.25	.157	4.0	.986	.067	24.6	1.7	25	<b>83-9281</b>	1,000	<b>84-9281</b>
16 – 14	1.5 – 2.5	.177	4.5	.986	.091	24.6	2.3	25	<b>83-9291</b>	1,000	<b>84-9291</b>
12 – 10	4.0 – 6.0	.248	6.3	1.043	.134	26.5	3.4	25	<b>83-9301</b>	500	<b>84-9301</b>

75° C/600 Volts max.

Listed 774A Cu Only Pressure Wire Connector

## Vinyl Insulated Parallel Splices



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.
				L	W	L	W		
22 – 18	0.5 – 1.0	.157	4.0	.512	.067	13.0	1.7	25	<b>83-9351</b>
16 – 14	1.5 – 2.5	.177	4.5	.512	.091	13.0	2.3	25	<b>83-9361</b>
12 – 10	4.0 – 6.0	.248	6.3	.591	.134	15.0	3.4	25	<b>83-9371</b>

75° C/600 Volts max.

## Tap Splice Connectors



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Color	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.
			L	W	L	W		
22 – 18	0.5 – 1.0	Red	1.063	.787	27.0	20.0	25	<b>83-3261</b>
16 – 14	1.5 – 2.5	Blue	1.063	.787	27.0	20.0	25	<b>83-3271</b>
12 – 10	4.0 – 6.0	Yellow	1.358	.807	34.5	20.5	25	<b>83-3281</b>

105° C/600 Volts max.

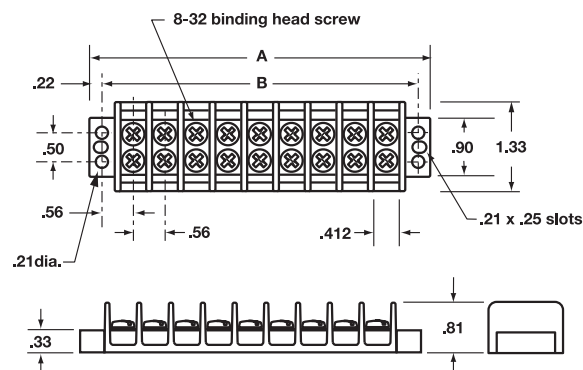


## Terminal Strips

- Heavy-duty, corrosion-resistant screws, surface plates and optional hardware
- Accessory hardware provides a variety of termination options
- Available cover helps prevent contact with live terminals

### 89-200 Series Terminal Strips 30A/600V\* UL/CSA

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



No. of Poles	Dimensions (Inches)		Cat. 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

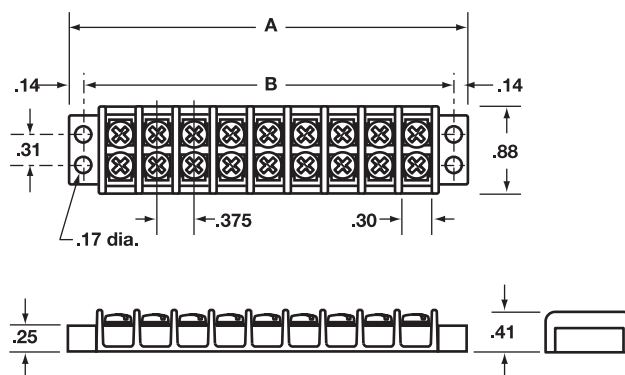
\*Max. electrical rating 30A/250V when used with optional quick-connects.



- Rugged polyester thermoplastic base (UL Rated 94V-O)
- Operating temperature rated from 130°C (260°F) to -40°C (-40°F)
- UL Recognized (E62622) and CSA Certified (LR15364)

### 89-300 Series Terminal Strips 15A/250V\*\* UL, 15A/150V\*\* CSA

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



No. of Poles	Dimensions (Inches)		Cat. 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

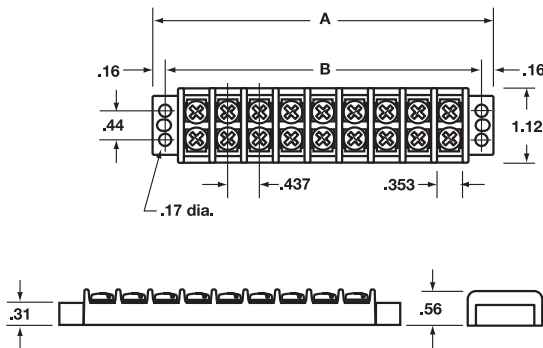
\*\*Max. electrical rating 15A/125V when used with optional quick-connects.





## 89-400 Series Terminal Strips 30A/300V UL/CSA

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



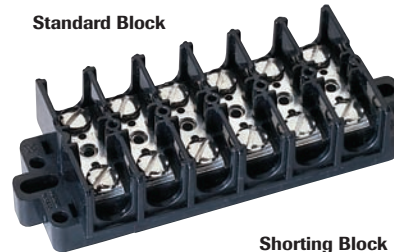
No. of Poles	Dimensions (Inches)		Cat. No.
	A	B	
2	1.63	1.31	89-402
4	2.51	2.18	89-404
6	3.38	3.06	89-406
8	4.25	3.93	89-408
10	5.13	4.81	89-410
12	6.00	5.68	89-412



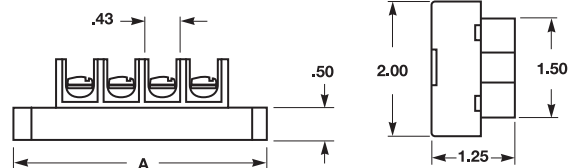
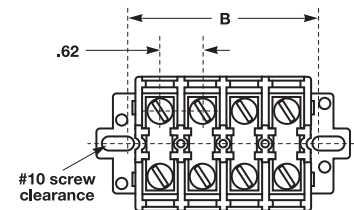
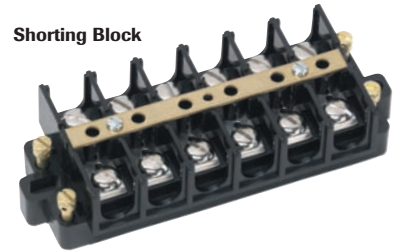
## 89-500 Series Terminal Strips 60A/600V\* UL/CSA

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

Standard Block



Shorting Block



No. of Poles	Dimensions (Inches)		Standard Block Cat. No.	Shorting Block Cat. 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

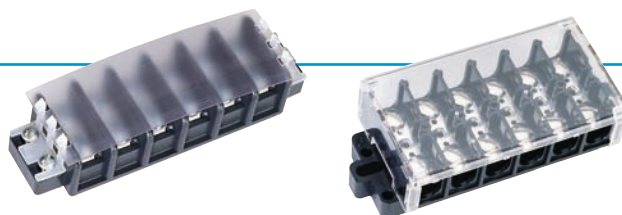
\*Max. electrical rating 60A/600V achieved only when used with #6 AWG copper wire crimped to ring terminal.





## Covers

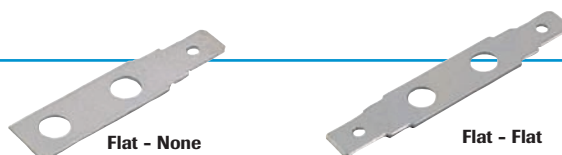
- Helps prevent contact with live terminals



No. of Circuits	For Use With Terminal Strip Series			
	89-200 Clear Cat. No.	89-300 Clear Cat. No.	89-400 Clear Cat. No.	89-500 Clear Cat. No.
2	89-233	89-334	89-434	—
3	89-234	—	—	—
4	89-235	89-335	89-435	89-514
6	89-236	89-336	89-436	89-516
8	89-237	89-337	89-437	89-518
10	89-238	89-338	89-438	—
12	89-239	89-339	89-439	89-520

## Quick Connects

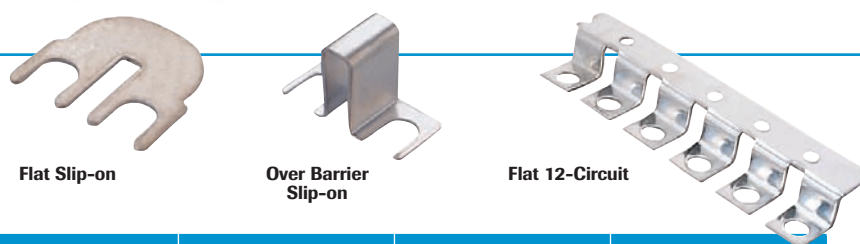
- Allows fast, flexible circuit changes



For Use With		Qty	Flat - None Cat. No.	Flat - Flat Cat. No.
Terminal Strip Series	Tab Size (Inches)			
89-300	.187 x .020	10 pcs.	89-314	89-317
89-200 & 89-400	.250 x .031	10 pcs.	89-414	89-417

## Jumpers

- Provides easy connection of multiple circuits

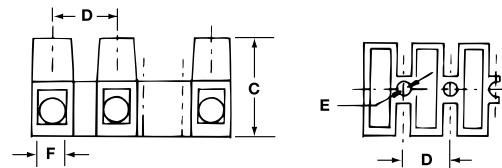
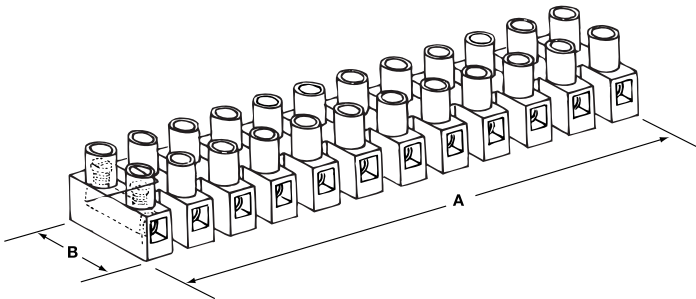


For Use With		Qty.	Flat Slip-on Cat. No.	Over Barrier Slip-on Cat. No.	Flat 12-Circuit Cat. No.
Terminal Strip Series	Center Spacing (Inches)				
89-200	.562	10 pcs.	89-229	89-224	—
		100 pcs.	89-230	—	—
89-300	.375	10 pcs.	89-323	89-324	—
		100 pcs.	89-330	—	—
89-400	.437	10 pcs.	89-423	89-424	—
		100 pcs.	89-430	—	—
89-500	.625	2 pcs.	—	—	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)



## Barrier Strips

Electrical Ratings	Wire Range (AWG)	No. of Circuits	Torque in.-lb.	Model No.	Dimensions (Inches)						Dimensions (mm)						Cat. No.
					A	B	C	D	E	F*	A	B	C	D	E	F**	
20A/600V UL	22 - 12	12	3.5	PA8DS	3.787	0.669	0.570	0.315	0.114	0.110	96.2	17.0	14.5	8.0	2.9	2.8	89-608
10A/400V CSA	20 - 18																
30A/600V UL	22 - 10																
20A/400V CSA	18 - 14	12	4.4	PA10DS	4.626	0.795	0.670	0.394	0.142	0.134	117.0	20.2	17.0	10.0	3.6	3.4	89-610
35A/600V UL/CUL	22 - 10	12	7.0	PA12DS	5.540	0.937	0.748	0.472	0.154	0.154	140.7	23.8	19.0	12.0	3.9	3.9	89-612
50A/600V UL/CUL	20 - 8	12	12.0	PA14DS	6.220	1.008	0.992	0.531	0.173	0.189	158.0	25.6	25.2	13.5	4.4	4.8	89-614

\*Plus or minus .004 in.

\*\*Plus or minus 0.1mm





## Crimp Connectors

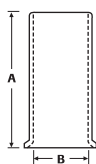


- Designed for making fast, permanent, pressure-type connections
- Long, zinc-plated steel sleeves maximize contact area with conductors
- Will not vibrate loose when securely crimped
- Steel crimp connectors are UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E.

### Steel Crimp Connectors

Model	Wire Combination Range	Quantity	Cat. No.
410	600V 18 thru 10 AWG Min. 1 #14 & 1 #18 Max. 2 #10 & 2 #14	Box of 100	<b>30-410</b>
		Carton of 1,000	<b>30-510</b>
		Keg of 10,000	<b>30-610</b>
411	600V 18 thru 8 AWG Min. 3 #12 Max. 4 #10	Box of 40	<b>30-401</b>
		Box of 50	<b>30-411</b>
		Carton of 1,000	<b>30-511</b>
412	600V 18 thru 4 AWG Min. 1 #14 & 1 #16 Max. 2 #8 & 1 #6	Box of 20	<b>30-402</b>
		Box of 50	<b>30-412</b>
		Carton of 1,000	<b>30-512</b>

### Dimensions (Inches)



Model	A	B
410 Steel	3/8	13/64
411 Steel	5/8	1/4
412 Steel	51/64	19/64



**IDEAL hand tools U.L. listed for Model 410, 411, 412.**  
**Crimps: 30-420, 30-425, 30-429, 30-430.**

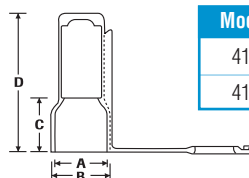
## Wrap-Cap® Insulators



- Provide high dielectric and physical protection for UL Listed, non-insulated pressure-type wire connectors
- Cap and loop design eliminates need for tape
- Unique design completely covers splice — insulates both around and between wires
- Reusable and easy to install
- UL Listed 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	Cat. No.
415	Insulator for Model 410 sleeves	Box of 20	<b>30-405</b>
		Box of 100	<b>30-415</b>
		Carton of 1,000	<b>30-515</b>
		Keg of 10,000	<b>30-615</b>
417	Insulator for Model 411 & 412 sleeves	Box of 10	<b>30-407</b>
		Box of 50	<b>30-417</b>
		Carton of 1,000	<b>30-517</b>

### Dimensions (Inches)



Model	A	B	C	D
415	1/2	5/8	23/32	1-13/64
417	11/16	3/4	3/4	1-25/32



## Pre-Insulated Crimp Connectors

- Three models cover a wide range of wire combinations from 22 AWG stranded through 8 AWG stranded
- Compact design fits easily into tight locations
- Flared skirt protects against turned-back strands
- Beveled opening eases wire entry
- UL Listed and CSA Certified for 600V maximum building wiring (1,000V maximum for fixtures and signs); temperature rated at 105°C (221°F) maximum



Model	Wire Combination Range	Quantity	Cat. No.
48	600V* Min. 2 #22 Max. 1 #14 w/2 #18	1,000	<b>30-245</b>
		10,000	<b>30-645</b>
49	600V* Min. 1 #22 w/1 #18 Max. 1 #12 w/1 #16	1,000	<b>30-249</b>
		10,000	<b>30-649</b>
NC-8	600V* Min. 4 #w16 Max. 1 #12 w/4 #14	1,000	<b>30-148</b>
		5,000	<b>30-648</b>

\*1,000V maximum in fixtures and signs



1-800-435-0705 for Customer Service

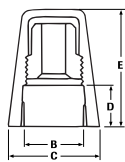


## Set-Screw Wire Connectors



- Eliminates need for restripping wire each time connection is disturbed
- Solid brass sleeves in three sizes handle 18 through 12 AWG wires
- 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

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



Cu/Cu Only

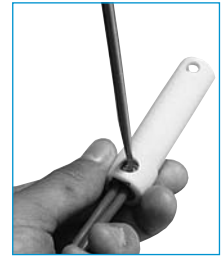
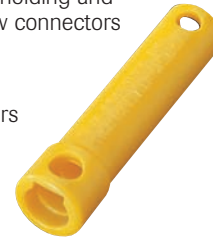


### Dimensions (Inches)

Model	Insert		Shell			
	A	B	C	D	E	
10	1/8	5/16	1/2	19/64	45/64	
11	3/16	3/8	33/64	13/32	63/64	
22	1/4	1/2	11/16	13/32	1-1/64	

## Set-Screw Holder

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



### For Connector Models

11 & 22

### Cat. No.

**K-2422**

## Noalox® Anti-Oxidant



- Anti-oxidant and anti-seizing 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 prevent further oxidation
- For use with all types of pressure-type wire connectors including screw-on, tap, service entrance and split-bolt
- Reduces galling and seizing on aluminum conduit joints – promotes good ground continuity

Description	Cat. No.
1/2-oz. Tube	<b>30-024</b>
4-oz. Squeeze bottle	<b>30-026</b>
8-oz. Squeeze bottle	<b>30-030</b>
8-oz. Brush cap	<b>30-031</b>
1-gal. Bucket	<b>30-032</b>
5-gal. Bucket	<b>30-040</b>



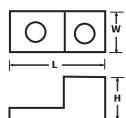
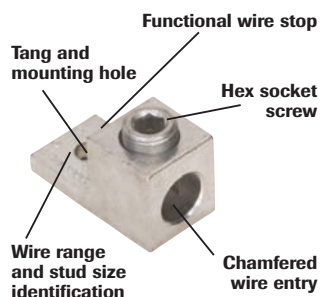
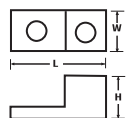
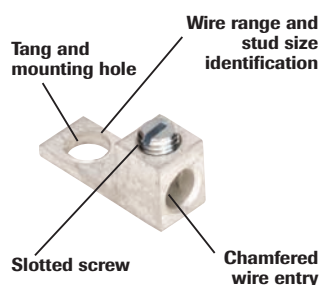


## Powr-Connect™ Mechanical Lugs

- Chamfered entry for faster, more reliable connections
- Uniform plating resists corrosion, reduces contact resistance and provides maximum conductivity
- UL Listed at 600V — acceptable for use through 2,000V
- Can be used through 8,000V if installed in accordance with National Electric Code Section 310-6 (UL Green Book)
- UL Listed to 486B for dual-rated connectors — UL Listed to 486A for copper connectors
- Meets ANSI C119.4 requirements

### Dual-Rated (Al/Cu) Single-Barrel Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL Listed to 486B (AL9CU)



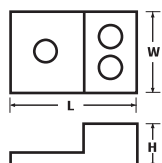
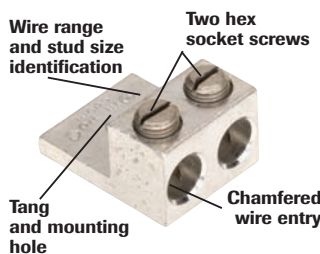
Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
LA-50-1	6 – 14 AWG	1-1/16	3/8	1/2	1/4	87-002
Narrow type – special mounting requirements						
LA-2	2 – 14 AWG	1-5/32	1/2	9/16	1/4	87-005
LA-1/0	1/0 – 14 AWG	1-15/32	5/8	25/32	1/4	87-007
LA-1/0*	1/0 – 14 AWG	1-15/32	5/8	25/32	3/8	87-008
LA-2/0	2/0 – 14 AWG	1-15/32	5/8	25/32	1/4	87-009
LA-2/0*	2/0 – 14 AWG	1-15/32	5/8	23/32	3/5	87-010
LA-250	250 KCMIL – 6 AWG	2	1	1-1/8	5/16	87-011
LA-250*	250 KCMIL – 6 AWG	2	1	1-1/8	3/8	87-012
LA-350	350 KCMIL – 6 AWG	2-1/4	1-1/8	1-1/4	3/8	87-015
LA-350*	350 KCMIL – 6 AWG	2-1/4	1-1/8	1-1/4	1/2	87-016
LA-500	500 KCMIL – 4 AWG	2-13/16	1-1/4	1-9/16	3/8	87-017
LA-500*	500 KCMIL – 4 AWG	2-13/16	1-1/2	1-9/16	1/2	87-018

\*Larger mounting hole



### Dual-Rated (Al/Cu) Two-Barrel Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU



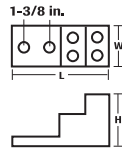
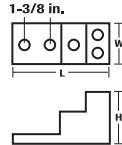
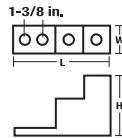
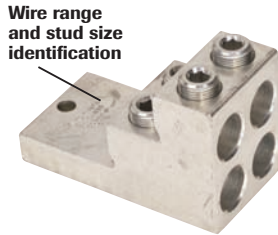
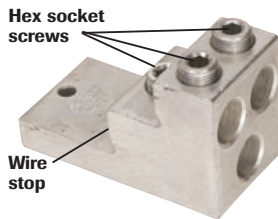
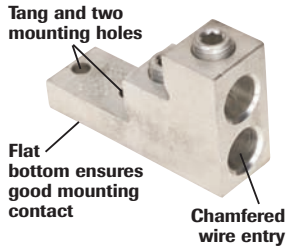
Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
L2A1-1/0	1/0 – 14 AWG (2)	1-15/32	1-1/8	25/32	1/4	87-040
L2A1-2/0	2/0 – 14 AWG (2)	1-15/32	1-1/4	25/32	1/4	87-042
L2A1-250	250 KCMIL – 6 AWG (2)	2-9/16	1-5/8	1-3/16	3/8	87-044
L2A1-350	350 KCMIL – 6 AWG (2)	2-7/8	1-15/16	1-1/4	1/2	87-046
L2A1-600	600 KCMIL – 2 AWG (2)	3-3/16	2-13/32	1-9/16	1/2	87-048





## Dual-Rated (Al/Cu) Panel-Board Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL Listed to 486B (AL9CU)

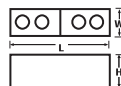
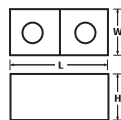
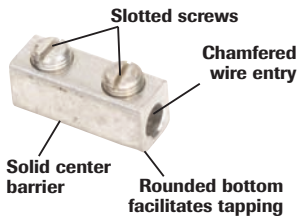


Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
PV2-600	600 KCMIL – 2 AWG	4-29/32	1-1/2	3	3/8	87-126
PV2-750	750 KCMIL – 1/0 AWG	4-29/32	1-9/16	3	3/8	87-129
PV3-600	600 KCMIL – 2 AWG	4-29/32	2-1/2	3	3/8	87-132
PV3-750	750 KCMIL – 1/0 AWG	4-29/32	2-27/32	3	3/8	87-135
PV4-600	600 KCMIL – 2 AWG	4-29/32	2-1/2	3	3/8	87-138
PV4-750	750 KCMIL – 3/0 AWG	4-29/32	2-27/32	3	3/8	87-141



## Dual-Rated (Al/Cu) Splicer Reducers

- Electro tin-plated, high-strength aluminum alloy construction
- UL Listed to 486B (AL9CU)



Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
SR-2*	2 – 14 AWG	1-3/8	1/2	9/16	5/8	87-143
SR-1/0*	1/0 – 14 AWG	1-29/32	3/4	3/4	7/8	87-144
SR-250	250 KCMIL – 6 AWG	3-15/16	1	1-1/8	1-15/16	87-145

\*Slotted screws



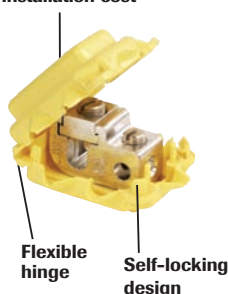


## Powr-Connect™ Tap Connectors

### Dual-Rated (Al/Cu) Parallel-Tap Connectors with Covers

- Electro tin-plated, high-strength aluminum alloy construction
- UL Listed to 486B (AL9CU) — 105°C, 600V max.

Insulating cover reduces installation cost

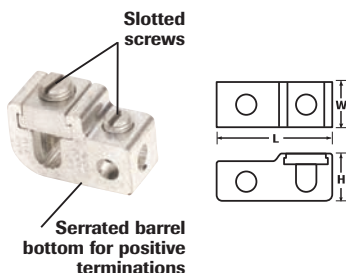


Model	Wire Range		Strip Length (In.)	Dimensions (Inches)			Cat. No.
	Main	Tap		L	W	H	
GP-2C	2 – 12 AWG	4 – 14 AWG	5/8	2-7/32	1-29/32	1-7/64	<b>87-180</b>
GP-1/0C	1/0 – 2 AWG	1/0 – 14 AWG	3/4	2-5/8	2-5/32	1-1/4	<b>87-182</b>
GP-250C	250 KCMIL – 1/0 AWG	250 KCMIL – 6 AWG	1-1/16	3-7/16	2-7/8	1-5/8	<b>87-186</b>
GP-350C	350 KCMIL – 4/0 AWG	350 KCMIL – 6 AWG	1-1/4	3-3/4	3-3/16	1-3/4	<b>87-190</b>
GP-500C	500 – 350 KCMIL	500 KCMIL – 2 AWG	1-3/8	4-3/8	3-5/16	2-3/32	<b>87-194</b>



### Dual-Rated (Al/Cu) Parallel-Tap Connectors without Covers

- Electro tin-plated, high-strength aluminum alloy construction
- UL Listed to 486B (AL9CU)

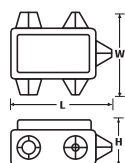
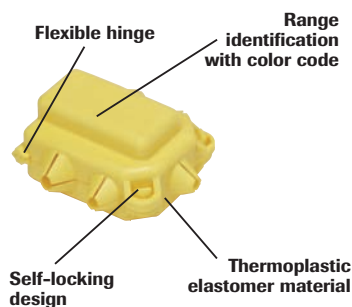


Model	Wire Range		Strip Length (In.)	Dimensions (Inches)			Cat. No.
	Main	Tap		L	W	H	
GP-2	2 – 12 AWG	4 – 14 AWG	5/8	1-25/64	5/8	7/8	<b>87-150</b>
GP-1/0	1/0 – 2 AWG	1/0 – 14 AWG	3/4	1-3/4	3/4	1	<b>87-152</b>
GP-250	250 KCMIL – 1/0 AWG	250 KCMIL – 6 AWG	1-1/16	2-9/32	1-1/16	1-5/16	<b>87-156</b>



### Insulating Covers for Parallel-Tap Connectors

- 600V maximum
- 105°C maximum temperature



Model	For Use With:	Color	Dimensions (Inches)			Cat. No.
			L	W	H	
GIC-2	87-150	Yellow	2-7/32	1-29/32	1-7/64	<b>87-370</b>
GIC-1/0	87-152	Gray	2-5/8	2-5/32	1-1/4	<b>87-372</b>
GIC-250	87-150	Red	3-7/16	2-7/8	1-5/8	<b>87-374</b>





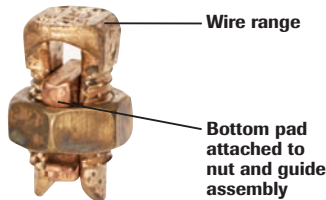
## Powr-Connect™ Grounding Connectors

- Designed to maintain proper contact and alignment between ground and wire rod

- Brass or plated screws for corrosion resistance
- High-strength copper alloy construction

### Type K Split Bolts for Copper Connections

- High-strength copper alloy construction (nut, bolt and body)
- UL 486A Listed



Model	Range for Equal Run & Tap	Min. Tap with Max. Run	Cat. No.
K-10	10 str. – 12 str.	16 str.	87-650
K-8	8 str. – 10 str.	14 str.	87-651
K-6	6 sol. – 8 str.	14 str.	87-652
K-4	4 sol. – 8 str.	14 str.	87-653
K-3	2 sol. – 6 str.	14 str.	87-654
K-2	2 str. – 6 str.	14 str.	87-655
K-1/0	1/0 str. – 4 str.	14 str.	87-656
K-2/0	2/0 str. – 2 str.	14 str.	87-657
K-3/0	3/0 str. – 1 str.	8 sol.	87-658

### Dual-Rated (Al/Cu) Type AS Split Bolts

- UL 486B Listed AL9CU

Spacer provides serration to retard corrosion

"Tooth" configuration provides low contact resistance

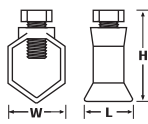
Aluminum, tin-plated to inhibit oxide formation

Anti-galling threaded components



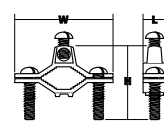
Model	Wire Range				Cat. No.
	Run		Tap		
	Max.	Min.	Max.	Min.	
AS-6	6 str.	10 sol.	6 str.	10 sol.	<b>87-681</b>
AS-4	4 str.	8 sol.	4 str.	10 sol.	<b>87-682</b>
AS-2	2 str.	6 sol.	2 str.	8 str.	<b>87-683</b>
AS-1/0	1/0 str.	2 compact	1/0 str.	8 sol.	<b>87-685</b>
AS-2/0	2/0 str.	2 compact	2/0 str.	8 str.	<b>87-686</b>
AS-4/0	4/0 str.	2 compact	4/0 str.	6 str.	<b>87-687</b>

### Heavy-Duty Clamps



Model	Rod Dia. (In.)	Wire Range	Dimensions (Inches)			Cat. No.
			H	W	L	
WB58	5/8	1/0 – 8	2-1/8	7/8	1	87-958

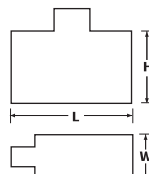
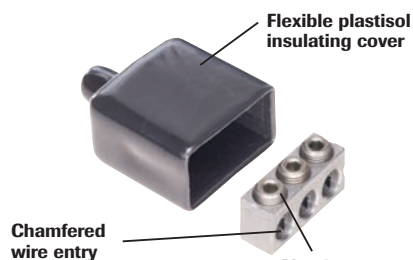
### High-Strength Ground Clamps



Model	Pipe Size (In.)	Wire Range	Dimensions (Inches)			Cat. No.
			H	W	L	
J	1/2 – 1	2 – 10	2-3/4	2-3/8	3/4	87-563
J2	1-1/4 – 2	2 – 10	3-3/4	3-5/8	7/8	87-564

### Dual-Rated (Al/Cu) Street-Light Connector Kit with Cover

- UL 486A Listed (Lug only)



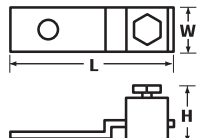
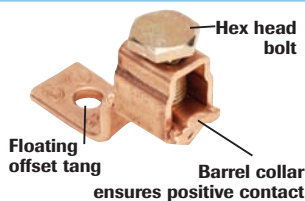
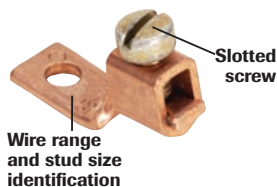
Model	Wire Range	No. of Cond.	Dimensions (Inches)			Cat. No.
			L	W	H	
SLK-1/0	1/0 – 14 AWG	3	2	1-3/16	2-3/16	88-100



## Powr-Connect™ Mechanical Solderless Lugs

### Single-Hole Solderless Lugs for Copper Conductors (Offset)

- Electrolytic copper construction
- UL 486A listed



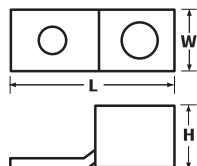
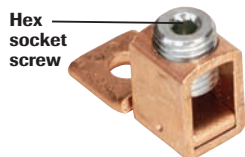
Model	Wire Range	Stud Size (In.)	Dimensions (Inches)			Cat. No.
			L	W	H	
CF-25*	10 – 14 AWG	#8	1	5/16	3/8	87-700
CF-35	6 – 14 AWG	3/16	1-3/32	3/8	3/4	87-701
CF-70	4 – 14 AWG	1/4	1-5/16	1/2	13/16	87-702
CF-90	2 – 8 AWG	1/4	1-15/32	1/2	1	87-703
CF-125	1/0 – 2 AWG	1/4	1-13/16	5/8	1-11/32	87-704
CF-225	4/0 – 2 AWG	5/16	2-5/8	1	1-13/16	87-706

\*Not CSA Certified



### Single-Hole Solderless Lugs for Copper Conductors

- Electrolytic copper construction
- UL 486A Listed



Model	Wire Range	Stud Size (In.)	Dimensions (Inches)			Cat. No.
			L	W	H	
FT-65	6 – 14 AWG	3/16	1	3/8	3/4	87-736
FT-90	1/0 – 14 AWG	1/4	1-17/64	5/8	1	87-738

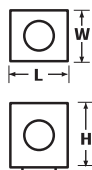


### Dual-Rated (Al/Cu) Collar Connectors

Slotted wire screw



10-32 tapped mounting hole with 0.229 in. square boss for bottom mounting to electrical devices or bus bars



Model	Wire Range	Dimensions (Inches)			Cat. No.
		L	W	H	
CA-60**	2 – 14 AWG	9/16	15/32	15/32	87-583
CA-110*	1/0 – 14 AWG	19/32	17/32	5/8	87-585

\*Successfully tested to AL9CU

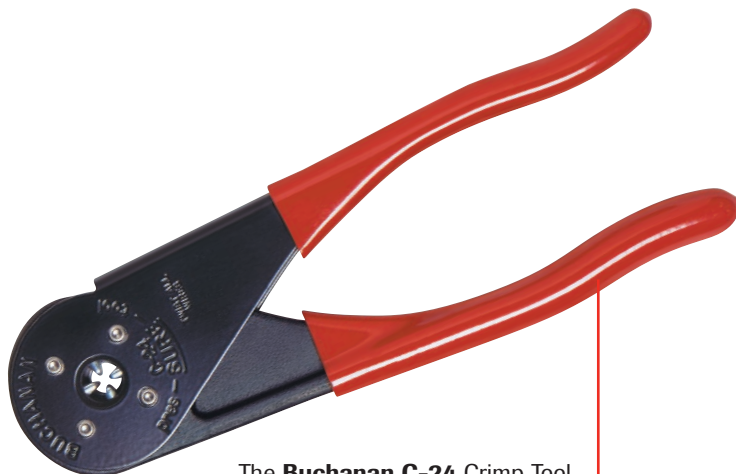
\*\*Successfully tested to AL7CU



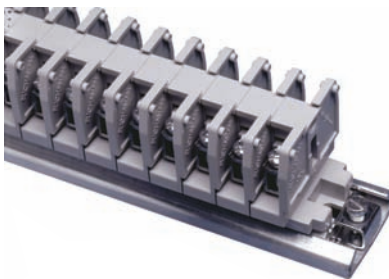




Our **wedge-edge** expanding spring is specially designed for faster pull-up and quick connections. It also accommodates a wide range of wire gauges.



The **Buchanan C-24** Crimp Tool has an iron-clad reputation that's up to every job, every time. A patented four-way crimp ensures reliable connections, while the spring-loaded, cam-actuated design fits a wide range of connectors.



The comprehensive line of **Buchanan** sectional terminal blocks offers a wide range of block configurations, mounting options and contact styles accommodating wire sizes from 30 AWG to 250 MCM.



The **B2 B-CAP®** Wire Connector is the universal connector that accepts the widest range of wire combinations. Plus, the Classic Fin™ ergonomic design fits easily in tight electrical boxes.

(2) #18 stranded

(1) #14 solid

(1) #18 stranded  
(2) #14 solid

(1) #14 solid  
(2) #12 stranded

(2) #10 stranded

(3) #12 solid  
(2) #14 solid

(5) #12 solid

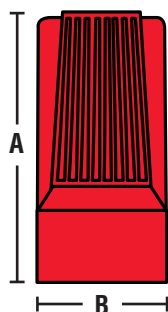


## B-CAP® Wire Connectors

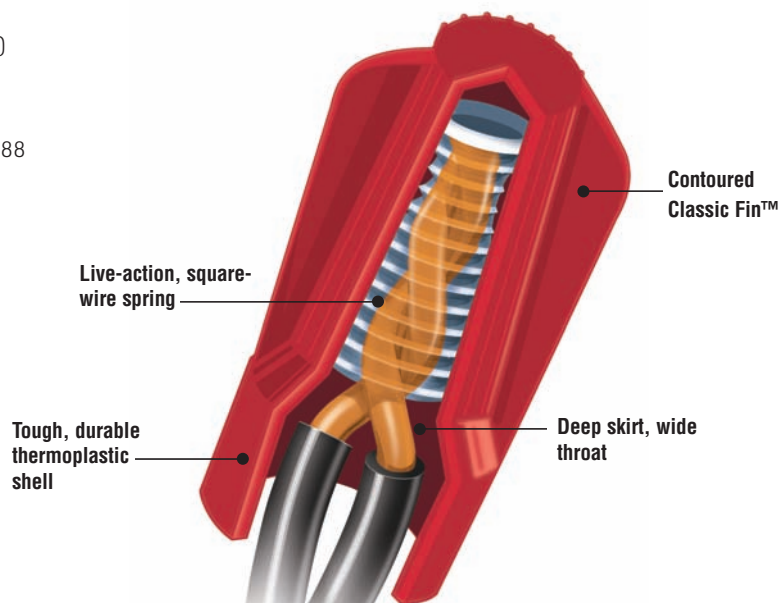
- Three color-coded models cover a full range of wire sizes from 22 AWG through 6 AWG
- Classic Fin™ design provides secure grip for extra leverage on maximum wire combinations
- Live-action spring expands to accept wire shape and size – no pre-twisting required
- Square-wire spring threads directly onto conductors for fast, secure connections
- Deep skirt protects against flash-over and turned-back strands for maximum dielectric protection
- Easily removed for repeat usage on same size or larger wire combinations
- 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 486C Listed (Green-B® UL 467 Listed) and CSA 22.2 #188 Certified; comply with Federal Specification -S-610E



**Dimensions (Inches / mm)**



Model	A	B
B1	31/32 24.5	15/32 12
B2	1-5/32 29.5	9/16 14
B4	1-1/2 38	3/4 19
BGR	1-5/32 29.5	9/16 14



Model	Color	Wire Combination Range (Inches)	Wire Combination Range (mm)	Quantity / Package	Cat. 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	100 / Box	<b>B1-1</b>
				250 / Jar	<b>B1-250JR</b>
				500 / Jar	<b>B1-500JR</b>
				2,500 / Bucket (5 bags, 500 ea.)	<b>B1-25</b>
				5,000 / Keg (10 bags, 500 ea.)	<b>B1-B</b>
				Barrel of 25,000	<b>B1-SK</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	100 / Box	<b>B2-1</b>
				350 / Jar	<b>B2-350JR</b>
				500 / Jar	<b>B2-500JR</b>
				2,500 / Bucket (5 bags, 500 ea.)	<b>B2-25</b>
				5,000 / Keg (10 bags, 500 ea.)	<b>B2-B</b>
				Barrel of 25,000	<b>B2-SK</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	50 / Box	<b>B4-1</b>
				1,000 / Bucket (4 bags, 250 ea.)	<b>B4-25</b>
				2,500 / Keg (10 bags, 250 ea.)	<b>B4-B</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	50 / Box	<b>BGR-1</b>
				2,500 / Bucket (10 bags, 250 ea.)	<b>BGR-25</b>
				5,000 / Keg (20 bags, 250 ea.)	<b>BGR-B</b>

\*1,000V maximum in fixtures and signs



Cu/Cu Only



EN 60-998-2-4

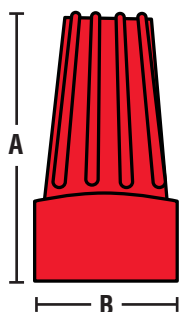


## WireTwist™ Wire Connectors

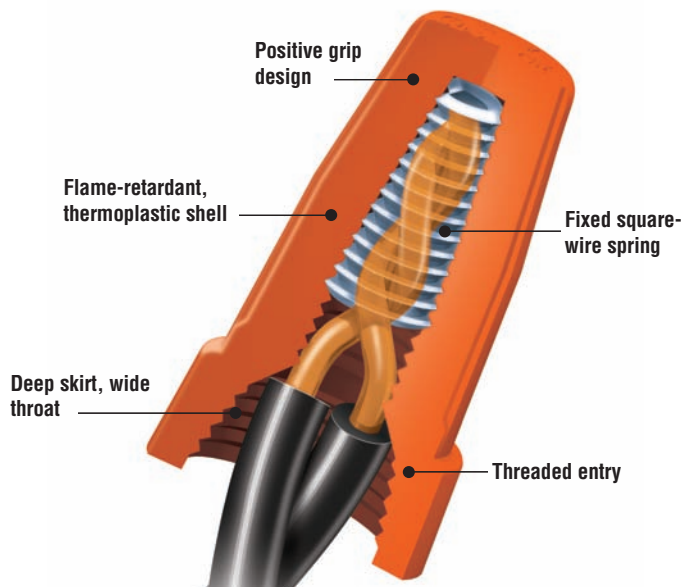
- Five color-coded models cover common construction wire ranges
- Ribbed cap provides positive grip for fast, easy installation
- Fixed, square-wire spring threads itself creating a secure pressure grip
- Deep, wide-throated skirt protects against flash-over and turned-back strands for maximum dielectric protection
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486C Listed and CSA 22.2 #188 Certified



Dimensions (Inches)  
mm



Model	A	B
WT1	$\frac{37}{64}$ 15	$\frac{21}{64}$ 8
WT2	$\frac{45}{64}$ 18	$\frac{25}{64}$ 10
WT3	$\frac{55}{64}$ 22	$\frac{7}{16}$ 11
WT4	$\frac{61}{64}$ 24	$\frac{35}{64}$ 14
WT6	$\frac{1-1}{16}$ 27	$\frac{21}{32}$ 17



Model	Color	Wire Combination Range (Inches)	Wire Combination Range (mm)	Quantity / Package	BUCHANAN Cat. No.	IDEAL Cat. No.
WT1	Gray	300V 22 to 14 AWG Min. 3 #22 Max. 2 #16	300V ,34mm <sup>2</sup> to 2,5mm <sup>2</sup> Min. 3-,34mm <sup>2</sup> Max. 2-1,5mm <sup>2</sup>	100 / Box	<b>WT1-1</b>	<b>30-WT1C</b>
				500 / Bag	<b>WT1-B</b>	<b>30-WT1B</b>
				50,000 / Barrel	—	<b>30-891</b>
WT2	Blue	300V 22 to 14 AWG Min. 3 #20 Max. 3 #16	300V ,34mm <sup>2</sup> to 2,5mm <sup>2</sup> Min. 3-,50mm <sup>2</sup> Max. 3-1,5mm <sup>2</sup>	100 / Box	<b>WT2-1</b>	<b>30-WT2C</b>
				500 / Bag	<b>WT2-B</b>	<b>30-WT2B</b>
				50,000 / Barrel	—	<b>30-892</b>
WT3	Orange	600V* 22 to 14 AWG Min. 2 #18 Max. 2 #14	600V* ,34mm <sup>2</sup> to 2,5mm <sup>2</sup> Min. 2-,75mm <sup>2</sup> Max. 2-2,5mm <sup>2</sup>	100 / Box	<b>WT3-1</b>	<b>30-WT3C</b>
				500 / Bag	<b>WT3-B</b>	<b>30-WT3B</b>
				50,000 / Barrel	—	<b>30-893</b>
WT4	Yellow	600V* 22 to 10 AWG Min. 3 #20 Max. 2 #12	600V* ,75mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 3-,50mm <sup>2</sup> Max. 2-4,0mm <sup>2</sup>	100 / Box	<b>WT4-1</b>	<b>30-WT4C</b>
				500 / Bag	<b>WT4-B</b>	<b>30-WT4B</b>
				30,000 / Barrel	—	<b>30-894</b>
WT6	Red	600V* 20 to 8 AWG Min. 2 #14 Max. 4 #12	600V* ,50mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 2-2,5mm <sup>2</sup> Max. 4-4,0mm <sup>2</sup>	100 / Box	<b>WT6-1</b>	<b>30-WT6C</b>
				250 / Bag	<b>WT6-B</b>	<b>30-WT6B</b>
				20,000 / Barrel	—	<b>30-896</b>

\*1,000V maximum in fixtures and signs

\*\*Includes 5 each of WT1, WT2, WT3, WT4 and WT6 WireTwist™ Wire Connectors



Cu/Cu  
Only





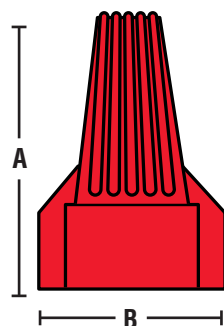
## WingTwist™ Wire Connectors

- Four color-coded models cover common construction wire ranges; green model designed for ground connections
- Unique contoured wing design acts as built-in wrench providing maximum torque with minimum effort
- Fixed, square-wire spring threads itself creating secure pressure grip
- Deep, wide-throated skirt protects against flash-over and turned-back strands for maximum dielectric protection
- Tough, UL 94V-2 flame retardant shell rated at 105°C (221°F)
- UL 486C Listed (WGR UL 467 Listed) and CSA C22.2 #188 Certified



### Dimensions (Inches / mm)

Model	A	B
WT51	1-1/32 26	23/32 18
WT52	1-1/4 32	29/32 23
WT53	1-5/16 33	1 25
WT54	1-9/16 40	1-15/64 31
WGR	1-5/32 29.5	7/8 22



Tough,  
flame-retardant shell

Fixed square-  
wire spring

Deep, wide  
skirt

Built-in  
contoured wings



Model	Color	Wire Combination Range (Inches)	Wire Combination Range (mm)	Quantity / Package	BUCHANAN Cat. No.	IDEAL Cat. No.
WT51	Yellow	600V* 18 to 10 AWG Min. 2 #18 Max. 3 #12	600V* ,75mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 2-,75mm <sup>2</sup> Max. 3-4,0mm <sup>2</sup>	100 / Box	<b>WT51-1</b>	<b>30-WT51C</b>
				500 / Bag	<b>WT51-B</b>	<b>30-WT51B</b>
				500 / Jar	<b>WT51-500JR</b>	<b>30-WT51J</b>
				25,000 / Barrel	<b>WT51-SK</b>	—
				30,000 / Barrel	—	<b>30-886</b>
WT41	Tan	600V* 22 to 10 AWG Min. 2 #20 Max. 3 #10 Solid	600V* ,34mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 2-0,5mm <sup>2</sup> Max. 3-6,0mm <sup>2</sup>	100 / Box	<b>WT41-1</b>	<b>30-WT41C</b>
				500 / Bag	<b>WT41-B</b>	<b>30-WT41B</b>
				500 / Jar	<b>WT41-500JR</b>	<b>30-WT41J</b>
				25,000 / Barrel	<b>WT41-SK</b>	<b>30-885</b>
WT52	Red	600V* 18 to 10 AWG Min. 2 #12 Max. 5 #12	600V* ,75mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 2-2,5mm <sup>2</sup> Max. 5-4,0mm <sup>2</sup>	100 / Box	<b>WT52-1</b>	<b>30-WT52C</b>
				500 / Bag	<b>WT52-B</b>	<b>30-WT52B</b>
				500 / Jar	<b>WT52-500JR</b>	<b>30-WT52J</b>
				25,000 / Barrel	<b>WT52-SK</b>	—
				20,000 / Barrel	—	<b>30-887</b>
WT54	Blue	600V* 14 to 6 AWG Min. 3 #12 Max. 2 #6	600V* 2,5mm <sup>2</sup> to 16,0mm <sup>2</sup> Min. 3-4,0mm <sup>2</sup> Max. 2-16,0mm <sup>2</sup>	50 / Box	<b>WT54-1</b>	<b>30-WT54C</b>
				100 / Bag	<b>WT54-B</b>	<b>30-WT54B</b>
WGR	Green	14 to 10 AWG Min. 2 #14 Max. 5 #12	2,5mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 2-2,5mm <sup>2</sup> Max. 5-4,0mm <sup>2</sup>	50 / Box	<b>WGR-1</b>	<b>30-WGRC</b>
				250 / Bag	<b>WGR-B</b>	<b>30-WGRB</b>
				500 / Jar	<b>WGR-500JR</b>	<b>30-WGRJ</b>
				25,000 / Barrel	<b>WGR-SK</b>	<b>30-890</b>
WT5	Assortment**	See WT51 & WT52 above	See WT51 & WT52 above	(75 Yellow, 75 Red)/Jar	<b>WT5152JR</b>	—

\*1,000V maximum in fixtures and signs

\*\*Includes 75 each of WT51 and WT52 WingTwist™ Wire Connectors



## Splice Cap Crimp Connectors

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



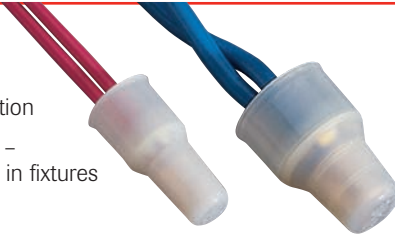
Description	Wire Combination Range (Inches)	Quantity / Package	Cat. No.
Copper Crimp Connector	600V* 18 to 10 AWG Min. 2 #18 Max. 4 #12	100 / Box	<b>2006S</b>
		1,000 / Bag	<b>2006SB</b>
Copper Crimp Connector	600V* 14 to 4 AWG Min. 2 #10 Max. 2 #6	50 / Box	<b>2011S</b>
		500 / Bag	<b>2011SB</b>

\*1,000V maximum in fixtures and signs



## 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)



For Connector Model	Quantity / Package	Cat. No.
2006S	100 / Box	<b>2007</b>
	1,000 / Bag	<b>2007B</b>
2011S	50 / Box	<b>2014</b>
	500 / Bag	<b>2014B</b>

## Termend® Lugs

- Convenient, safe and fast installation
- One size fits 16 AWG through 8 AWG solid or stranded wire
- Available in ring, spade and locking spade



Tongue Type	Stud Size	Quantity / Package	Cat. No.
Ring	10	50 / Box	<b>16-8-10</b>
Ring	1/4	50 / Box	<b>16-8-1/4</b>
Spade	10	50 / Box	<b>16-8-10S</b>
Locking Spade	10	50 / Box	<b>16-8-10L</b>

## Four-Way Crimp Tool

- Patented design ensures even compression and reliable connectors
- Spring-loaded, cam-actuated plungers
- Fingertip adjustment for different connector sizes



Description	Cat. No.
Four-Way Crimp Tool	<b>C-24</b>

## NM Cable Connectors

- Unique snap-in detents hold fitting firmly in place – eliminates the need for screws, lock nuts or clamps
- UL Listed and CSA Certified for 14/2, 14/3, 12/2, 12/3, 10/2, 10/3 and for double-runs of 14/2 and 12/2 NM sheathed cable



Description	Quantity	Cat. No.
12 in. NM Cable Connector	100	<b>1050</b>



## B-TAP® Insulation-Piercing Tap Connectors

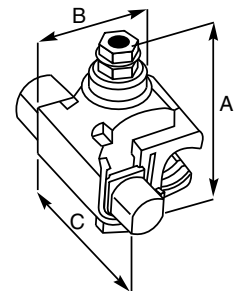
- Eliminates split bolts and tape
- Easy two-minute installation requires only box/socket wrench
- Installs on energized systems eliminating costly power shutdowns
- Self-sealing, grease-filled end-cap ensures safe, weather-tight connection
- Unique turbo spacer keeps connector wide open for quick and easy installation
- Torque-regulating nut breaks off when proper tension is reached
- Full-line is 600V dual-rated, 194°F (90°C)



B-Tap® Wire Range Chart

		Wire Size																		
Cat. No.		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	750
BTC1/0-10	Main: 1/0 - 8																			
	Tap: 2 - 10																			
BTC2/0-14	Main: 2/0 - 4																			
	Tap: 10 - 14																			
BTC4/0-4	Main: 4/0 - 2																			
	Tap: 4/0 - 4																			
BTC4/0-10	Main: 4/0 - 3																			
	Tap: 2 - 10																			
BTC4/0-6	Main: 4/0 - 2																			
	Tap: 2/0 - 6																			
BTC250-4	Main: 250 - 1																			
	Tap: 4/0 - 4																			
BTC350-1/0	Main: 350 - 1/0																			
	Tap: 350 - 1/0																			
BTC500-4	Main: 500 - 2/0																			
	Tap: 4/0 - 4																			
BTC500-1/0	Main: 500 - 4/0																			
	Tap: 350 - 1/0																			
BTC500-14	Main: 750 - 3/0																			
	Tap: 10 - 14																			
BTC750-250	Main: 750 - 250																			
	Tap: 500 - 250																			

Main —  
Tap —



Conductor Range		Voltage Rating	Dimensions (Inches)			Socket Size (Inches)	Torque (In. Lbs.)	No. of Bolts	Cat. No.
Run	Tap		A	B	C				
1/0-8	2-10 <sup>1</sup>	600V	3.1	1.8	2.2	1/2	80	1	<b>BTC1/0-10</b>
2/0-4	10-14 <sup>2</sup>	600V	3.1	1.8	2.2	1/2	80	1	<b>BTC2/0-14</b>
4/0-2	4/0-4	600V	4.4	2.4	3.2	1/2	160	1	<b>BTC4/0-2</b>
4/0-3	2-10 <sup>3</sup>	600V	3.1	1.8	2.2	1/2	125	1	<b>BTC4/0-10</b>
4/0-2	2/0-6	600V	3.5	2.2	2.5	1/2	160	1	<b>BTC4/0-6</b>
250-1	4/0-4	600V	3.5	2.2	2.5	1/2	160	1	<b>BTC250-4</b>
350-1/0	350-1/0	600V	4.5	3	3.9	5/8	330	2	<b>BTC350-1/0</b>
500-2/0	4/0-4	600V	4.5	3	3.9	5/8	330	2	<b>BTC500-4</b>
500-4/0	350-1/0	600V	4.5	3	3.9	5/8	330	2	<b>BTC500-1/0</b>
750-3/0	10-14 <sup>4</sup>	600V	3.7	2.5	2.2	1/2	80	1	<b>BTC500-14</b>
750-250	500-250	600V	4.7	3.4	4.75	5/8	330	2	<b>BTC750-250</b>
Assortment*									<b>BTCA-2</b>

\* Includes BTC 1/0-10, BTC 2/0-14, BTC 4/0-2, BTC 4/0-10, BTC 4/0-6, BTC 250-4, BTC 350-1/0, BTC 500-4 & BTC 500-1/0

<sup>1</sup> Tap #2 - #10 Cu solid/stranded; #2 - #10 Al stranded

<sup>2</sup> Tap #10 - #14 Cu solid/stranded; #10 - #14 Al stranded

<sup>3</sup> Tap #2 - #10 Cu solid/stranded; #2 - #8 Al stranded

<sup>4</sup> Tap #10 - #14 Cu solid/stranded; #10 - #12 Al stranded





## Waterproof Breakaway Steetlight Connector & Splice Insulating Kits

- Safe and easy installation in five minutes or less
- No special equipment necessary – requires only a knife, wire stripper and crimp tool
- Unique wire entry port, cut-off design accommodates industry's widest range of insulation diameters
- Fewer parts than competitive brands for better waterproof protection
- Built-in break-away design eliminates de-energization of complete circuits
- Safely separates upon impact without breaking wires – eliminates potential danger and electrical shock (breakaway models)
- Unique 2-in-1 one-piece crimp barrel accommodates industry's widest range of conductors (breakaway models)
- Spring-loaded contacts compensate for thermal expansion to maintain integrity of waterproof connection (breakaway models)



## Application Guide

### Examples of Several Kit Configurations

### For Poles with Transformer Bases, Standard Bases and Junction Boxes

#### Underground Feed Phase to Phase

##### Configurations

- D65 dual in-line for phases and two 84 or 84S kits for taps
- Two 82 or 82S Y-Tap Kits for phases and taps
- Two BTS4 B-CAP® Twist & Seal Wire Connectors

##### Comments

- Recommended
- Cost-effective
- Non-breakaway, small gauge (8 AWG and above). See Wire Connector section.

#### Underground Feed Phase to Neutral

##### Configurations

- D65PN dual in-line for phase and neutral and Two 84 or 84S kits for tap
- One 82 or 82S Y-Tap Kit for phase and tap and one 83 or 83S Y-Tap Kit for neutral and tap
- Two BTS4 B-CAP® Twist & Seal Wire Connectors

##### Comments

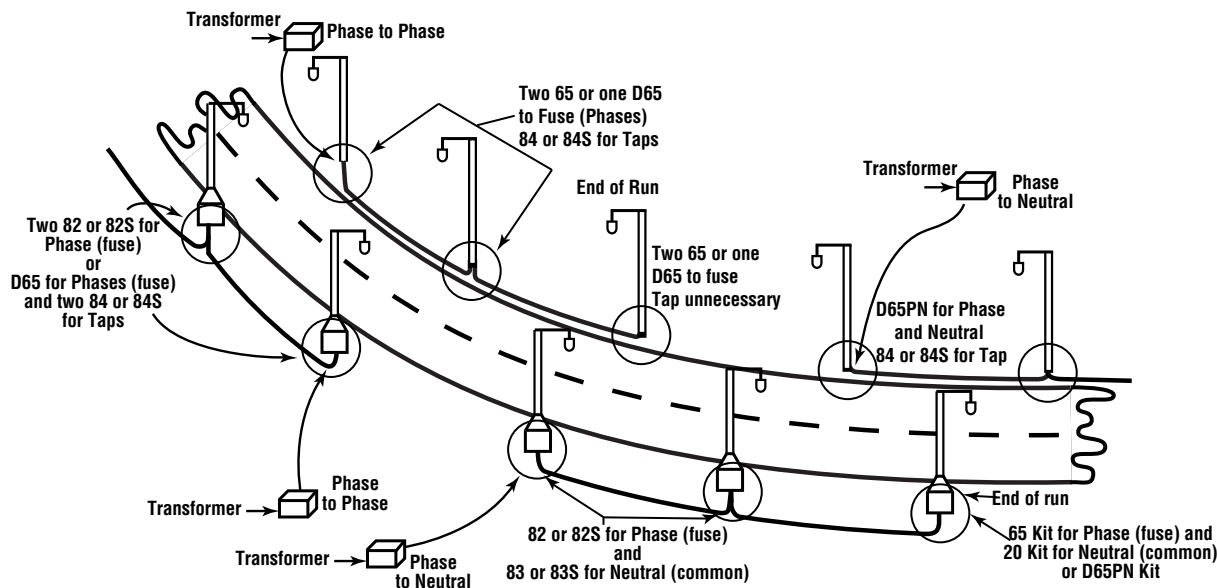
- Recommended configuration
- Cost-effective
- Non-breakaway, small gauge (8 AWG and above). See Wire Connector section.

### For Lights Mounted to Utility Poles, etc...

#### Overhead Feed

- Two B-Tap® Insulation Piercing Connectors for phase and/or tap (for insulated conductors only)

Recommended configuration, see B-Tap® Insulation Piercing Connectors in this catalog.

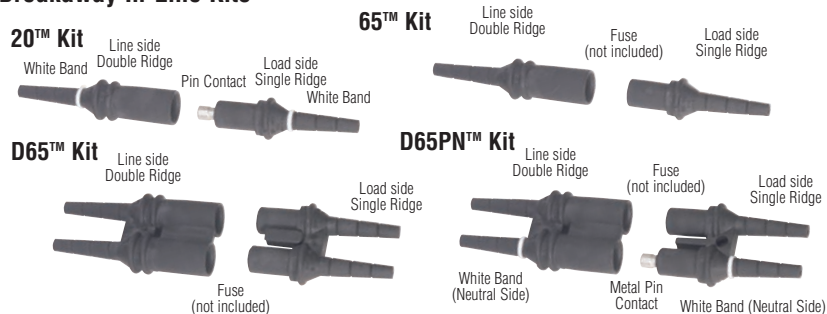




## Ordering Information

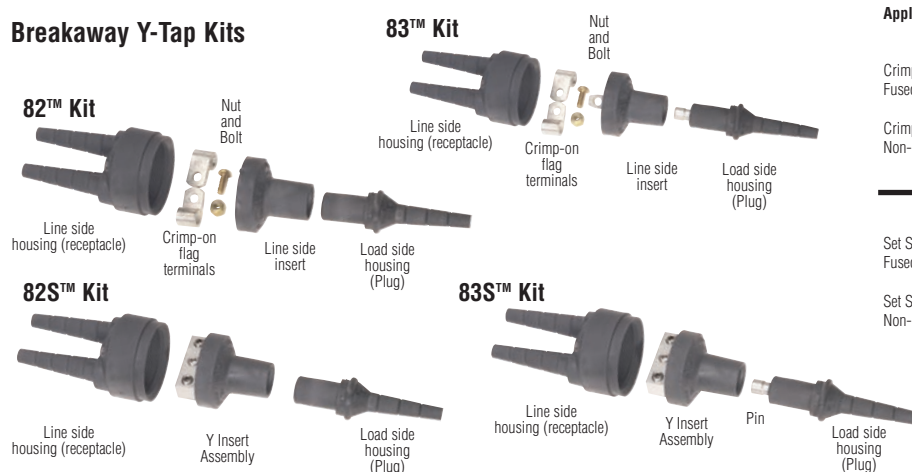
Use the following chart and table to determine the correct part number by choosing model, line side, and load side ordering codes from the shaded columns. See example below, right (Page A-45).

### Breakaway In-Line Kits



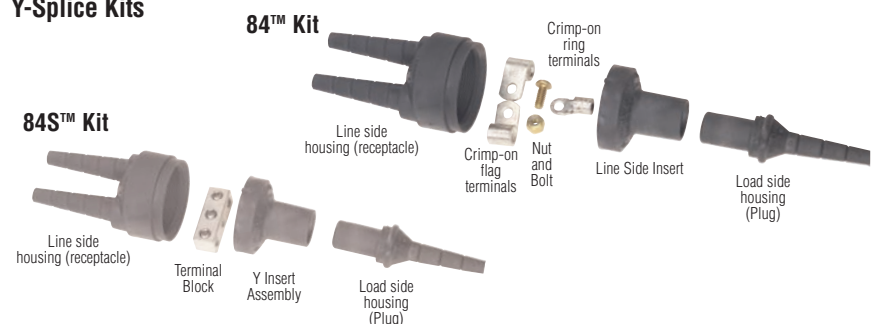
MODEL		
Application	Electrical Rating	Ordering Code
In-Line Neutral Non-Fused Breakaway	30 Amp 600 Volt	20 –
In-Line Phase Fused Breakaway	1/10-30 Amp 600 Volt	65 –
Dual In-Line Phase Fused Breakaway	1/10-30 Amp 600 Volt	D65 –
Dual In-Line Phase & Neutral Fused Breakaway	1/10-30 Amp Phase 30 Amp Neutral 600 Volt	D65PN –

### Breakaway Y-Tap Kits



Application	Electrical Rating	Ordering Code
Crimped Phase Fused Tap & Run	1/10-30 Amp 600 Volt	82 –
Crimp Neutral Non-Fused Tap & Run	125 Amp Line 30 Amp Load 600 Volt	83 –
Set Screw Phase Fused Tap & Run	1/10-30 Amp 600 Volt	82S –
Set Screw Neutral Non-Fused Tap & Run	70 Amp Line 30 Amp Load 600 Volt	83S –

### Y-Splice Kits



Application	Electrical Rating	Ordering Code
Crimp Splice Tap & Run	150 Amp 600 Volt	84 –
Set Screw Splice Tap & Run	70 Amp 600 Volt	84S –

**Excerpts of the 1996 NEC Tables 5 & 5A  
Dimensions of Insulated Conductors and Fixture Wires**

Size (AWG)	Approx. Diameter in Inches for Insulation Types:						Approx. Diameter in Inches for Compact AL with Insulation Types:		
	RH	RHW-2, RHW	TW	THW, THW-2	THWN, THWN-2	XHHW, XHHW-2	THW, THHW	THHN	XHHW
14	0.163	0.193	0.133	0.163	0.111	0.133	—	—	—
12	0.182	0.212	0.152	0.182	0.130	0.152	—	—	—
10	0.236	0.236	0.176	0.206	0.164	0.176	—	—	—
8	0.326	0.326	0.236	0.266	0.216	0.236	0.255	—	0.224
6	0.364	0.364	0.304	0.304	0.254	0.274	0.290	0.240	0.260
4	0.412	0.412	0.352	0.352	0.324	0.322	0.335	0.305	0.305
3	0.440	0.440	0.380	0.380	0.352	0.350	—	—	—
2	0.472	0.472	0.412	0.412	0.384	0.382	0.390	0.360	0.360
1	0.582	0.582	0.492	0.492	0.446	0.442	0.465	0.415	0.415
1/0	0.622	0.622	0.532	0.532	0.486	0.482	0.500	0.450	0.450

National Electric Code®, Copyright © 1996, National Fire Protection Association, Quincy MA 02269



# Wire Termination

## LINE SIDE

Insulation Diameter Range (Inches)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)
.120-.430	12-6	Copper Crimp	U –
	12-6	Aluminum Crimp	UA –
	4 or 2	Copper Crimp	LC –
	4 or 2	Aluminum Crimp	LA –

## LOAD SIDE

Insulation Diameter Range (Inches)	Equivalent Conductor (See Table)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)
.120-.430	1	12-6	Copper Crimp	U
		12-6	Aluminum Crimp	UA
		4 or 2	Copper Crimp	LC
		4 or 2	Aluminum Crimp	LA

NOTE: It is not necessary to use the load side ordering code if it is the same as the line side code, i.e., a 65U-U is ordered as a 65U.

Insulation Diameter Range (Inches)	Ordering Code (CHOOSE 1)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	Insulation Diameter Range (Inches)	Equivalent Conductor (See Table)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)
.155-.430	ADB	10	Copper Crimp	6 –	.120 -.430	1	12-6	Copper Crimp	C
		8	Copper Crimp	4 –			12-6	Aluminum Crimp	A
		6	Copper Crimp	3 –			4 or 2	Copper Crimp	LC
		4	Copper Crimp	2 –					
.420-.785	EAFB	2	Copper Crimp	1 –	.120 -.430	1	4 or 2	Copper Crimp	LC
		1	Copper Crimp	0 –			4 or 2	Aluminum Crimp	LA
		1/0	Copper Crimp	10 –					
.155-.430	ADB	10		1 –	.120 -.430	1	12-6	Copper Crimp	C
		8		1 –			12-6	Aluminum Crimp	A
		6	Terminal Block with Set Screws	1 –			4 or 2	Copper Crimp	LC
		4	Copper or Alum. Conductors	1 –			4 or 2	Aluminum Crimp	LA
.420-.785	EAFB	2		1 –	.120 -.430	1			
		1		10 –					
		1/0		10 –					

Insulation Diameter Range (Inches)	Ordering Code (CHOOSE 1)	Stranded* Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)	Insulation Diameter Range (Inches)	Equivalent Conductor (See Table)	Conductor Size (AWG)	Type	Ordering Code (CHOOSE 1)
.155-.430	ADB	10	Copper Crimp	6 –	.120 -.430	1	10	Copper Crimp	6
		8	Copper Crimp	4 –			8	Copper Crimp	4
		6	Copper Crimp	3 –			6	Copper Crimp	3
		4	Copper Crimp	2 –			4	Copper Crimp	2
.420-.785	EAFB	2	Copper Crimp	1 –	.120 -.430	1	2	Copper Crimp	1
		1	Copper Crimp	0 –			1	Copper Crimp	0
		1/0	Copper Crimp	10 –					
.155-.430	ADB	10		1 –	.120 -.430	1	10-2	Terminal Block Copper or Aluminum Conductors	N/A
		8		1 –					
		6	Terminal Block with Set Screws	1 –					
		4	Copper or Alum. Conductors	1 –					
.420-.785	EAFB	2		1 –	.120 -.430	1			
		1		10 –					
		1/0		10 –					

75°C / 600 Volts Max.



LR32565

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.**

\* For solid wire: 14-4 AWG, use codes U, UA, C, or A. 2 AWG, use codes LC or LA.

### Example:

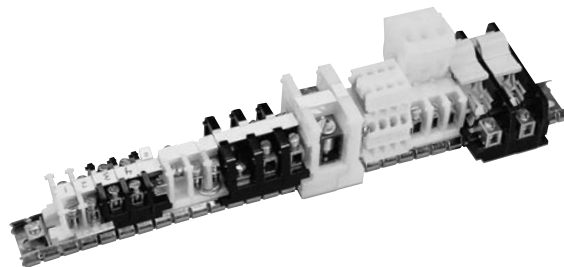
A Y-Tap Kit with set screws for a 2 AWG phase line side conductor with a diameter of .472" and a 10 AWG copper load side conductor is ordered as an 82S-EAFB1-C.



## Terminal Blocks

BUCHANAN CONSTRUCTION PRODUCTS, INC. offers the industry's most comprehensive and accommodating line of terminal blocks. BUCHANAN terminal blocks make wiring jobs simpler and allow easy ready hook-up of wires from different components or areas throughout a structure.

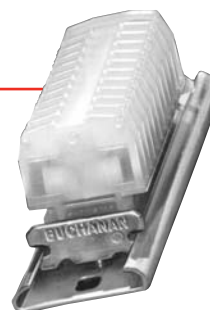
- Wide range of configurations to solve virtually any wiring need
- Wide wire ranges – 30 AWG to 250 KCMIL (MCM)
- Easy installation – connect and disconnect quickly making them perfect for maintenance and troubleshooting applications
- Versatile, accommodating sectional design
- Three housing options to meet your specific applications – nylon, phenolic and polyester
- Wide selection of contact types
- Full line of accessories for easy customization



### 100 Series - Miniature (High Density)

These miniature terminal blocks fit on a much smaller channel to save valuable panel space or can be surface mounted directly to the panel. Miniature blocks accept wire as large as 12 AWG.

- No wire crimping required – clamp contacts hold wire from 30 AWG to 12 AWG better than crimp-on terminals
- Saves installation time and cost – tubular clamp contacts supplied with captive screws backed out
- Nylon housing for rugged applications
- Positive stop prevents wire from being inserted too far and prevents screw from being tightened on insulation; easy access contact provides safe, reliable and cost-effective connection
- Quick installation and change – additional sections may be added or removed without removing channel mounting screw
- Matte-finish area for marking directly on block



Catalog Number - 100 Series	125	115	End Section	
			130	120
Mounting Style	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)

WIRE RANGE: Solid or Stranded

#### Tubular Clamp

1 #12 AWG, 1 #14 AWG, 1 to 3 #16 AWG, 1 to 5 #18 AWG, 1 to 6 #20 AWG, 1 to 7 #22 AWG

### Terminal Block Specifications

100 Series	125	115
Housing Material	Nylon	
Maximum Service Temperature	125°C (257°F)	
Flammability	UL94V2	
Wire Strip Length (in.)	5/16	
Torque (lbs.)	6-9	
UL Rating	28A @ 300V	
Wire Range (AWG) Solid & Stranded	30-12	
Pitch (in.)	0.25	
Terminals per foot	48	



## Miniature - Single Tier HIGH DENSITY

### Flat Base

$$C = .29 + (.25 \times N)$$

$$L = .51 + (.25 \times N)$$

#### On Miniature #12 Channel:

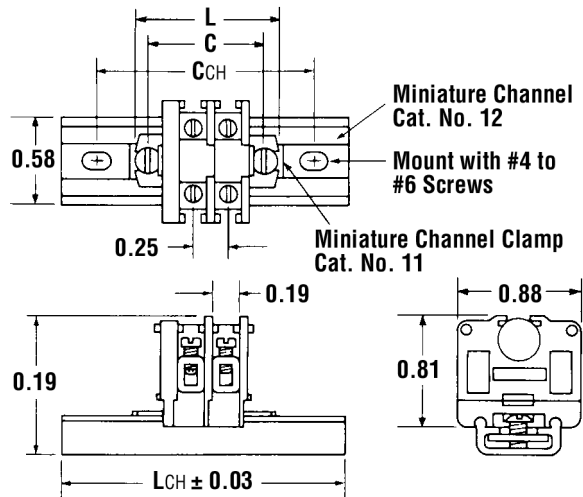
$$C_{CH} = 1.00 + (.25 \times A)$$

$$L_{CH} = 1.35 + (.25 \times A)$$

$$A = N \text{ when } N \text{ is even}$$

$$A = N + 1 \text{ when } N \text{ is odd}$$

N = Number of Miniature Sections



### Dovetail Base

$$C = .35 + (.25 \times N)$$

$$L = .50 + (.25 \times N)$$

#### On Standard #60 Channel:

$$C_{CH} = 2.00 + (.25 \times A)$$

$$L_{CH} = 2.75 + (.25 \times A)$$

N = Number of Single Tier Sections

#### On Miniature #12 Channel:

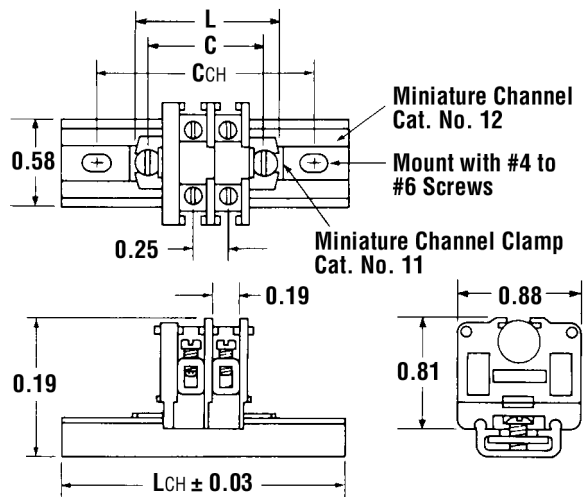
$$C_{CH} = 1.00 + (.25 \times A)$$

$$L_{CH} = 1.35 + (.25 \times A)$$

$$A = N \text{ when } N \text{ is even}$$

$$A = N + 1 \text{ when } N \text{ is odd}$$

N = Number of Miniature Sections

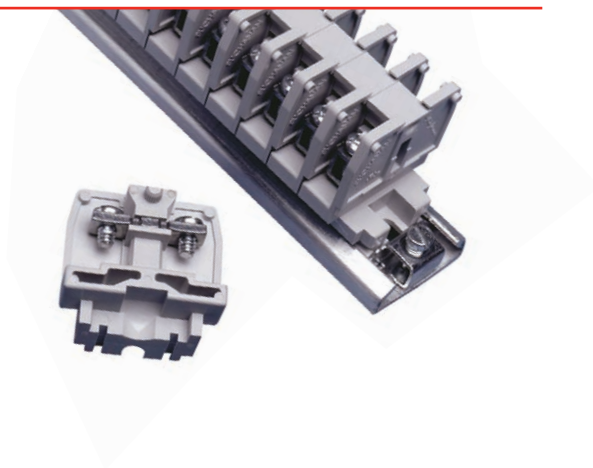




## 900 Series Medium Duty

This family of polyester blocks is ideal for high temperature applications. The rugged material withstands temperatures up to 302°F (150°C)

- Three contact styles cover broad wire range — accept single wire or combinations from 22 AWG to 8 AWG solid or stranded
- Rated at 15A to 50A per circuit
- Flat base models mount directly to surfaces; dovetail base models mount on stranded channel
- Only one end section needed per block assembly
- Readily identifiable circuits - write directly on matte surface of block
- Sections snap-fit with Heavy Duty, Intermediate Heavy Duty and Fuse blocks



### Specifications

**Center-to-Center Spacing:** .375 in.

**Voltage Rating:** 600 Volt max., Current: 50 Amp max.

**Ampacity:** #8 - #22 AWG

Catalog Number	921	0921	924	0924	925	0925	930	0930
Mounting Style	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	End Section (Direct Mount)	End Section (Channel Mount)
Ampacity	15A		50A		30A		—	—
Contact Type	Strap Screw		Tubular Screw		Tubular Clamp		—	—
Screw Type	6-32 Combo Head		10-32 Combo Head		10-32 Combo Head		—	—
Screw Torque	12 in./lbs.		8 in./lbs.		8 in./lbs.		—	—
Wire Range (AWG)	#14 to #22		#8 to #22		#10 to #22		—	—

Housing Material	Polyester (gray)
Contact Material	Copper Alloy, Zinc Plated
Screw Material	Steel, Zinc Plated
Maximum Service Temperature	150°C (302°F)
Flammability	UL94V-0 Rated



WIRE RANGE: Solid or Stranded

#### Strap Screw

1 #22 to 1 #14 AWG

#### Tubular Screw

1 #8 AWG, 1 #10 AWG, 1 to 3 #12 AWG, 1 to 4 #14 AWG, 1 to 4 #16 AWG, 1 to 5 #18 AWG, 1 to 10 #22 AWG

#### Tubular Clamp

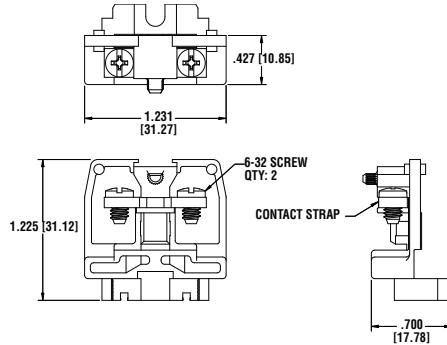
1 #10 AWG, 1 or 2 #12 AWG, 1 to 3 #14 AWG, 1 to 4 #16 AWG, 1 to 5 #18 AWG, 1 to 10 #22 AWG



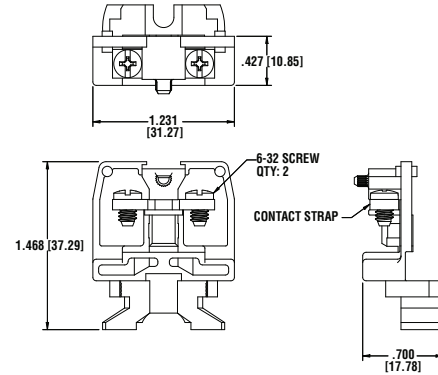
## 900 Series

### Strap Screw

#### Direct Mount (Flat Base)

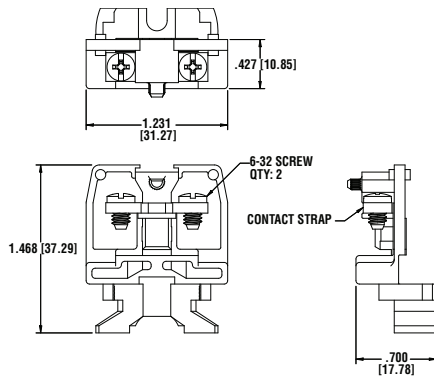


#### Channel Mount (Dovetail Base)

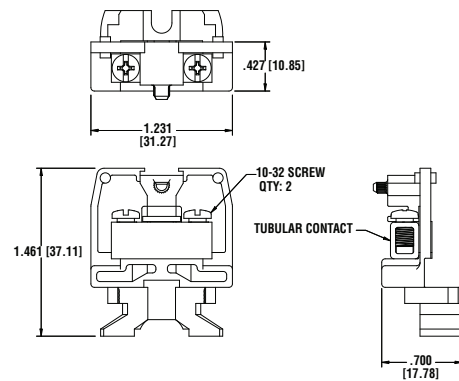


### Tubular Screw/Tubular Clamp

#### Direct Mount (Flat Base)

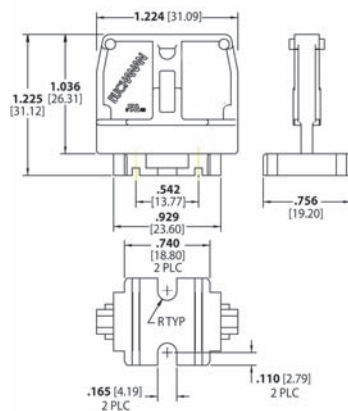


#### Channel Mount (Dovetail Base)

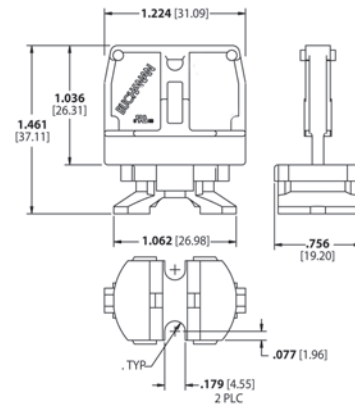


### End Section

#### Direct Mount (Flat Base)



#### Channel Mount (Dovetail Base)

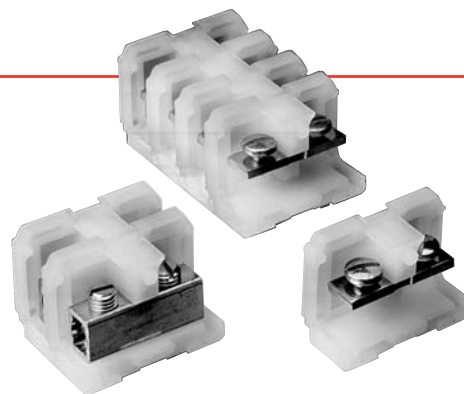




## 200 Series - Nylon HEAVY DUTY

This compact design, heavy-duty line accepts single wire or combinations up to 4 AWG, solid or stranded,; 600V UL and NEMA rating.

- 138 circuits per 6 foot length
- Three contact styles conservatively rated from 35A to 85A per circuit
- Two-way flat-base models surface mount directly to the panel or snap-on miniature channel; dovetail base models mount on standard channel
- Only one end section needed per block assembly
- Readily identifiable circuits – mark directly on painted surface of block sections or use removable marking tape
- Nylon housing for more rugged applications
- Sections snap-fit with Phenolic Heavy Duty, Intermediate Heavy Duty and Fuse blocks



### Specifications

**Center-to-Center Spacing:** .50 in. CL: 24 circuits per foot.

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEEE switchgear standards for 750V.

**Ampacity:** For a single 4 AWG wire, the maximum amperage recommended is 85A.



Catalog Number	241	0241	242	0242	243	0243	250	0250
Mounting Style	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	End-Section (Direct Mount)	End-Section (Channel Mount)
Ampacity	35A		85A		65A		—	—
Contact Type	Strap Screw		Tubular Screw		Tubular Clamp		—	—
Screw Type	10-32 Slotted Binding Head		1/4-28 Slotted Headless		1/4-28 Slotted Headless		—	—
Wire Range (AWG)	#22 to #10		#18 to #4		#18 to #6		—	—
Wire Strip Length	—		1/2 in.		1/2 in.		—	—

Housing Material	Nylon, Type 6/6 unfilled
Contact Material	Copper / Copper Alloy
Screw Material	Steel Plated
Maximum Service Temperature	125°C (257°F)
Breakdown Voltage AC, 60Hz	7000V
Dielectric Strength (RH40% at sea level)	470-385 V/mil thickness (per ASTM D149)
UL High Voltage Arc Testing (in./min.)	0.1 - .35
Water Absorption (24 hrs. % weight gain)	1.5%
Flammability	94V-2 (per UL94)
Chemical Resistance	Resistant to aromatic hydrocarbons, strong alkalis
Radiation Resistance (ergs g <sup>-1</sup> C)	8 x 10 <sup>7</sup>

WIRE RANGE: Solid or Stranded

#### Strap Screw

1 #22 to 1 #10 AWG

#### Tubular Screw

1 #4 AWG, 1 #6 AWG, 1 or 2 #8 AWG, 1 to 4 #10 AWG, 1 to 5 #12 AWG, 1 to 6 #14 AWG, 1 to 6 #16 AWG, 1 to 8 #18 AWG

#### Tubular Clamp

1 #6 AWG, 1 or 2 #8 AWG, 1 to 3 #10 AWG, 1 to 4 #12 AWG, 1 to 4 #14 AWG, 1 to 6 #16 AWG, 1 to 8 #18 AWG



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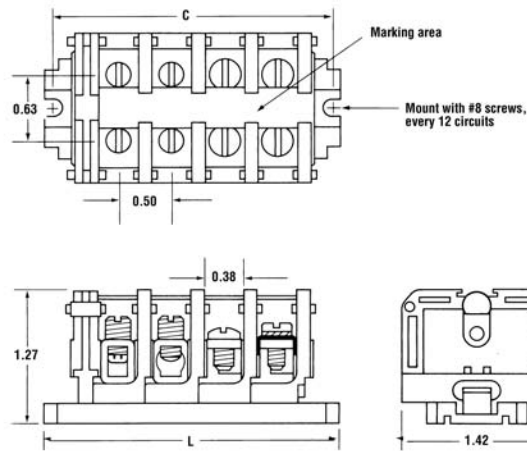
## 200 Series - Nylon HEAVY DUTY

### Flat Base (Direct Mount)

$$C = .56 + (.50 \times N)$$

$$L = .78 + (.50 \times N)$$

N = Number of circuits

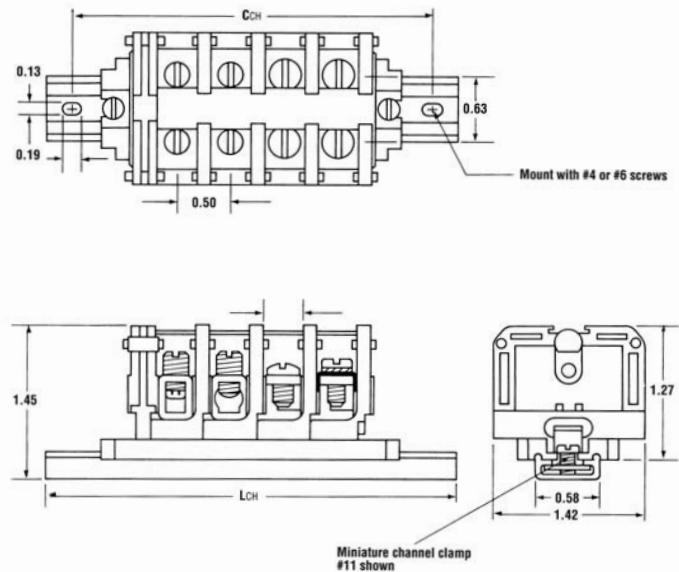


### Flat Base Mounted on #12 Miniature Channel

$$LCH = 1.85 + (.50 \times N)$$

$$CCH = 1.50 + (.50 \times N)$$

N = Number of Circuits

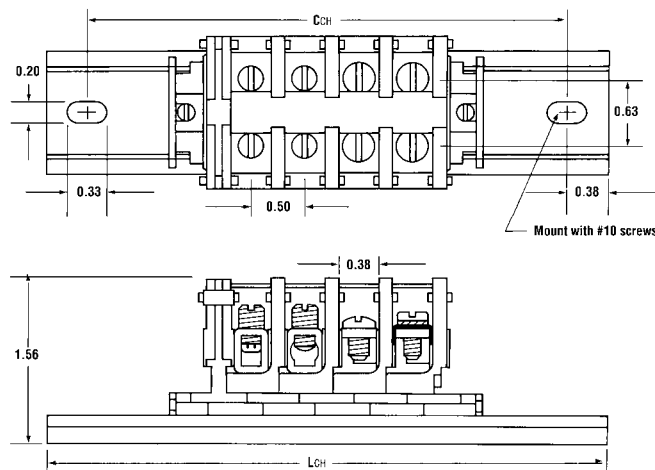
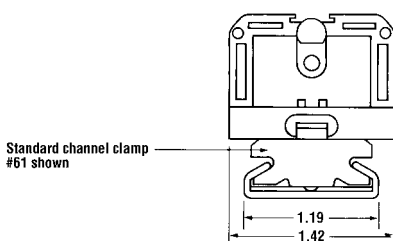


### Dovetail Base Mounted on Standard #60 Channel

$$LCH = .3.03 + (.50 \times N)$$

$$CCH = 2.28 + (.50 \times N)$$

N = Number of circuits

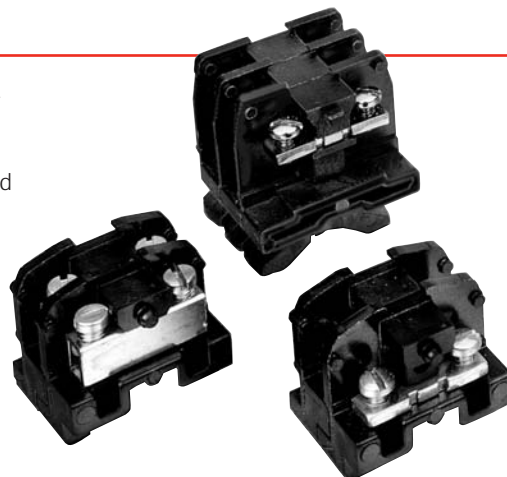




## 200 Series - Phenolic HEAVY DUTY

The family of phenolic heavy duty blocks is ideal for high temperature, high current applications. The rugged material withstands temperatures up to 302°F (150°C).

- Sturdy block accepts single wire or combinations up to 4 AWG solid or stranded
- 122 circuits per 6 foot length
- Three contact styles conservatively rated to 35A to 85A
- Only one end section needed per block assembly
- Readily identifiable circuits – mark directly on painted marking surface or use removable marking strip
- Sections snap-fit with Nylon Heavy Duty, Intermediate Heavy Duty and Fuse Blocks



### Specifications

**Center-to-Center Spacing:** .56 in. CL: 20 circuits per foot.

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEEE switchgear standards for 750V.

**Ampacity:** For a single 4 AWG wire, the maximum amperage recommended is 85A.



Catalog Number	221	0221	222	0222	223	0223	230	0230
Mounting Style	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	End-Section (Direct Mount)	End-Section (Channel Mount)
Ampacity	35A		85A		65A		—	—
Contact Type	Strap Screw		Tubular Screw		Tubular Clamp		—	—
Screw Type	10-32 Slotted Binding Head		1/4-28 Slotted Headless		1/4-28 Slotted Headless		—	—
Wire Range (AWG)	#22 to #10		#18 to #4		#18 to #6		—	—
Wire Strip Length	—		1/2 in.		1/2 in.		—	—

Housing Material	Phenolic, Filled, Flame retardant
Contact Material	Copper / Copper Alloy
Screw Material	Steel Plated
Maximum Service Temperature	150°C (302°F)
Breakdown Voltage AC, 60Hz	7000V
Dielectric Strength (RH40% at sea level)	300V/mil thickness (per ASTM D149)
UL High Voltage Arc Testing (in./min.)	.49 - .59
Water Absorption (24 hrs. % weight gain)	45% (per ASTM D570)
Flammability	94V-1 (per UL94)
Chemical Resistance	Resistant to acids, alkalies, aliphatic hydrocarbons and ketones (per ASTM D5343)
Radiation Resistance (ergs g <sup>-1</sup> C)	2.7 x 10 <sup>8</sup> min.

WIRE RANGE: Solid or Stranded

#### Strap Screw

1 #18 to 1 #8 AWG

#### Tubular Screw

1 #4 AWG, 1 #6 AWG, 1 or 2 #8 AWG, 1 to 4 #10 AWG, 1 to 5 #12 AWG, 1 to 6 #14 AWG, 1 or 6 #16 AWG, 1 to 8 #18 AWG

#### Tubular Clamp

1 #6 AWG, 1 or 2 #8 AWG, 1 to 3 #10 AWG, 1 to 4 #12 AWG, 1 to 4 #14 AWG, 1 to 6 #16 AWG, 1 to 8 #18 AWG



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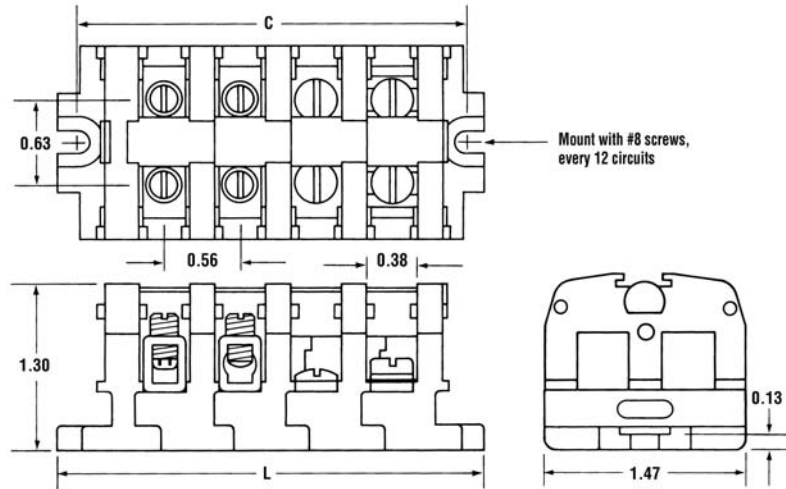
## 200 Series - Phenolic HEAVY DUTY

### Flat Base (Direct Mount)

$$C = .59 + (.57 \times N)$$

$$L = .81 + (.57 \times N)$$

N = Number of circuits

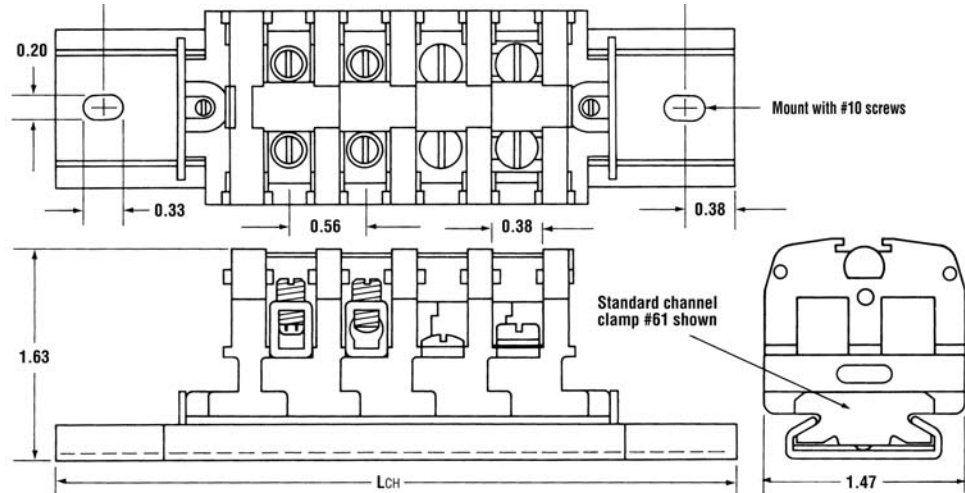


### Dovetail Base Mounted on Standard #60 Channel

$$CCH = 2.31 + (.57 \times N)$$

$$LCH = 3.06 + (.57 \times N)$$

N = Number of circuits

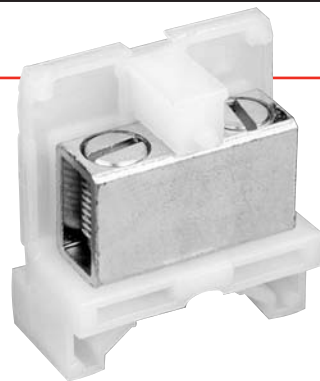




## Nylon INTERMEDIATE HEAVY DUTY

The 800 Series line of 600V blocks is conservatively rated up to 150A for a single 1/0 AWG copper wire.

- Exceptionally compact block accepts single wire or combinations up to 1/0 AWG
- 92 circuits per 6 foot length
- Tubular screw contact style accepts AWG sizes from 12 to 1/0, solid or stranded
- Two-way mounting base fits standard channel or mounts directly to flat surfaces
- Only one end section needed per block assembly
- Readily identifiable circuits – write directly on painted marking surface or use removable vinyl marking strip
- Nylon housing for rugged applications, 7/16 -20 slotted headless screws
- Snap-fit with Heavy-Duty Nylon and Phenolic and Fuse Blocks



### Specifications

**Center-to-Center Spacing:** .75 in. CL: 16 circuits per foot.

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA standards for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEEE switchgear standards for 750V.

**Ampacity:** For a single 1/0 AWG copper wire, the maximum amperage recommended is 150A.

Catalog Number	824	830
Mounting Style	Two-Way Mounting Base	End Section
Ampacity	150A	—
Contact Type	Tubular Screw	—
Screw Type	7/16-20 Slotted Headless	—
Wire Range (AWG)	12 to 1/0	—
Wire Strip Length	11/16 in.	—

Housing Material	Nylon, Type 6/6 Unfilled
Contact Material	Copper
Screw Material	Steel, Zinc-Plated
Maximum Service Temperature	125°C (257°F)
Breakdown Voltage AC, 60Hz	8800V
Dielectric Strength (RH40% at sea level)	470-385V/mil thickness (per ASTM D149)
UL High Voltage Arc Testing (in./min.)	.01 - .35
Water Absorption (24 hrs. % weight gain)	1.5%
Flammability	94V-2
Chemical Resistance	Resistant to aromatic hydrocarbons, strong alkalies
Radiation Resistance (ergs g <sup>-1</sup> C)	8 x 10 <sup>7</sup>

WIRE RANGE: Solid or Stranded

#### Tubular Screw

1 #1/0 AWG, 1 #1 AWG, 1 #2 AWG, 1 or 2 #4 AWG, 1 to 3 #6 AWG, , 2, 3 or 5 #8 AWG, 1 to 6 #10 AWG, 1 to 7 #12 AWG



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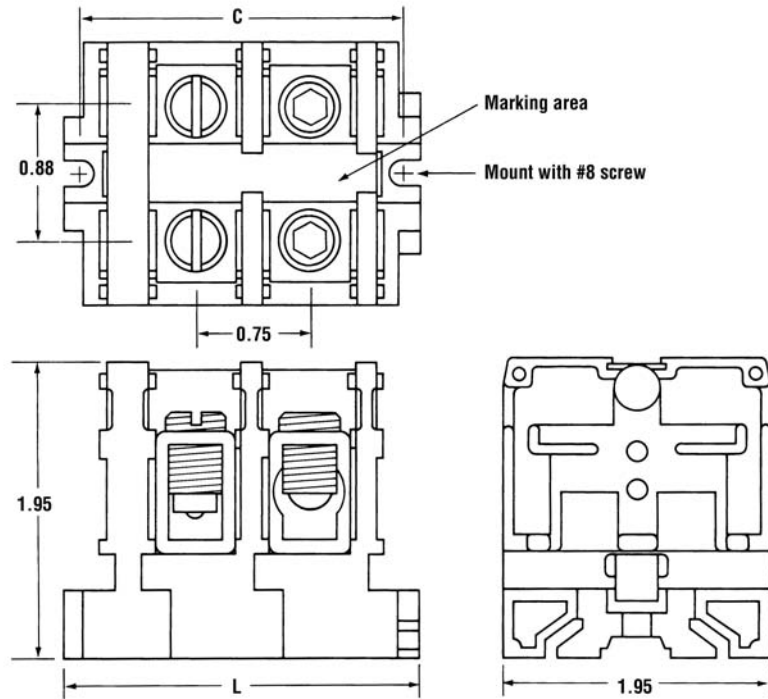
## Phenolic HEAVY DUTY

### Flat Base (Direct Mount)

$$C = .59 + (.75 \times N)$$

$$L = .81 + (.75 \times N)$$

N = Number of circuits

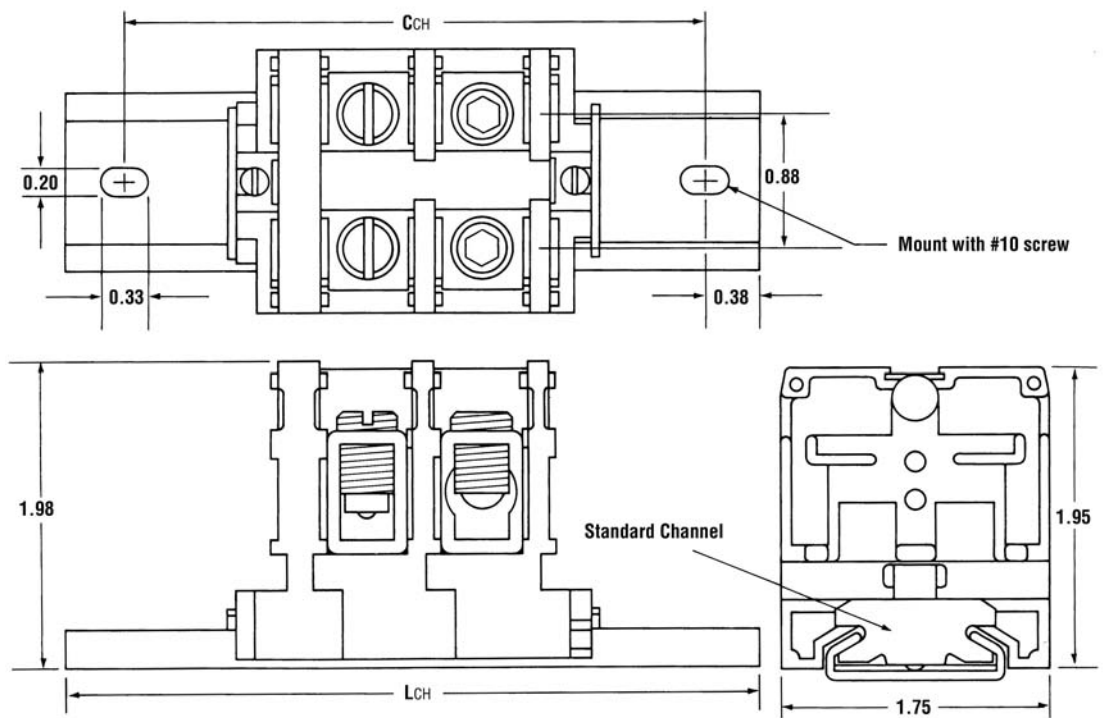


### Dovetail Base Mounted on Standard #60 Channel

$$C_{CH} = 2.31 + (.75 \times N)$$

$$L_{CH} = 3.06 + (.75 \times N)$$

N = Number of circuits

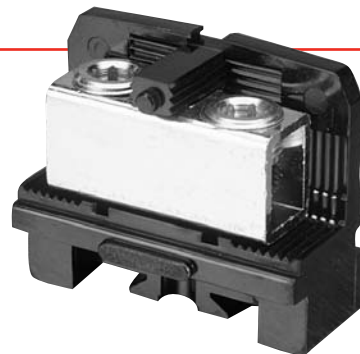




## Phenolic ULTRA HEAVY DUTY - 250 KCMIL (MCM)

This Ultra Heavy Duty line is rated up to 255 amps with a single 250 MCM conductor.

- Compact block accepts wire sizes up to 2/0 or 250 KCMIL (MCM)
- 57 circuits per 6 foot length
- Tubular screw contact style for maximum electrical rating
- Block mounts directly on flat surface or standard channel
- Only one end section needed per block assembly
- Readily identifiable circuits – write directly on painted marking area or use removable vinyl marking strip
- Hex socket screws allow maximum torque when using large wire sizes
- High current capacity snap-fit sectional blocks do not snap-fit with other block styles



### Specifications

**Center-to-Center Spacing:** 1.19 in. CL: 9 circuits per foot.

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEEE switchgear standards for 750V.

**Ampacity:** For a single 250 KCMIL wire, the maximum amperage recommended is 255A.

Catalog Number	426	427	430
Mounting Style	Two-Way Mounting Base	Two-Way Mounting Base	End-Section
Ampacity	175A	255A	—
Contact Type	Tubular Screw	Tubular Screw	—
Screw Type	1/2-30 Hex Socket	3/4-16 Hex Socket	—
Wire Range (AWG)	#12-2/0	#6-250 KCMIL/MCM	—
Wire Strip Length	1 in.	1 in.	—

Housing Material	Phenolic, Filled, Flame retardant
Contact Material	Copper
Screw Material	Steel Plated
Maximum Service Temperature	150°C (302°F)
Breakdown Voltage AC, 60Hz	10000V
Dielectric Strength (RH40% at sea level)	300V/mil thickness (per ASTM D149)
UL High Voltage Arc Testing (in./min.)	.49 - .58
Water Absorption (24 hrs. % weight gain)	0.45% (per ASTM D570)
Flammability	94V-1 (per UL94)
Chemical Resistance	Resistant to acids, alkalis and aliphatic, hydrocarbons and ketones (per ASTM D543)
Radiation Resistance (ergs g <sup>-1</sup> C)	2.7 x 10 <sup>8</sup> min.

WIRE RANGE: Solid or Stranded

#### Tubular Screw

1 #2/0 AWG, 1 #1/0 AWG, 1 #1 AWG, 1 or 2 #2 AWG, 1 to 3 #4 AWG, 1 to 3 #6 AWG, 1 to 4 #8 AWG, 1 to 6 #10 AWG, 2 to 8 #12 AWG

#### Tubular Screw

1 #250 KCMIL, 1 #4/0 AWG, 1 #3/0 AWG, 1 or 2 #2/0 AWG, 1 or 2 #1/0 AWG, 1 or 2 #1 AWG, 1 to 3 #2 AWG, 1 to 4 #4 AWG, 1 to 5 #6 AWG



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## Phenolic HEAVY DUTY

### Flat Base Mounted on Standard #60 Channel

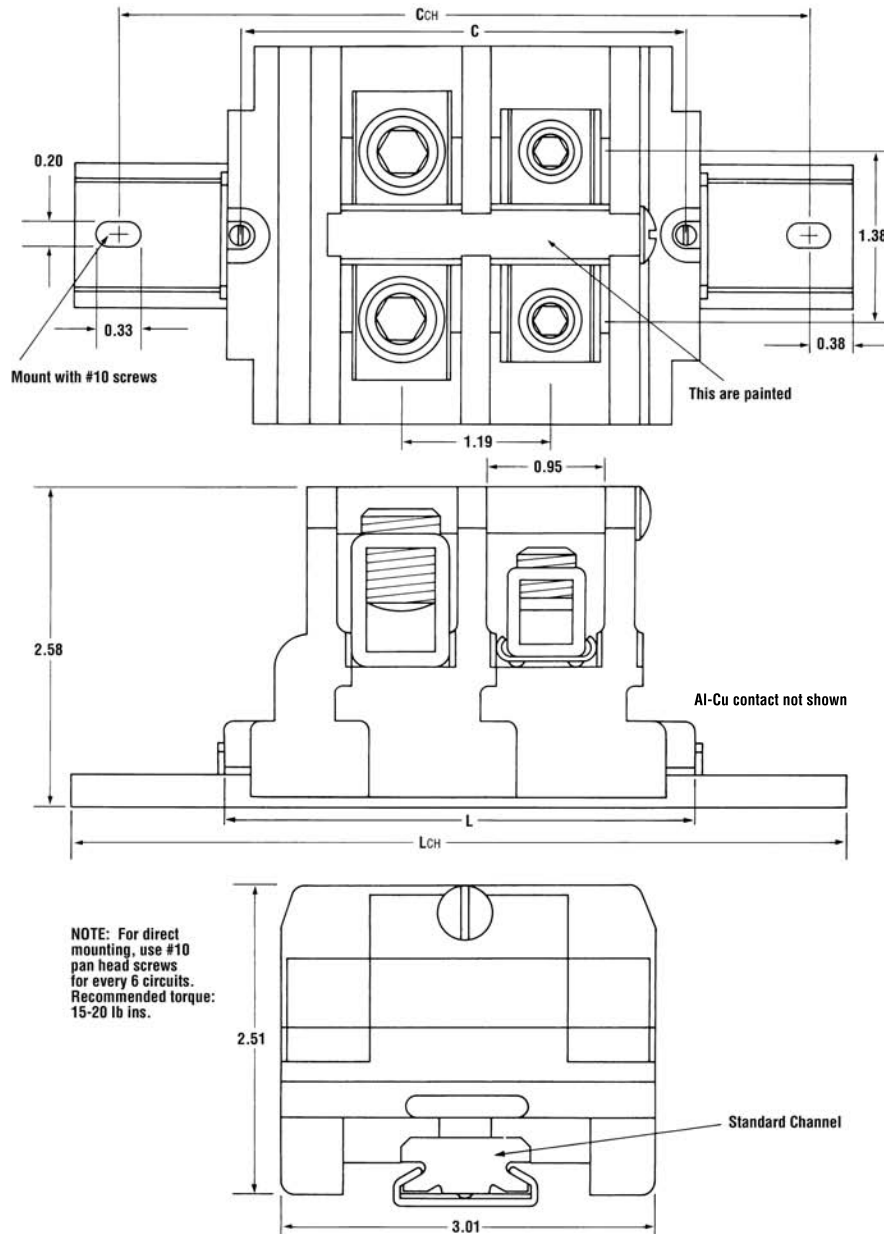
$$C = 1.19 + (1.19 \times N)$$

$$L = 1.40 + (1.19 \times N)$$

$$CCH = 2.90 + (2.90 \times N)$$

$$LCH = 3.65 + (3.65 \times N)$$

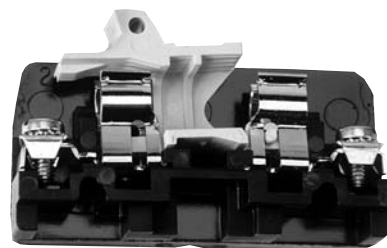
N = Number of circuits





## Phenolic Fuse Blocks

- Provide in-line circuit protection for any circuit or group of circuits
- Three contact styles for terminated or unterminated wire are conservatively rated to 30A
- Remove, check and replace fuses safely and quickly – switch-action fuse blocks open circuits before fuse can be removed or installed
- Good circuit density when mounted adjacently – 91 circuits per 6 foot length
- Use in high temperature applications – phenolic housing withstands temperatures up to 302°F (150°C)
- Flat base models for surface mounting, dovetail base models for standard channel
- Only one end section needed per block assembly
- Open or close several circuits simultaneously – holes in puller handles allow use of nylon “ganging” rods
- Readily identifiable circuits – mark directly on white, matte-surface puller assembly, marking tab on block or use removable marking tape
- Sections snap-fit with Heavy Duty and Intermediate Heavy Duty Blocks



## Specifications

**Center-to-Center Spacing:** .75 in. CL: 16 circuits per foot.

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEEE switchgear standards for 750V.

**Ampacity:** Fuse blocks, 30A

**Fuse Size:** Any 13/32 in. x 1-1/2 in. ferrule-type cartridge fuse up to 30A, indicating or non-indicating, which meets MIL. Spec. F-15160 is recommended.



Catalog Number	351	0351	358	0358	352	0352	330	0330
Mounting Style	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	Direct Mount (Flat Base)	Channel Mount (Dovetail Base)	End-Section (Direct Mount)	End-Section (Channel Mount)
Ampacity	30A		30A		30A		—	—
Contact Type	Strap Screw		Strap Clamp		Tubular Screw		—	—
Screw Type	10-32 Binding Head		8-32 Pan Head w/Clamp		1/4-28 Set Screw		—	—
Wire Range (AWG)	#22 to #8		#18 to #8		#18 - #8		—	—
Wire Strip Length	—		1/2 in.		1/2 in.		—	—

Housing Material	Phenolic, Filled, Flame retardant
Contact Material	Copper alloy
Screw Material	Steel Plated
Maximum Service Temperature	150°C (302°F)
Breakdown Voltage AC, 60Hz	8400V
Dielectric Strength (RH40% at sea level)	300V/mil thickness (per ASTM D149)
UL High Voltage Arc Testing (in./min.)	.49 - .58
Water Absorption (24 hrs. % weight gain)	0.45% (per ASTM D570)
Flammability	94V-1 (per UL94)
Chemical Resistance	Resistance to acids, alkalis and aliphatic hydrocarbons and ketones (per ASTM D543)
Radiation Resistance (ergs g <sup>-1</sup> C)	2.7 x 10 <sup>7</sup> min.

WIRE RANGE: Solid or Stranded

**Tubular Screw, Cat. No. 362 and 0362**

1 #4 AWG, 1 #6 AWG, 1 or 2 #8 AWG, 1 to 4 #10 AWG, 1 to 5 #12 AWG, 1 to 6 #14 AWG, 1 to 6 #16 AWG, 1 to 8 #18 AWG



LR25557



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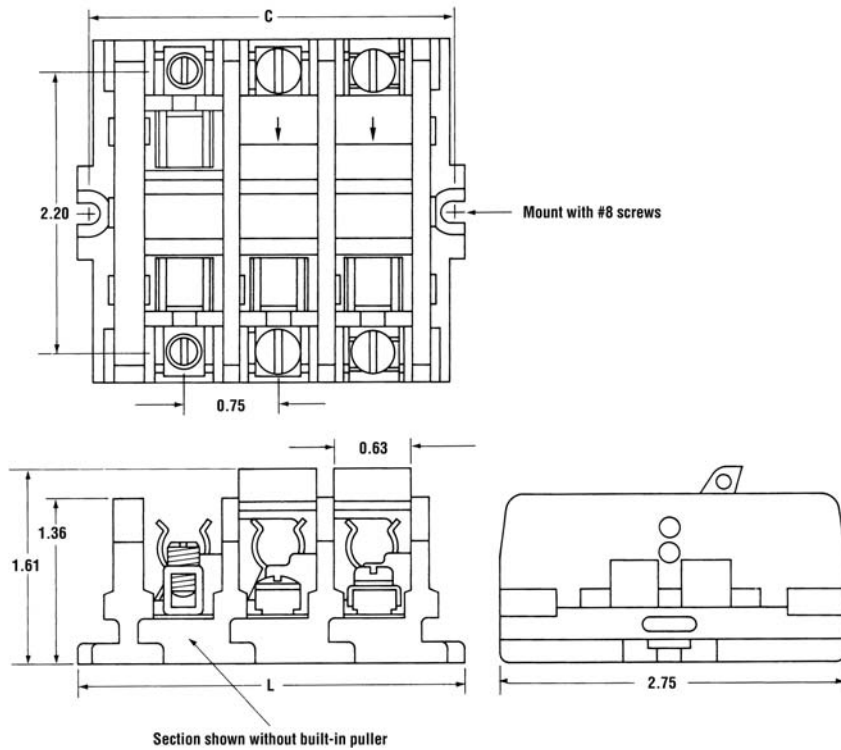
## Phenolic Fuse Blocks

### Flat Base (Direct Mount)

$$C = .59 + (.75 \times N)$$

$$L = .81 + (.75 \times N)$$

N = Number of circuits

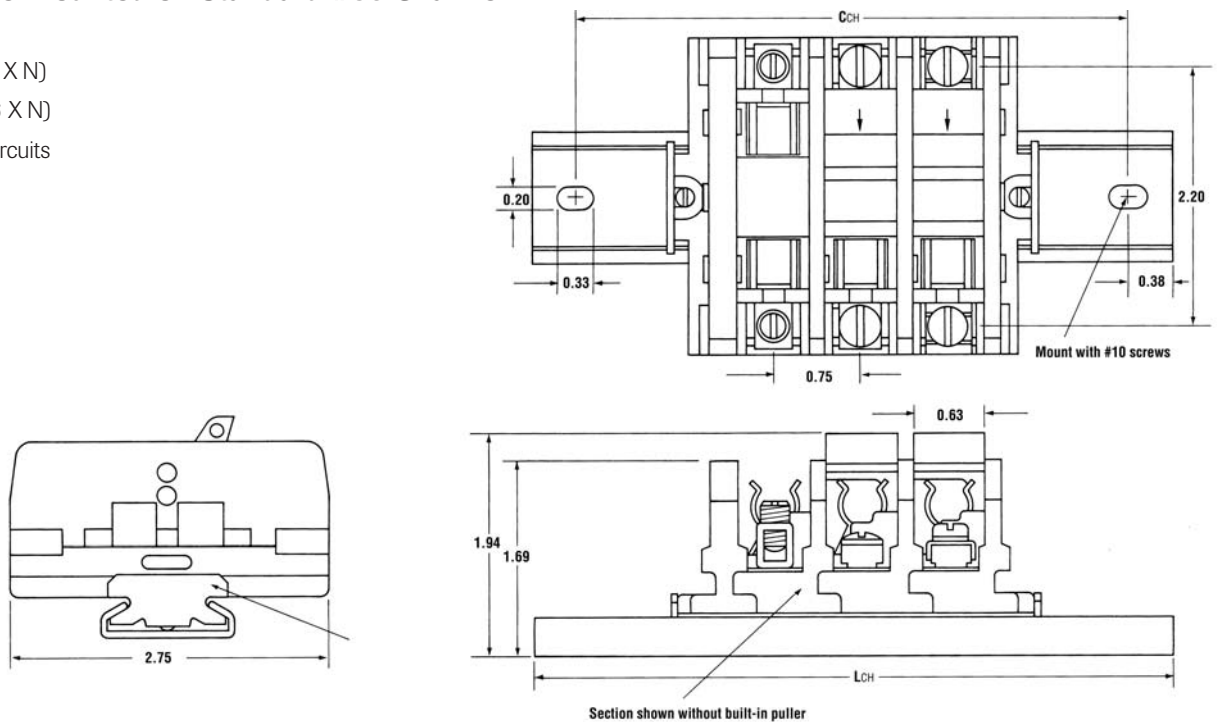


### Dovetail Base Mounted on Standard #60 Channel

$$CCH = 2.31 + (.76 \times N)$$

$$LCH = 3.06 + (.76 \times N)$$

N = Number of circuits

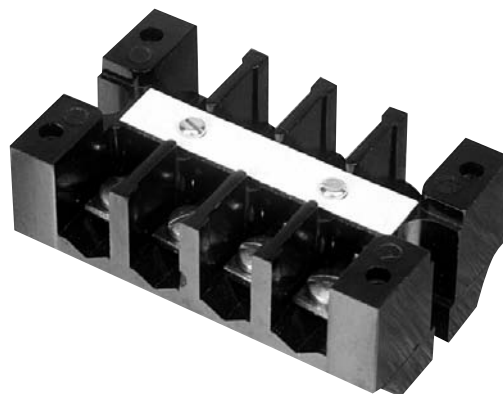




## Phenolic One Piece

Traditional standard in the heavy industrial, rail transport, utility and traffic control industries. The rugged, one-piece construction finds wide application in dirty and fibration-prone environments.

- Two, four, six, eight and twelve circuit models
- Strap screw contacts accept wire 8 AWG and smaller and are rated to 50 Amps
- Dovetail base mounts on standard size channel
- Pilot point screws with strap screw contacts speed installation time
- Easily identifiable circuits with use of plain white marking strip
- No assembly required - each block is a single, easily installed unit



## Specifications

**Center-to-Center Spacing:** .63 in. CL

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEEE switchgear standards for 750V.

**Ampacity:** For a single 8 AWG wire, the maximum amperage recommended is 50A.

Catalog Number	B102	B104	B106	B108	B112
Mounting Style	Two-Way Mounting Base	Two-Way Mounting Base	Two-Way Mounting Base	Two-Way Mounting Base	Two-Way Mounting Base
Number of Circuits	2	4	6	8	12
Ampacity	50A	50A	50A	50A	50A
Contact Type	Strap Screw (Steel)	Strap Screw (Steel)	Strap Screw (Steel)	Strap Screw (Steel)	Strap Screw (Steel)
Screw Type	10-32 Binding Head	10-32 Binding Head	10-32 Binding Head	10-32 Binding Head	10-32 Binding Head
Wire Range (AWG)	#18 to #8	#18 to #8	#18 to #8	#18 to #8	#18 to #8

Housing Material	Phenolic, Filled, Flame retardant
Contact Material	Copper / Copper Alloy
Screw Material	Steel Plated
Maximum Service Temperature	150°C (302°F)
Dielectric Strength (RH40% at sea level)	300V/mil thickness (per ASTM D149)
UL High Voltage Arc Testing (in./min.)	.49 - .58
Water Absorption (24 hrs. % weight gain)	0.45% (per ASTM D570)
Flammability	94V-1 (per UL94)
Chemical Resistance	Resistance to acids, alkalies and aliphatic hydrocarbons and ketones (per ASTM D543)
Radiation Resistance (ergs g <sup>-1</sup> C)	2.7 x 10 <sup>7</sup> min.

WIRE RANGE: Solid or Stranded

**Strap Screw**

1 #18 AWG through 1 #8 AWG

## Dimensions

No. of Circuits	C	L
2	1.63	2.0
4	2.88	3.25
6	4.13	4.50
8	5.38	5.75
12	7.88	8.25



LR25557

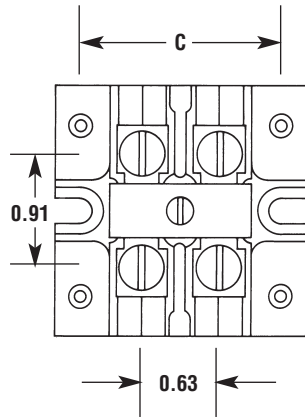


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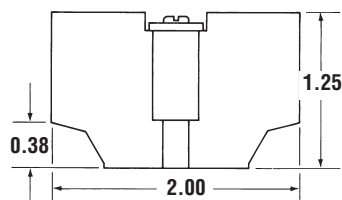
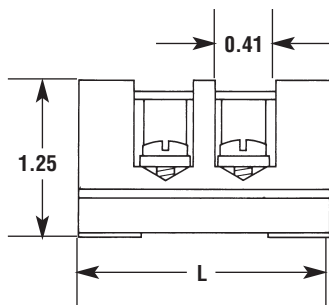


## Phenolic One Piece

### Dovetail Base Mounted on Standard #60 Channel Strap Screw (Steel)



No. of Circuits	C	L
2	1.63	2.0
4	2.88	3.25
6	4.13	4.50
8	5.38	5.75
12	7.88	8.25





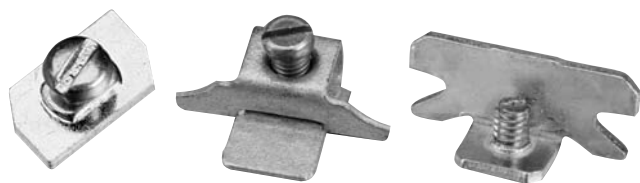
## Mounting Channels



Miniature Channel    Steel Channel    Aluminum Channel (Pre-punched)

Mounting Channels	Length	Cat. No.	For use with:
Miniature Channel	3 ft.	12	Heavy Duty (200 Series)
Steel Channel	6 ft. 3 ft.	60 63	Medium Duty (900 Series) Heavy Duty (200 Series) Intermediate Heavy Duty (800 Series) Ultra Heavy Duty (400 Series) Fuse Blocks (300 Series)
Aluminum Channel (Pre-punched)	6 ft. 3 ft.	64 67	Medium Duty (900 Series) Heavy Duty (200 Series) Intermediate Heavy Duty (800 Series) Ultra Heavy Duty (400 Series) Fuse Blocks (300 Series)

## Channel Clamps

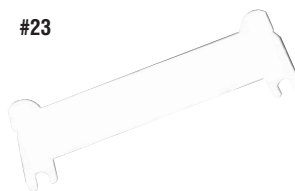


Miniature Clamp    Universal Clamp    Screw Clamp

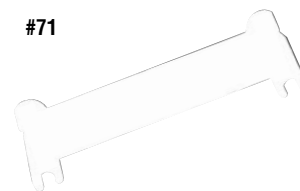
Mounting Channels	Cat. No.	For use with:
Miniature Clamp	11	High Density Miniature (100 Series) Heavy Duty (200 Series)
Universal Clamp	68	High Density Miniature (100 Series) Medium Duty (900 Series) Heavy Duty (200 Series) Intermediate Heavy Duty (800 Series) Ultra Heavy Duty (400 Series) Fuse Blocks (300 Series)
Screw Clamp	61	High Density Miniature (100 Series) Medium Duty (900 Series) Heavy Duty (200 Series) Intermediate Heavy Duty (800 Series) Ultra Heavy Duty (400 Series) Fuse Blocks (300 Series)

## Covers

#23



#71



Description	Cat. No.	Available for:
Terminal Block	23	Heavy Duty (200 Series) Heavy Duty-Phenolic (200 Series)
	71	Medium Duty (900 Series)

## Jumpers

Jumper for Tubular Contacts



#41, 42, 70

Jumper for Strap Screw



#43

Description	Cat. No.	Available for:
Jumpers for Tubular Contacts	41	Heavy Duty-Phenolic (200 Series)
	42	Heavy Duty (200 Series)
	43	Heavy Duty-Phenolic (200 Series)
	70	Medium Duty (900 Series)



## Wire Marker Booklets

- Self-sticking on wire and cable
- Perforated 1/4" x 1-1/2" markers
- For applications above or below ground
- Resists abrasion, moisture, dirt and oil
- Non-smear black legend ensures high visibility

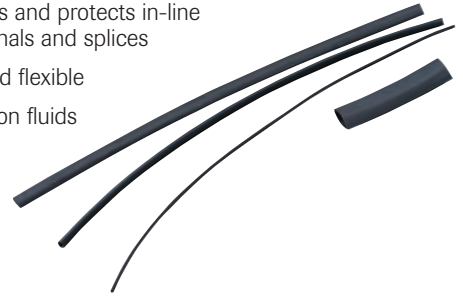


Legend	Quantity	Cat. No.
0-9	45 each	775101
A-Z, 0-15, +, -, /	10 each	775102
1-45	10 each	775103
46-90	10 each	775104

\*Ten pages per booklet with each page bearing the legend assortment indicated. All booklets contain 450 wire and terminal markers.

## BUCHANAN Thin-Wall Heat Shrink Tubing

- Electrically insulates and protects in-line components, terminals and splices
- Flame-retardant and flexible
- Resistant to common fluids and solvents
- Meets UL 224 125°C VW-1 600V
- RoHS compliant
- 2:1 shrink ratio
- Minimum shrink temperature: 70°C
- Operating temperature: -55°C to +125°C

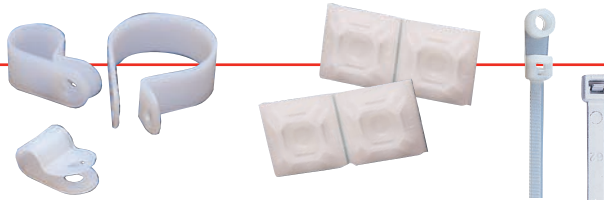


Description	Nominal Size (in.)	Color	Length (ft.)	Cat. No.
Thin Wall Heat Shrink	1/16	Black	4	772-1/16-BL
Thin Wall Heat Shrink	3/32	Black	4	772-3/32-BL
Thin Wall Heat Shrink	1/8	Black	4	772-1/8-BL
Thin Wall Heat Shrink	3/16	Black	4	772-3/16-BL
Thin Wall Heat Shrink	1/4	Black	4	772-1/4-BL
Thin Wall Heat Shrink	3/8	Black	4	772-3/8-BL
Thin Wall Heat Shrink	1/2	Black	4	772-1/2-BL
Thin Wall Heat Shrink	3/4	Black	4	772-3/4-BL
Thin Wall Heat Shrink	1	Black	4	772-1-BL



## Multi-Purpose Cable Ties

- General purpose cable tie for every day bundling and cable management
- UL recognized



Size	Thickness x Width	Color	Tensile Strength (lbs.)	Pkg. Qty.	Cat. No.
<b>Miniature Ties</b>					
4"	.039 x .095	Natural	18	100	<b>B-4-18-9-C</b>
4"	.039 x .095	Natural	18	1000	<b>B-4-18-9-M</b>
4"	.039 x .095	UV Black	18	100	<b>B-4-18-0-C</b>
<b>Intermediate Ties</b>					
6"	.047 x .142	Natural	40	100	<b>B-6-40-9-C</b>
6"	.047 x .142	Natural	40	1000	<b>B-6-40-9-M</b>
6"	.047 x .142	UV Black	40	100	<b>B-6-40-0-C</b>
<b>Standard Air Handling Ties</b>					
8"	.053 x .178	Burgandy	50	100	<b>B-8-50-35-C</b>
11"	.053 x .178	Burgandy	50	100	<b>B-11-50-35-C</b>
<b>Standard Ties</b>					
8"	.057 x .181	Natural	50	100	<b>B-8-50-9-C</b>
8"	.057 x .181	Natural	50	500	<b>B-8-50-9-D</b>
8"	.057 x .181	Natural	50	1000	<b>B-8-50-9-M</b>
8"	.057 x .181	UV Black	50	100	<b>B-8-50-0-C</b>
8"	.057 x .181	UV Black	50	1000	<b>B-8-50-0-M</b>
11"	.057 x .181	Natural	50	100	<b>B-11-50-9-C</b>
11"	.057 x .181	Natural	50	500	<b>B-11-50-9-D</b>
11"	.057 x .181	UV Black	50	100	<b>B-11-50-0-C</b>
11"	.057 x .181	UV Black	50	500	<b>B-11-50-0-D</b>
14"	.057 x .181	Natural	50	100	<b>B-14-50-9-C</b>
14"	.057 x .181	Natural	50	500	<b>B-14-50-9-D</b>
14"	.057 x .181	UV Black	50	100	<b>B-14-50-0-C</b>
14"	.057 x .181	UV Black	50	500	<b>B-14-50-0-D</b>

## Assorted Cable Tie Canisters

- Perfect general purpose assortment for almost any job



Description				Cat. No.
Cable Tie Assortment Canister				<b>B-ASST-500C</b>
<b>INCLUDES:</b>				
Size	Color	Tensile Strength (lbs.)	Pkg. Qty.	Cat. No.
4"	Natural	18	200	<b>B-4-18-9-C</b>
6"	Natural	40	100	<b>B-6-40-9-C</b>
8"	Natural	50	200	<b>B-8-50-9-C</b>

Reference catalog number: Product is packaged in a canister, not individual bags.

Size	Thickness x Width	Color	Tensile Strength (lbs.)	Pkg. Qty.	Cat. No.
<b>Heavy-Duty Ties</b>					
14"	.066 x .299	Natural	120	50	<b>B-14-120-9-C</b>
14"	.066 x .299	UV Black	120	50	<b>B-14-120-0-L</b>
24"	.066 x .299	Natural	175	50	<b>B-24-175-9-L</b>
24"	.066 x .299	UV Black	175	50	<b>B-24-175-0-L</b>
36"	.066 x .299	UV Black	175	50	<b>B-36-175-0-L</b>
36"	.066 x .299	Natural	175	50	<b>B-36-175-9-L</b>
48"	.066 x .299	Natural	175	50	<b>B-48-175-9-L</b>
48"	.066 x .299	UV Black	175	50	<b>B-48-175-0-L</b>
<b>Mounting Ties</b>					
8"	.057 x .189	Natural	50	100	<b>B-8-50MT-9-C</b>
8"	.057 x .189	UV Black	50	100	<b>B-8-50MT-0-C</b>
14"	.053 x .178	Natural	50	100	<b>B-14-50MT-9-C</b>
14"	.053 x .178	UV Black	50	100	<b>B-14-50MT-0-C</b>
<b>Mounting Pads</b>					
3/4" x 3/4"	.142 Max. Tie Width	Natural	N/A	100	<b>BMP-750-9-C</b>
1" x 1"	.189 Max. Tie Width	Natural	N/A	100	<b>BMP-1000-9-C</b>

## Cable Tie Installation Tool

- Tighten-n-Trim Tool has a plastic construction, pull the trigger to tighten the tie and then twist the tool to remove the excess tail
- The economy tool has a plastic/steel construction. Use the trigger to tighten the tie. The excess tail will be automatically trimmed once the tension meets the setting on the tension adjustment dial



Description	Cat. No.
Tighten-n-Trip Tool (not shown)	<b>BCTT-200</b>
Economy Cable Tie Tool (shown)	<b>BCTT-100</b>



**B**

# Wire Installation





# Tuff-Grip™ Pro... Industry's Leading Fish Tape!

**Tuff-Cuff™** tape retaining feature keeps tape properly positioned in the opening.

Full-perimeter handle band helps keep dirt and moisture out, prolonging life

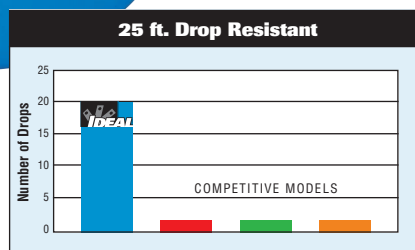
**Tuff-Grip™ Handle**  
Large, comfortable ergonomically-designed, grasp from the top or side. Allows for use with gloves.

**Available in:**  
Blued Steel  
Stainless Steel  
Zoom™ Jacketed Stainless Steel  
Gold-Fish® Brass Plated Steel Coil  
S-Class® Nylon Jacketed Fiberglass  
Volt-Guard™ 1000V Non-Conductive Fiberglass

**Exceptionally Durable Case**

## Why IDEAL?

### Tuff-Grip™ Pro 25 ft. Drop Resistant Test

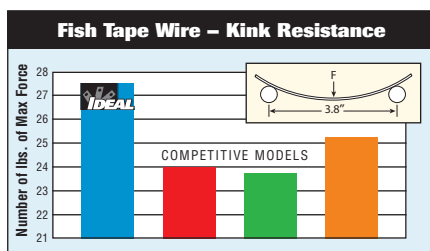


#### Drop Test

Fish tape samples were subjected to a 25 ft. drop onto concrete. All samples were new and dropped side by side, under the same conditions, and at the same time. After each drop the samples were examined for structural damage.

**Importance:** Strong, durable, long lasting

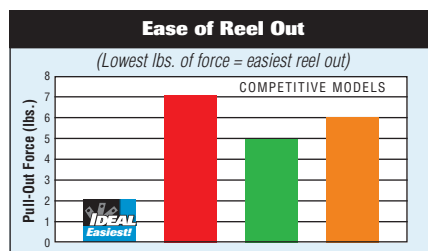
Visit [www.idealindustries.com](http://www.idealindustries.com), click the Fish Tape link and watch our Drop Test video today!



#### Kink Resistance Test (Blued Steel)

The test was performed by supporting the sample at two points (3.8 in. apart) and then exerting a force centrally between the two points. The maximum force that the wire would exert upon 1 in. of deflection was recorded.

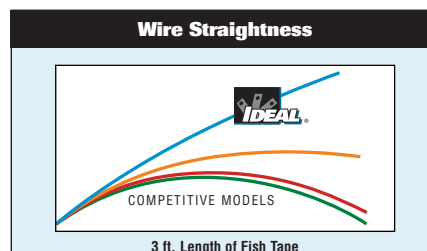
**Importance:** The better a tape resists kinking the longer it will serve you. Kinked tape is almost impossible to push through conduit. Kink resistance tape makes your job easier.



#### Ease of Reel-Out Test (Blued Steel)

This test was performed by connecting a force gage to the hook of the wire and then pulling out the wire at a slow pace for about 10 ft. The fish tape case was held by a person. Three measurements were taken and the average appears.

**Importance:** An easy reel out allows you to finish the job faster without straining your body.



#### Wire Straightness Test (Blued Steel)

This test was performed by placing each sample of wire on a table such that it was touching two pins that were 3 ft. apart. (A straight edge connected the two pins.) Each sample was pressed toward the straight edge and then slowly released until the wire came to rest at an equilibrium state. The maximum distance from the wire to the straight edge was recorded.

**Importance:** The straighter the steel as it pays out of the fish tape case the further and easier it will push down conduits.



## Fish Tape Cases

### Tuff-Grip™ Pro

- Tuff-Cuff™ tape retaining feature keeps tape properly positioned in the opening
- Full-perimeter handle band helps keep dirt and moisture out.
- Superior pull-out and rewind characteristics
- Exceptionally durable case and handle



### Rapid-Pak®

- Inner rotating reel with winding knob retrieves tape faster than traditional fish tapes for increased labor savings
- Funneled tape opening reduces kinking and tape breakage
- Reversible, hinged knob for right or left handed rewinds
- Stationary handle for extra durability
- Impact-resistant plastic case



### Speed-Grip™ Pro Handle

- New vertical grip allows for faster payout and rewind
- Ergonomically designed handle puts less strain on your wrist
- Large hand opening allows for use with gloves
- Attached to the exceptionally durable Tuff-Grip™ Pro Case

*\*On select S-Class® and Zoom™ Fish Tape Models.*



### Thumb Winder™

- Convenient 7 in. size can be stored in tool bag
- Durable, impact resistant ABS case
- Easy-to-use thumb-operated rewind
- Great for datacomm and small-sized conduit applications



## Fish Tape Materials

### Blued Steel™

- Unique finish is non-oily and resists rust
- Multiple options in width, length and eyelet for ease of use
- Industry's straightest wire
- Stiffer for long runs
- Highest grade carbon steel
- Tensile strength 1,600 lbs.



### Gold-Fish®

- Brass-plated coiled steel resists rust
- No "memory" – hangs straight after being coiled for long periods
- Kink proof
- Excellent for multiple bends



### Stainless Steel

- Won't rust or corrode in damp locations or humid environments
- Super clean finish prevents marks on walls or carpets
- Great for wet or corrosive work environment
- Smoother pay-out
- Tensile strength 1,600 lbs.



### S-Class™

- Non-conductive tape designed for use around live circuits
- Strong S-Class® core for longer life and greater pushing power
- Smooth nylon jacket provides great handling around bends
- Omni-directional pushing



### Zoom™

- 19 strands of stainless steel
- Ultrahard nylon jacket adds slipperiness, protects cables and the user's hands
- Excellent for corrugated plastic conduit
- Excellent for multiple bends or wet/corrosive work environment
- The only one in the industry



19 strand twisted radial steel core encased in high molecular density outer jacket.

### Volt-Guard™

- Non-conductive to 1000V
- Rectilinear profile for superior pushing power
- Designed for use around live circuits





## Blued-Steel™ Fish Tapes

- High column strength for longer runs
- Non-oily finish resists rust



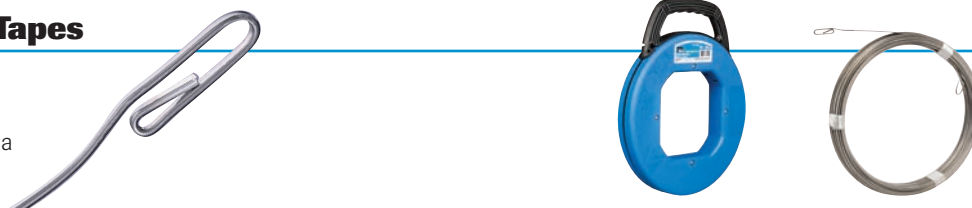
Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Rapid-Pak®	Thumb-Winder™	Replacement Tapes
<b>Blued Steel™</b>							
25	1/8 in. x .045 in.	7 in.	Formed hook	—	—	31-012	—
50	1/8 in. x .045 in.	7 in.	Formed hook	—	—	31-010	—
50	1/8 in. x .060 in.	9 in.	Formed hook	31-033**	—	—	—
60	1/8 in. x .060 in.	12 in.	Formed hook	31-055	—	—	31-035
100	1/8 in. x .060 in.	12 in.	Formed hook	—	31-081†	—	31-036
120	1/8 in. x .060 in.	12 in.	Formed hook	31-056	—	—	31-036
200	1/8 in. x .060 in.	12 in.	Formed hook	—	31-098†	—	31-038
240	1/8 in. x .060 in.	12 in.	Formed hook	31-057	—	—	31-038
500	1/8 in. x .060 in.	None	Formed hook	—	—	—	31-3380
700	1/8 in. x .060 in.	None	Formed hook	—	—	—	31-3379
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.	12 in.	Formed hook	—	—	—	31-052
400	1/4 in. x .060 in.	None	Formed hook	—	—	—	31-2128
15,000	1/4 in. x .060 in.	None	Formed hook	—	—	—	31-2982

†16 in. diameter Rapid-Pak® Case

\*\*9 in. diameter Tuff-Grip™ Pro Case

## Stainless Steel Fish Tapes

- Won't 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 Tapes
<b>Stainless Steel</b>					
120	1/8 in. x .060 in.	12 in.	Formed hook	31-066	31-073
240	1/8 in. x .060 in.	12 in.	Formed hook	31-067	31-074



## S-Class® Fish Tape

- Non-conductive tape for use around live circuits
- Structural glass core gives you a more durable fiberglass tape

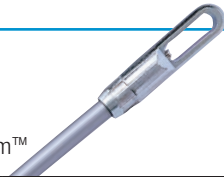


Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Rapid-Pak®	Replacement Tapes
<b>S-Class® Nylon Jacketed Fiberglass</b>						
50	3/16 in. diameter	12 in.	Leader	31-060	31-187†	31-150
50	3/16 in. diameter	12 in.	Eyelet	31-062	31-190†	31-160
100	3/16 in. diameter	12 in.	Leader	31-061	31-186†	31-152
100	3/16 in. diameter	12 in.	Eyelet	31-063	31-189†	31-162
200	3/16 in. diameter	16 in.	Leader	31-064*	31-207†	31-155
200	3/16 in. diameter	16 in.	Eyelet	31-065*	31-208†	31-165
300	3/16 in. diameter	None	Eyelet	—	—	31-2138

\* 16 in. diameter Tuff-Grip™ Case † 16 in. diameter Rapid-Pak® Case

## Zoom™ Fish Tapes

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



Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes
<b>Zoom™ Nylon Jacketed Stainless Steel</b>					
50	3/16 in. diameter	12 in.	Eyelet	31-090	31-091
100	3/16 in. diameter	12 in.	Eyelet	31-092	31-093
200	3/16 in. diameter	16 in.	Eyelet	31-096*	31-097

\* 16 in. diameter Tuff-Grip™ Case

## Volt-Guard™ Fish Tapes

- Non-conductive up to 1000V
- Elliptical design gives the Volt-Guard™ greater pushing power



Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes
<b>Fiberglass</b>					
60	.1875 in. x .094 in.	12 in.	Eyelet	31-542	31-552
120	.1875 in. x .094 in.	12 in.	Eyelet	31-544	31-554

## Gold-Fish® Fish Tape

- Ultra-flexible tape for hard-to-navigate areas
- Brass-plated coils resist rust



Length (ft.)	Width & Thickness	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes
<b>Gold-Fish® Brass Plated Steel Coil</b>					
25	3/16 in. diameter	None	Eyelet	—	31-140
50	3/16 in. diameter	12 in.	Eyelet	31-144	31-141
100	3/16 in. diameter	None	Eyelet	—	31-142



## S-Class® Fiberglass and Zoom™ Fish Tape Field Application Kits

- Crimps on new eyelet or leader in minutes
- Dies can be used with Crimpmaster™ Crimp Tool
- Connection guaranteed to withstand 500 lbs.

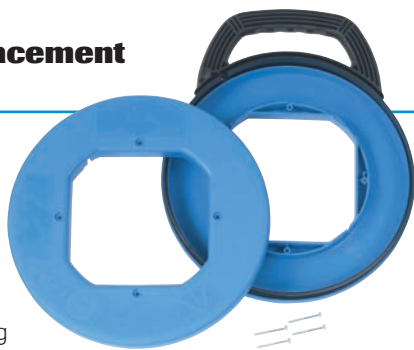


Description	Cat. No.
Field Application Kit includes: Crimpmaster™ Crimp Tool frame, die set, S-Class® eyelets (2), S-Class® leaders (2), Zoom™ eyelets (2) & instant adhesive	<b>31-156</b>
Die Set Kit* includes: eyelets (2), leaders (2) & instant adhesive	<b>31-164</b>
Replacement eyelets (4) for S-Class® Fish Tape	<b>31-158</b>
Replacement eyelets (2) for Zoom™ Fish Tape	<b>31-094</b>
Replacement leaders (4) for S-Class® Fish Tape	<b>31-159</b>
Die Set Only	<b>31-166</b>

\*For those who already have a Crimpmaster™ Crimp Tool.

## Fish Tape Replacement Cases

- Durable impact-resistant case
- Easy-to-install replacement tapes
- Full-perimeter handle band helps prolong life by keeping more dirt and moisture out
- Large, ergonomically designed handle allows for a comfortable grasp from the top or side, and for use with gloves



*Screws sold separately, case requires four LA-4218.*

Description	Cat. No.
12 in. Tuff-Grip™ Pro Replacement Case	<b>K-8985</b>
Replacement Screws	<b>LA-4218</b>



### 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.

## Fish Tape Leaders

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



Description	Cat. No.
Fish Tape Leader for steel or stainless steel tapes	<b>31-148</b>
Fish Tape Leader for S-Class® Fiberglass Fish Tape	<b>31-159</b>

## Fish Tape Swivel Ball

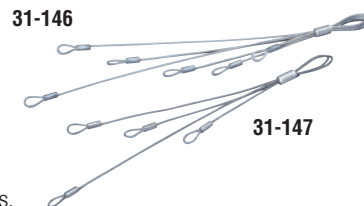
- Swivels to prevent wires from twisting during pull
- Designed for use on 1/8 in. steel or stainless steel tape
- Eyelet holds up to four 10 AWG bare wires



Description	Cat. No.
Fish Tape Swivel Ball	<b>31-085</b>

## Multi-Wire Pulling Leaders

- Pulls multiple wires at one time
- Staggered connection points prevent bunching or hang-ups in tight bends
- 500 lb. working strength at main eyelet and up to 150 lbs. with each individual eyelet

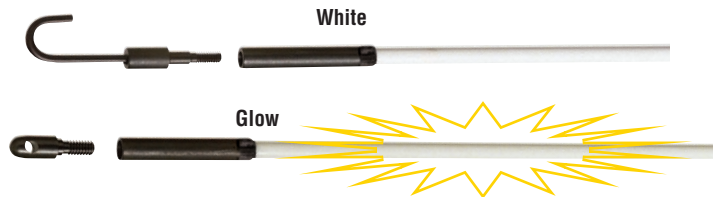


Description	Cat. No.
Multi-Wire Pulling Leader – 6-loop	<b>31-146</b>
Multi-Wire Pulling Leader – 4-loop	<b>31-147</b>



## Tuff-Rod™ 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



### Tuff-Rod™ Regular Flex

- 1/4 in. white fiberglass
- Extra stiffness for added control when maneuvering wires

Description	Cat. No.
12 ft. kit with fixed bullet nose and threaded J hook (3 ea. 4 ft. sections)	<b>31-611</b>
24 ft. kit with fixed bullet nose and threaded bullet nose (4 ea. 6 ft. sections)	<b>31-612</b>
12 pack of 1/4 in. x 4 ft. Regular Flex Replacement Rods	<b>31-643</b>
12 pack of 1/4 in. x 6 ft. Regular Flex Replacement Rods	<b>31-644</b>

### Tuff-Rod™ Extra Flex Glow

- 3/16 in. pale green luminescent fiberglass
- Glow-in-the-dark material for easy use in attics, basements and other dim lit areas

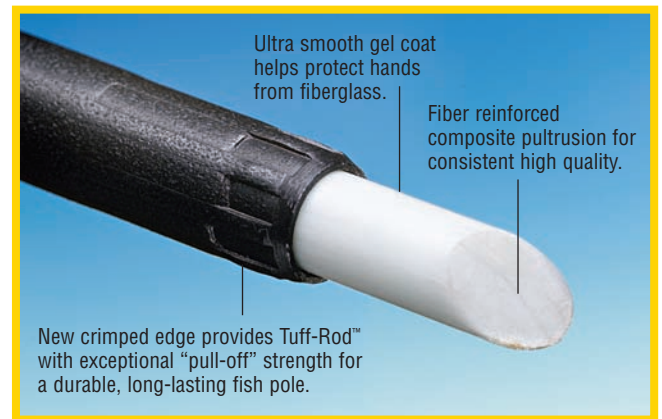
Description	Cat. No.
12 ft. kit with fixed bullet nose and threaded J hook (3 ea. 4 ft. sections)	<b>31-631</b>
30 ft. kit with fixed bullet nose and threaded bullet nose (5 ea. 6 ft. sections)	<b>31-633</b>
12 pack of 3/16 in. x 4 ft. Extra Flex Glow Replacement Rods	<b>31-647</b>
12 pack of 3/16 in. x 6 ft. Extra Flex Glow Replacement Rods	<b>31-648</b>

### Accessory Kits

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

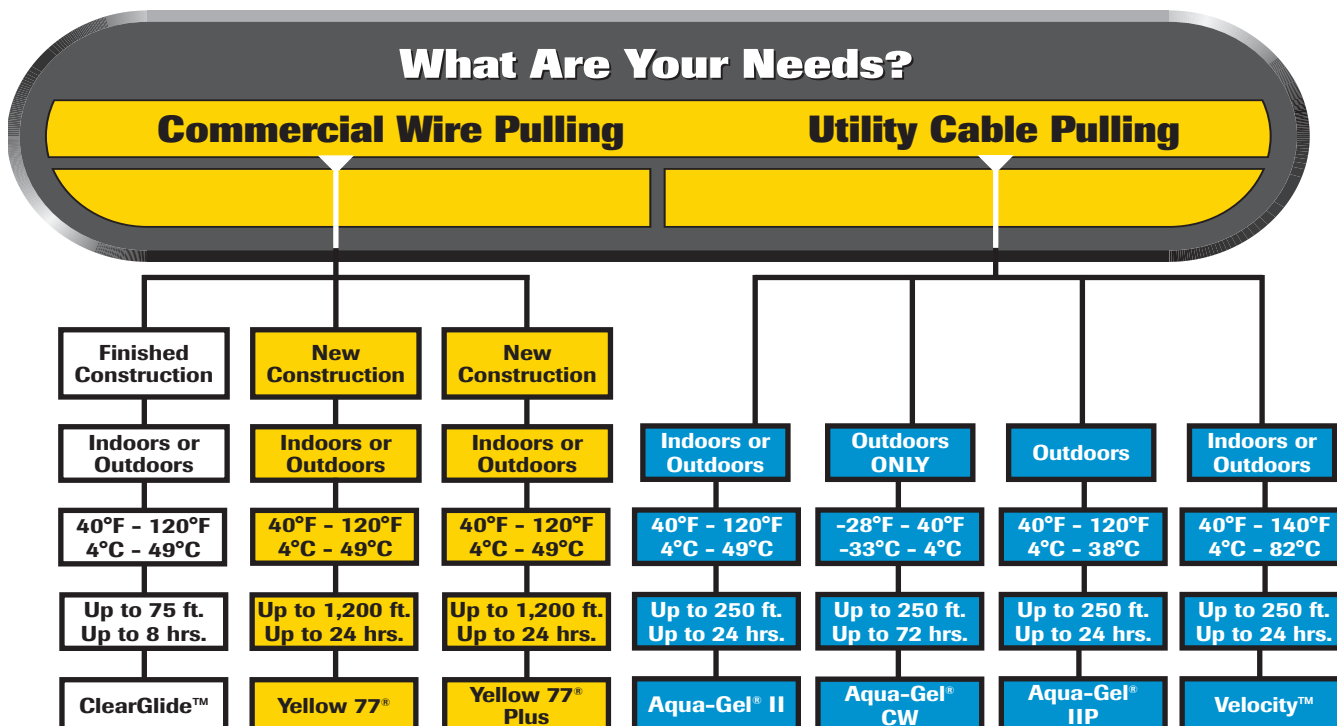


Description	Cat. No.
3/16 in. Accessory kit	<b>31-651</b>
1/4 in. Accessory kit	<b>31-652</b>





## Select-a-Lubricant



## Wire Pulling Lubricant Selection Guide



	ClearGlide™ Wire Pulling Lubricant	Yellow 77® Wire Pulling Lubricant	Yellow 77® Plus Wire Pulling Lubricant	Aqua-Gel® II Cable Pulling Lubricant	Aqua-Gel® CW Cable Pulling Lubricant	Aqua-Gel® IIP Cable Pulling Lubricant	Velocity™ Wire Pulling Lubricant
Color	Clear	Yellow	Yellow	Blue	Pink	Blue	Cream
Base	Polymer	Wax	Wax	Polymer	Polymer	Polymer	Polymer
Average Coefficient of Friction*	.17	.08	.16	.11	.07	.11	.14
Safe Storage Temperature 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)	-28°F – 190°F (-33°C – 82°C)	32°F – 180°F (0°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)	-28°F – 40°F (-33°C – 4°C)	40°F – 100°F (4°C – 38°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 Falex Corporation, an independent testing agency specializing in tribology tests, using the Falex-ISC On Disk Tribometer System machine with the ASTM G99 modified method.



## 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 30°F to 190°F (-1°C to 88°C)
- Dries slowly to a thin, non-conductive film that won't harden in conduit
- Easy to apply by hand or by brush
- Creamy texture applies easily and uniformly
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive

Description	Cat. No.
1-qt. Squeeze bottle	31-398
1-gal. Bucket	31-391
5-gal. Bucket	31-395
5-gal. Bucket – 36 Buckets/Pallet	31-395BP



## 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
- Easy to apply by hand or by brush
- Creamy texture applies easily and uniformly
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive

Description	Cat. No.
1-qt. Squeeze bottle	31-358
1-gal. Bucket	31-351
5-gal. Bucket	31-355
55-gal. Drum	31-365
5-gal. Bucket – 36 Buckets/Pallet	31-355BP





## 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 range — usable from 30°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

Description	Cat. No.
1-qt. Squeeze bottle	31-388
1-gal. Bucket	31-381
5-gal. Bucket	31-385
5-gal. Bucket — 36 Buckets/Pallet	31-385BP
55-gal. Drum	31-2143



## Velocity™ Wire Pulling Lubricant

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

Description	Cat. No.
1-qt. Squeeze bottle	31-276
1-gal. Bucket	31-277
5-gal. Bucket	31-278
5-gal. Bucket — 36 Buckets/pallet	31-278BP
55-gal. Drum	31-279
1-qt. Bag (12 bags/bucket)	31-282
1/2-gal. Bag (6 bags/bucket)	31-283



## Recommended Qty. of Lubricant Formula

$$Q = .0015 \times L \times D$$

Q = Quantity of recommended lube in gallons

L = Length of pull in feet

D = Nominal ID of conduit in inches

The formula listed above 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
- Pulls with several bends
- Rough, old or dirty conduits
- High temperatures
- High percent conduit fill

## Selection & Application Guides

Description	Cat. No.
Lubricant Selection Slide Rule	P-2710

Web Based Selection & Application Guide:

<http://ideal.sdafiles.com/#select>





## 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 cleaner and safer job
- Compatible with all cable types
- Cleans up easily with soap and water
- Environmentally safe – non-toxic, non-flammable and non-corrosive

Description	Cat. 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

Description	Cat. No.
1-qt. Squeeze bottle	31-298
1-gal. Jug	31-291
5-gal. Bucket	31-295
55-gal. Drum	31-3373



## Aqua-Gel® II Cable Pulling Lubricant

- Polymer-based formula provides maximum tension reduction in high-stress electrical and communications cable-pulling operations
- Compatible with all 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

Description	Cat. No.
1-qt. Squeeze bottle	31-378
1-gal. Bucket	31-371
1-qt. Bag (12 bags per bucket)	31-376
1/2-gal. Bag (6 bags per bucket)	31-377
5-gal. Bucket	31-375
5-gal. Bucket – 36 Buckets/Pallet	31-375BP
55-gal. Drum	31-3855





## Duct Seal

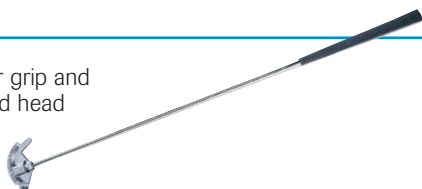
- Seals around junction boxes, flashings and service entrances
- Permanently soft, non-toxic compound can be painted immediately after application
- Won't adversely affect other plastic materials or corrode metals



Description	Cat. No.
1 lb. Block (10/carton)	31-601
5 lb. Block (10/carton)	31-605

## Bender Putter

- Steel shaft with rubber grip and conduit bender-shaped head
- Includes velour pouch to protect head



Description	Cat. No.
Bender Putter	74-999

## IDEAL Wipes™ The Multi-Purpose Towel

- Pre-moistened wipes require no water
- Cleans dirt, grease, lube and grime
- Durable fabric scrubs without tearing
- Infused with natural hand moisturizers and Vitamin E
- Orange citrus scent



Description	Qty.	Cat. No.
IDEAL Wipes™, 12 in. x 9 in.	82/can	38-500

## Noalox® Anti-Oxidant

- Anti-oxidant and anti-seizing compound improves efficiency and service life of aluminum-to-aluminum and aluminum-to-copper electrical connections
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inter-strand and inter-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to prevent further oxidation
- For use with all types of pressure-type wire connectors including screw-on, tap, service entrance and split-bolt
- Reduces galling and seizing and promotes good ground continuity on aluminum conduit joints



Description	Cat. 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

## Twist-a-Nut™ Conduit Deburring Tool



- 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 in drill or cordless screwdriver
- Universal Wire-Nut® Wire Connector wrench in handle end eases installation of twist-on connectors
- Lifetime guarantee (excludes blades)

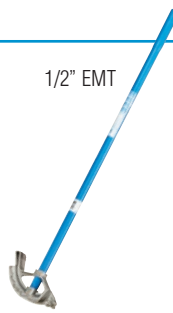


Description	Cat. No.
Conduit Deburring Tool, slotted tip	35-083
Conduit Deburring Tool - head only, slotted tip	35-096
Conduit Deburring Tool, square tip	35-075
Conduit Deburring Tool - head only, #2 square tip	35-098
Replacement Blades (2/pack)	35-097

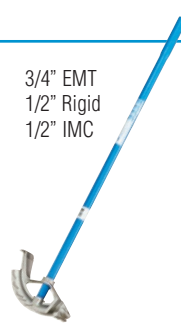


## Conduit Benders

- Exceptional, durable, materials for extra strength
- Reinforced at stress points for 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 Benfield bending system



1/2" EMT



3/4" EMT  
1/2" Rigid  
1/2" IMC



1" EMT  
3/4" Rigid  
3/4" IMC



1-1/4" EMT  
1" Rigid  
1" IMC

## Ductile Iron

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



## Aluminum

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



### Ductile Iron Head & Handle Complete

Conduit Type and Size	Cat. No.
1/2 in. EMT	74-026
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-027
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-028
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-034

### Aluminum Head & Handle Complete

Conduit Type and Size	Cat. No.
1/2 in. EMT	74-046
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-047

### Ductile Iron Head Only

Conduit Type and Size	Cat. No.
1/2 in. EMT	74-001
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-002
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-003
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-006



### Aluminum Head Only

Conduit Type and Size	Cat. No.
1/2 in. EMT	74-031
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-032



## Handles for Benders

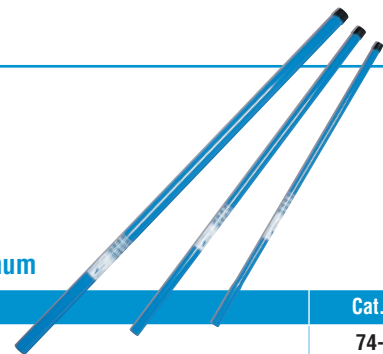
- Rugged, steel construction for long-term durability
- Baked-on blue enamel finish resists corrosion and enhances visibility
- Convenient bending guide for offset bends

### Handles for Ductile Iron

Conduit Type and Size	Cat. No.
1/2 in. EMT	74-019
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-019
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-020
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-021

### Handles for Aluminum

Conduit Type and Size	Cat. No.
1/2 in. EMT	74-019
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-019
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-020
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-021





## Hickeys

- Exceptional, durable, heat treated materials for extra strength
- Reinforced at stress points for longer life
- Grooved internal hook surface helps prevent conduit from slipping



## Ductile Iron Hickeys

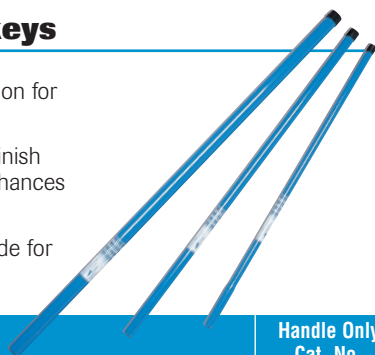


- High-strength ductile iron construction
- Grooved internal hook helps prevent conduit from slipping
- Lifetime replacement guarantee

Conduit Type and Size	Hickey Only Cat. No.
1/2 in. EMT	74-010
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-011
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-012
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-013

## Handles for Hickeys

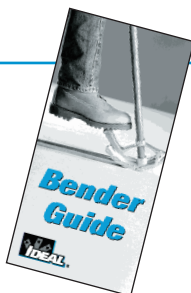
- Rugged, steel construction for long-term durability
- Baked-on blue enamel finish resists corrosion and enhances visibility
- Convenient bending guide for offset bends



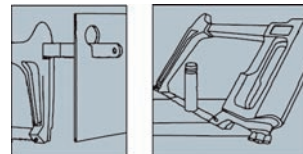
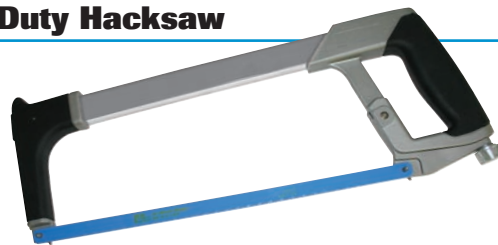
Conduit Type and Size	Handle Only Cat. No.
1/2 in. EMT	74-019
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-019
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-020
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-021

## Pocket Bender Guide

- Convenient pocket-sized reference guide
- Includes simple, concise bending techniques for precision stubs, back-to-back, offset and saddle bends
- Request free booklet #P-100



## Heavy-Duty Hacksaw



- Use as conventional hacksaw or as jab saw to enlarge holes
- Rugged frame provides lightweight rigidity and exceptional control
- Stores up to nine extra blades
- Blades can be adjusted to 55° angle for flush cutting and tensioned to 25,000 psi
- Includes 12 in. x 24T bi-metal blade

Description	Cat. No.
Heavy Duty Hacksaw	35-260

## Ergonomic Hacksaw

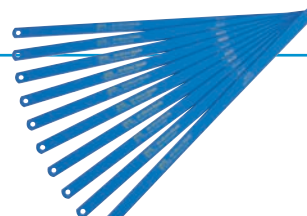


- Angled handle for easier cutting
- Blade can easily be adjusted for flush cutting
- Easy tensioning wing-nut keeps blades tight for straighter cuts
- Cushioned ergonomic grip for performance and comfort
- Includes 12 in. x 24T bi-metal blade

Description	Cat. No.
Ergonomic Hacksaw	35-261

## Hacksaw Blades

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



Description	Qty./Pack	Cat. 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 24T Blades	100	35-263
12 in. x 32T Blades	100	35-264



## 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

**Standard  
Duty**



Description	Tensile Strength	Cat. No.
Valu-Line™ Pull-Line – 6,500 ft. (bucket)	190 lbs.	<b>31-338</b>

## 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

**Heavy  
Duty**



Description	Tensile Strength	Cat. No.
Powr-Fish® Pull-Line – 6,500 ft. (bucket)	210 lbs.	<b>31-340</b>
Powr-Fish® Pull-Line – 6,500 ft. (box)	210 lbs.	<b>31-343</b>
Powr-Fish® Pull-Line – 6,500 ft. (36 buckets/pallet)	210 lbs.	<b>31-340BP</b>

## 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

**Extra-  
Heavy  
Duty 500#**



Description	Tensile Strength	Cat. No.
Powr-Fish® Pull-Line – 2,200 ft. (bucket)	500 lbs.	<b>31-344</b>

## 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
- Dispenser features built-in cutter, handle, non-skid base and adjustable reel tension
- Will not rot or mildew



Description	Cat. No.
Conduit Measuring Tape – 3,000 ft.	<b>31-347</b>

## Pro-Pull™ Rope

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



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

† Eye splice on working end.



## 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

### Foam Carriers

Description	Cat. No.
1/2 in. Foam Carrier, 5-pack bag	<b>31-466</b>
3/4 in. Foam Carrier, 5-pack bag	<b>31-467</b>
1 in. Foam Carrier, 5-pack bag	<b>31-468</b>
1-1/4 in. Foam Carrier, 3-pack bag	<b>31-469</b>
1-1/2 in. Foam Carrier, 2-pack bag	<b>31-470</b>
2 in. Foam Carrier, 1-pack bag	<b>31-471</b>
2-1/2 in. Foam Carrier, 1-pack bag	<b>31-322</b>
3 in. Foam Carrier, 1-pack bag	<b>31-323</b>
3-1/2 in. Foam Carrier, 1-pack bag	<b>31-324</b>
4 in. Foam Carrier, 1-pack bag	<b>31-325</b>
5 in. Foam Carrier, 1-pack bag	<b>31-326</b>
6 in. Foam Carrier, 1-pack bag	<b>31-327</b>

## Line Packages



- One-piece pull line and foam tip unwind as they move through conduit
- One-piece construction for faster, easier 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

### Line Packages

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



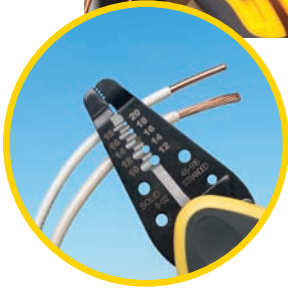


# ***Tools and Totes***





# Engineered to strip every wire right



## Kinetic™ Reflex™ T®-Stripper Wire Stripper

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



## Kinetic™ Super Wire Stripper

The ergonomic design and patented Santoprene™ grip wicks away perspiration and reduces muscle fatigue. The Thumb Valley™ guide and precision stripping holes promote the highest accuracy in the industry.



## 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.



## 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.



## Super T®-Stripper Wire Stripper

Traditional T®-Stripper Wire Stripper features with the added convenience of bolt-cutting holes and locking pawl. Curved comfort-grip handles accommodate high-volume wire stripping.



## T®-Stripper Wire Stripper

The industry standard for almost 50 years. 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

- Locking Pawl
- Bolt Cutting
- Comfort
- Curved Handles

- Extended Textured
- Ergo Handles

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

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

## T®-Stripper Wire Stripper Selection Guide

6	8	10	12	14	16	18	20	22	24	26	28	30	Wire Size		#45-100's	#45-300's	#45-400's	#45-600's	#45-700's	#45-900's
8	10	12	14	16	18	20	22	24	26	28	30	32								
								22	24	26	28	30	Solid		45-125	45-317	45-417	—	—	—
								24	26	28	30	32	Stranded							
				14	16	18	20	22	24				Solid		45-121	45-316	45-416	45-616	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		—	45-315	—	45-615	—	—
	10	12	14	16	18								Stranded							
6	8	10	12	14									Solid		45-124	45-318	45-418	45-618	45-718	45-918
8	10	12	14	16									Stranded							
													T-Cutter		45-123	—	—	—	—	—

Static Disp



## Kinetic™ Super Wire Strippers



- Non-slip Santoprene™ textured grips
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easier and more accurate
- “Shear-Cut™” bolt cutters

Description	Solid	Stranded	Cat. No.
Kinetic Super™ Wire Stripper	10-18	12-20	<b>45-715</b>
Kinetic Super™ Wire Stripper	14-24	16-26	<b>45-716</b>
Kinetic Super™ Wire Stripper	6-14	8-16	<b>45-718</b>

## Reflex™ Premium T®-Stripper Wire Strippers



- Ergonomic design for maximum comfort
- Curved handles reduce wrist fatigue
- Sleeves that extend to stripping head to cushion thumb and fingers
- Textured, no-slip sleeves provide a sure, easy grip

Description	Solid	Stranded	Cat. No.
Reflex™ Premium T®-Stripper Wire Stripper	10-18	12-20	<b>45-415</b>
Reflex™ Premium T®-Stripper Wire Stripper	14-24	16-26	<b>45-416</b>
Reflex™ Premium T®-Stripper Wire Stripper	22-30	24-32	<b>45-417</b>
Reflex™ Premium T®-Stripper Wire Stripper	6-14	8-16	<b>45-418</b>
Reflex™ Premium T®-Stripper – Metric	0.5mm <sup>2</sup> -4.0mm <sup>2</sup>		<b>45-425-341</b>
Reflex™ Premium T®-Cutter	Cutter		<b>45-423</b>

## Kinetic™ Reflex™ T®-Stripper Wire Strippers



- Non-slip Santoprene™ textured grips and thumb rest
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easier and more accurate
- “Shear-Cut™” bolt cutters

Description	Solid	Stranded	Cat. No.
Kinetic™ Reflex™ T®-Stripper Wire Stripper	10-18	12-20	<b>45-915</b>
Kinetic™ Reflex™ T®-Stripper Wire Stripper	6-14	8-16	<b>45-918</b>

## Reflex™ Super T®-Stripper Wire Strippers



- 6/32 and 8/32 self-chasing screw-cutting holes
- Locking pawl for safe storage
- Ergonomic design for maximum comfort
- Curved handles reduce wrist fatigue
- Sleeves that extend to stripping head to cushion thumb and fingers
- Textured sleeves with extra cushioning for added comfort

Description	Solid	Stranded	Cat. No.
Reflex™ Super T®-Stripper Wire Stripper	8-16	10-18	<b>45-615</b>
Reflex™ Super T®-Stripper Wire Stripper w/static dissipative grips	14-24	16-26	<b>45-616</b>
Reflex™ Super T®-Stripper Wire Stripper	8-14	8-16	<b>45-618</b>
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	12-2 and 14-2	—	<b>45-621</b>
Reflex™ Super 12/3 & 14/3 NM Cable T®-Stripper Wire Stripper	12-3 and 14-3	—	<b>45-622</b>



## T®-Stripper Wire Strippers

- Form-ground, knife-type blades for accurate, easy stripping without nicking insulation
- Built-in wire cutter and looping holes
- Convenient plier nose for extra gripping strength
- Laser-etched wire gauge for easy-to-read visibility
- Spring-loaded automatic opening
- Corrosion-resistant, black oxide finish
- Tough steel construction



Description	Solid	Stranded	Cat. No.
T®-5 T®-Stripper Wire Stripper	10-18	12-20	45-120
T®-6 T®-Stripper Wire Stripper	14-24	16-26	45-121
T®-7 T®-Stripper Wire Stripper	22-30	24-32	45-125
T®-8 T®-Stripper Wire Stripper	6-14	8-16	45-124
T®-Stripper Wire Stripper – Metric	0.75-6mm <sup>2</sup>		45-120-341
T®-Stripper Wire Stripper – Metric	0.5-4mm <sup>2</sup>		45-125-341

## NM Cable T®-Stripper Wire Strippers

- Easy, one-step stripping of outer jacket of NM cable – no slitting required
- Versatility to strip, cut and loop conductor wires with precision and ease
- Stripping holes for 12 or 14 AWG solid wire
- Locking pawl for safe storage



Description	Cat. No.
14/2 NM Cable T®-Stripper Wire Stripper	45-248
12/2 NM Cable T®-Stripper Wire Stripper	45-249
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	45-621
Reflex™ Super 12/3 & 14/3 Cable T®-Stripper Wire Stripper	45-622

## NM Cable Dual-Hole T®-Stripper Wire Stripper

- 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	Wire Range	Cat. No.
Premium T®-14 T®-Stripper Wire Stripper	12 or 14 AWG solid	45-247

Romex® is a registered trademark of Southwire.

## Super T®-Stripper Wire Strippers

- 6-32 and 8-32 self-chasing screw-cutting holes (not available on metric stripper)
- Curved, cushion-grip handles for ergonomic comfort
- Locking pawl to keep stripper in closed position
- Built-in wire cutter and looping holes
- Convenient plier nose for extra gripping strength
- Laser-etched wire gauge for easy-to-read visibility
- Spring-loaded automatic opening
- Tough steel construction, corrosion-resistant, black oxide finish



Description	Solid	Stranded	Cat. No.
Super T®-5 T®-Stripper Wire Stripper	8-16	10-18	45-315
Super T®-8 T®-Stripper Wire Stripper	6-14	8-16	45-318
Super T®-Stripper Wire Stripper – Metric	0.5-4mm <sup>2</sup>		45-310-341
Super T®-Stripper Wire Stripper – Metric	0.75-6mm <sup>2</sup>		45-315-341
Super T®-Stripper Wire Stripper – Metric	0.5-4mm <sup>2</sup>		45-317-341

## Lil' Ripper Stripper™

- Rips Romex® outer jacket cleanly and quickly
- Clips outer sheathing to remove excess Romex® jacket
- Strips inner conduit wires
- Looping holes loop wire for screw-on connections
- Twist-Assist™ tightens most popular sizes of winged twist-on connectors
- Injection molded elastomer grip provides a comfortable, slip resistant grip
- Strip length measuring scale allows for quick and easy measurements
- Conveniently fits in your pocket



Description	Cat. No.
Lil' Ripper Stripper™	45-025

## Reflex™ Super T®-Stripper Wire Strippers

- 6/32 and 8/32 self-chasing screw-cutting holes
- Locking pawl for safe storage
- Ergonomic design for maximum comfort
- Curved handles reduce wrist fatigue
- Sleeves that extend to stripping head to cushion thumb and fingers
- Textured sleeves with extra cushioning for added comfort



Description	Solid	Stranded	Cat. No.
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	12-2 and 14-2	—	45-621
Reflex™ Super 12/3 & 14/3 NM Cable T®-Stripper Wire Stripper	12-3 and 14-3	—	45-622



## Super T®-Stripper Wire Strippers—Static Dissipative

- Static dissipative grips for dispersing static charge buildup through the operator to the ground (operator must be grounded via wrist strap or other grounding device)
- Locking pawl to keep stripper in closed position



Description	Solid	Stranded	Cat. No.
Super T®-6 T®-Stripper Wire Stripper w/static dissipative grips	14-24	16-26	45-316
Super T®-7 T®-Stripper Wire Stripper w/static dissipative grips	22-30	24-32	45-317

## 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
- Locking hasp



Description	Cat. No.
V-Notch Stripper	45-101

## 7-in-1 Stripper



- Versatile, seven-function tool features precision-ground stripping blades, cushioned grips and plier nose
- Strips 8 – 16 AWG solid and 10 – 18 AWG stranded wire
- 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, Romex® and U.F. wire to 8 AWG
- Reams and de-burrs conduit
- Gauges and loops wire

Description	Cat. No.
7-in-1 Stripper	45-777

Romex® is a registered trademark of Southwire.

## Ringer™ Shielded Cable Stripper

- Precision stripping for most non-round cable, including extruded Teflon®, Kapton®, Tefzel®, Kynar® and high-temperature insulations
- Spring-loaded head provides even tension
- Heat-treated, stainless-steel blades resist wear
- Fixed blades are sized to insulation thickness, for accurate stripping
- V-notch jaw automatically positions and holds cable
- Wire guide roller maintains stripping head alignment, for square, clean cuts



Description	Blade	Color	Cat. No.
Cable Stripper, 5 Mil insulation, includes blade	K-6492	(Orange)	45-401
Cable Stripper, 8-10 Mil insulation, includes blade	K-6493	(Yellow)	45-402
Cable Stripper, Cable diameters up to 0.12 in.	sold separately	(Blue)	45-400
Cable Stripper, Cable diameters from 0.12 in. to 0.22 in.	sold separately	(Red)	45-403
Cable Stripper, w/"deep V" forcable diameters up to 0.30 in.	sold separately	(Green)	45-404

## Replacement Blades

Cutting Depth	Cat. No.	Cutting Depth	Cat. No.	Cutting Depth	Cat. No.
.0030 in.	K-6491	.0100 in.	K-6497	.0180 in.	K-6503
.0044 in.	K-6492	.0110 in.	K-6498	.0200 in.	K-6504
.0060 in.	K-6493	.0120 in.	K-6499	.0220 in.	K-6505
.0070 in.	K-6494	.0130 in.	K-6500	.0250 in.	45-2108-1
.0080 in.	K-6495	.0140 in.	K-6501		
.0090 in.	K-6496	.0160 in.	K-6502		

Select blade with cutting depth less than insulation thickness.

## Wire Stops



Description	Cat. No.
Up to 2-1/2 in.	LB-825
2-1/2 in. to 5 in.	LB-840

## IDEAL Gripper™



Description	Cat. No.
Slug Remover	45-333

Teflon® and Kapton® are registered trademarks of E.I. duPont de Nemours and Company. Kynar® is a registered trademark of Pennwall.



## Data T®-Cutter Wire Cutters



- 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
- Data T®-Cutter II designed for RG-58 and RG-6 coaxial cable

Description	Cat. No.
Data T®-Cutter	45-074
Data T®-Cutter II	45-075

## Combo Tool

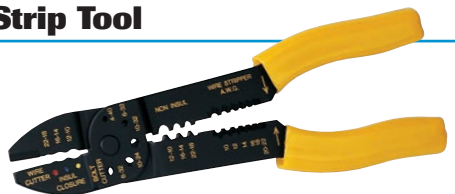
- Convenient, four-function tool features precision-ground stripping holes and knife-to-anvil cutting blades
- Crimps bare and insulated terminals
- Strips 8 – 20 AWG solid and 10 – 22 AWG stranded wire
- Cuts unhardened bolts (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads



Description	Cat. No.
Combo Tool	30-428

## Multi-Crimp Strip Tool

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



Description	Cat. No.
Multi-Crimp Strip Tool	45-778

## T®-Cutter Wire Cutters

- Hardened steel, shear-type blades
- Spring-loaded automatic opening
- Convenient plier nose for extra gripping strength
- Corrosion-resistant, black oxide finish
- Tough steel construction
- Locking tab keeps spring in place



Description	Wire Range	Cat. No.
T®-Cutter Wire Cutter	Up to 1/2 in. O.D. fine-stranded wire and 10 AWG solid wire	45-123
Reflex™ Premium T®-Cutter Wire Cutter	Up to 1/2 in. O.D. fine-stranded wire and 10 AWG solid wire	45-423

## T®-Cutter Lite Wire Cutter

In today's cutting-edge electronic production and assembly operations, the T®-Cutter Lite is a "must-have." Stranded or solid, copper or aluminum, this wire cutter cuts cleanly and accurately. Compact and lightweight with a cushioned ESD grip prove comfort and precision go hand-in-hand.

- Knife-type blade provides a shear-type cut
- Lightweight, compact design
- Perfect for copper and aluminum wire
- Cushioned ESD grip



Description	Cat. No.
T®-Cutter Lite Wire Cutter	45-260

## 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

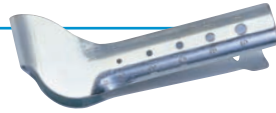


Description	Cat. No.
Coax Strip & Crimp Tool	30-433
Coax Strip & Crimp Tool w/F-Connectors	30-433F



## Cable Ripper

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



Description	Cat. No.
Side Entry Cable Ripper	45-118

## Underground Feeder (UF) Cable Stripper

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



Description	Cat. No.
Underground Feeder Cable Stripper	45-235

## Grip-N-Strip™ End Stripper

- Self-adjusting stripping blades automatically select proper position
- Strips 12 AWG solid to 20 AWG stranded PVC insulated wire
- Dual strip-length gauge marks at 3/16 in. and 5/16 in.
- Cuts up to 12 AWG solid wire
- Lightweight, ergonomic design reduces user fatigue
- Reinforced fiberglass construction
- Hardened steel blades for extra strength and longer life



Description	Cat. No.
Grip-N-Strip™ End Stripper	45-227



## Sir Nickless Cutter

TO SEVER AND PROTECT ARMORED CABLE

- 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



Description	Cat. No.
Replacement blades (5/pack)	35-781
Rotary Armored Cable Cutter	35-782

## Round Cable Slitting and 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	Cat. No.
Cable Stripper for 1/4 in. to 3/4 in. O.D.	45-128
Cable Stripper for 3/4 in. to 1 1/2 in. O.D.	45-129
Replacement Blades for 45-128 and 45-129 (2/pkg.)	L-7486

## Stripmaster® Wire Strippers

- One-step stripping enhances productivity
- Spring-action motion increases leverage and reduces operator fatigue
- Precision-ground, knife-type blades provide clean, accurate stripping



Description	Cat. No.
Stripmaster® Wire Stripper, 10-22 AWG	45-092
Stripmaster® Wire Stripper, Coax RG-6	45-262
Stripmaster® Wire Stripper, 10-22 AWG	45-292

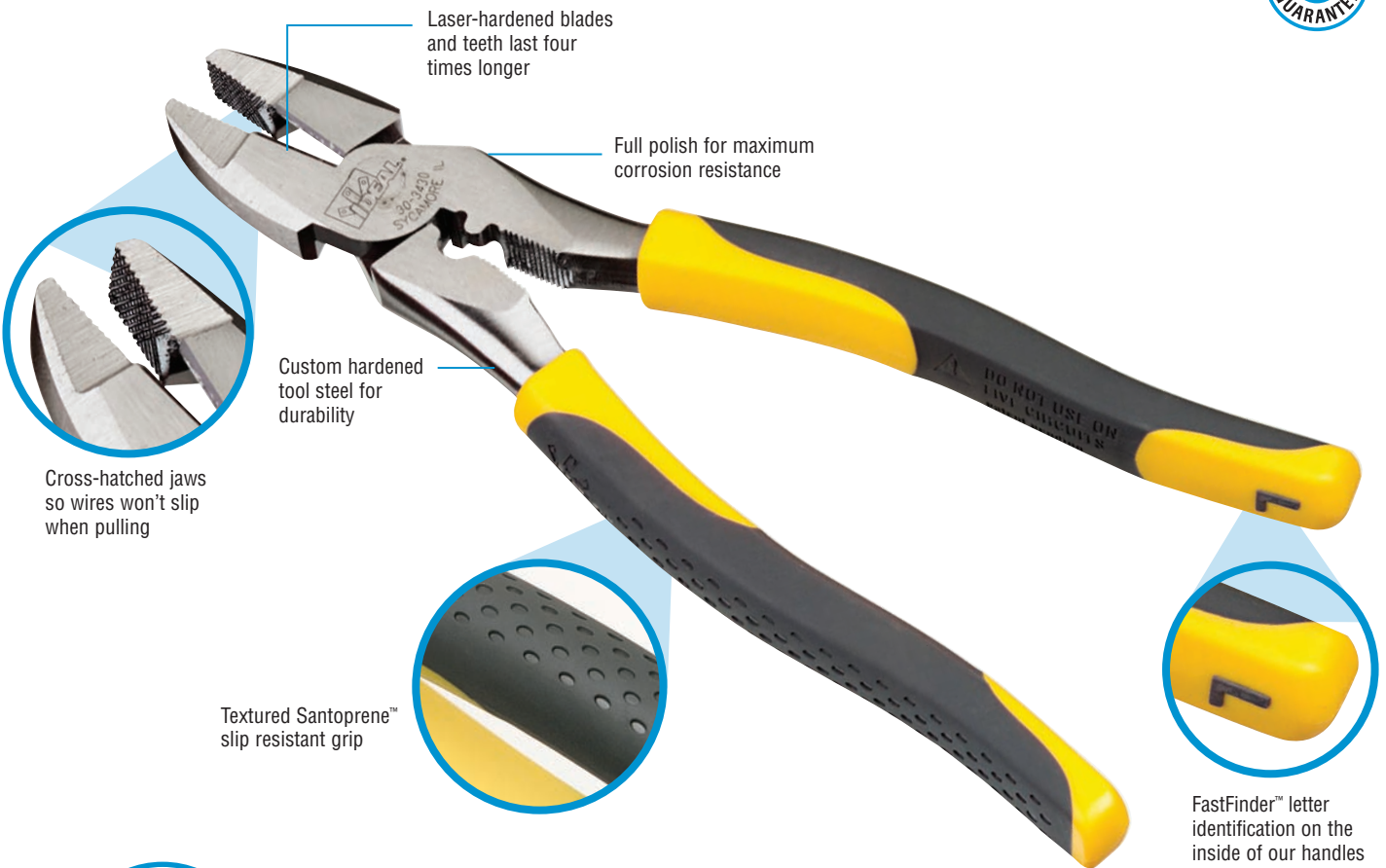
See Section D for complete Stripmaster® Wire Stripper line.



## LASERedge™

**LASERedge™ pliers use high carbon, 1080 steel, which provides extra strength and hardness without sacrificing flexibility. It is one of the reasons our tools outperform the competition in performance**

**and durability. All of our LASERedge tools have laser-hardened blades and teeth, which are more precise and provide better durability for strenuous applications like cutting steel or ACSR.**



### Blade Design

LASERedge pliers feature “knife-to-anvil” cutting blades for long life.  
(Ideal for cutting screws, nails, hardened wire and ACSR)



**Diagonal**



**Long Nose**



**Tongue & Groove**



**Cable Cutter**

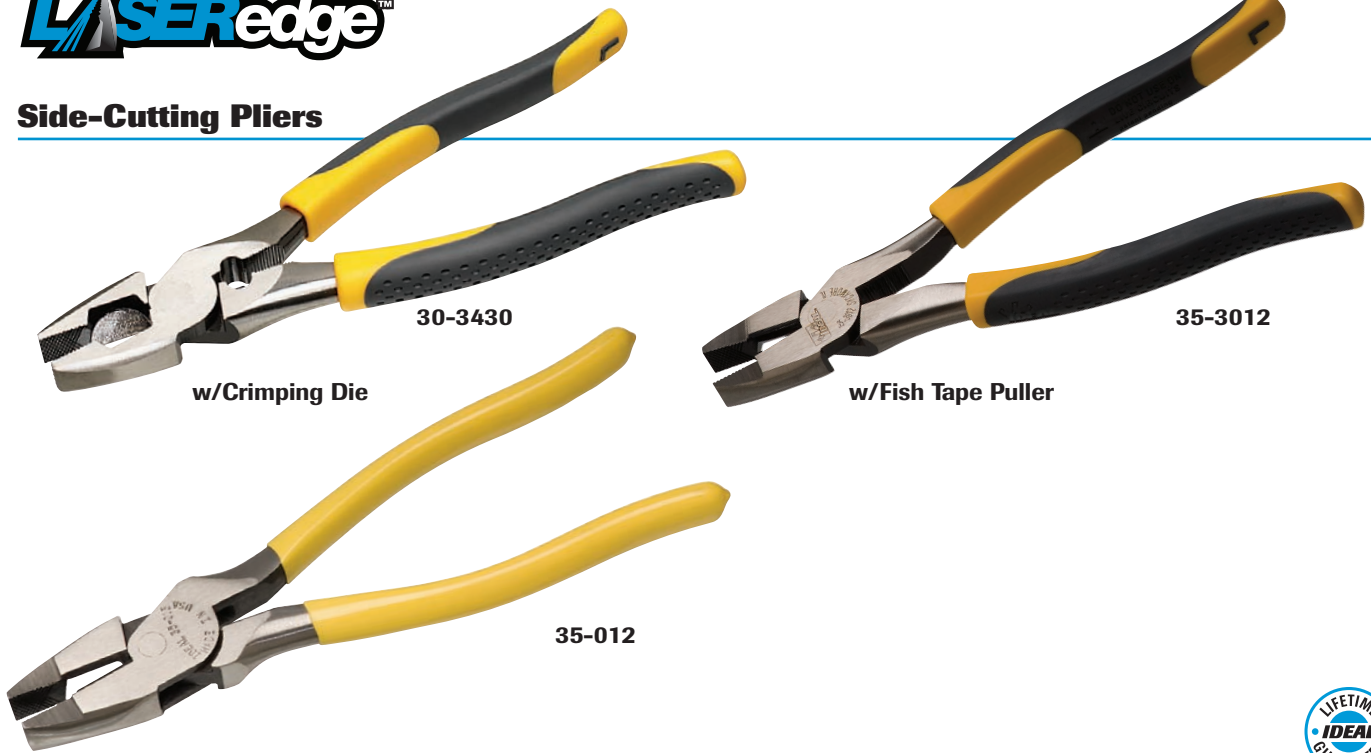


**Crimper**





## Side-Cutting Pliers

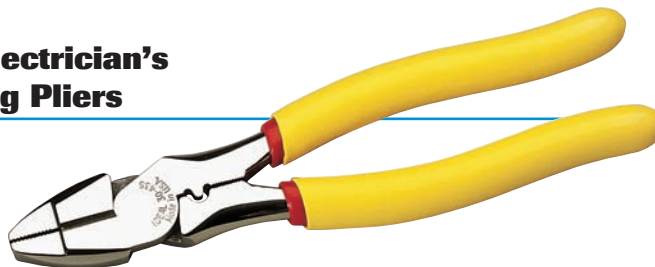


- Drop-forged, high-carbon steel construction withstands toughest applications
- Knife-to-anvil blades never need resharpener
- Cuts hardened wire, bolts and ACSR
- Laser-hardened blades and serrated jaws for long-term durability
- High-leverage design provides 40% more cutting power
- Unique reverse rivet protects smooth action of plier movement
- Vinyl-coated, comfort-grip handles for a secure grip



Description (Smart-Grip™ Handles)	Cat. No.
9-1/4 in. New England nose high-leverage w/fish tape puller	35-3012
9-1/4 in. New England nose high-leverage w/crimping die	30-3430
Description (Dipped Handles)	Cat. No.
9-1/4 in. New England nose high-leverage w/fish tape puller	35-012
9-1/4 in. New England nose high-leverage w/crimping die	30-430

## Premium Electrician's Side-Cutting Pliers



All of the features of the Side-Cutting Pliers plus:

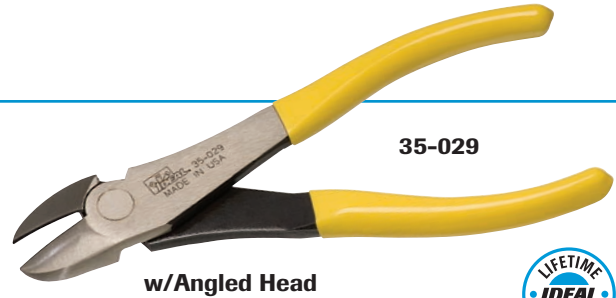
- Mirror-polished finish to maintain premium appearance
- Double-dipped grips for extra cushioning comfort

Description (Dipped Handles)	Cat. No.
9-1/4 in. New England high-leverage w/fish tape puller and crimping die	30-435



## LASERedge™

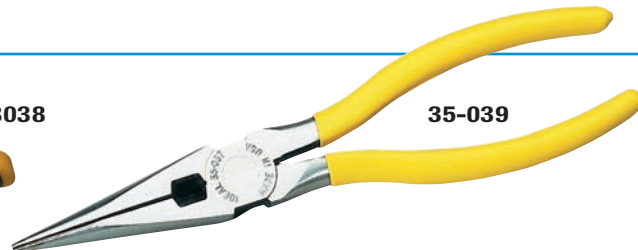
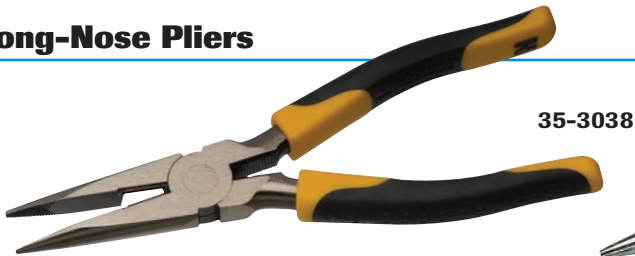
### Diagonal-Cutting Pliers



- Drop-forged, high-carbon steel construction withstands toughest applications
- Knife-to-anvil blades never need resharpening
- Laser-hardened blades cut hardened wire, bolts and ASCR
- Vinyl-coated, comfort-grip handles for a secure grip
- High-leverage design provides 40% 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)	Cat. No.
8 in. High-leverage Diagonal	35-3028
8 in. High-leverage Diagonal w/angled head	35-3029
Description (Dipped Handles)	Cat. No.
8 in. High-leverage Diagonal	35-028
8 in. High-leverage Diagonal w/angled head	35-029

### Long-Nose Pliers



- Narrow profile head designed for working in tight areas
- Serrated jaws provide secure gripping surface
- Drop-forged, high-carbon steel construction
- Knife-to-anvil blades never need resharpening
- Laser-hardened blades cut hardened wire, bolts and ASCR
- Vinyl-coated, comfort-grip handles for a secure grip

Description (Smart-Grip™ Handles)	Cat. No.
8-1/2 in. Long Nose w/Cutter	35-3038
Description (Dipped Handles)	Cat. No.
6 in. Long Nose w/Cutter	35-036
7-3/4 in. Long Nose w/Cutter	35-037
8-1/2 in. Long Nose w/Cutter	35-038
8-1/2 in. w/Cutter & stripping holes for 12 & 14 AWG wire	35-039

### Tongue and Groove Pliers



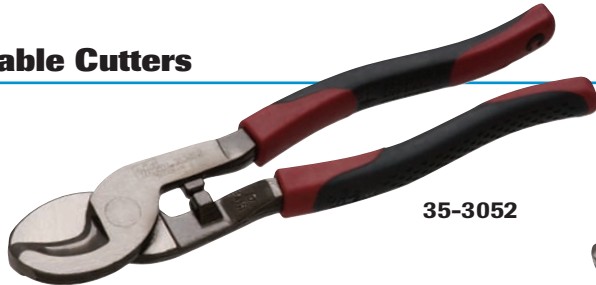
- Patented undercut tongue and groove design ensures solid grip
- Patented reinforced flange protects against breakage
- Laser-hardened teeth remain sharp longer
- Drop-forged, high-carbon steel construction
- Vinyl-coated, comfort-grip handles for a secure grip

Description (Smart-Grip™ Handles)	Jaw Opening (Inches)	Cat. No.
10 in. Tongue & Groove Pliers	2	35-3430
Description (Dipped Handles)	Jaw Opening (Inches)	Cat. No.
6-1/2 in. Tongue & Groove Pliers	7/8	35-426
9-1/2 in. Tongue & Groove Pliers	1-1/2	35-420
10 in. Tongue & Groove Pliers	2	35-430
12 in. Tongue & Groove Pliers	2-1/4	35-440
16 in. Tongue & Groove Pliers	4-1/4	35-460

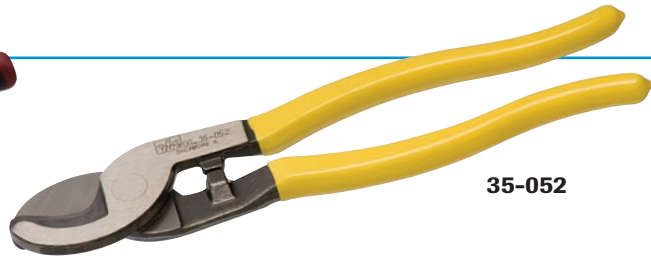




## Cable Cutters



35-3052



35-052



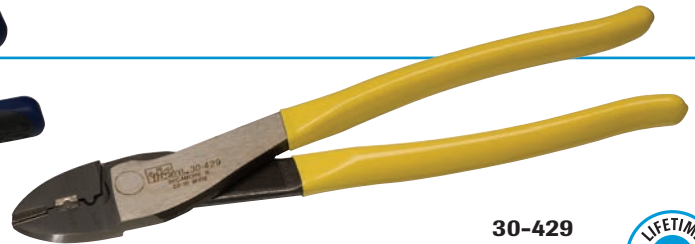
- Drop-forged, high-carbon steel construction
- Precision-ground, hardened cutting edges provide accurate cuts without cable distortion
- Designed for maximum leverage with minimum effort
- Cuts 2/0 copper and 4/0 aluminum (not for use on ACSR)
- Vinyl-coated, comfort-grip handles

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

## Multi-Crimp Tools



30-3429



30-429



- Crimps bare or insulated terminals and splices on 10 – 22 AWG wire
- Knife-to-anvil blades never need resharpening
- Excellent leverage for easy crimping and cutting
- Drop-forged, high-carbon steel construction
- Vinyl-coated handles provide a solid, comfortable grip

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

## Crimp Tool

- Crimps all IDEAL crimp sleeves
- Excellent leverage for right-angle, double-indent crimps
- Cuts and twists wire
- Vinyl-coated handles provide a solid, comfortable grip

Description	Cat. No.
Crimp Tool - 10-1/4 in.	30-425







*WireMan™ pliers provide professional results for everyday use. These tools are the workhorse of electrical pliers; they are rugged yet precise, providing exceptional durability, easy cutting and a lifetime of quality use.*



#### **Blade Design**

WireMan pliers feature “knife-to-knife” cutting blades for easy cuts.



**Diagonal**



**Long Nose**



**Tongue & Groove**



**Cable Cutter**



**Crimper**

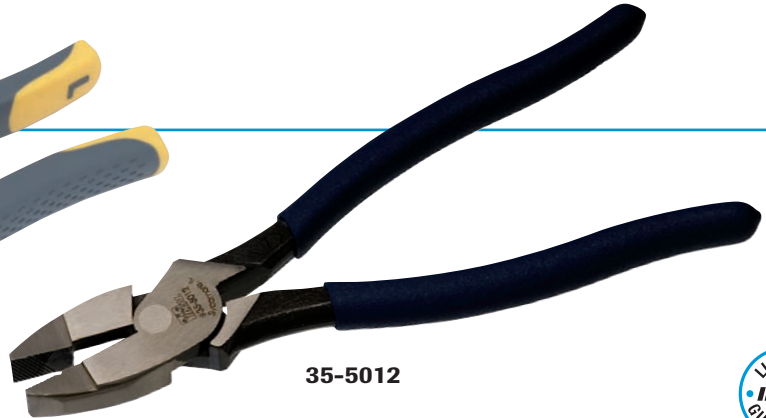




## Side-Cutting Pliers



30-4430



35-5012



- Custom chrome vanadium steel for durability
- High leverage pivot requires less cutting force
- Sharp, knife-to-knife blades for easy cutting
- Induction hardened teeth for long life
- Cross-hatched jaws so wires won't slip when pulling
- Ergonomic handles for comfortable, all-day use

Description (Smart-Grip™ Handles)	Cat. No.
7 in. Cutting Pliers	30-4419
8 in. Side-Cutting Pliers	30-4420
9-1/4 in. Side-Cutting Pliers	35-4012
9-1/4 in. Side-Cutting Pliers w/crimp and fish tape puller	30-4430
Description (Dipped Handles)	Cat. No.
7 in. Cutting Pliers	30-5419
8 in. Side-Cutting Pliers	30-5420
9-1/4 in. Side-Cutting Pliers	35-5012
9-1/4 in. Side-Cutting Pliers w/crimp and fish tape puller	30-5430

## Diagonal-Cutting Pliers



35-4028



35-5029



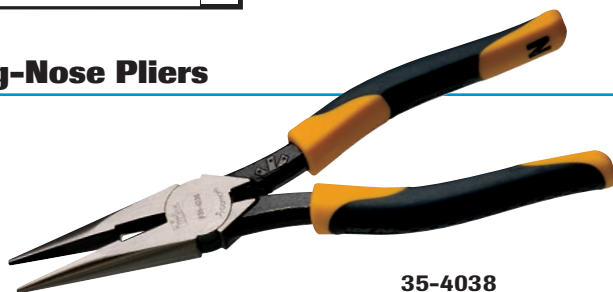
- Custom chrome vanadium steel for durability
- High leverage pivot requires less cutting force
- Sharp, knife-to-knife blades for easy cutting
- Induction hardened teeth for long life
- Ergonomic handles for comfortable, all-day use

Description (Smart-Grip™ Handles)	Cat. No.
6 in. Diagonal-Cutting Pliers	35-4026
8 in. Diagonal-Cutting Pliers	35-4028
8 in. Diagonal-Cutting Pliers w/angled head	35-4029
Description (Dipped Handles)	Cat. No.
6 in. Diagonal-Cutting Pliers	35-5026
8 in. Diagonal-Cutting Pliers	35-5028
8 in. Diagonal-Cutting Pliers w/angled head	35-5029





## Long-Nose Pliers



35-4038



35-5035



- Custom chrome vanadium steel for durability
- High leverage pivot requires less cutting force
- Sharp, knife-to-knife blades for easy cutting
- Induction hardened teeth for long life
- Cross-hatched jaws so wires won't slip when pulling
- Ergonomic handles for comfortable, all-day use

Description (Smart-Grip™ Handles)	Cat. No.
6 in. Long-Nose Pliers w/Strip & Crimp	35-4035
6 in. Long-Nose Pliers	35-4036
8 in. Long-Nose Pliers	35-4038
Description (Dipped Handles)	Cat. No.
6 in. Long-Nose Pliers w/Strip & Crimp	35-5035
6 in. Long-Nose Pliers	35-5036
8 in. Long-Nose Pliers	35-5038

## Tongue and Groove Pliers



35-4430



35-5430



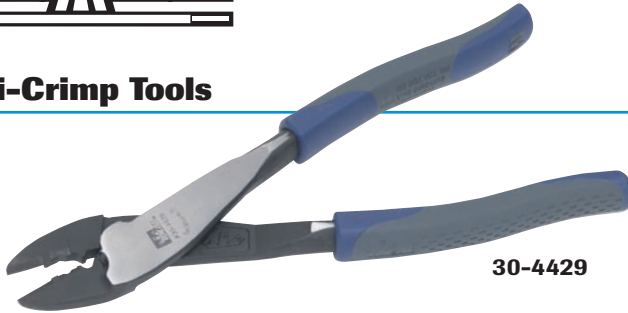
- Custom chrome vanadium steel for durability
- Ergonomic handles for comfortable, all-day use

Description (Smart-Grip™ Handles)	Cat. No.
10 in. Tongue & Groove Pliers	35-4430
Description (Dipped Handles)	Cat. No.
10 in. Tongue & Groove Pliers	35-5430

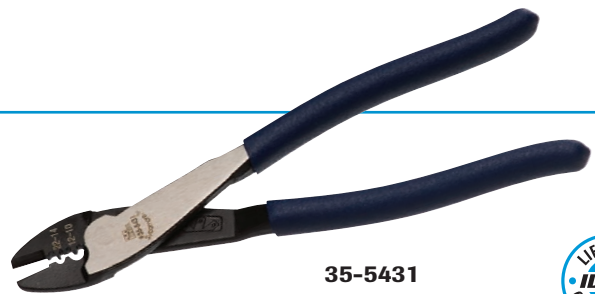




## Multi-Crimp Tools



30-4429



35-5431



- Custom chrome vanadium steel for durability
- High-leverage pivot requires less force
- Ergonomic handles for comfortable, all-day use
- Cuts, crimps and splices 10 – 22 AWG wire for insulated and non-insulated crimp connectors

Description (Smart-Grip™ Handles)	Cat. No.
9-1/4 in. Multi-Crimp Tool	30-4429
9-1/4 in. Multi-Crimp Tool - Bare Terminals	35-4431
Description (Dipped Handles)	Cat. No.
9-1/4 in. Multi-Crimp Tool	30-5429
9-1/4 in. Multi-Crimp Tool - Bare Terminals	35-5431

## Cable Cutters



35-4052



35-5052



- Custom chrome vanadium steel for durability
- High-leverage pivot requires less force
- Sharp, knife-to-knife blades for easy cutting
- Induction hardened teeth for long life
- Ergonomic handles for comfortable, all-day use

Description (Smart-Grip™ Handles)	Cat. No.
9 in. 2/0 Cable Cutter	35-4052
Description (Dipped Handles)	Cat. No.
9 in. 2/0 Cable Cutter	35-5052

## Tenite Grips

- Fits LASERedge™ and WireMan™ Pliers
- Not insulated from electrical shock
- Boil in water to soften for easy installation onto handles



Description	Cat. No.
Replacement grips for 6 in. pliers (one pair)	35-006
Replacement grips for 7 in. pliers (one pair)	35-007
Replacement grips for 8 in. or 9 in. pliers (one pair)	35-008



## Twist-a-Nut™ Screwdriver/Nutdriver

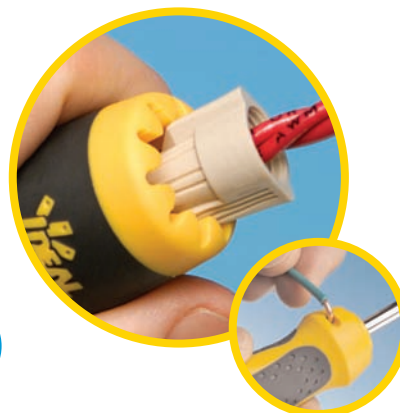
Textured Santoprene™ grip provides excellent torque and resists perspiration, water, oil and chemicals

Six torsion bars provide exceptional grip

Accu-Loop™ Wire Looping Hole

(Image actual size.)

Patented Wire-Nut® Wire Connector Wrench accepts a wide variety of connectors.



Accu-Loop™ Wire looping holes



Patented Wire-Nut® Wrench accepts a wide variety of IDEAL wire connectors (and others) including:



Wing-Nut®



Wire-Nut®



Twister®



B-Cap®



WingTwist™ / WireTwist™

## 9-in-1 Ratch-a-Nut™ Screwdriver



- Ratcheting wire connector wrench prevents finger fatigue and gets in tight spots
- Premium screwdriver ratchet mechanism can handle high torque without failure
- Ergonomic, slip-free comfort grip
- Accepts Twist-a-Nut™ replacement bits
- Includes: 1/4 in. and 3/16 in. slotted, #1 & #2 Phillips, 1/4 in., 5/16 in., 7/16 in. nutdrivers, ratcheting screwdriver end, ratcheting wire connector wrench and wire-looping hole in handle



## 7-in-1 Twist-a-Nut™ Screwdriver/Nutdrivers



- Includes universal Wire-Nut® Wire Connector Wrench in handle to help install twist-on wire connectors
- Includes wire-looping hole in handle
- Includes #1 & #2 Phillips, 1/4 in. & 3/16 in. slotted, 1/4 in. & 5/16 in. Nutdriver
- #35-909 includes #1 & #2 Square Recess in place of #1 & #2 Phillips
- Twist-a-Nut™ handle is interchangeable with new conduit deburrer head (#35-096) and 6-in-1 Tap Tool (#35-922)

Description	Cat. No.
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	<b>35-908</b>
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver with square tip	<b>35-909</b>

Description	Cat. No.
9-in-1 Ratch-a-Nut™ Screwdriver	<b>35-988</b>

### Replacement Bits (for both Ratch-a-Nut™ and Twist-a-Nut™)

Description	Cat. No.
1/4 in. slotted – #2 Phillips	<b>35-911</b>
3/16 in. slotted – #1 Phillips	<b>35-912</b>
1/4 in. slotted – #2 Square Recess	<b>35-913</b>
3/16 in. slotted – #1 Square Recess	<b>35-914</b>
#15 & #10 Torx®	<b>35-915</b>

Torx® is a trademark of Camcar division of Textron, Inc.

### Replacement Bits (for both Ratch-a-Nut™ and Twist-a-Nut™)

Description	Cat. No.
1/4 in. slotted – #2 Phillips	<b>35-911</b>
3/16 in. slotted – #1 Phillips	<b>35-912</b>
1/4 in. slotted – #2 Square Recess	<b>35-913</b>
3/16 in. slotted – #1 Square Recess	<b>35-914</b>
#15 & #10 Torx®	<b>35-915</b>

Torx® is a trademark of Camcar division of Textron, Inc.



## Twist-a-Nut™ Pro Electrician's Screwdrivers



- Convenient Wire-Nut® Wire Connector Wrench in end of handle
- Wire-looping hole in handle
- Vapor-blasted tip prevents plate chipping
- Tough, chrome vanadium steel shank
- Precision ground tip provides secure fit in screw slot



Description		Cat. No.
#2 x 6 in. Robertson		30-330
1/4 in. x 4 in. Slotted		30-331
#2 x 4 in. Phillips		30-332
1/4 in. x 6 in. Slotted Cabinet Tip		30-333

## 6-in-1 Twist-a-Nut™ Tapping 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)

Description	Cat. No.
Twist-a-Nut™ Tapping Tool includes: 6-32, 8-32 & 10-32 on one tapping side, 10-24, 12-24 & 1/4-20 on the other	35-922
Twist-a-Nut™ Shaft assembly includes: Collar, 35-422 & 35-423	35-923

## Twist-a-Nut™ Conduit Deburring Tools



Accu-Loop™ wire looping holes

- 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 in drill or cordless screwdriver
- Universal Wire-Nut® Wire Connector Wrench in handle end eases installation of twist-on connectors
- Lifetime guarantee (excludes blades)



Description	Cat. No.
Conduit Deburring Tool, slotted tip	35-083
Conduit Deburring Tool - head only, slotted tip	35-096
Conduit Deburring Tool - #2 square tip	35-075
Conduit Deburring Tool - head only, #2 square tip	35-098
Replacement Blades (2/pack)	35-097

## 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 Torx®), 8-Pocket Carrying Pouch (35-927)

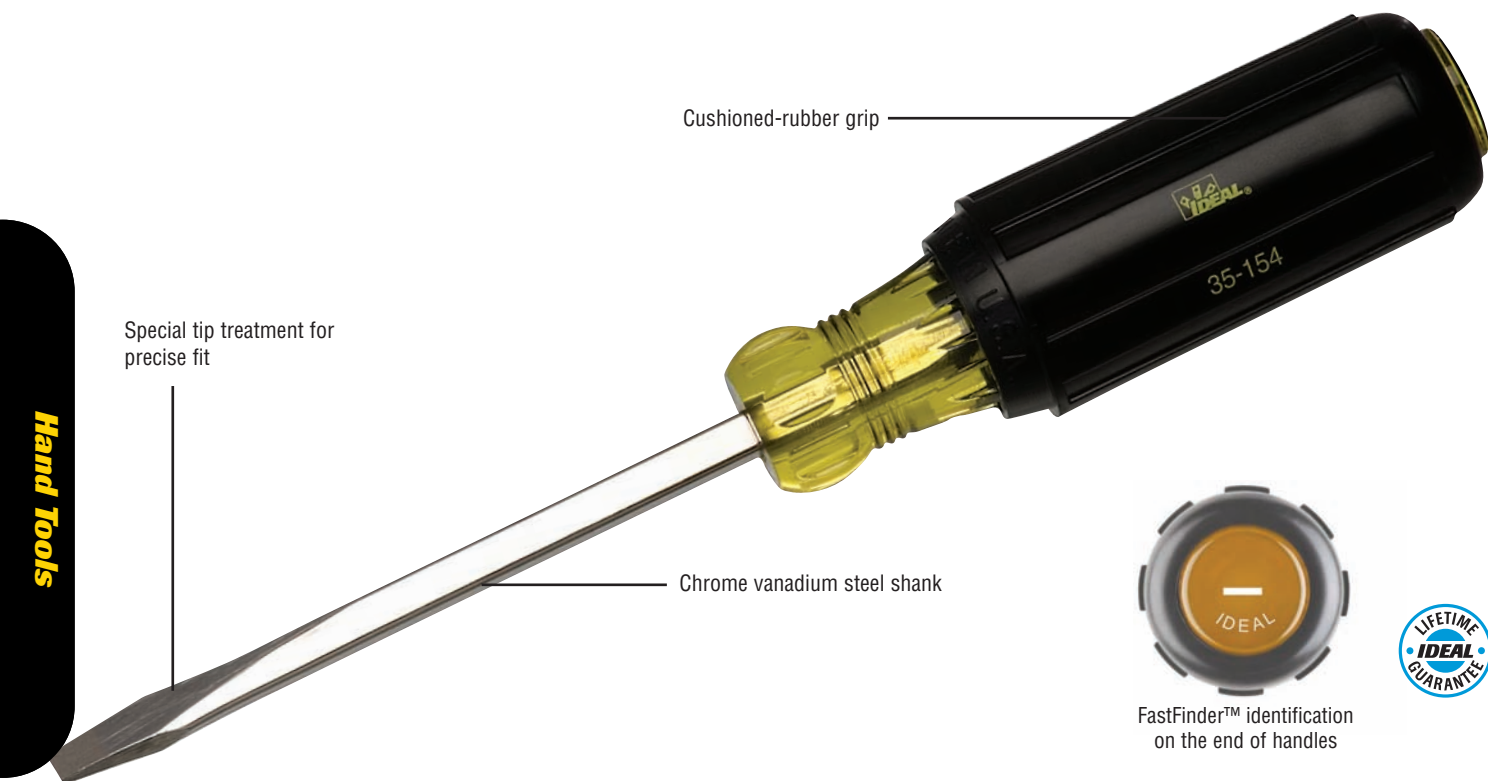


- Nylon carrying pouch holds all three Twist-a-Nut™ tools plus room for four replacement bits or taps
- Strong easy-slide metal belt clip

Description	Cat. No.
Twist-a-Nut™ Combo Pack	35-926
Twist-a-Nut™ Carrying Pouch only	35-927



## Cushioned-Grip Screwdrivers



### 8-Piece Screwdriver Set



#### Includes:

- 1/4 in. x 6 in. HD Cabinet
- 1/4 in. x 4 in. Square Shank HD Keystone
- 1/4 in. x 4 in. HD Keystone
- 5/16 in. x 6 in. Keystone
- 3/16 in. x 3 in. Cabinet
- 3/16 in. x 6 in. Cabinet
- Phillips #1 x 3 in.
- Phillips #2 x 4 in.



### 5-Piece Screwdriver Set



#### Includes:

- 1/4 in. x 6 in. HD Cabinet
- 1/4 in. x 4 in. Square Shank HD Keystone
- 5/16 in. x 6 in. Keystone
- 3/16 in. x 6 in. Cabinet
- Phillips #2 x 4 in.

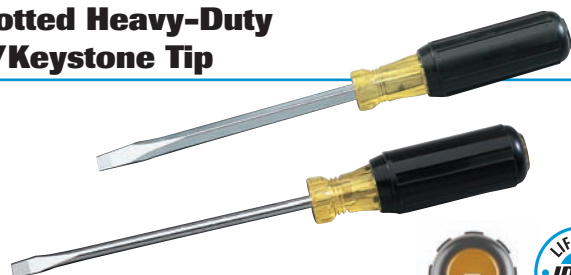


Description	Cat. No.
8-Piece Screwdriver Set	35-298

Description	Cat. No.
5-Piece Screwdriver Set	35-297



## Slotted Heavy-Duty w/Keystone Tip

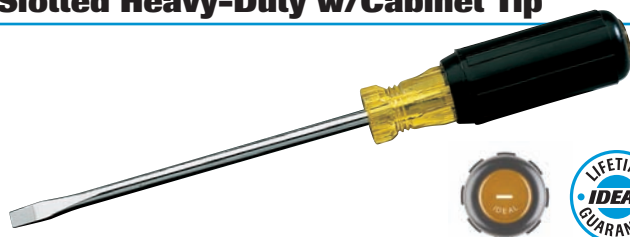


- Larger shank for heavy-duty applications
- Identification mark on ends
- Vapor-blasted tip prevents plate chipping
- Precision ground tip provides secure fit in screw slot
- Square-shank models offer wrench-assisted turning
- Tough, chrome vanadium steel shank
- Cushioned rubber grips

Square Shank	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	4 in.	8-3/8 in.	<b>35-154</b>
5/16 in. Shank and tip	6 in.	11 in.	<b>35-156</b>
5/16 in. Shank and tip	8 in.	13 in.	<b>35-158</b>

Round Shank	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	1 in.	3-3/8 in.	<b>35-161</b>
1/4 in. Shank and tip	4 in.	8-3/8 in.	<b>35-164</b>
5/16 in. Shank and tip	6 in.	11 in.	<b>35-166</b>
5/16 in. Shank and tip	8 in.	13 in.	<b>35-168</b>

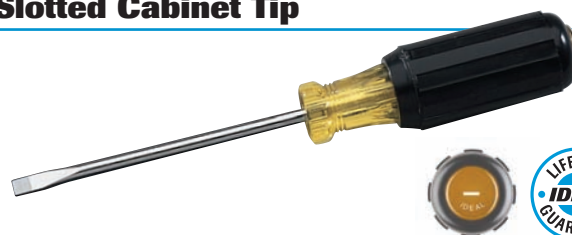
## Slotted Heavy-Duty w/Cabinet Tip



- Large diameter shank for tough applications
- Identification marks on ends
- Vapor-blasted tip prevents plate chipping
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shanks
- Cushioned rubber grip

Description	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	4 in.	8-3/8 in.	<b>35-150</b>
1/4 in. Shank and tip	6 in.	10-3/8 in.	<b>35-151</b>
1/4 in. Shank and tip	8 in.	12-3/8 in.	<b>35-152</b>
1/4 in. Shank and tip	10 in.	14-3/8 in.	<b>35-153</b>

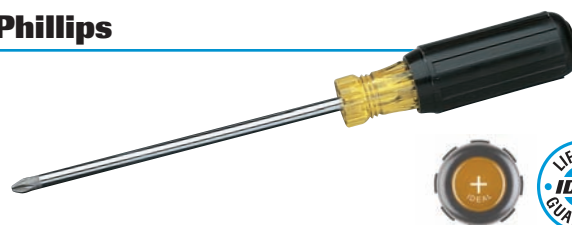
## Slotted Cabinet Tip



- Vapor-blasted tip prevents plate chipping
- Identification mark on ends
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip

Description	Blade Length	Total Length	Cat. No.
3/16 in. Shank and tip	3 in.	6-3/4 in.	<b>35-183</b>
3/16 in. Shank and tip	4 in.	7-3/4 in.	<b>35-184</b>
3/16 in. Shank and tip	6 in.	9-3/4 in.	<b>35-186</b>
3/16 in. Shank and tip	8 in.	11-3/4 in.	<b>35-188</b>
3/16 in. Shank and tip	10 in.	13-3/4 in.	<b>35-190</b>

## Phillips

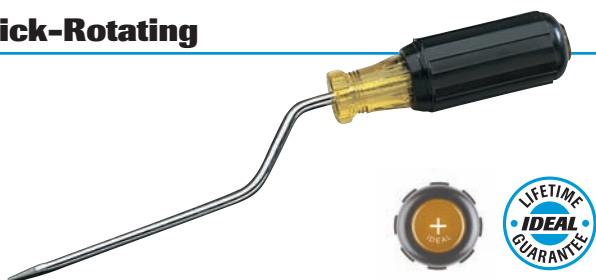


- Vapor-blasted tip prevents plate chipping
- Identification mark on ends
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip

Description	Blade Length	Total Length	Cat. No.
#1 Phillips	3 in.	6-3/4 in.	<b>35-193</b>
#2 Phillips	1 in.	3-3/8 in.	<b>35-191</b>
#2 Phillips	4 in.	8-3/8 in.	<b>35-194</b>
#2 Phillips	6 in.	10-3/8 in.	<b>35-195</b>
#3 Phillips	6 in.	11 in.	<b>35-196</b>



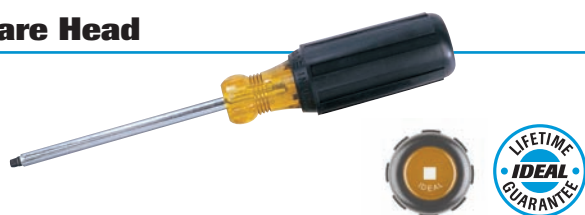
## Quick-Rotating



- Ideal for threading screws in switches, fixtures and anchors
- Identification mark on ends
- One-handed crank action for quick and easy use
- Vapor-blasted tip prevents plate chipping
- Precision-ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip

Description	Total Length	Cat. No.
3/16 in. Shank and Tip	8-3/4 in.	<b>35-200</b>
#2 Phillips Tip and 1/4 in. Shank	9-3/4 in.	<b>35-203</b>

## Square Head



- Precise tip for square-recess screws
- Color-coded handle for easy identification
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip

Description	For Screw Sizes	Cat. No.
#0 x 4 in.	3, 4	<b>35-690</b>
#1 x 4 in.	5, 6, 7	<b>35-691</b>
#1 x 8 in.	5, 6, 7	<b>35-692</b>
#2 x 4 in.	8, 9, 10	<b>35-693</b>
#2 x 8 in.	8, 9, 10	<b>35-694</b>
#3 x 4 in.	12, 14	<b>35-695</b>
#3 x 8 in.	12, 14	<b>35-696</b>

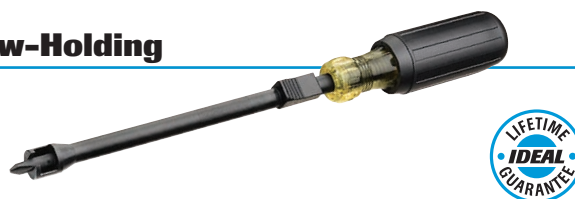
## Awl



- Heavy-duty construction for piercing, punching and scribing
- Identification mark on end
- Cushioned rubber grip

Description	Blade Length	Total Length	Cat. No.
Awl	3 in.	6-3/4 in.	<b>35-202</b>

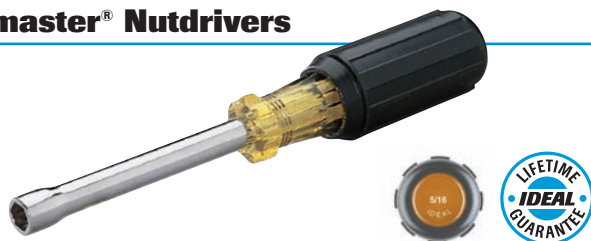
## Screw-Holding



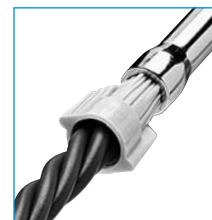
- Holds screw when collar is extended
- Holds screw in place when installing in hard-to-reach locations
- Tough, chrome vanadium steel shank and comfort grip handle

Description	Blade Length	Total Length	Cat. No.
3/16 in. Slotted	6 in.	10 in.	<b>35-406</b>
#2 Phillips	7 in.	11 in.	<b>35-404</b>

## Nutmaster® Nutdrivers



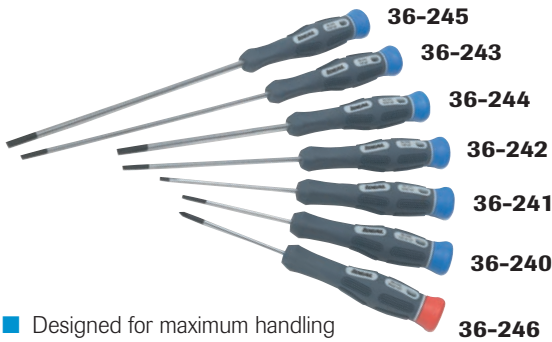
- Long, hollow shank handles longer bolts
- Identification and color coding on ends
- Nickel/chrome plated to resist rust and corrosion
- Cushioned rubber grips
- Models 35-292 and 35-295 fit Twister® Wire Connectors



Description	Shaft Length	Color	Cat. No.
3/16 in.	3-1/4 in.	Black	<b>35-290</b>
1/4 in.	3-1/4 in.	Red	<b>35-291</b>
5/16 in.	3-1/4 in.	Yellow	<b>35-292</b>
11/32 in.	3-1/4 in.	Green	<b>35-293</b>
3/8 in.	3-1/4 in.	Blue	<b>35-294</b>
7/16 in.	4 in.	Brown	<b>35-295</b>
1/2 in.	4 in.	Red	<b>35-296</b>



## Slim Electronics



- Designed for maximum handling comfort when working in tight areas
- Tough, chrome vanadium steel shank
- Phosphate tip for longer wear life
- Rotating cap for optimum control for precise centering
- Color-coded cap for easy identification



Description	Style	Blade Length	Cat. No.
3/32 in.	Cabinet Tip	2-1/2 in.	36-240
3/32 in.	Cabinet Tip	3 in.	36-241
1/8 in.	Cabinet Tip	4 in.	36-242
1/8 in.	Cabinet Tip	6 in.	36-243
5/32 in.	Cabinet Tip	4 in.	36-244
5/32 in.	Cabinet Tip	6 in.	36-245
#0 - 1/8 in.	Phillips Head	2-1/2 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

## 7-Piece Nutdriver Set



### Includes:

- 3/16 in. x 3-1/4 in.
- 1/4 in. x 3-1/4 in.
- 5/16 in. x 3-1/4 in.
- 11/32 in. x 3-1/4 in.
- 3/8 in. x 3-1/4 in.
- 7/16 in. x 4 in.



Description	Cat. No.
7-Piece Nutdriver Set	35-299

## 10-in-1 Screwdriver/Nutdriver

- Includes 1/4 in. slotted, #2 Phillips, 3/16 in. slotted, #1 Phillips, #1 & #2 square recess, #15 and #10 Torx® and 5/16 in. & 1/4 in. Nutdriver
- Cushion grip for comfort and performance



Description	Cat. No.
10-in-1 Screwdriver/Nutdriver	35-910

### Replacement Bits (for 10-in-1 Screwdriver)

Description	Cat. No.
1/4 in. slotted - #2 Phillips (2/pack)	35-940
3/16 in. slotted - #1 Phillips (2/pack)	35-941
#1 & #2 Square Recess (2/pack)	35-942
#15 & #10 Torx® (2/pack)	35-943

Torx® is a trademark of Camcar division of Textron, Inc.

## 5-in-1 Screwdriver/Nutdriver

- Contains: 5/16 in. Nutdriver, #1 Phillips, #2 Phillips, 9/32 in. slotted and 3/16 in. slotted
- Cushion grip for performance and comfort



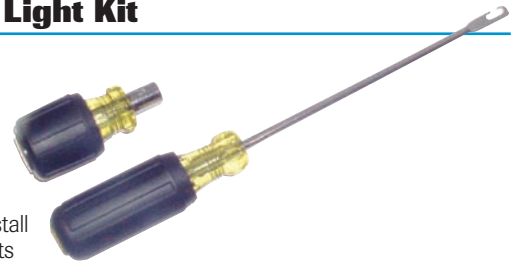
Description	Cat. No.
5-in-1 Screwdriver/Nutdriver	35-905

### Replacement Bits (for 5-in-1 Screwdriver)

Description	Cat. No.
#1 Phillips - 3/16 in. slotted	LA-4123
#2 Phillips - 9/32 in. slotted	LA-4124

## Recessed Light Kit

- All the tools needed to install recessed lights
- Long spring tool easily installs and removes spring
- Compact nutdriver is 2-1/4 in. - providing added clearance in recess lighting
- Cushion grip for added comfort



Description	Cat. No.
Recessed Light Kit	35-698



## PowerBlade™ Cable Cutter

(Drill not included)



- Extremely versatile: fits almost any drill (12V minimum)
- Cuts up to 750 MCM hard - drawn copper, 1000 MCM aluminum\*
- Heavy-duty gears and specially hardened blades for professional quality
- Rounded blade design minimizes cable distortion during cutting
- No need to mess with battery packs or special chargers; this tool works with the drill you already carry!



(Folding handle for storage.)

Description	Cat. No.
PowerBlade™ Cable Cutter	<b>35-078</b>
PowerBlade™ Replacement Handle	<b>K-8947R</b>
PowerBlade™ Replacement Blades (pair)	<b>K-8906R</b>
PowerBlade™ Replacement Torque Arm Assembly	<b>K-8909</b>
PowerBlade™ Replacement Carrying Case	<b>K-8926</b>

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

## 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 ASCR.



**35-033**

Description	Length	Cat. No.
250 MCM Long-Arm Cable Cutter	14 in.	<b>35-031</b>
500 MCM Long-Arm Cable Cutter	22 in.	<b>35-032</b>
1000 MCM Long-Arm Cable Cutter	32 in.	<b>35-033</b>
Replacement Head - 250 MCM (for 35-031)	—	<b>35-031B</b>
Replacement Head - 500 MCM (for 35-032)	—	<b>35-032B</b>
Replacement Head - 1000 MCM (for 35-033)	—	<b>35-033B</b>

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

## 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	Cat. No.
400 KCMIL (MCM) Ratcheting Cable Cutter*	<b>35-056</b>
Replacement blade (moveable side only)	<b>35-085</b>

\*Max. Jaw Opening - 1.375 in. Not for cutting steel or ASCR.

## Ratcheting Cable Cutter

- 750 KCMIL Ratcheting Cable Cutter is 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



Description	Cat. No.
750 KCMIL (MCM) Ratcheting Cable Cutter*	<b>35-053</b>
Replacement blade (moveable side only)	<b>35-057</b>

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

## Telco Ratcheting Cable Cutters

- Telco Ratcheting Cable Cutter jaw cuts up to 2,700 pair telephone cable and Stalpath® type communications cable
- 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



Description	Cat. No.
Telco Ratcheting Cable Cutter*	<b>35-055</b>
Replacement blade (moveable side only)	<b>35-054</b>

\*Max. Jaw Opening - 3 in. Not for cutting steel or ASCR.



## Sir Nickless Cutter

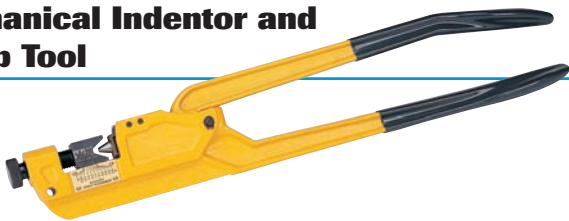
TO SEVER AND PROTECT ARMORED CABLE



- 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

Description	Cat. No.
Replacement blades (5/pack)	35-781
Rotary Armored Cable Cutter	35-782

## 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
- Connections are UL Listed when using this tool with IDEAL Non-Insulated Terminals (#8 - #4 AWG).

Description	Cat. No.
Mechanical Indentor	88-843

## Heavy-Duty Crimp Tool

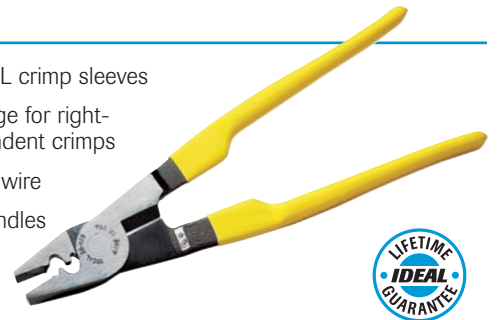
- Crimp nests for 2, 4, 6 or 8 AWG and 8-38 mm<sup>2</sup> uninsulated terminals
- Rotating crimp nests eliminate costly die changes
- Decimal and metric wire sizes clearly marked on each crimp nest
- Comfort-grip handles for a secure grip
- Connections are UL Listed when using this tool with IDEAL Non-Insulated Terminals (#8 - #4 AWG).



Description	Cat. No.
Heavy-Duty Crimp Tool	83-005

## Crimp Tool

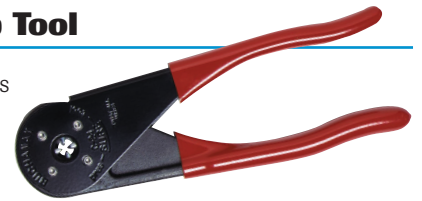
- Crimps all IDEAL crimp sleeves
- Excellent leverage for right-angle, double-indent crimps
- Cuts and twists wire
- Vinyl-coated handles provide a solid, comfortable grip



Description	Cat. No.
Crimp Tool - 10-1/4 in.	30-425

## Buchanan Construction Products Four-Way Crimp Tool

- Patented design ensures even compression and reliable connections
- Spring-loaded, cam-actuated plungers
- Fingertip adjustment for different connector sizes



Description	Cat. No.
Four-Way Crimp Tool	C-24

## 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	Cat. No.
Ratchet Crimp Tool	83-001



## Adjustable Wrenches



- Narrow profile head reaches into tight spaces
- Tight tolerance on thumbscrew won't loosen or wobble with use
- Extra wide jaw capacity with standard and metric markings
- Lightweight, non-conductive handle (not insulated)



Description	Jaw Capacity	Cat. No.
8 in. Adjustable Wrench	1-1/8 in.	35-020
10 in. Adjustable Wrench	1-5/16 in.	35-021

## 6-in-1 Twist-a-Nut™ Tapping Tools



- 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)

Description	Cat. No.
6-in-1 Twist-a-Nut™ Tap Tool (includes 6-32, 8-32 & 10-32, 10-24, 12-24 & 1/4-20 taps)	35-923

## Triple-Tap Tool

- Cleans and chases burred threads
- Taps three hole sizes



Description	Cat. No.
Triple Tap Tool (includes 10/24, 8/32, & 6/32 taps)	35-411
Triple Tap Tool (includes 10/32, 8/32, & 6/32 taps)	35-412

## Replacement Taps (for 35-923, 35-411 and 35-412)

Thread Sizes	Replacement Tap Cat. No.
10/24, 8/32, & 6/32	35-421
10/32, 8/32, & 6/32	35-422
10/24, 12/24 & 1/4-20	35-423
6-32, 8-32 & 10-32 on one side, 10-24, 12-24 & 1/4-20 on the other side	35-922

## IDEAL Wipes™ The Multi-Purpose Towel

- Pre-moistened wipes require no water
- Cleans dirt, grease, lube and grime
- Durable fabric scrubs without tearing
- Infused with natural hand moisturizers and Vitamin E
- Orange citrus scent



Description	Qty.	Cat. No.
IDEAL Wipes™, 12 in. x 9 in.	82/can	38-500

## Forged-Steel Handled Hammer

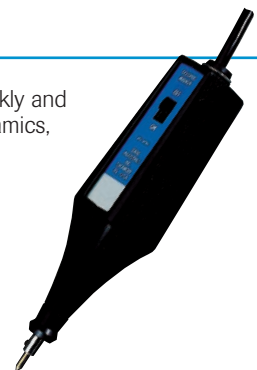


- One-piece drop-forged, tempered-steel polished head and handle
- Long, straight claws simplify removal of electrical fixtures
- Comfortable, perforated anti-vibe grips
- Elongated neck for hitting inside boxes

Description	Cat. No.
18 oz. x 12-1/2 in. Electrician's Fiberglass-handled Hammer	35-210

## Electric Engraving Tools

- Low-cost, industrial-quality marker quickly and easily engraves metal, glass, stone, ceramics, plastics, hard rubber, wood and many other hard materials
- Unique design reduces bouncing and provides smooth, easy writing
- Operates 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	Cat. No.
Engraver w/carbide-tipped point — 120V, 60 Hz	11-111
Engraver w/carbide-tipped point & 3-conductor grounded cord & plug — 120V, 60 Hz	11-113
Carbide-tipped replacement point	11-200
Diamond replacement point	11-201



## Automatic Blade Lock Measuring Tape

- Blade automatically stays out when extended
- Push button for smooth blade retraction
- Comfortable, shock-resistant rubber grip



Description	Cat. No.
Auto-Lock™ Tape Measure - 25 ft.	35-242

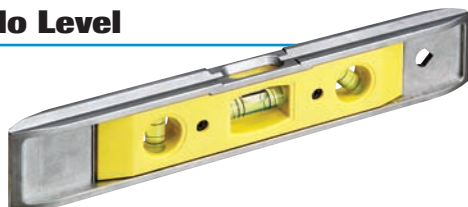
## Magnetic-Tip Measuring Tape

- Strong magnetic tip for one person measurement
- Durable nylon coated blade
- Full rubber jacket protects case



Description	Cat. No.
Mag-Tape™ Tape Measure - 25 ft.	35-238

## Torpedo Level



- 9 in. aluminum frame with magnetic and V-grooved edges
- White windows provide easy reading of plumb level and 45° mitre in dim lighting

Description	Cat. No.
9 in. Torpedo Level	35-205

## Hex-Key Sets

- 8650 steel construction
- Dual-durometer, slip-resistant grip



Description	Cat. 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., 3/16 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

## Utility Knife

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



Description	Cat. No.
Utility Knife	35-300
Replacement blades — Universal (10/pack)	35-301

## Pocket Knives



35-285

35-286

35-287

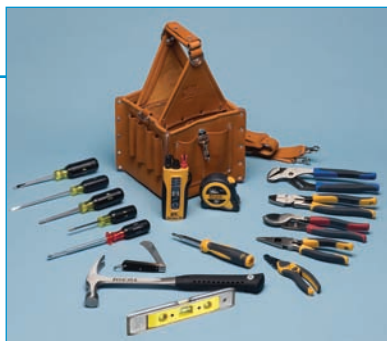
- 2-1/4 in. blade locks in position
- High-carbon stainless steel blade construction for extra strength and durability
- Durable Buyrate® non-slip handle
- Brass liners

Description	Cat. No.
Electrician's Knife w/spearpoint and screwdriver blade	35-285
Hawkbill Knife w/curved blade	35-286
Lineman's Jack Knife w/sheepfoot blade	35-287



## Tool Kits featuring **LASERedge™** Pliers

### 17-Piece Set - #35-809



#### Set Includes:

- Four LASERedge™ Pliers with Smart-Grip™ Handles (#35-3012 – 9-1/4" Linesman w/fish tape puller, #35-3038 – 8" Long Nose, #35-3430 – 10" Tongue and Groove, #35-3052 – 9-1/2" Cable Cutter)
- #45-915 – Kinetic™ Reflex™ T®-Stripper Wire Stripper
- #35-908 – 7-in-1 Twist-A-Nut™ Screwdriver
- #Five Cushion Grip Screwdrivers (#35-193 – #1 x 3 Phillips, #35-194 – #2 x 4 Phillips, #35-186 – 3/16" x 6 Slotted Cabinet Tip, #35-164 – 1/4" x 4 Slotted round shank, #35-406 – 3/16" x 6 Screw holding slotted)
- #35-286 – Hawkbill Knife
- #35-210 – Electrician's Hammer
- #35-242 – 25' Auto-Lock™ Tape Measure
- #35-205 – Torpedo Level
- #61-086 – Vol-Con® XL Voltage/Continuity Tester
- #35-975 – Tuff-Tote™ Premium Leather Tool Carrier

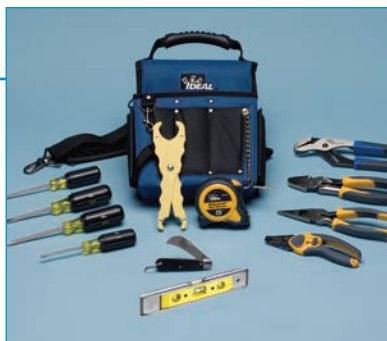
### 16-Piece Set - #35-800



#### Set Includes:

- Five LASERedge Pliers with dipped grips (#30-430 – 9-1/4" Linesman w/ crimper, #35-029 – 8" Offset Diagonal, #35-038 – 8" Long Nose, #35-430 – 10" Tongue and Groove, #35-052 – 2/0 Cable Cutter)
- #45-120 – Premium T®-5 T®-Stripper Wire Stripper
- #35-908 – 7-in-1 Twist-A-Nut™ Screwdriver
- Two Cushion Grip Screwdrivers (#35-194 – #2 x 4 Phillips, #35-164 – 1/4 x 4 Slotted round shank)
- #35-083 – Twist-A-Nut™ Conduit Deburring Tool
- #35-210 – Electrician's Hammer
- #35-242 – 25' Auto-Lock™ Tape Measure
- #35-285 – Electrician's Knife
- #61-086 – Vol-Con® XL Voltage/Continuity Tester
- #61-201 – Replacement battery
- #35-311 – Tuff-Tote™ Leather Tool Pouch

### 13-Piece Set - #35-790



#### Set Includes:

- Three LASERedge™ Pliers with Smart-Grip™ handles (#35-3012 – 9-1/4" Linesman w/fish tape puller, #35-3038 – 8" Long Nose, #35-3430 – 10" Tongue and Groove)
- #45-915 – Kinetic™ Reflex™ T®-Stripper Wire Stripper
- Four Cushion Grip Screwdrivers (#35-193 – #1 x 3 Phillips, #35-194 – #2 x 4 Phillips, #35-186 – 3/16" x 4 Slotted Cabinet Tip, #35-164 – 1/4" x 4 Slotted round shank)
- #35-242 – 25' Auto-Lock™ Tape Measure
- #35-286 – Hawkbill Knife
- #34-002 – Medium Size Fuse Puller
- #35-205 – Torpedo Level
- #35-462 – Journeyman Electrician's Tote™

### 16-Piece Set - #35-808



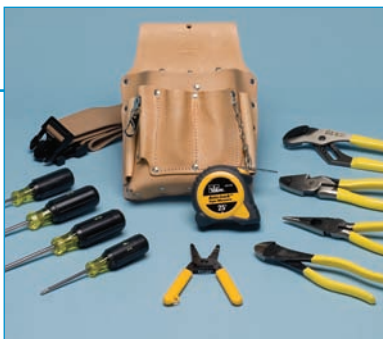
#### Set Includes:

- Four LASERedge Pliers with dipped grips (#35-012 – 9-1/4" Linesman w/fish tape puller, #35-038 – 8" Long Nose, #35-430 – 10" Tongue and Groove, #35-012 – 9-1/2" Cable Cutter)
- #45-415 – Reflex™ T®-5 T®-Stripper Wire Stripper
- #30-428 – Combo Crimp/Strip Tool
- Four Cushion Grip Screwdrivers (#35-193 – #1 x 3 Phillips, #35-194 – #2 x 4 Phillips, #35-186 – 3/16" x 6 Slotted Cabinet Tip, #35-164 – 1/4" x 4 Slotted round shank)
- #35-210 – Electrician's Hammer
- #35-242 – 25' Auto-Lock™ Tape Measure
- #34-002 – Pocket Fuse Puller
- #35-286 – Hawkbill knife
- #35-261 – Ergonomic Hacksaw
- #35-427 – 18" Large Mouth Bag



## Tool Kits featuring **LASERedge™** Pliers

### 12-Piece Set - #35-805



#### Set Includes:

- Four LASERedge™ Pliers with dipped grip handles (#35-012 – 9-1/4" Linesman w/fish tape puller, #35-028 – 8" Diagonal, #35-038 – 8" Long Nose, #35-430 – 10" Tongue and Groove)
- #45-120 – Premium T®-5 T®-Stripper Wire Stripper
- Four Cushion Grip Screwdrivers (#35-193 – #1 x 3 Phillips, #35-194 – #2 x 4 Phillips, #35-186 – 3/16" x 4 Slotted Cabinet Tip, #35-164 – 1/4" x 4 Heavy-Duty Slotted round shank)
- #35-242 – 25' Auto-Lock™ Tape Measure
- #10-466 – Electrician's Leather Tool Pouch
- #10-398 – Web Belt

### 6-Piece Set - #35-794

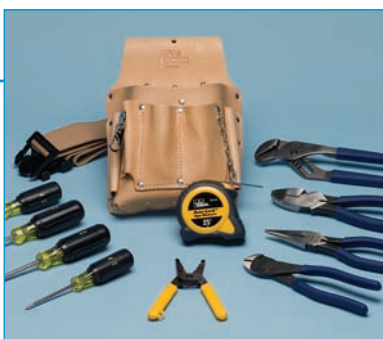


#### Set Includes:

- One LASERedge Plier with dipped grip handles (#30-430 – 9-1/4" Linesman w/crimper)
- #45-120 – Premium T®-5 T®-Stripper Wire Stripper
- #35-908 – 7-in-1 Twist-a-Nut™ Screwdriver
- #35-242 – 25' Auto-Lock™ Tape Measure
- #35-300 – Utility Knife
- #35-505 – Pocket Pal™ Tool Holster

## Tool Kits featuring **WireMan™** Pliers

### 12-Piece Set - #35-5805



#### Set Includes:

- Four WireMan™ Pliers with dipped grip handles (#35-5012 – 9-1/4" Linesman, #35-5028 – 8" Diagonal, #35-5038 – 8" Long Nose, #35-5430 – 10" Tongue and Groove)
- #45-120 – Premium T®-5 T®-Stripper Wire Stripper
- Four Cushion Grip Screwdrivers (#35-193 – #1 x 3 Phillips, #35-194 – #2 x 4 Phillips, #35-184 – 3/16" x 4 Slotted Cabinet Tip, #35-164 – 1/4" x 4 Slotted round shank)
- #25' Auto-Lock™ Tape Measure
- #10-466 – Electrician's Leather Tool Pouch
- #10-398 – Web Belt

### 5-Piece Set - 35-5792



#### Set Includes:

- One WireMan™ Plier with dipped grip handles (#30-5430 – 9-1/4" Linesman w/crimper)
- #45-120 – T®-5 T®-Stripper Wire Stripper
- Two Screwdrivers (#35-194 – #2 x 4 Phillips, #35-186 – 3/16" x 4 Slotted Cabinet Tip)
- #35-505 – Pocket Pal™ Tool Holster



## Premium Leather Line

Top of the line tool carriers are handcrafted from heavy, 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. Natural or black leather – your choice.



## 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. Watch their color age to a deep tan over the years.

## Fabric Line

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



## Tuff-Tote™ Tool Carriers



- Convenient 6 in. x 8 in. tool carrier with four center screwdriver slots, two interior compartments, two divided outside pockets and four outside tool loops
- Exclusive leather 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	Cat. No.
Premium Leather Carrier w/shoulder strap	35-969
Premium Black Leather Carrier w/shoulder strap	35-969BLK

## Tuff-Tote™ Tool Pouches



- Eight-pocket, belt-mounted pouch features large utility compartment with two dividers and six screwdriver loops, seven 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	Cat. No.
Premium Leather Pouch w/shoulder strap	35-950
Premium Black Leather Pouch w/shoulder strap	35-950BLK

## Tuff-Tote™ Ultimate Tool Carriers



- Eight-inch square tool carrier features two divided inside compartments with six screwdriver loops each, one large center compartment, four outside pockets and eight 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	Cat. 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



## Electrician's Tool Pouch

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



Description	Cat. No.
Electrician's Tool Pouch	10-466

## Hip Holster Tool Pouches

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



Description	Cat. No.
6-Pocket Hip Holster, Black	35-784BLK
3-Pocket Hip Holster, Standard	35-964

## Tuff-Tote™ Tester Pouches

- Fits most hand-held testers
- Easy-access top
- Convenient belt strap



Note: Tester sold separately

Description	Cat. No.
Premium Leather Pouch w/belt strap	35-956
Premium Black Leather Pouch w/belt strap	35-956BLK
Standard Leather Pouch w/belt strap	35-339

## Hammer Holder

- Heavy-duty leather construction
- Riveted steel hammer loop
- Fits on all sizes of tool belts



Description	Cat. No.
Hammer Holder	10-399

## Shoulder Straps



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

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

## Belts



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

Description	Cat. No.
Premium Leather Belt – 2 in. x 48 in.	35-995
Premium Black Leather Belt – 2 in. x 48 in.	35-995BLK
Standard Leather Belt – 1-3/4 in. x 46 in.	35-316
Web Belt	10-398



## Pocket Pal™ Tool Holster

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



Description	Cat. No.
Pocket Pal™ Tool Holster	35-505

Note: Tools sold separately.

## Belt Bag™ Supplies Pouch

- Holds wire connectors, staples, and other supplies ready for use on the job
- Easy access opening closes automatically to keep supplies safely retained until needed



Description	Cat. No.
Belt Bag™ Supplies Pouch	35-405

## Zipper Pouches



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

Description	Cat. No.
Zipper Pouch, 10-1/2 in. long	35-402
Zipper Pouch, 12-1/2 in. long	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



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

Note: Wire Connectors sold separately.

## Bucket Bag Tool Carrier

- 11-1/2 in. deep bag fits over the rim of a standard 5-gallon bucket
- Forty-three convenient pockets — 36 pleated outside and inside pockets
- Rugged nylon polyester construction



Description	Cat. No.
Bucket Bag Tool Carrier	35-665

Note: Tools sold separately.

## Supplies Apron



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

Description	Cat. No.
Supplies Apron	35-474



## 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	Cat. 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

Note: Tools sold separately.

## Journeyman Electrician's Tote™

- 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	Cat. No.
Journeyman Electrician's Tote™	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	Cat. 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	Cat. No.
Mechanic's Tool Bag	35-535

Note: Tools sold separately.

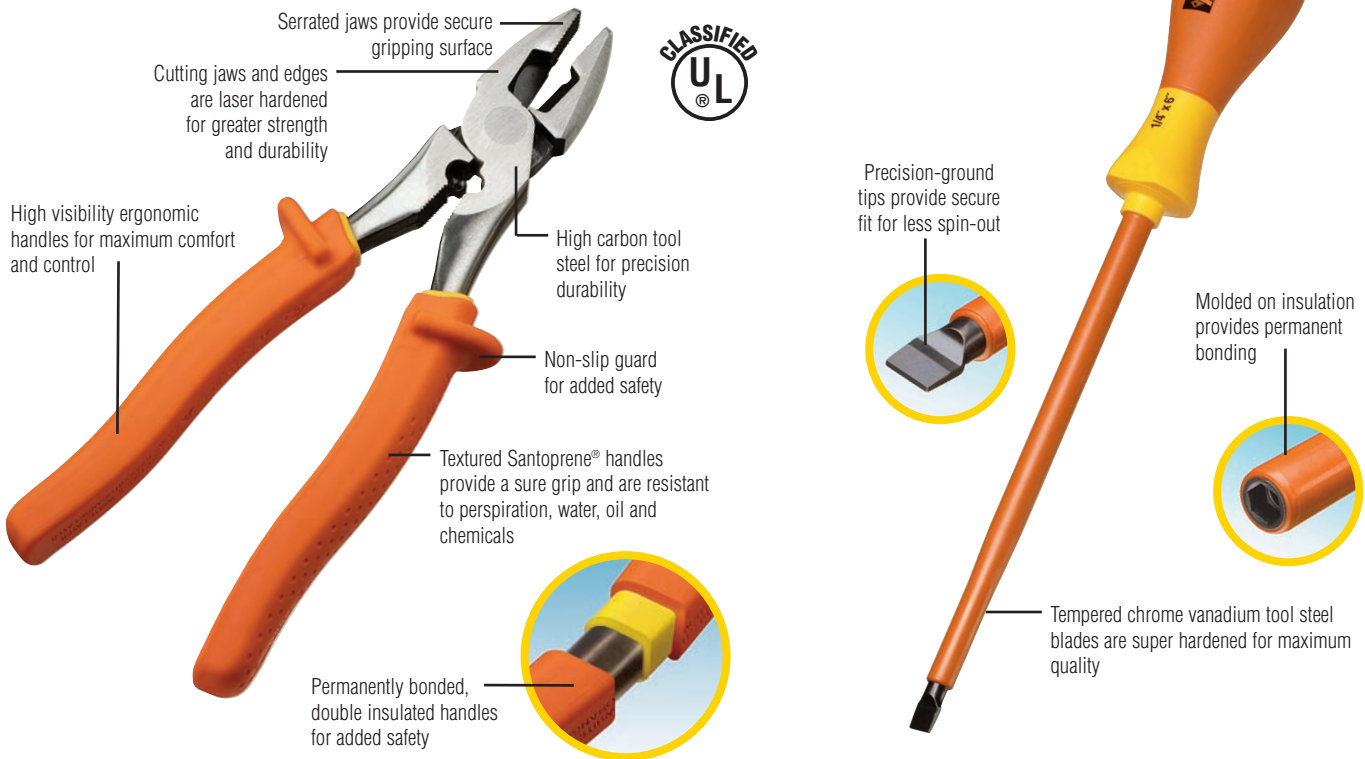


## Insulated Tools

The IDEAL insulated tool line creates a perfect blend of safety, comfort and precision functionality. Each tool features double insulated Santoprene® handles with a soft, easy-to-grip outer surface. In addition to the ergonomic qualities found in our tools, the insulated coating process acts as an 'at-a-glance' safety check. If the orange outer coating reveals any of the inner yellow surface, an electrician will know that this tool needs to be replaced.

### Tools feature:

- First UL tested and classified insulated pliers
- Each one designed and tested to meet ASTM F1505-01, EN DIN, and IEC 60 900 test standards
- Individually tested and VDE certified to 1000V AC (1500V DC)
- Meets OSHA requirements for insulated tools



### 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.**

### REGULATIONS

#### Testing:

- Every 1000V insulated tool we sell is individually tested to ensure no failure when subjected to live current.

#### UL and VDE Certification:

Listed below are some of the tests we perform in order to pass certification:

- Tools are immersed in water for 24 hours, then tested under current for 3 minutes to ensure no current leakage or sparkover occurs.
- After being stored for 168 hours at -40° C (-40° F), tools are dropped to ensure no damage from impact.
- After being stored for 168 hours at +70° C (158° F), a tensile load is applied to ensure the grip is firmly bonded to the tool.
- Tools are subjected to flame for 10 seconds to ensure no flammability of the insulating material.

#### OSHA Regulations:

*OSHA 1910.335(a)(2)(i)* When working near exposed energized conductors or circuit parts, **each employee shall use insulated tools** or handling equipment if the tools or handling equipment might make contact with such conductors or parts.  
*OSHA 1910.335 (a)(1)(i)* Employees working in areas where there are potential electrical hazards **shall be provided with, and shall use**, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed.

**Make sure you are in compliance by providing and using IDEAL insulated tools!**



## 26-Piece Journeyman Kit - #35-9302



### Kit Includes:

- Four insulated pliers (#30-9430 – 9-1/4 in. Linesman w/crimper, #35-9029 – 8 in. Offset diagonal, #35-9038 – 8-1/2 in. Long Nose, #35-9430 – 10 in. Tongue and Groove)
- Eight insulated screwdrivers (#35-9321 – 1/8 x 4 in. slotted, 3/16 x 5 in. slotted, #35-9323 – 1/4 x 6 in. slotted, #35-9324 – 5/16 x 7 in. slotted, #35-9325 – 3/8 x 8 in. slotted, #35-9310 – #1 x 3 Phillips, #35-9311 – #2 x 4 in. Phillips, #35-9312 – #3 x 6 in. Phillips)
- Six insulated nutdrivers (#35-9330 – 3/16 x 5 in., #35-9331 – 1/4 x 5 in., #35-9332 – 5/16 x 5 in., #35-9333 – 3/8 x 5 in., #35-9334 – 7/16 x 5 in., #35-9335 – 1/2 x 5 in.)
- #35-9052 – 9-1/2 in. insulated High-Leverage Cable Cutter
- #30-9429 – 9-3/4 in. insulated Multi-Crimp Tool
- #45-9615 – Insulated Reflex™ Super T®-Stripper Wire Stripper
- #45-9120 – Insulated Wire Stripper Cutter
- #35-9340 – Insulated Electrician's Skinning Knife
- #61-063 – Volt-Sensor® NCV Tester
- #34-002 – 7-1/2 in. Non-Conductive Fuse Puller
- #35-9352 – Heavy-Duty Soft Tool Case



## 18-Piece Standard Kit - #35-9301



### Kit Includes:

- Four insulated pliers (#30-9430 – 9-1/4 in. Linesman w/crimper, #35-9029 – 8 in. Offset diagonal, #35-9038 – 8-1/2 in. Long Nose, #35-9430 – 10 in. Tongue and Groove)
- Eight insulated screwdrivers (#35-9320 – 1/8 x 4 in. slotted, #35-9321 – 3/16 x 5 in. slotted, #35-9323 – 1/4 x 6 in. slotted, #35-9324 – 5/16 x 7 in. slotted, #35-9325 – 3/8 x 8 in. slotted, #35-9310 – #1 x 3 Phillips, #35-9311 – #2 x 4 in. Phillips, #35-9312 – #3 x 6 in. Phillips)
- #35-9052 – 9-1/2 in. Insulated High-Leverage Cable Cutter
- #45-9615 – Insulated Reflex™ Super T®-Stripper Wire Stripper
- #35-9340 – Insulated Electrician's Skinning Knife
- #61-063 – Volt-Sensor® NCV Tester
- #34-002 – 7-1/2 in. Non-Conductive Fuse Puller
- #35-9351 – Heavy-Duty Soft Tool Case



## 10-Piece Basic Kit - #35-9300



### Kit Includes:

- Three insulated pliers (#34-9430 – 9-1/4 in. Linesman w/crimper, #35-9029 – 8 in. Offset diagonal, #35-9038 – 8-1/2 in. Long Nose)
- Three insulated screwdrivers (#35-9321 – 3/16 x 5 in. slotted, #35-9323 – 1/4 x 6 in., #35-9311 – #2 x 4 in. Phillips)
- #35-9052 – 9-1/2 in. Insulated High-Leverage Cable Cutter
- #45-9615 – Insulated Reflex™ Super T®-Stripper Wire Stripper
- #34-002 – 7-1/2 in. Non-Conductive Fuse Puller
- #35-9350 – Heavy-Duty Soft Tool Case





## Insulated Pliers

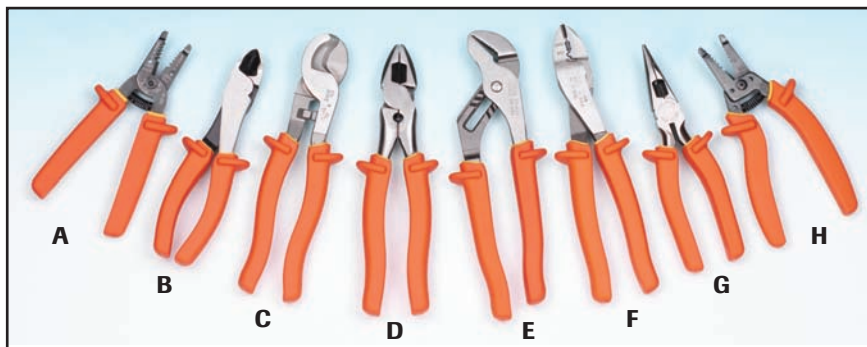


Fig.	Description	Cat. No.
A	Premium T®-Stripper Wire Stripper	45-9120
B	8 in. Diagonal Cutting Pliers w/angled head	35-9029
C	9-1/2 in. High-Leverage Cable Cutter	35-9052
D	9-1/4 in. Side Cutting Linesman Pliers	30-9430

Fig.	Description	Cat. No.
E	10 in. Tongue and Groove Pliers	35-9430
F	9-3/4 in. Multi-Crimp Tool	30-9429
G	8-1/2 in. Long-Nose Pliers	35-9038
H	Reflex™ Super T®-Stripper Wire Stripper	45-9615

## Insulated Screwdrivers



Description	Shaft Length	Cat. No.
#1 Phillips Screwdriver	3 in.	35-9310
#2 Phillips Screwdriver	4 in.	35-9311
#3 Phillips Screwdriver	6 in.	35-9312
1/8 in. Slotted Screwdriver	4 in.	35-9320
3/16 in. Slotted Screwdriver	5 in.	35-9321
7/32 in. Slotted Screwdriver	7 in.	35-9322
1/4 in. Slotted Screwdriver	6 in.	35-9323
5/16 in. Slotted Screwdriver	7 in.	35-9324
3/8 in. Slotted Screwdriver	8 in.	35-9325

Screwdriver Kit	Cat. No.
9-Piece Insulated Screwdriver Kit with hard case (Includes all nine screwdrivers listed above.)	35-9303

## Insulated Nutdrivers



Description	Shaft Length	Cat. No.
3/16 in. Hex Nutdriver	5 in.	35-9330
1/4 in. Hex Nutdriver	5 in.	35-9331
5/16 in. Hex Nutdriver	5 in.	35-9332
3/8 in. Hex Nutdriver	5 in.	35-9333
7/16 in. Hex Nutdriver	5 in.	35-9334
1/2 in. Hex Nutdriver	5 in.	35-9335
9/16 in. Hex Nutdriver	5 in.	35-9336

Nutdriver Kit	Cat. No.
7-Piece Insulated Nutdriver Kit with hard case (Includes all seven Nutdrivers listed above.)	35-9304

## Insulated Knife



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

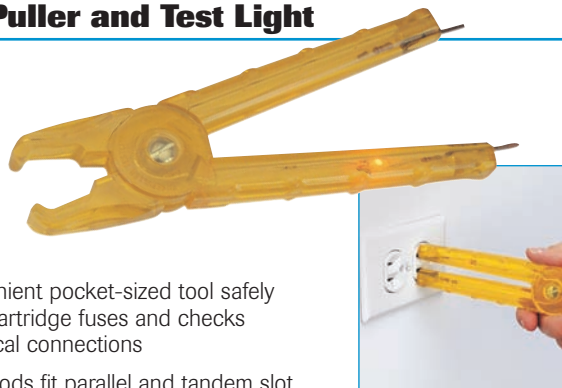
## Cases



Description	Cat. No.
Soft Zipper Case for Basic Kit (35-9300)	35-9350
Soft Zipper Case for Standard Kit (35-9301)	35-9351
Soft Zipper Case for Journeyman Kit (35-9302)	35-9352
Hard Case for Screwdriver Kit (35-9303) & Nutdriver Kit (35-9304)	35-9353



## Fuse Puller and 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
- For use on fuses to 100A/250V and 60A/600V
- Test capacity from 100V to 600V AC/DC

Description	Cat. No.
Fuse Puller & Test Light	34-012

## Safe-T-Grip® Fuse Pullers



- 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	Cat. No.
Small Puller for 250V, 9/32 in. to 1/2 in. dia. fuses; 5 in. long	34-001
Medium Puller for 0 to 100A/250V & 600V, 1/2 in. to 1 in. dia. fuses; 7-1/2 in. long	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. long	34-003

## Fuse Pullers



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

Description	Cat. No.
Small Puller for 0 to 30A/250V, 1/4 in. to 1/2 in. dia. fuses; 5 in. long	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. long	34-016

## 1000V Insulated Screw-Holding Screwdriver

- Split blade wedges into screw slot when collar is extended
- Holds screw in place when installing in hard to reach areas
- Easy to start screw when wearing gloves



Description	Cat. No.
1000V Insulated Screw Holding Screwdriver, 3/16 x 6 in. slotted Tip	35-9406

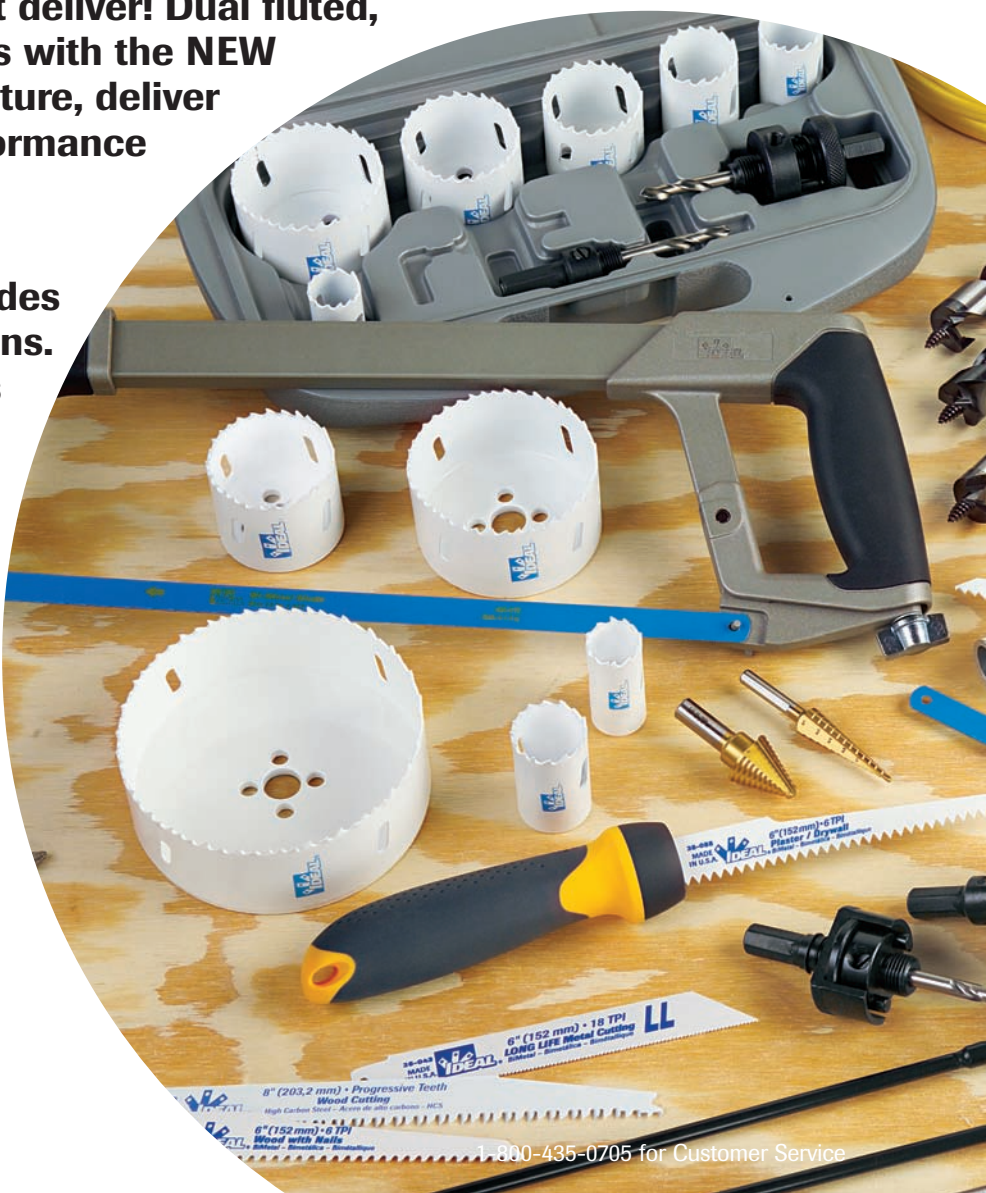




## Cutting & Holemaking Tools

***IDEAL cutting tools offer a powerful line-up that includes...***

- **New T.K.O. Carbide-Tipped Hole Cutters** provide extreme productivity gains over traditional knockouts, even through stainless steel!
- **A new line of Bul-Z-Eye™ Self Feed Wood Boring Bits** with twin cutting edges and superior construction that cuts smoother and faster holes than the competition
- **Superior step drill bits** that deliver! Dual fluted, titanium nitride coated bits with the **NEW** split-point self starting feature, deliver faster cuts, improved performance and longer tool life than conventional bits.
- **Bi-metal reciprocating blades** for the toughest applications. Engineered bi-metal blades last up to ten times longer than standard carbon steel blades.
- **A broad line of flexible drill bits and specialty wood bits** that deliver superior performance at any job site.
- **An expanded range of hacksaws and all-purpose hand saws and blades.**





## Step Drill Bits



35-511



35-512



35-513



35-514



35-515

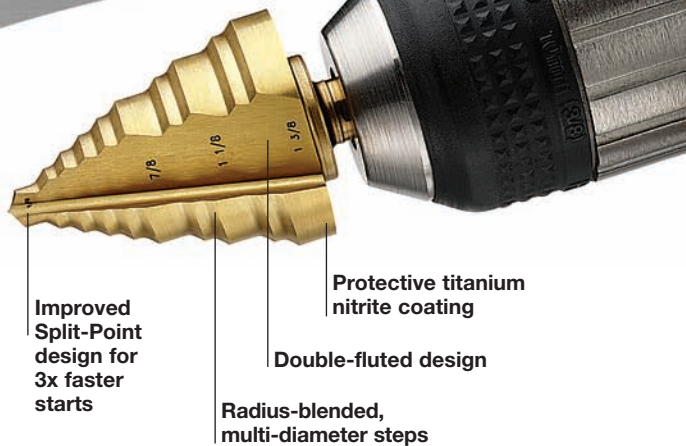


35-516



35-517

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 nitride 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.



Improved Split-Point design for 3x faster starts

Protective titanium nitride coating

Double-fluted design

Radius-blended, multi-diameter steps



Step Drill Bits

## Electrician's Step Bit Kit

- Durable blow-molded case securely holds and protects bits
- Kit includes four step bits (35-511, 35-513, 35-515 and 35-517)
- Kit provides a solution for every electrical hole size between 1/8 in. and 1-3/8 in.



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

All shanks are 1 in. length.

\*Requires pilot holes.

Description	Cat. No.
Electrician's Step Bit Kit	<b>35-520</b>

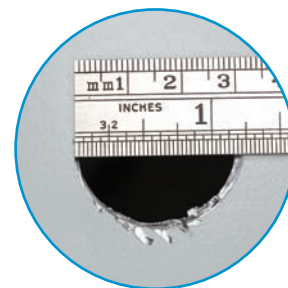


## Carbide Tipped Hole Cutters

Introducing the new TKO™ Carbide Tipped Hole Cutters from IDEAL INDUSTRIES, INC. TKO 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 smoother, more precise hole than competitors (holes cut with 1-1/8 in. cutters)*

### Carbide-Tipped Hole Cutters

Hole Size (Inches)	Conduit & Pipe Size (Inches)	Cat. No.
3/4	—	<b>36-300</b>
7/8	1/2	<b>36-301</b>
1	—	<b>36-302</b>
1-1/8	3/4	<b>36-303</b>
1-1/4	—	<b>36-304</b>
1-3/8	1	<b>36-305</b>
1-7/16	—	<b>36-306</b>
1-1/2	—	<b>36-307</b>
1-3/4	1-1/4	<b>36-308</b>
2	1-1/2	<b>36-309</b>
2-1/2	—	<b>36-310</b>

**36-309**



**36-305**



**36-303**



**36-301**



**Available in a full range of sizes from 1 in. to 2-1/2 in.**

### SmoothStart™ Replacement Pilot Drill

Exclusive! SmoothStart™ pilot guides cutter to surface providing smoother holes and avoiding cutter damage.



Description	Cat. No.
SmoothStart™ Replacement Pilot Drill	<b>36-312</b>

### 4-Piece Kit

Includes the three most common sizes along with a spare SmoothStart™ pilot bit and a convenient carrying case



Description	Cat. No.
4-Piece Carbide Hole Cutter Kit — Includes SmoothStart™ Replacement Tip, 7/8 in., 1-1/8 in., 1-3/8 in.	<b>36-311</b>

*Integrated overdrill flange prevents penetration beyond the sheet metal.*





## Carbide Tipped Hole Cutters

Carbide tips cut over 200 holes through stainless steel, and out-perform HSS cutters and bi-metal hole saws in sheet steel

Exclusive SmoothStart™ pilot drill guides cutter



Integral arbor provides smoother, more accurate holes than hole saws or two-piece carbide-tipped cutters

Integrated overdrill flange prevents penetration beyond the sheet metal

Ejection spring effortlessly ejects slug

### See how IDEAL TKO can save time...

**Total time using the IDEAL TKO™**  
**30 Seconds**



**Chuck Cutter**

**00:10**

**Drill hole & store**



**00:30**

**Total time using the competitors' knockout tool**  
**More than 6 Minutes**



**Chuck Step Drill**

**00:10**



**Drill Pilot Hole**

**00:30**



**Assemble knockout punch & stud pull**

**02:00**



**Ratchet**

**04:20**



**Slug removed, disassemble & store**

**06:20**

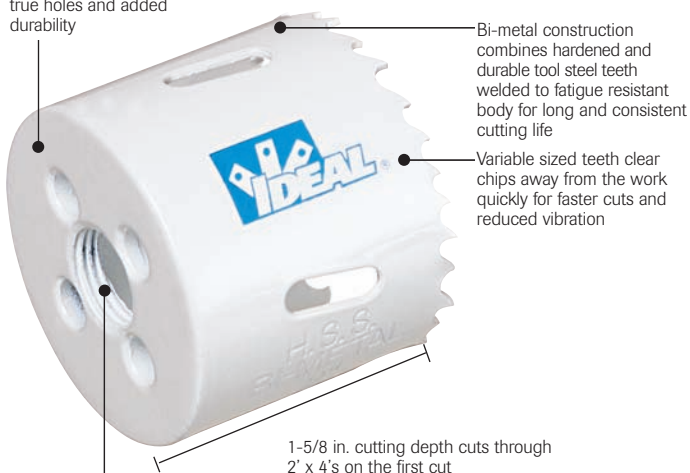




## Bi-Metal Hole Saws

IRONMAN™ Bi-metal hole saws from IDEAL INDUSTRIES, INC., with re-engineered bi-metal construction, a thick “flex-free” backing plate, and variable sized teeth, IDEAL IRONMAN™ hole saws will rival the cutting speed and longevity of any in the industry. The bi-metal construction cuts metal, wood and plastics including: tool and stainless steel, nail embedded wood, plywood, and pipe. An extensive list of 51 sizes, effective accessories, and kits are available to meet all your cutting needs. When it comes to quality, performance and durability, IDEAL is the professional's choice for hole saws.

New improved solid plate design resists flexing of the new hole saw for clean true holes and added durability



Threads fit all standard arbors

### Hole Saws

- Thicker, **FLEX FREE** backing plate for clean true holes and longer tool life
- Improved bi-metal construction for long life and durability
- 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

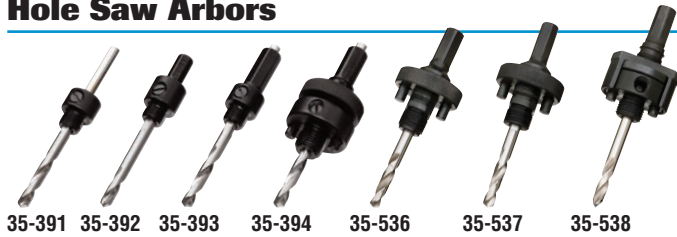


Saw Diameter (Inches)	Pipe Tap Size* (Inches)	Pipe Entrance Size* (Inches)	Cat. No.
Use Arbor No. 35-391, 35-392 or 35-393			
9/16	—	—	35-340
5/8	—	—	35-341
11/16	—	—	35-342
3/4	1/2	3/8	35-343
13/16	—	—	35-344
7/8	3/4	1/2	35-345
15/16	—	—	35-346
1	—	—	35-347
1-1/16	—	—	35-348
1-1/8	1	3/4	35-349
1-3/16	—	—	35-350
Use Arbor No. 35-394, 35-536 or 35-537			
1-1/4	—	—	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
1-11/16	—	—	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
Use Arbor No. 35-394, 35-536, 35-537 or 35-538			
3	—	2-1/2	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.



## Hole Saw Arbors



Durable steel construction means years of long-lasting performance. Set-screw in body allows easy replacement of the pilot drill. Save valuable time through this versatile design. Instantly change hole saws without tools and without having to remove the arbor from the chuck.

Shank Size	Thread Size	Chuck Size	Fits Hole Saw Sizes	Cat. No.
1/4 in. Round	1/2-20 in.	1/4 in.	9/16 - 1-3/16 in.	<b>35-391</b>
3/8 in. Hex	1/2-20 in.	3/8 in.	9/16 - 1-3/16 in.	<b>35-392</b>
7/16 in. Hex	1/2-20 in.	1/2 in.	9/16 - 1-3/16 in.	<b>35-393</b>
7/16 in. Hex	5/8-18 in.	1/2 in.	1-1/4 - 6 in.	<b>35-394</b>
7/16 in. Hex	5/8-18 in.	1/2 in.	1-1/4 - 6 in.	<b>35-536</b>
3/8 in. Hex	5/8-18 in.	3/8 in.	1-1/4 - 6 in.	<b>35-537</b>
7/16 in. Hex	5/8-18 in.	1/2 in.	2 - 6 in.	<b>35-538</b>

## Replacement Pilot Drills for Hole Saw Arbors

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



**35-397**

Description	Cat. No.
4-1/2 in. x 1/4 in. – Fits 35-391, 35-393, 35-394 & 35-538 arbors	<b>35-397</b>
3-1/4 in. x 1/4 in. – Fits 35-392, 35-536 & 35-537 arbors	<b>35-398</b>

## Arbor Extension

For boring jobs that require a longer reach, arbor extensions add up to 18 in. length and can be easily connected to IDEAL hole saw arbors.



Description	Cat. No.
Extension for 7/16 in. Arbors, 12 in. long	<b>35-396</b>

## Adjustable Can Light Hole Saws

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



*Drill not included.*

Description	Cat. No.
Adjustable Can Light Hole Saw – 10 sizes from 2-1/2 in. to 7 in.	<b>35-598</b>
Adjustable Can Light Hole Saw – 13 sizes from 6-1/4 in. to 10-3/8 in.	<b>35-599</b>

## Hole Saw Kits

### Electrician's Hole Saw Kit

- Reliable 8-piece kit in a durable plastic case
- Find electrical sizes for pipe and conduit through 2 in.



#### Kit 35-400 Includes:

Description	Cat. No.
Hole Saw sizes 7/8 in., 1-1/8 in., 1-3/8 in., 1-3/4 in., 2 in. & 2-1/2 in. Also includes arbor models 35-393 & 35-394	<b>35-400</b>

### 14-Piece Electrician's Hole Saw Kit

- Generous 14-piece kit offers a tremendous selection
- You'll find electrical sizes for pipe and conduit through 4 in.
- Sturdy plastic case survives extra wear and tear



#### Kit 35-401 Includes:

Description	Cat. No.
Hole Saw sizes 7/8 in., 1-1/8 in., 1-3/8 in., 1-3/4 in., 2 in., 2-1/2 in., 3 in., 3-5/8 in., 4-1/8 in., 4-1/2 in. Also includes arbor models 35-391, 35-393 & 35-394 and extension bar 35-396.	<b>35-401</b>

### 19-Piece Master Electrician's Hole Saw Kit

- For electrical, industrial and all-purpose maintenance needs
- 19-piece kit comes in sturdy durable plastic case
- Plumbing and electrical sizes for pipe and conduit through 4 in.



#### Kit 35-518 Includes:

Description	Cat. No.
Hole Saw sizes 3/4 in., 7/8 in., 1 in., 1-1/8 in., 1-3/8 in., 1-1/2 in., 1-3/4 in., 2 in., 2-1/4 in., 2-1/2 in., 3 in., 3-5/8 in., 4-1/8 in. & 4-1/2 in. Also includes arbor models 35-393, 35-394, pilot drill 35-397 (two pieces) and extension bar 35-396.	<b>35-518</b>



## 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 (Inches)	TPI	Material	Blade Bock	Qty.	Application	Cat. No.
<b>Metal Cutting</b>							
	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"	<b>36-059</b>
	6 x 3/4 x .035	14	Bi-metal	Straight	25	Pipe, structural steel, stainless steel: 3/32" - 1/4", Non-ferrous metal: 3/32" - 3/8"	<b>36-059B</b>
	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	<b>36-055</b>
	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	<b>36-057</b>
	6 x 3/4 x .035	18	Bi-metal	Straight	25	Structural steel, pipe conduit, stainless steel: 1/16" - 3/16" thick, Non-ferrous metal: 1/16" - 5/16" thick	<b>36-057B</b>
	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	<b>36-060</b>
	6 x 3/4 x .035	24	Bi-metal	Straight	5	All metal less than 1/8" thick: Tubing conduit, trim	<b>36-058</b>
	6 x 3/4 x .035	24	Bi-metal	Straight	25	All metal less than 1/8" thick: Tubing conduit, trim	<b>36-058B</b>
<b>Heavy-Duty Metal Cutting</b>							
	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	<b>36-085</b>
	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	<b>36-086</b>
	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	<b>36-087</b>
<b>Wood w/Nails</b>							
	6 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	<b>36-065</b>
	6 x 3/4 x .050	6	Bi-metal	Taper	25	Fast cutting, roughing-in work, nail-embedded wood, remodeling	<b>36-065B</b>
	9 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	<b>36-066</b>
	12 x 3/4 x .050	6	Bi-metal	Taper	5	Fast cutting, roughing-in work, nail-embedded wood, remodeling	<b>36-067</b>
<b>Demolition</b>							
	9 x 7/8 x .062	6	Bi-metal	Taper	2	Demolition work in nail-embedded wood, remodeling	<b>36-095</b>
	9 x 7/8 x .062	10	Bi-metal	Taper	2	Demolition work in wood, metal, pipe and fire and rescue	<b>36-096</b>
<b>General Purpose</b>							
	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"	<b>36-075</b>
<b>Specialty Cutting</b>							
	8 x 3/4 x .050	Grit	Tung. Grit	Straight	2	Iron pipe, fiberglass, reinforced plastics, ceramic tile, stone, slate and brick.	<b>36-090</b>
	3 x 5/16 x .035	18	Bi-Metal	Scroll	5	Scroll cutting wood, cast aluminum and non-ferrous metals	<b>36-054</b>
<b>Plaster/Drywall</b>							
	6 x 3/4 x .050	6	Bi-metal	Taper	2	For plaster, drywall, plaster board & lath. Bi-directional cutting	<b>36-088</b>

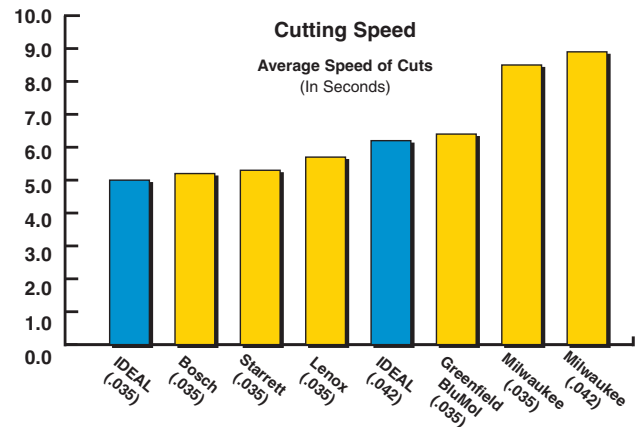
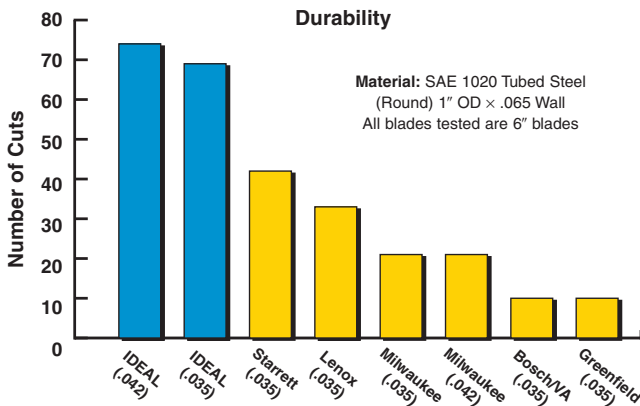


## Long-Life Metal Cutting Reciprocating Blades

- 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





Long-Life Blades	L/W/TH (Inches)	TPI	Material	Blade Bock	Qty.	Application	Cat. 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: 1/16" - 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: 1/16" - 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.

Long-Life Blades	L/W/TH (Inches)	Material	Blade Bock	Qty.	Application	Cat. No.
	6 x 3/4 x .035	Progressive	Bi-metal	5	All metal, non-ferrous metal, sheet metal, pipe and other metal materials	36-056
	8 x 3/4 x .050	Progressive	Bi-metal	5	For wood, nail-embedded wood, non-ferrous metals, plastic and fiberglass	36-076

## 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, structurals, rebar and stainless steel tubing

L/W/TH (Inches)	TPI	Qty./Pack	Cat. 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







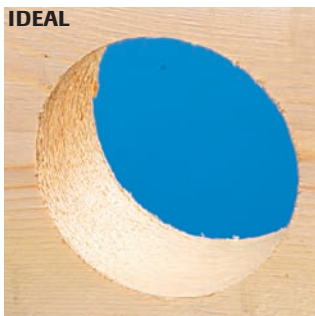
# BULZ-EYE Self Feed Wood Boring Bits

Introducing the new premium line of BULZ-EYE™ self-feed wood boring bits from IDEAL INDUSTRIES, INC. BULZ-EYE™ self-feed bits include a number of superior features and benefits that combine to deliver the most outstanding performance of any self-feed bit product available today. The new design features twin cutting edges and precision ground teeth with up to 50% wider cutting surface. These features deliver improved cutting speeds, better balance and control, and clean more accurate holes than the leading brand in the market. BULZ-EYE™ self-feed bits are manufactured with the best materials and machinery available to ensure quality, performance and consistency. The bits are also black oxide coated, heat treated and hardened for added durability. When it comes to quality, performance and durability, IDEAL is the professional's choice for self-feed bits.

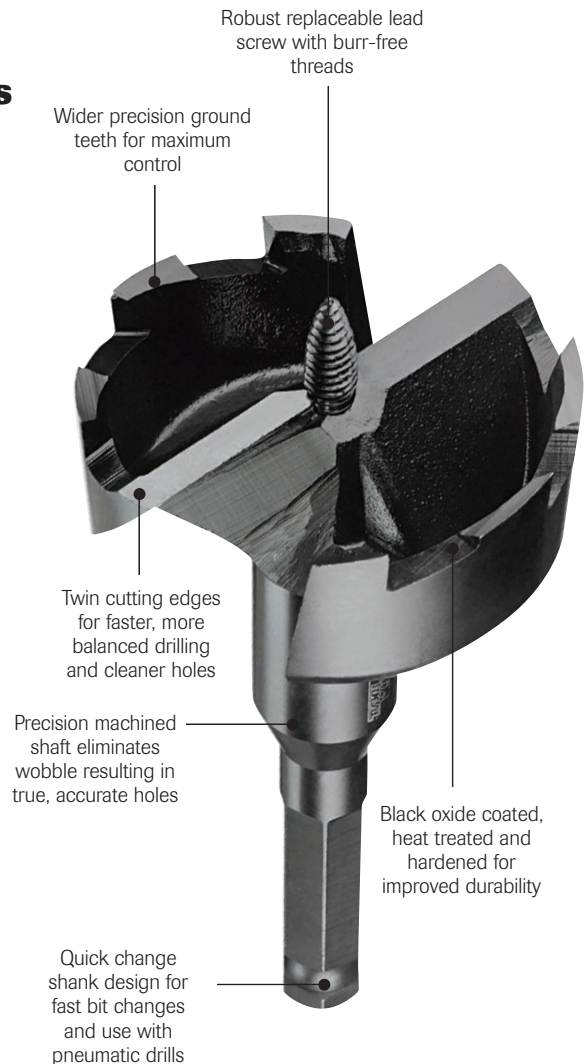
Wood Boring Bits

Description	Diameter	Entrance Size for Pipe & EMT	Cat. No.
1 in. Self-Feed Wood Boring Bit	1 in.	1/2 in.	<b>36-250</b>
1-1/8 in. Self-Feed Wood Boring Bit	1-1/8 in.	—	<b>36-251</b>
1-1/4 in. Self-Feed Wood Boring Bit	1-1/4 in.	3/4 in.	<b>36-252</b>
1-3/8 in. Self-Feed Wood Boring Bit	1-3/8 in.	1 in.	<b>36-253</b>
1-1/2 in. Self-Feed Wood Boring Bit	1-1/2 in.	—	<b>36-254</b>
1-3/4 in. Self-Feed Wood Boring Bit	1-3/4 in.	1-1/4 in.	<b>36-255</b>
2 in. Self-Feed Wood Boring Bit	2 in.	1-1/2 in.	<b>36-256</b>
2-1/8 in. Self-Feed Wood Boring Bit	2-1/8 in.	—	<b>36-257</b>
2-1/4 in. Self-Feed Wood Boring Bit	2-1/4 in.	—	<b>36-258</b>
2-9/16 in. Self-Feed Wood Boring Bit	2-9/16 in.	2 in.	<b>36-259</b>
3 in. Self-Feed Wood Boring Bit	3 in.	2-1/2 in.	<b>36-260</b>
3-5/8 in. Self-Feed Wood Boring Bit	3-5/8 in.	3 in.	<b>36-261</b>
4-5/8 in. Self-Feed Wood Boring Bit	4-5/8 in.	4 in.	<b>36-262</b>
5-1/2 in. Extension	Ext	—	<b>36-273</b>
18 in. Extension	Ext	—	<b>36-819</b>

All bits are 4-5/8 in. long and come with a 7/16 in. shank designed to easily accommodate all 1/2 in. drill chucks.



Cuts a smoother, more accurate hole with less splintering than competitive bits. This decreases resistance during pipe installation and improves on-the-job productivity.



Quickly powers through wet and treated woods with no binding or jamming.



## 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

36-271



36-270



Description	Cat. No.
3-pack small replacement lead screws, fits bit sizes 1 in. - 2-9/16 in.	<b>36-271</b>
3-pack large replacement lead screws, fits bit sizes 3 in. - 4-5/8 in.	<b>36-270</b>

## Extension Bars

- Cuts into hard-to-reach areas
- Fits IDEAL Auger Bits



Description	Cat. No.
5-1/2 in. Extension Bar	<b>36-273</b>
18 in. Extension Bar	<b>35-819</b>

## Sharpening File

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



Description	Cat. No.
Sharpening File	<b>36-272</b>

## 5-Piece Kit

Includes four different bit sizes, a 5-1/2 in. extension bar, and a convenient carrying case, giving you everything you need for drilling multiple hole sizes in any wood material.

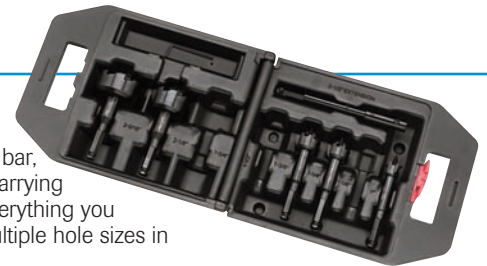


### Kit 36-265 Includes:

Description	Cat. No.
5-1/2 in. extension bar, 1-3/8 in., 1-1/2 in., 2-1/8 in., 2-9/16 in. bits	<b>36-265</b>

## 6-Piece Kit

Includes five different bit sizes, a 5-1/2 in. extension bar, and a convenient carrying case, giving you everything you need for drilling multiple hole sizes in any wood material.

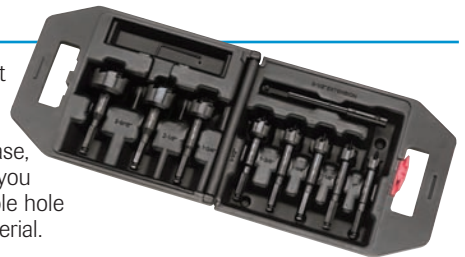


### Kit 36-266 Includes:

Description	Cat. No.
5-1/2 in. extension bar, 1 in., 1-1/4 in., 1-3/8 in., 2 in., 2-9/16 in. bits	<b>36-266</b>

## 9-Piece Kit

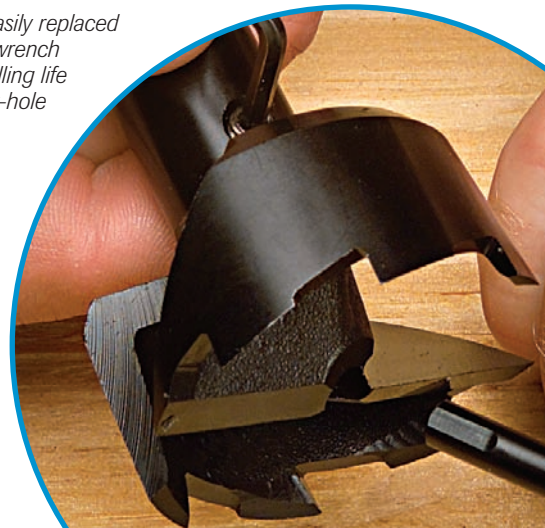
Includes eight different bit sizes, a 5-1/2 in. extension bar, and a convenient carrying case, giving you everything you need for drilling multiple hole sizes in any wood material.



### Kit 36-269 Includes:

Description	Cat. No.
5-1/2 in. extension bar, 1 in., 1-1/8 in., 1-1/4 in., 1-3/8 in., 1-1/2 in., 1-3/4 in., 2-1/8 in., 2-9/16 in. bits	<b>36-269</b>

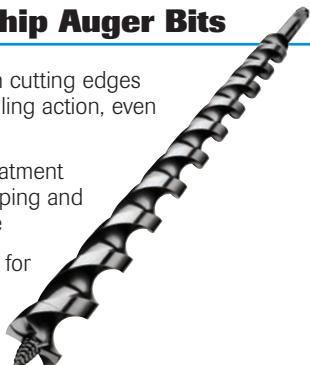
*Lead screws can be easily replaced with the use of a hex wrench providing extended drilling life and optimum cost-per-hole value.*





## Nailbiter™ Premium Ship Auger Bits

- Dual-Helix construction with twin cutting edges provides faster and smoother 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



Power Ship Augers - Bit Length = 7-1/2", Twist = 5", Shank = 7/16" Description	Hole Diameter	Overall Length	Twist Length	Cat. No.
5/8 in. Power Ship Auger	5/8 in.	7-1/2 in.	5 in.	<b>35-810</b>
11/16 in. Power Ship Auger	11/16 in.	7-1/2 in.	5 in.	<b>35-811</b>
3/4 in. Power Ship Auger	3/4 in.	7-1/2 in.	5 in.	<b>35-812</b>
13/16 in. Power Ship Auger	13/16 in.	7-1/2 in.	5 in.	<b>35-813</b>
7/8 in. Power Ship Auger	7/8 in.	7-1/2 in.	5 in.	<b>35-814</b>
1 in. Power Ship Auger	1 in.	7-1/2 in.	5 in.	<b>35-815</b>
1-1/8 in. Power Ship Auger	1-1/8 in.	7-1/2 in.	5 in.	<b>35-816</b>
1-1/4 in. Power Ship Auger	1-1/4 in.	7-1/2 in.	5 in.	<b>35-817</b>
Power Ship Augers - Bit Length = 18", Twist = 15", Shank = 7/16" Description	Hole Diameter	Overall Length	Twist Length	Cat. No.
1/2 in. Power Ship Auger	1/2 in.	18 in.	15 in.	<b>35-820</b>
5/8 in. Power Ship Auger	5/8 in.	18 in.	15 in.	<b>35-821</b>
11/16 in. Power Ship Auger	11/16 in.	18 in.	15 in.	<b>35-822</b>
3/4 in. Power Ship Auger	3/4 in.	18 in.	15 in.	<b>35-823</b>
13/16 in. Power Ship Auger	13/16 in.	18 in.	15 in.	<b>35-824</b>
7/8 in. Power Ship Auger	7/8 in.	18 in.	15 in.	<b>35-825</b>
15/16 in. Power Ship Auger	15/16 in.	18 in.	15 in.	<b>35-826</b>
1 in. Power Ship Auger	1 in.	18 in.	15 in.	<b>35-827</b>
1-1/8 in. Power Ship Auger	1-1/8 in.	18 in.	15 in.	<b>35-828</b>
1-1/4 in. Power Ship Auger	1-1/4 in.	18 in.	15 in.	<b>35-829</b>

## Mini™ Utility Bit Augers

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



Mini™ Augers - Bit Length = 4-3/4", Twist = 2-1/2", Shank = 7/16" Description	Hole Diameter	Overall Length	Twist Length	Cat. No.
5/8 Mini™ Auger	5/8 in.	4-3/4 in.	2-1/2 in.	<b>35-862</b>
3/4 Mini™ Auger	3/4 in.	4-3/4 in.	2-1/2 in.	<b>35-864</b>
7/8 Mini™ Auger	7/8 in.	4-3/4 in.	2-1/2 in.	<b>35-866</b>
1 Mini™ Auger	1 in.	4-3/4 in.	2-1/2 in.	<b>35-868</b>

## RESI-MASTER™ Heavy-Duty Ship Augers

- 62° cutting angle reinforces the cutting edge and provides greater 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



Power Ship Augers - Bit Length = 7-1/2", Twist = 5", Shank = 7/16" Description	Hole Diameter	Overall Length	Twist Length	Cat. No.
5/8 in. RESI-MASTER™ Auger	5/8 in.	7-1/2 in.	5 in.	<b>35-892</b>
11/16 in. RESI-MASTER™ Auger	11/16 in.	7-1/2 in.	5 in.	<b>35-730</b>
3/4 in. RESI-MASTER™ Auger	3/4 in.	7-1/2 in.	5 in.	<b>35-893</b>
13/16 in. RESI-MASTER™ Auger	13/16 in.	7-1/2 in.	5 in.	<b>35-892</b>
7/8 in. RESI-MASTER™ Auger	7/8 in.	7-1/2 in.	5 in.	<b>35-896</b>
15/16 in. RESI-MASTER™ Auger	15/16 in.	7-1/2 in.	5 in.	<b>35-897</b>
1 in. RESI-MASTER™ Auger	1 in.	7-1/2 in.	5 in.	<b>35-898</b>
1-1/8 in. RESI-MASTER™ Auger	1-1/8 in.	7-1/2 in.	5 in.	<b>35-899</b>
1-1/4 in. RESI-MASTER™ Auger	1-1/4 in.	7-1/2 in.	5 in.	<b>35-732</b>
Power Ship Augers - Bit Length = 18", Twist = 15", Shank = 7/16" Description	Hole Diameter	Overall Length	Twist Length	Cat. No.
1/2 in. RESI-MASTER™ Auger	1/2 in.	18 in.	15 in.	<b>35-726</b>
5/8 in. RESI-MASTER™ Auger	5/8 in.	18 in.	15 in.	<b>35-971</b>
11/16 in. RESI-MASTER™ Auger	11/16 in.	18 in.	15 in.	<b>35-727</b>
3/4 in. RESI-MASTER™ Auger	3/4 in.	18 in.	15 in.	<b>35-972</b>
13/16 in. RESI-MASTER™ Auger	13/16 in.	18 in.	15 in.	<b>35-728</b>
7/8 in. RESI-MASTER™ Auger	7/8 in.	18 in.	15 in.	<b>35-976</b>
15/16 in. RESI-MASTER™ Auger	15/16 in.	18 in.	15 in.	<b>35-977</b>
1 in. RESI-MASTER™ Auger	1 in.	18 in.	15 in.	<b>35-978</b>
1-1/8 in. RESI-MASTER™ Auger	1-1/8 in.	18 in.	15 in.	<b>35-979</b>
1-1/4 in. RESI-MASTER™ Auger	1-1/4 in.	18 in.	15 in.	<b>35-729</b>

## Auger Bit Extensions

\*Dual locking screws



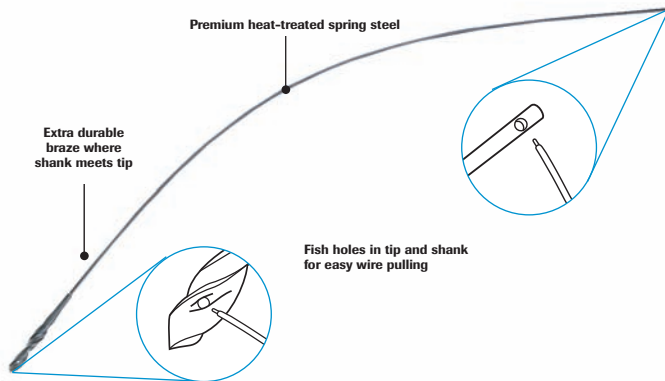
Auger Bit Extensions, 18 in. Six flats to fit drill chuck – Allen wrench included Description	Cat. No.
Auger Bit Extension – 5/16 in.	<b>35-818</b>
Auger Bit Extension – 7/16 in.	<b>35-819</b>



## Flexible Drill Bits



Professional drill bits drill and fish wire in one easy step. Drill and pull wire through blind areas in ceilings, walls and floors. Shanks are made from premium heat-treated spring steel for maximum flexibility while practically eliminating any retained shank bend. A three-flat non-slip grip on the shank and fish holes in both the tip and shank insure trouble-free wire pulling in either direction. Our tip design provides superior tip/shank contact, increasing the strength and durability of the braze and preventing separation when striking nails or other obstructions. Multiple styles are available for a variety of applications.



## Screw Point Flexible 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



**Best for WOOD**

Description	Shank	Cat. No.
3/8 in. x 24 in. Screw Point Flexible Bit	3/16	<b>90-080</b>
3/8 in. x 36 in. Screw Point Flexible Bit	3/16	<b>90-081</b>
3/8 in. x 54 in. Screw Point Flexible Bit	3/16	<b>90-082</b>
3/8 in. x 72 in. Screw Point Flexible Bit	3/16	<b>90-083</b>
1/2 in. x 36 in. Screw Point Flexible Bit	3/16	<b>90-084</b>
1/2 in. x 54 in. Screw Point Flexible Bit	3/16	<b>90-085</b>
1/2 in. x 72 in. Screw Point Flexible Bit	3/16	<b>90-086</b>
9/16 in. x 36 in. Screw Point Flexible Bit	3/16	<b>90-087</b>
9/16 in. x 54 in. Screw Point Flexible Bit	3/16	<b>90-088</b>
9/16 in. x 72 in. Screw Point Flexible Bit	3/16	<b>90-089</b>
3/4 in. x 36 in. Screw Point Flexible Bit	1/4	<b>90-090</b>
3/4 in. x 54 in. Screw Point Flexible Bit	1/4	<b>90-091</b>
3/4 in. x 72 in. Screw Point Flexible Bit	1/4	<b>90-092</b>

## Flexible Bit Extensions

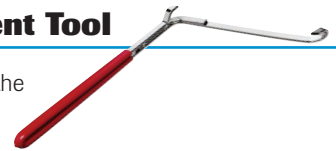
- Three lengths available for 3/16 in. and 1/4 in. shaft diameters
- Connect to chuck end of shaft to increase the length of the bit



Description	Shank	Cat. No.
3/16 in. x 36 in. Flexible Bit Extension	3/16	<b>90-170</b>
3/16 in. x 54 in. Flexible Bit Extension	3/16	<b>90-171</b>
1/4 in. x 36 in. Flexible Bit Extension	1/4	<b>90-173</b>
1/4 in. x 54 in. Flexible Bit Extension	1/4	<b>90-174</b>

## Flexible Bit Placement Tool

- Use as a positioning guide for the flexible drill bits
- Aids in more accurate placement of bit tips within walls
- Increases directional control during drilling



Description	Cat. No.
Flexible Bit Placement Tool	<b>90-176</b>

## Serrated Combination Flexible Bits, Type C

- Multi-purpose versatile bit for clean holes
- Designed for easy to medium wood drilling and light metal
- Pressure is needed for starting and pulling the bit through the wood



**Best for light WOOD & light METAL**

Description	Shank	Cat. No.
1/4 in. x 54 in. Serrated Combination Flexible Bit	3/16	<b>90-063</b>
3/8 in. x 54 in. Serrated Combination Flexible Bit	3/16	<b>90-067</b>
1/2 in. x 54 in. Serrated Combination Flexible Bit	3/16	<b>90-070</b>
9/16 in. x 54 in. Serrated Combination Flexible Bit	3/16	<b>90-073</b>

## Masonry Flexible Bits, Type M

- Masonry drill bit
- Designed for drilling in lightweight masonry materials



**Best for MASONRY**

Description	Shank	Cat. No.
3/8 in. x 54 in. Masonry Flexible Bit	3/16	<b>90-124</b>
1/2 in. x 72 in. Masonry Flexible Bit	1/4	<b>90-128</b>

## 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

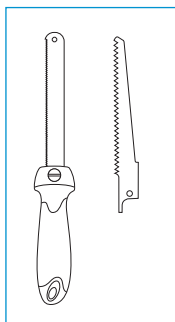
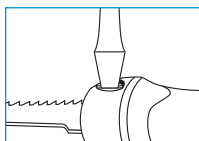
Description	Length	Cat. No.
Installer Bit — 1/4 in.	18 in.	<b>35-870</b>
Installer Bit — 3/8 in.	18 in.	<b>35-871</b>
Installer Bit — 1/2 in.	18 in.	<b>35-872</b>



## Jab Saw



- Includes replaceable bi-metal wallboard blade
- Holds all reciprocating blades and hacksaw blades
- Ergonomic grip



Description	Cat. No.
Jab Saw	35-275
Replacement blade	36-088

## Folding Saw



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

Description	Cat. No.
Folding Saw	35-274

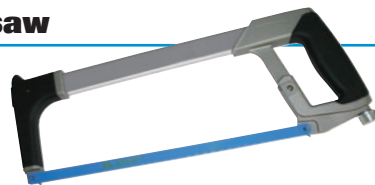
## Aviation Tin Snips



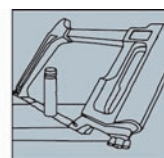
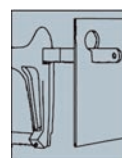
- Chrome-molybdenum steel forged blades for greater strength and durability
- Serrated edges provide a stable hold when cutting
- Labor-saving design for easier cutting
- Comfortable non-slip dual durometer grips

Description	Cat. No.
Straight Cut Aviation Tin Snips	35-001

## Heavy-Duty Hacksaw



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



Description	Cat. 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
- Includes 12 in. x 24T bi-metal blade

Description	Cat. No.
Ergonomic Hacksaw	35-261

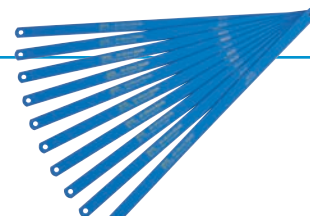
## Mini Hacksaw



- Heavy-duty die cast frame
- Non-slip rubber comfort grip
- Accepts all standard hacksaw blades

Description	Cat. No.
Mini Hacksaw	35-259

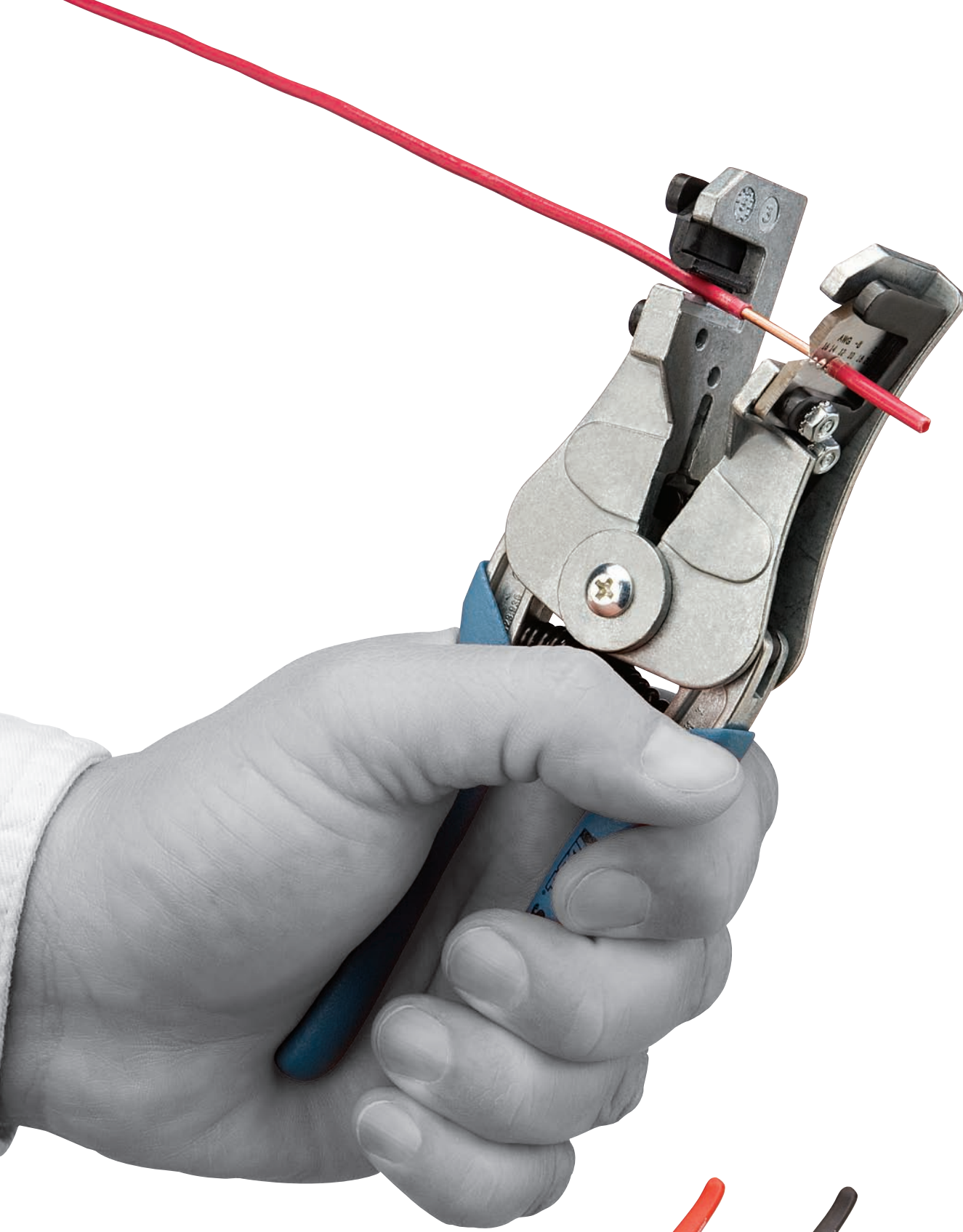
## Hacksaw Blades



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

Description	Qty./Pack	Cat. 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 24T Blades	100	35-263
12 in. x 32T Blades	100	35-264



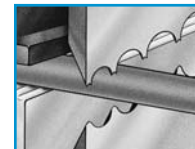
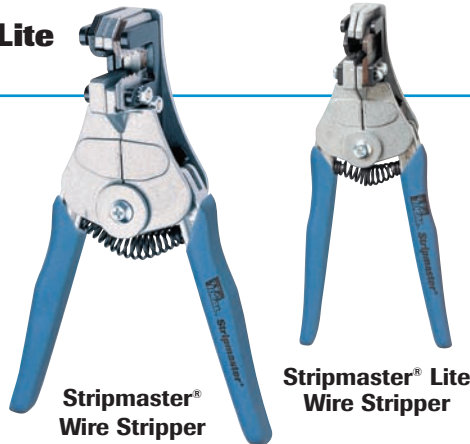


**Stripmaster® Wire Strippers**

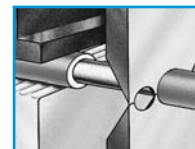


## Stripmaster® and Stripmaster® Lite Wire Strippers

- One-step stripping enhances productivity
- Spring-action motion increases leverage and reduces operator fatigue
- Precision-ground, knife-type blades provide clean, accurate stripping
- Sturdy die cast frame provides long-term durability
- Wire gripper holds wire securely in position
- Stripmaster® Lite designed for smaller hands — 3/4 the size of the standard Stripmaster®



Gripper holds the wire securely in position.



Knife-type stripping blades have form-ground holes which penetrate the insulation like a knife, giving a clean insulation cut.

### Stripmaster® Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (Inches)													Cat. No.	Replacement Blades (Pair) Cat. No.
Wire Size AWG														
6	8	10	12	14	16	18	20	22	24	26	28	30		
	.159	.141	.106										45-090* or 45-290**	L-4419
		.144	.105	.085	.073	.073							45-091	L-4420
		.144	.113	.090	.072	.061	.048	.048					45-092* or 45-292**	L-4421
				.090	.072	.061	.039	.039					45-093	L-4422
.230	.198												45-096	L-4453
					.072	.061	.048	.039	.032	.026			45-097	L-4994
							.048	.039	.032	.026	.021	.016	45-098	L-5361
	.198	.167			.062	.055							45-099	L-8763

\*Boxed \*\*Blister Card Tolerances +.001 -.005

### Stripmaster® Lite Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (Inches)													Cat. No.	Replacement Blades (Pair) Cat. No.
Wire Size AWG														
12	14	16	18	20	22	24	26	28	30	16/18	20/22	Cutting Edge		
		.072	.061	.048	.039								45-671	LB-1001
						.032	.026	.021	.016				45-672	LB-1002
.113	.090	.072	.061 (All Stranded wire)										45-673	LB-1003
.096	.085	.073	.061 (12 & 14 Solid wire, 16 & 18 Stranded wire)										45-674	LB-1004
										.072	.048	.250 Wide	45-675	LB-1005

Tolerances +.001 -.005

### Coax Stripmaster® Wire Strippers and Blades

Description	Coax Cable Type (RGU)	Repl. Blade Cat. No.	Cat. No.
Coax Stripmaster® for RG-6	RG-6	LB-740	45-262
Coax Stripmaster® for RG-58	RG-58	LB-742	45-264
Coax Stripmaster® for RG-59	RG-59	LB-743	45-265
Coax Stripmaster® for RG-62	RG-62	LB-744	N/A
Coax Stripmaster® for RG-6 QuadShield	RG-6 QuadShield	LA-3953	45-282

Coaxial Cables: two-step strip for termination, jacket and dielectric.

Replacement Frame Assemblies	Cat. No.
For Stripmaster® Wire Strippers	L-5620
For Stripmaster® Lite Wire Strippers	LB-1421

### Stripmaster® Wire Strippers with Rectangular Holes

Description	Cat. No.	Replacement Blades (Pair) Cat. No.
For Flat Telephone Cable (.60 in. or 1.52mm)	N/A	LB-1155
For European Flat Lamp Cord	45-089	L-8762
For SP-SPT Lamp Cord	45-095*	L-4452

\*Also strips 2- and 3-conductor low-voltage wire used in G.E. and Touchplate remote control wiring system.

Optional Accessories	Cat. No.
Transparent Adjustable Wire Stop (for Stripmaster® Wire Strippers)	L-5270
Transparent Adjustable Wire Stop (for Stripmaster® Lite Wire Strippers)	LB-1195
Replacement Moveable Gripper	L-1953



# Stripmaster® Wire Strippers

## Stripmaster® Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (mm)													Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.
Wire Size AWG															
6	8	10	12	14	16	18	20	22	24	26	28	30			
	4	3.6	2.7										45-090 or 45-290	L-4419	L-5620
		3.6	2.7	2.2	1.8								45-091	L-4420	L-5620
		3.6	2.9	2.3	1.8	1.5	1.2						45-092 or 45-292-241*	L-4421	L-5620
				2.3	1.8	1.5	1.2	1					45-093	L-4422	L-5620
2.3	1.9												45-096		
					1.8	1.5	1.2	1	0.8	0.7			45-097	L-4994	L-5620
							1.2	1	0.8	0.7	0.5	0.4	45-098	L-5361	L-5620
	5	4.2			1.6	1.4							45-099	L-8763	L-5620

\*Boxed Tolerances +.001 -.005

## Stripmaster® Lite Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (mm)													Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.	
Wire Size AWG																
12	14	16	18	20	22	24	26	28	30	16/18	20/22	Cutting Edge				
		1.8	1.5	1.2	1								45-671	LB-1001	LB-1421	
						0.8	0.7	0.5	0.4				45-672	LB-1002	LB-1421	
2.9	2.3	1.8	1.5 (All Stranded wire)											45-673	LB-1003	LB-1421
2.4	2.2	1.9	1.5 (12 & 14 Solid wire, 16 & 18 Stranded wire)											45-674	LB-1004	LB-1421
										1.8	1.2	6.4 wide	45-675	LB-1005	LB-1421	

## Stripmaster® Wire Strippers and Knife-Type Blades for Metric Wire

Specifications—Stripping Hole Diameter (mm)														Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. 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	45-090-341 or 45-290-341*	L-4419M	LA-2358
						1.3	1.6	1.9	2.4	3	3.6			45-092-341 or 45-292-341*	L-4421M	LA-2358
0.6	0.7	0.8	0.9	1	1.1									45-098-341 or 45-298-341*	L-5361M	LA-2358

\*Boxed Tolerances +.001 -.005

## Stripmaster® Lite Wire Strippers and Knife-Type Blades for Metric Wire

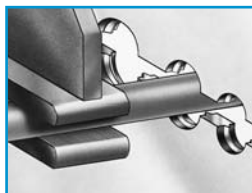
Specifications—Stripping Hole Diameter (mm)									Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.
Wire Size (mm²)											
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5			
				1	1.1	1.3	1.6	1.9	45-671-341	LB-1001M	H-2909
0.6	0.7	0.8	0.9						45-672-341	LB-1002M	H-2909

Free Application Engineering Service and made-to-order Custom Stripmaster® and Stripmaster® Wire Strippers are available. Contact IDEAL INDUSTRIES, INC. for complete information at 1-800-435-0705.

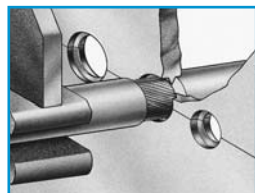


## Custom Stripmaster® and Custom Stripmaster® Lite Wire Strippers

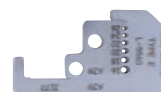
- Strips 30 through 10 AWG solid or stranded wire
- Mil-spec die-type blades allow precision stripping
- Inner cutting hole sized to conductor and counter-bored holes sized to insulation
- Replaceable Grippers
- Optional short stop latch and transparent wire stop
- Cushioned, comfort grip handles
- Custom Stripmaster® Lite is 3/4's the size of Custom Stripmaster® Wire Stripper and strips 16 through 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.



Gripper pads hold the wire securely in a centerline relationship with the blade.



Die-type blades incorporate a counter-bored hole sized to the insulation and an inner cutting hole sized to the conductor. This varies depending on insulation type and thickness.



### Custom Stripmaster® Wire Strippers and Die-Type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Inches)												
Wire Size AWG											Stripper Cat. No.	Blade Only Cat. No.
30	28	26	24	22	20	18	16	14	12	10		
For Type E Teflon® (600V)												
								$\frac{.076}{.0935}$	$\frac{.096}{.113}$	$\frac{.119}{.136}$	45-176	L-5559
		$\frac{.023}{.039}$	$\frac{.028}{.043}$	$\frac{.034}{.052}$	$\frac{.042}{.0595}$	$\frac{.052}{.070}$	$\frac{.061}{.081}$				45-177	L-5560
$\frac{.016}{.032}$	$\frac{.019}{.035}$	$\frac{.023}{.039}$									45-178	L-5561
For Type EE Teflon® (1000V)												
								$\frac{.076}{.104}$	$\frac{.096}{.125}$	$\frac{.119}{.144}$	45-173	L-5562
		$\frac{.023}{.0465}$	$\frac{.028}{.055}$	$\frac{.034}{.0595}$	$\frac{.042}{.067}$	$\frac{.052}{.0785}$	$\frac{.061}{.089}$				45-174	L-5563
$\frac{.016}{.042}$	$\frac{.019}{.043}$	$\frac{.023}{.0465}$									45-175	L-5564
For Other Misc. Insulations												
								$\frac{.076}{.113}$	$\frac{.0937}{.138}$	$\frac{.116}{.154}$	45-170	L-5210
		$\frac{.022}{.052}$	$\frac{.0292}{.0595}$	$\frac{.035}{.0635}$	$\frac{.042}{.073}$	$\frac{.052}{.086}$	$\frac{.062}{.096}$				45-171	L-5211
$\frac{.016}{.037}$	$\frac{.020}{.040}$	$\frac{.024}{.043}$									45-172	L-5436
For Wire Wrap & Other Thin Insulated Wire												
$\frac{.012}{.020}$								Three identical holes			45-179	L-7625
$\frac{.012}{.019}$	$\frac{.014}{.023}$	$\frac{.018}{.025}$	$\frac{.024}{.033}$					Solid Wires			45-169	L-9300

Tolerances: Cutter Dia.:  $\pm .001$ ; Counter-bore Dia.:  $\pm .002$

The 45-170 Series is a Custom Stripmaster® Wire Stripper frame without the short stop latch and wire stop.

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



# Stripmaster® Wire Strippers



## Custom Stripmaster® Lite Wire Strippers and Die-type Blades

Specifications — <div>Cutting Hole Diameter Counterbore Diameter (Inches)</div>									
Wire Size AWG								Stripper Cat. No.	Blade Only Cat. No.
30	28	26	24	22	20	18	16		
MIL-W-16878 Type E 600V Teflon® Wire									
				<div><div>.034</div><div>.052</div></div>	<div><div>.042</div><div>.0595</div></div>	<div><div>.052</div><div>.070</div></div>	<div><div>.061</div><div>.081</div></div>	45-638	LB-918
		<div><div>.023</div><div>.039</div></div>	<div><div>.028</div><div>.043</div></div>	<div><div>.034</div><div>.052</div></div>	<div><div>.042</div><div>.0595</div></div>			45-639	LB-919
<div><div>.016</div><div>.032</div></div>	<div><div>.019</div><div>.035</div></div>	<div><div>.023</div><div>.039</div></div>	<div><div>.028</div><div>.043</div></div>					45-640	LB-920
MIL-W-16878 Type EE 1000V Teflon® Wire									
				<div><div>.034</div><div>.0595</div></div>	<div><div>.042</div><div>.067</div></div>	<div><div>.052</div><div>.0785</div></div>	<div><div>.061</div><div>.089</div></div>	45-635	LB-915
		<div><div>.023</div><div>.0465</div></div>	<div><div>.028</div><div>.055</div></div>	<div><div>.034</div><div>.0595</div></div>	<div><div>.042</div><div>.067</div></div>			45-636	LB-916
<div><div>.016</div><div>.042</div></div>	<div><div>.019</div><div>.043</div></div>	<div><div>.023</div><div>.0465</div></div>	<div><div>.028</div><div>.055</div></div>					45-637	LB-917
General Purpose									
				<div><div>.035</div><div>.0635</div></div>	<div><div>.042</div><div>.073</div></div>	<div><div>.052</div><div>.086</div></div>	<div><div>.062</div><div>.096</div></div>	45-632	LB-912
		<div><div>.022</div><div>.052</div></div>	<div><div>.0292</div><div>.0595</div></div>	<div><div>.035</div><div>.0635</div></div>	<div><div>.042</div><div>.073</div></div>			45-633	LB-913
<div><div>.016</div><div>.037</div></div>	<div><div>.020</div><div>.040</div></div>	<div><div>.024</div><div>.043</div></div>	<div><div>.0292</div><div>.0595</div></div>					45-634	LB-914
Wire Wrapping (Thin Insulation Solid Wire)									
<div><div>.012</div><div>.020</div></div>					Four holes, same size			45-641	LB-921
<div><div>.012</div><div>.019</div></div>	<div><div>.014</div><div>.023</div></div>	<div><div>.018</div><div>.025</div></div>	<div><div>.024</div><div>.033</div></div>		Solid Wires			45-631	LB-911

Tolerances: Cutter Dia.:  $\pm .001$ ; Counterbore Dia.:  $\pm .002$ . Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

## Custom Stripmaster® Wire Strippers and Die-type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Millimeters) (Reference chart only. Blades are not marked in mm)												
mm² Nom											Stripper Cat. No.	Blade Only Cat. No.
0.05	0.08	0.13	0.2	0.22	0.5	1.0	1.5	2.5	4.0	6.0		
For Type E Teflon® (600V)												
								$\frac{1.93}{2.37}$	$\frac{2.44}{2.87}$	$\frac{3.02}{3.45}$	45-176	L-5559
		$\frac{.584}{.99}$	$\frac{.711}{1.09}$	$\frac{.863}{1.32}$	$\frac{1.07}{1.5}$	$\frac{1.33}{1.78}$	$\frac{1.55}{2.06}$				45-177	L-5560
$\frac{.406}{.813}$	$\frac{.482}{.889}$	$\frac{.584}{.99}$									45-178	L-5561
For Type EE Teflon® (1000V)												
								$\frac{1.93}{2.64}$	$\frac{2.44}{3.17}$	$\frac{3.02}{3.6}$	45-173	L-5562
		$\frac{.584}{1.17}$	$\frac{.711}{1.39}$	$\frac{.863}{1.5}$	$\frac{1.07}{1.70}$	$\frac{1.33}{1.99}$	$\frac{1.55}{2.49}$				45-174	L-5563
$\frac{.406}{1.07}$	$\frac{.482}{1.09}$	$\frac{.584}{1.17}$									45-175	L-5564
For Other Misc. Insulations												
								$\frac{1.93}{2.87}$	$\frac{2.38}{3.45}$	$\frac{2.94}{3.91}$	45-170	L-5210
		$\frac{.560}{1.33}$	$\frac{.736}{1.5}$	$\frac{.889}{1.61}$	$\frac{1.07}{1.85}$	$\frac{1.33}{2.18}$	$\frac{1.57}{2.44}$				45-171	L-5211
$\frac{.406}{.940}$	$\frac{.508}{1.01}$	$\frac{.609}{1.09}$									45-172	L-5436
For Wire Wrap & Other Thin Insulated Wire												
$\frac{.305}{.508}$								Three identical holes			45-179	L-7625
$\frac{.305}{.482}$	$\frac{.356}{.584}$	$\frac{.457}{.635}$	$\frac{.609}{.838}$								45-169	L-9300

Tolerances: Cutter Dia.:  $\pm .025\text{mm}$ ; Counterbore Dia.:  $\pm .051\text{mm}$ . Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

1-800-435-0705 for Customer Service

www.idealindustries.com

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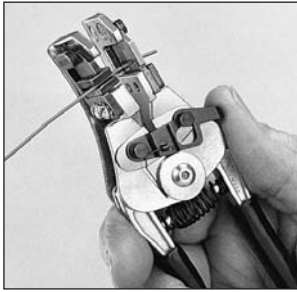
## Custom Stripmaster® Lite Wire Strippers and Die-type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Millimeters)								
Wire Size AWG								Stripper Cat. No.
1,5	1,0	0,5	0,22	0,2	0,13	0,08	0,05	
MIL-W-16878 Type E 600V Teflon® Wire								45-638
$\frac{1,55}{2,06}$	$\frac{1,32}{1,99}$	$\frac{1,07}{1,51}$	$\frac{0,86}{1,32}$					
		$\frac{1,07}{1,51}$	$\frac{0,86}{1,32}$	$\frac{0,71}{1,09}$	$\frac{0,58}{,099}$			45-639
				$\frac{0,71}{1,09}$	$\frac{0,58}{0,99}$	$\frac{0,48}{0,89}$	$\frac{0,41}{0,82}$	45-640
MIL-W-16878 Type EE 1000V Teflon® Wire								45-635
$\frac{1,55}{2,26}$	$\frac{1,32}{1,99}$	$\frac{1,07}{1,70}$	$\frac{0,86}{1,51}$					
		$\frac{1,07}{1,70}$	$\frac{0,86}{1,51}$	$\frac{0,71}{1,40}$	$\frac{0,58}{1,18}$			45-636
				$\frac{0,71}{1,40}$	$\frac{0,58}{1,18}$	$\frac{0,48}{1,09}$	$\frac{0,41}{1,07}$	45-637
General Purpose								45-632
$\frac{1,57}{2,44}$	$\frac{1,32}{2,18}$	$\frac{1,07}{1,85}$	$\frac{0,89}{1,61}$					
		$\frac{1,07}{1,85}$	$\frac{0,89}{1,61}$	$\frac{0,74}{1,51}$	$\frac{0,56}{1,32}$			45-633
				$\frac{0,74}{1,51}$	$\frac{0,61}{1,09}$	$\frac{0,51}{1,02}$	$\frac{0,41}{0,86}$	45-634
Wire Wrapping (Thin Insulation Solid Wire)								45-641
		Four holes, same size					$\frac{0,30}{0,76}$	
		Solid Wires		$\frac{0,61}{0,84}$	$\frac{0,46}{0,64}$	$\frac{0,36}{0,58}$	$\frac{0,30}{0,48}$	45-631

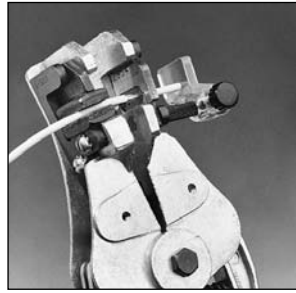
Tolerances: Cutter Dia.:  $\pm .001$ ; Counterbore Dia.:  $\pm .002$ . Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.



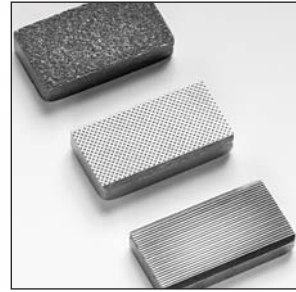
# Stripmaster® Wire Strippers



Short-stop Latch protects wire strands by limiting the stripping stroke to 5/32 in. and retains the slug until the wire is ready for terminating.



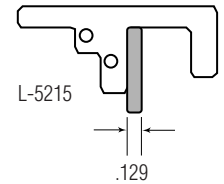
Transparent wire stop provides uniform stripping length.



Gripper Pads are available in your choice of either parallel, file or grit-type. File-type pads may be used on hard-to-grip insulations such as Kapton® and some Teflon®.

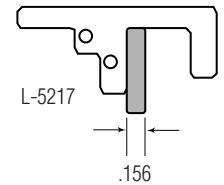
## Stationary Gripper for Red Handle Units

For 10, 12 & 14 AWG Wire



## Stationary Gripper for Black Handle Units

For 16 thru 30 AWG wire.



## Replacement Gripper Pads

For Custom Stripmaster® and Custom Steel Stripmaster® Wire Strippers			
Surface Type	Gripper Set* Cat. No.	Movable Gripper Cat. No.	Stationary Gripper (Thickness)
Grit**	<b>LB-197</b>	<b>L-5212</b>	<b>L-5215</b> (.129 in.)
Grit**	<b>LB-198†</b>	<b>L-5212</b>	<b>L-5217</b> (.156 in.)
File	<b>LB-721</b>	<b>LB-718</b>	<b>LB-719</b> (.129 in.)
File	<b>LB-722‡</b>	<b>LB-718</b>	<b>LB-720</b> (.156 in.)
Parallel	<b>LB-730</b>	<b>LB-727</b>	<b>LB-728</b> (.129 in.)
Parallel	<b>LB-731</b>	<b>LB-727</b>	<b>LB-729</b> (.156 in.)

## For Custom Stripmaster® Lite Wire Strippers

Surface Type	Gripper Set* Cat. No.	Movable Gripper Cat. No.	Stationary Gripper (Thickness)
Grit*	<b>LB-1188</b>	<b>LB-882</b>	<b>LB-883</b> (.109 in.)
File	<b>LB-1189</b>	<b>LB-1184</b>	<b>LB-1185</b> (.109 in.)
Parallel	<b>LB-1190</b>	<b>LB-1186</b>	<b>LB-1187</b> (.109 in.)

\* Gripper Set includes one movable gripper, one stationary gripper.

\*\* Grit pads are standard for most Custom Stripmaster® and Custom Stripmaster® Lite products.

† Formerly L-7954

‡ Formerly L-8928. These are for use on hard-to-grip surfaces such as Kapton® and Teflon®.

Gripper pad selection depends on insulation type and user preference.

Note: For wire gauge 10-14, use .129 in. stationary gripper. For 16-30 AWG, use .156 in. gripper.

## Replacement Frame Assemblies

For Custom Stripmaster® Wire Strippers	Cat. No.
Frame only, 10-14 AWG	<b>L-5616</b>
Frame only, 16-30 AWG	<b>L-5617</b>
Frame only, 10-14 AWG, Wire Stop and Latch	<b>L-5618</b>
Frame only, 16-30 AWG, Wire Stop and Latch	<b>L-5619</b>
Frame only, 10-14 AWG, internal spring (see note)	<b>L-9039</b>
Frame only, 16-30 AWG, internal spring (see note)	<b>L-9038</b>

Note: Frames with internal springs allow additional blade penetration pressure for difficult and multi-layered insulation types.

For Custom Stripmaster® Lite Wire Strippers	Cat. No.
Frame only	<b>LB-895</b>
Frame only, Wire Stop and Latch	<b>LB-896</b>

For Custom Steel Stripmaster® Wire Strippers	Cat. No.
Frame only, 10-14 AWG	<b>LB-1091</b>
Frame only, 16-30 AWG	<b>LB-1092</b>
Frame only, 10-14 AWG, internal spring (see note)	<b>LB-1090</b>
Frame only, 16-30 AWG, internal spring (see note)	<b>LB-1089</b>

Note: Frames with internal springs allow additional blade penetration pressure for difficult and multi-layered insulation types.

## Optional Accessories

Short Stop Latch	Cat. No.
For Custom & Custom Steel Stripmaster® Wire Strippers	<b>L-5269</b>
For Custom Stripmaster® Lite Wire Strippers	<b>LB-1194</b>

Transparent Adjustable Wire Stop Assembly	Cat. No.
For Custom & Custom Steel Stripmaster® Wire Strippers	<b>L-5270</b>
For Custom Stripmaster® Lite Wire Strippers	<b>LB-1195</b>

## Custom Steel Stripmaster® Wire Strippers and Special Flat-Blades for Ribbon and Multi-Conductor Cable

Description	Blade Gap ("x") vertical height	Blade Only Cat. No.	Frame & Blade Cat. No.
Custom Steel frame only	N/A	N/A	<b>LB-1091</b>
Flat blade for 26 AWG (.40mm dia.) multi-conductor	.022 in.	<b>LB-1151</b>	<b>45-890</b>
Flat blade for 24 AWG (.00mm dia.) multi-conductor	.030 in.	<b>LB-1152</b>	<b>45-891</b>
Flat blade for 22 AWG (.64mm dia.) multi-conductor	.038 in.	<b>LB-1153</b>	<b>45-892</b>
Flat blade for 20 AWG (.00mm dia.) multi-conductor	.050 in.	<b>LB-1154</b>	<b>45-893</b>
Flat blade for 18 AWG (1.02mm dia.) multi-conductor	.060 in.	<b>LB-1155</b>	<b>45-894</b>
Flat blade for 16 AWG (1.29mm dia.) multi-conductor	.075 in.	<b>LB-1156</b>	<b>45-895</b>

Teflon® and Kapton® are registered trademarks of E. I. du Pont de Nemours and Company.





## Custom Stripmaster® Wire Stripper and Custom Stripmaster® Lite Wire Stripper MIL-spec reference chart

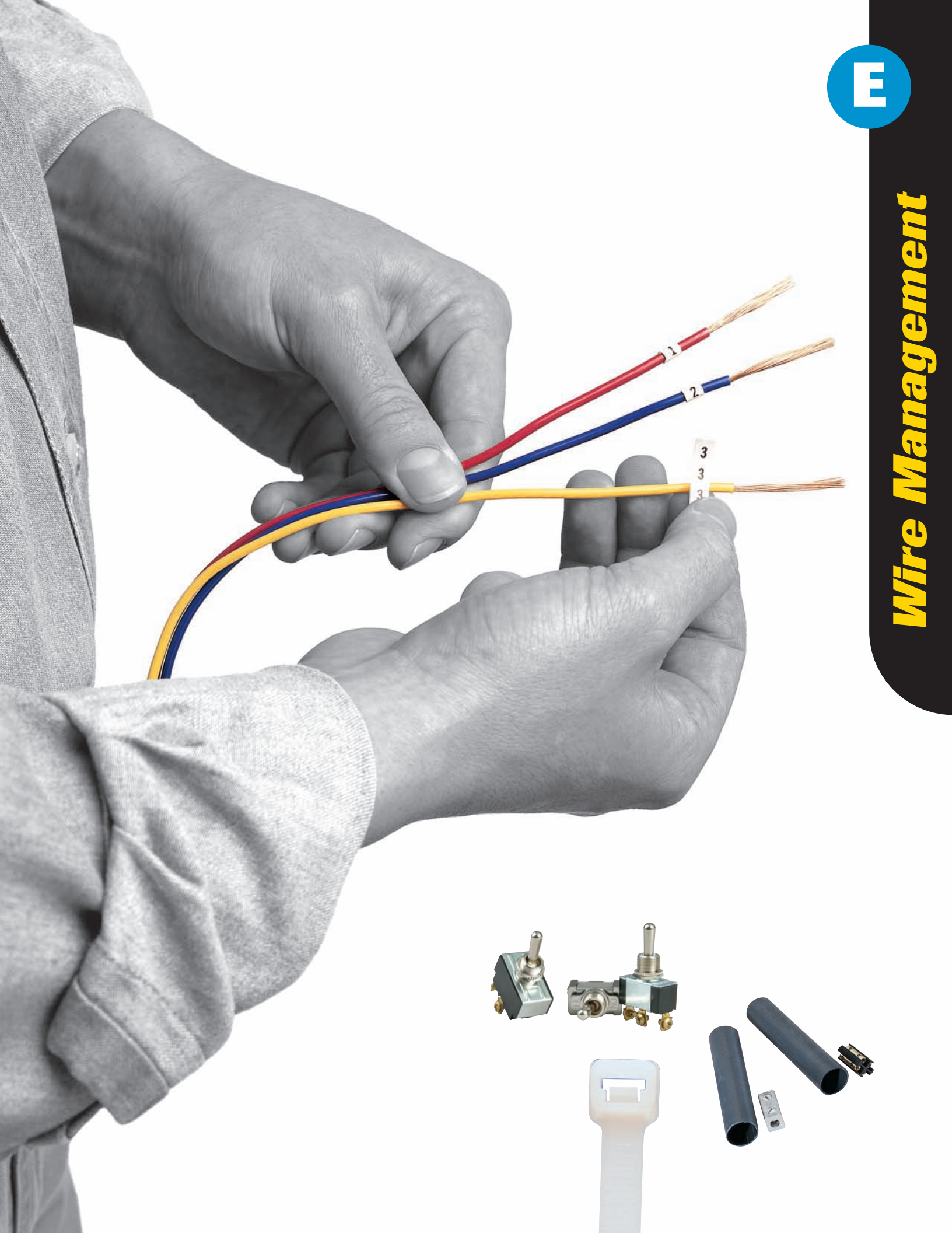
Wire Specification	Custom Stripmaster®			Custom Stripmaster® Lite		
	Cat. No.	Blade Only Cat. No.	Wire Gauge	Cat. No.	Blade Only Cat. No.	Wire Gauge
MIL-W-81044/4/5/6 MIL-W-5086/1/7	45-170 45-171	L-5210 L-5211	10-14 AWG 16-26 AWG	N/A	N/A	N/A
MIL-W-81044/8/9/10 MIL-W-16878/5 MIL-W-81381/3/4	45-173 45-174 45-175	L-5562 L-5563 L-5564	10-14 AWG 16-26 AWG 26-30 AWG	45-635 45-637 45-637	LB-915 LB-917 LB-917	16-22 AWG 24-30 AWG 24-30 AWG
MIL-W-22759/32/33/44/45/46	45-1987 45-1654	45-1987-1 45-1654-1	16-26 AWG 16-26 AWG	45-2133 45-2132	45-2133-1 45-2132-1	16-24 AWG 16-24 AWG
MIL-81044/11/12/13 MIL-W-22759/34/35/41/42/43	45-1611 45-2500 45-1987	45-1611-1 45-2500-1 45-1987-1	10-14 AWG 10-14 AWG 16-26 AWG	45-2133 45-2118 45-640	45-2133-1 45-2118-1 LB-920	16-24 AWG 20-26 AWG 24-30 AWG
Raychem 44A021X, 44/051X MIL-W-16878/4 MIL-W-22759/11/12/22/23	45-176 45-1611 45-177 45-178	L-5559 45-1611-1 L-5560 L-5561	10-14 AWG 10-14 AWG 16-26 AWG 26-30 AWG	45-640	LB-920	24-30 AWG
MIL-W-81044/16/17	45-1611 45-1610	45-1611-1 45-1610-1	10-14 AWG 16-26 AWG	45-2131	45-2131-1	16-24 AWG
MIL-W-81381/1/2//6/7/8/9/10/17/21	45-1609 45-1551 45-178	45-1609-1 45-1551-1 L-5561	10-14 AWG 16-26 AWG 26-30 AWG	45-640	LB-920	24-30 AWG
MIL-W-81381/11/12/13/14/22	45-1608 45-1654 45-178	45-1608-1 45-1654-1 L-5561	10-14 AWG 16-26 AWG 26-30 AWG	45-640	LB-920	24-30 AWG
MIL-W-22759/18/19	45-1608 45-1551	45-1608-1 45-1551-1	10-14 AWG 16-26 AWG	N/A	N/A	N/A
MIL-W-81381/17/21	45-1633	45-1633-1	16-26 AWG	45-2020	45-2020-1	20-26 AWG
MIL-W-81381/18/19/20	45-1609 45-1551	45-1609-1 45-1551-1	10-14 AWG 16-26 AWG	N/A	N/A	N/A
MIL-W-22759/16/17	45-1611 45-1987	45-1611-1 45-1987-1	10-14 AWG 16-26 AWG	45-2133 45-2118	45-2133-1 45-2118-1	16-24 AWG 22-26 AWG
MIL-W-24640/19/22/23/24	45-1957	45-1957-1	14-22 AWG	N/A	N/A	N/A
MIL-W-85485/5/6/7/8	45-1925 45-1924	45-1925-1 45-1924-1	10-14 AWG 16-24 AWG	N/A	N/A	N/A
MIL-W-85485/9/10/11/12 MIL-W-85485/9/10	45-1611 45-1610	45-1611-1 45-1610-1	10-14 AWG 16-24 AWG	45-2131	45-2131-1	16-24 AWG
BMS 1360 Type 1-6, 19-21, 23-27, 33-34	45-2541 42-2543	45-2541-1 45-2543-1	10-14 AWG 16-24 AWG	45-2697	45-2697-1	16-24 AWG
BMS 1360 Type 12-18, 28-32	45-2542 45-2544	45-2542-1 45-2544-1	10-14 AWG 16-24 AWG	N/A	N/A	N/A
BMS 1360 Type 7-12	45-2565 45-2564	45-2565-1 45-2564-1	10-14 AWG 16-26 AWG	N/A	N/A	N/A
MIL-W-22759/80/81/82/91/92	45-2542 45-2544	45-2542-1 45-2544-1	10-14 AWG 16-24 AWG	45-2693 45-2692	45-2693-1 45-2692-1	16-22 AWG 20-26 AWG
MIL-W-22759/83/84/85/86/87/88/89/90	45-2541 45-2543 45-2618	45-2541-1 45-2543-1 45-2618-1	10-14 AWG 16-24 AWG 16-26 AWG	45-2685	45-2685-1	16-24 AWG

NOTE: The above blades represent the best blade for nominal conductor sizes within the wire spec. tolerance. If the conductor size is over or under the nominal dims. an alternate blade may be required. Please contact our wire stripping applications engineer at 1-800-435-0705 ext. 300 for alternate blades and for blade numbers for MIL-specs. not listed on this chart.



E

# Wire Management





## IDEAL Cable Tie Catalog Numbering System

**IT - 2 - S - MH - C - 0**

IT	2	S	MH	C	0
<b>IT = IDEAL Powr-Tie™ Cable Ties</b>	<b>Size</b> Approximate Bundle Diameter for ties	<b>TENSILE Strength</b> 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.)	<b>Style</b> = Standard Tie MH = Mounting ID = Identification MB = Mounting Base LPMB = Low Profile Mounting Base MP = Mounting Pad CCL = Cable Clamp	<b>Qty. Per Package</b> L = 50 C = 100 D = 500 M = 1000	<b>Color</b> = Natural 0 = UV Black 8 = Gray 30 = Heat Stabilized Black 35 = Maroon 702 = Halar

### Cable Tie Bag



- Keep your cable ties right where you need them, eliminate loss with this convenient easy-to-use bag that clips securely onto your belt
- Includes a bag for 8 in. cable ties and a bag for 11 in. cable ties, they easily clip together or can be used separately
- Elastic cord quickly and easily cinches to keep ties securely in place

Description	Cat. No.
Cable Tie Bag	IT-BAG

### 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
- Standard and heavy-duty models feature rugged, construction with comfortable, cushioned grips



Description	Cat. No.
Economy – use w/intermediate & standard ties*	BCTT-200
Standard – use w/intermediate & standard ties**	41-990
Heavy-Duty – use w/standard & heavy-duty ties**	41-995

\*Color may vary

\*\*Not Shown

### Cable Tie Assortment with Cable Tie Bag

- 500 of the most popular sized cable ties packaged with an easy-to-use bag that clips securely onto your belt
- UL Listed Nylon 6/6 cable ties are suitable for use in Air Handling Spaces (Plenums) 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.

Description	Cat. No.
Cable Tie Assortment	IT-COMBO
<b>IT-COMBO Includes:</b>	<b>Qty.</b>
7-1/2 in. Natural Air Handling Cable Ties	300
11 in. Natural Air Handling Cable Ties	200
Cable Tie Bag	1
	<b>IT-BAG</b>

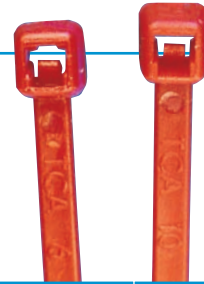




## Plenum Ties

### Halar® Ties

- For use in air handling/plenum environments
- Easily recognized maroon color
- Low smoke density and excellent flammability rating, non-flammable UL 94V-O
- Superior chemical resistance
- 300°F temperature use



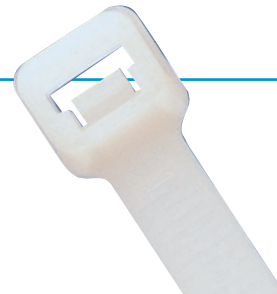
Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Qty./Bag	Cat. No.
Maroon Halar	8.0 in./203mm	.178 in./4.5mm	.053 in./1.35mm	1/16 - 2 in.	50 lbs.	100	IT2S-C702
Maroon Halar	11.0 in./279mm	.178 in./4.5mm	.053 in./1.35mm	1/16 - 3 in.	50 lbs.	100	IT3S-C702

Approximate dimensions.

Halar® is a trademark of Ausimont Chemical Co.

### UL Listed for Air Handling Ties - Plenum

- 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	Qty./Bag	Cat. No.
Burgandy Nylon	7.5 in./190mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 1-7/8 in.	50 lbs.	MS3367-1-9	100	IT2S-C35
Natural Nylon							100	IT2S-C
Natural Nylon							1000	IT2S-M
UV Black Nylon						MS3367-1-0	100	IT2S-C0
UV Black Nylon							1000	IT2S-M0
Burgandy 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-C35
Natural Nylon							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	Qty./Bag	Cat. 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	100	IT2SMH-C
Natural Nylon							1000	IT2SMH-M
UV Black Nylon							100	IT2SMH-C0

### Definition of "Air Handling Spaces"

Air Handling Spaces - Ducts or plenums used for environmental air and other spaces used for environmental air, such as above hung ceilings or below raised floors. This does not include plenums used for the removal of dust, loose stock or vapor, or ventilation of commercial-type cooking equipment.<sup>1</sup>

<sup>1</sup>UL 1565 CSA C22.2 4th Edition

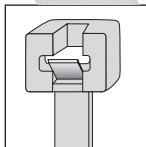




## Powr-Tie™ Cable Ties

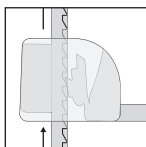
### Quality Construction

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



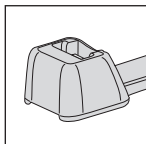
### Low Insertion Force

- Tapered thin tip reduces initial friction
- Lowest insertion force with the highest tensile strength
- Reduces installation fatigue



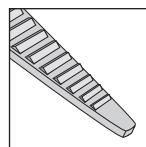
### No Burrs or Sharp Edges

- Smooth corners provide added safety
- Rounded edges eliminate insulation damage



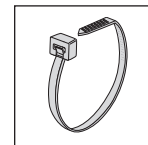
### Stepped Tail Gripper

- Tapered tail grip assures positive threading
- Stepped tail allows 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/254°F working temperature

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

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. 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	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 - 1-1/2 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.) Ties Natural & UV Black

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. 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	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

\*1\_5 & 2I Series





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

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. 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	100	IT2S-C
Natural Nylon							1000	IT2S-M
UV Black Nylon						MS3367-1-0	100	IT2S-C0
UV Black Nylon							1000	IT2S-M0
Heat Stabilized Black Nylon						—	100	IT2S-C30
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 (Plenums) 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 & Extra Heavy-Duty Ties Natural, UV Black & Heat Stabilized Black

Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. No.
Natural Nylon	8.7/220.9mm	.300 in./7.62mm	.076 in./1.93mm	2-1/16 in.	120 lbs.	—	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	33.1 in./841mm	.340 in./8.64mm	.090 in./2.29mm	3/16-9-3/4 in.	175 lbs.	MS3367-12-9	50	IT10H-L
UV Black Nylon						MS3367-12-0	50	IT10H-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
Gray Nylon						MS3367-16-8	50	IT14H-L8
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

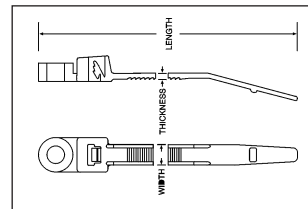
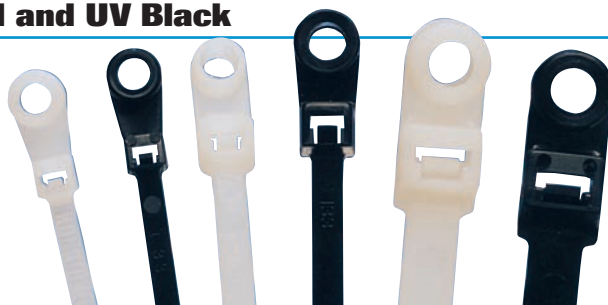
\*4LH, 7H, 10H, 11H, 14H Series





## Mounting Head Ties Natural and UV Black

- 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	Strap Thickness	Max. Bundle	Tensile Strength	Screw Size	Qty./Bag	Cat. 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	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.

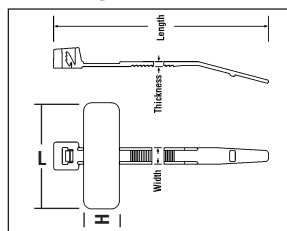


## Identification Ties

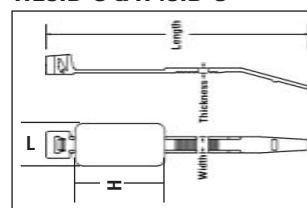
- Write-on surface
- Bundle and identify at the same time



IT1MID-C



IT2SID-C & IT4SID-C

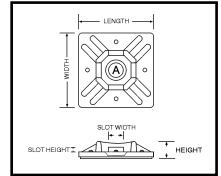
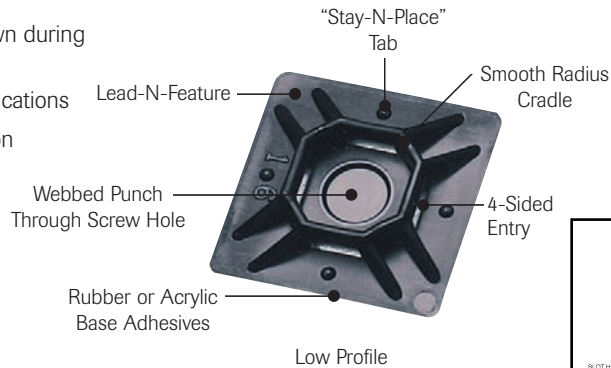


Description	Length	Width	Thickness	Max. Bundle	Tensile Strength	Pad Size (H X L)	Qty./Bag	Cat. No.
Natural Nylon	4.0 in./102mm	.100 in./2.54mm	.044 in./1.12mm	1/16 - 7/8 in.	18 lbs.	5/16 in. x 1 in.	100	IT1MID-C
Natural Nylon	7.8 in./200mm	.181 in./4.59mm	.055 in./1.40mm	1/16 - 1-7/8 in.	50 lbs.	1-1/8 in. x 1/2 in.	100	IT2SID-C
Natural Nylon	14.1 in./358mm	.187 in./4.75mm	.055 in./1.40mm	3/8 - 4 in.	50 lbs.	1-1/8 in. x 1/2 in.	100	IT4SID-C



## Mounting Pads

- Patented stay-in-place tab keeps cable ties from sliding down during vertical applications
- 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

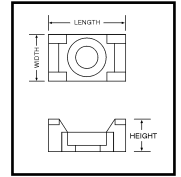
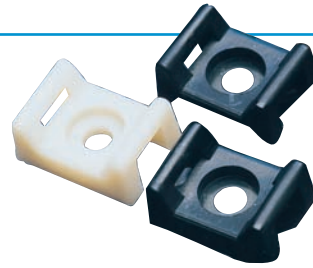


Description	Width	Height	Slot Height	Slot Width	Screw Size	Qty./Bag	Cat. No.
Natural Nylon	.74 in./19mm	.19 in./4.8mm	.05 in./1.2mm	.20 in./5.1mm	No. 4	100	<b>IT750MP-C</b>
UV Black Nylon						100	<b>IT750MP-C0</b>
Natural Nylon	.99 in./25mm	.20 in./5.0mm	.06 in./1.5mm	.20 in./5.1mm	No. 6	100	<b>IT1000MP-C</b>
UV Black Nylon						100	<b>IT1000MP-C0</b>



## Screw Mounting Bases - Standard

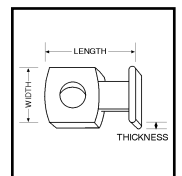
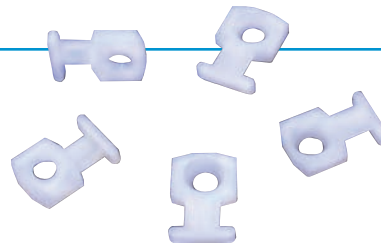
- Deep cradle design provides minimum support for larger bundles and tubing
- Recessed screw hole allows cable ties to easily pass over screw head



Description	Length	Width	Height	Slot Height	Slot Width	Screw Size	Qty./Bag	Cat. No.
Screw Mount Natural Nylon	.590 in./15mm	.370 in./9.40mm	.270 in./6.86mm	.062 in./1.59mm	.190 in./4.83mm	No. 6	100	<b>IT1SMB-C</b>
Screw Mount UV Black Nylon							100	<b>IT1SMB-C0</b>
Screw Mount 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	<b>IT2SMB-C</b>
Screw Mount UV Black Nylon							100	<b>IT2SMB-C0</b>

## 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	Qty./Bag	Cat. 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	100	<b>IT1LPMB-C</b>



## Material Specifications

### Nylon 6/6 - General Purpose

General purpose nylon 6/6 features lightweight, high-strength and a wide-temperature range. Even at higher than recommended temperatures or exposure to flame, nylon does not give off toxic or irritating by-products. Nylon 6/6 is hydroscopic and, therefore, absorbs or releases moisture depending on its environment. Moisture level of the material will affect tensile strength, stiffness and elongation of the product.

### Nylon 6/6 - UV Stabilized

General purpose nylon 6/6 with increased resistance to ultraviolet light. Carbon black is one of the most effective stabilizers known today. A uniform dispersion of carbon black provides good ultraviolet light resistance without adversely affecting physical properties. The addition of carbon black, or any other ultraviolet light stabilizer, prolongs the useful life of plastic products used outdoors, but it does not totally eliminate the destructive effects of the light.

### Halar®

Although weaker than general-purpose nylon 6/6 (about 37%), Halar is resistant to a wide range of chemicals such as concentrated hydrofluoric and sulfuric acids. It is radiation resistant. Halar also withstands high temperatures, ultraviolet light exposure and meets U.L. flammability requirement 94V-0. Its outstanding characteristic is a lower smoke density when burned. This makes Halar more desirable for use in areas where smoke generation is a concern.

### Nylon 6/6 - Heat Stabilizer

Used for continuous or extended exposure to high temperatures (up to 250°F). They contain specially formulated heat stabilizers to provide additional thermal endurance to prevent reduction in physical properties and fatigue as a result of high temperatures. Heat stabilized nylon meets the UL standard for electrical applications.

## Military Cross Reference

Material	Continuous Operating Temp.		Tensile AT 73F ASTM D-638	UL Flame Rating	Radiation Resistance	UV Resistance
	Max.	Min.				
Nylon 6/6 – General Purpose	185° F 85° C	-40° F -40° C	12,000	94V-2	1 X 10 Rads	Poor
Nylon 6/6 – UV Stabilized	185° F 85° C	-40° F -40° C	12,000	94V-2	1 X 10 Rads	Very Good
Nylon 6/6 – Heat Stabilized	220° F 105° C	-40° F -40° C	12,000	94V-2	1 X 10 Rads	Very Good
Halar®	284° F 140° C	-50° F -46° F	7,500	94V-0	1 X 10 Rads	Excellent

Current MIL Std. Part Number*	Cable Tie Part Number
MS3367-1-*	IT2S-*
MS3367-2-*	IT4S-*
MS3367-3-*	IT4LH-*
MS3367-4-*	IT1M-*
MS3367-5-*	IT1.5L-*
MS3367-5-*	IT2I-*
MS3367-7-*	IT3S-*
MS3367-10-*	IT7H-*
MS3367-13-*	IT11H-*
MS3367-16-*	IT14H-*

\*Color and package denotation

### Material Suitability Chart (10 = most suitable, 1 = least suitable)

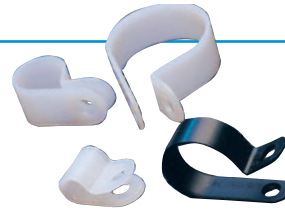
Design Criteria	Weather Natural 6.6 Nylon	Heat Stabilized Resistant 6.6 Nylon	Black 6.6 Nylon	Halar®
Part # Suffix Material Designation		-0	-30	-702
Loop Tensile Strength	7	7	7	5
Low Temperature Service	6	6	6	7
High Temperature Service	5	5	6	7
Flammability	6	6	6	9
Ultraviolet Resistance	1	6	4	9
Radiation Resistance	3	3	3	9
Overall Chemical Resistance	6	6	6	10
- Hydrocarbons	9	9	9	10
- Chlorinated Hydrocarbons	7	7	7	10
- Acids	2	2	2	10
- Bases	7	7	7	10
- Salts	3	3	3	10
Relative Price	Low	Low	Low	High

\*Halar® is a trademark of Ausimont Chemical Co.



## 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	Qty./Bag	Cat. No.
Natural Nylon	.125 in./3.18mm	.343 in./8.71mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm	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-CO
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-CO
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

## Flange-Type Plastic Anchors



- Multi-purpose use in solid materials or hollow walls, will not fall through
- For use with sheet-metal or wood screws
- High-impact plastic construction resists moisture, corrosion and deterioration

Description	Screw Size	Drill Size (In.)	Quantity	Cat. No.
Yellow – 7/8 in. long	6-8-10	3/16	100	90-041
Red – 1 in. long	10-12	1/4	100	90-042
White – 1-1/2 in. long	14-16	5/16	50	90-044

## Flange-Type Plastic Anchor Kits



- Kits include flange-type anchors, slotted/Phillips head screws and masonry bit
- Convenient plastic storage container

Contents	Cat. No.
100 #6-8-10 x 7/8 in. Flange-type anchors, 100 #8 x 1 in. combo-head, sheet-metal screws & 1-3/16 in. masonry bit (carbide-tipped)	90-051
100 #10-12 x 1 in. Flange-type anchors, 100 #10 x 1-1/4 in. combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	90-052
100 #10-12 x 1 in. Flange-type anchors, 100 #12 x 1 in. 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, 40 #14 x 1-1/2 in. combo-head, sheet-metal screws 1-5/16 in. masonry bit (carbide-tipped)	90-054
100 #10-12 x 1 in. Flange-type anchors, 100 #10 x 1 in. combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	90-055

## Flexible Tubing\*

- Flexible polyethylene cuts easily to desired length
- Splits open for neat “bundling” of wiring jobs
- Snaps shut to create a continuous protective cover

Description	Qty.	Cat. No.
3/8 in. Flexible Tubing	10 ft.	772240
3/8 in. Flexible Tubing	1,200 ft.	772245
1/2 in. Flexible Tubing	1 ft.	772241
1/2 in. Flexible Tubing	900 ft.	772244
1 in. Flexible Tubing	5 ft.	772242
1 in. Flexible Tubing	250 ft.	772243

\*Buchanan branded





## Cable Staples

- Full line of quality insulated and non-insulated staples to fit all cabling applications
- Packaged to answer electrician's need for clean, dry, rust-free staples
- Convenient reclosable containers keep staples organized in the truck and on the job-site



## Plastic Insulated Staples

- Use with wider cable such as Romex®, NM and UF
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion

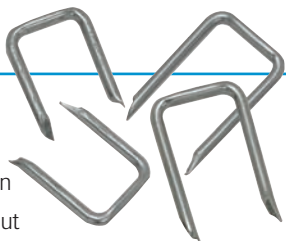


Description	Qty./Package	Cat. No.
1/2 in. Insulated	50/Bag	<b>BPS2-50</b>
	100/Bag	<b>BPS2-1</b>
	225/Jar	<b>BPS2-JRL</b>
	400/Jar	<b>BPS2B-JR</b>
	500/Bag	<b>BPS2-5</b>
	5,000/Bucket	<b>BPS2-5M</b>
	30,000/Barrel	<b>BPS2-30K</b>
3/4 in. Insulated	50/Bag	<b>BPS3-50</b>
	100/Bag	<b>BPS3-1</b>
	200/Jar	<b>BPS3-JRL</b>
	250/Bag	<b>BPS3-2</b>

Romex® is a registered trademark of General Cable Co.

## Carbon Steel Staples

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

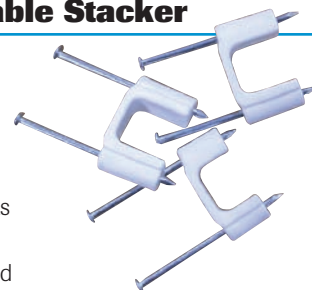


Description	Qty./Package	Cat. No.
1/2 in. x 1 in.	100/Box	<b>BCS1-1</b>
	500/Jar	<b>BCS1-JR</b>
	500/Box	<b>BCS1-5</b>
	5,000/Bucket	<b>BCS1-5M</b>
9/16 in. x 1-1/4 in.	100/Box	<b>BCS2-1</b>
	400/Jar	<b>BCS2-JR</b>
	500/Box	<b>BCS2-5</b>
	5,000/Bucket	<b>BCS2-5M</b>

Romex® is a registered trademark of General Cable Co.

## Plastic Insulated Cable Stacker

- Use with wider cable such as Romex®, NM and UF
- High-grade carbon steel construction
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Qty./Package	Cat. No.
1/2 in. 2 Cable Stacker	50/Bag	<b>BPS2/2-50</b>
1/2 in. 3 Cable Stacker	50/Bag	<b>BPS2/3-50</b>
1/2 in. 4 Cable Stacker	50/Bag	<b>BPS2/4-50</b>

Romex® is a registered trademark of General Cable Co.

## Cable Stacker

- Perfect for centering multiple cables on 2 x 4 framing members in compliance with NEC 300.4.(2)
- Use with cable such Romex®, NM and UF

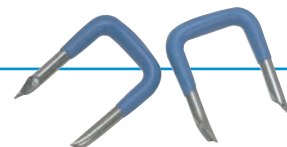


Description	Qty./Package	Cat. No.
Cable Stacker	15	<b>BPSTCKR-15</b>

Romex® is a registered trademark of General Cable Co.

## Insulated Staples

- Use with wider cable such as Romex®, NM and UF
- High-grade carbon steel with flexible PVC insulation
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion



Description	Qty./Package	Cat. No.
1/2 in. x 1 in.	125	<b>BICS1-125</b>
9/16 in. x 1-1/4 in.	125	<b>BICS2-125</b>

Romex® is a registered trademark of General Cable Co.



## Coaxial Cable Straps

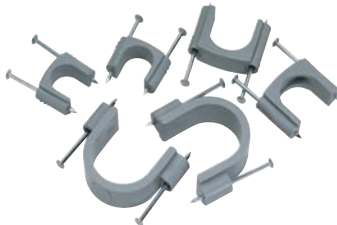
- Use with round cable such as CATV/VCR, RG-5, RG-6 and phone cables or with plastic and metal tubing
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Nail Type	Qty./Package	Cat. No.
1/4 in. White	Standard	25/Clamshell	772808
		100/Clamshell	772809
		250/Jar	BPCXSW-JR
1/4 in. Black	Standard	25/Clamshell	772806
		100/Clamshell	772807
		250/Jar	BPCXSB-JR
	Roofing	25/Clamshell	772891
		200/Jar	BPCSRB-JR
	Masonry	25/Clamshell	772890
		200/Jar	BPCXMBJR
Double 1/4" Black	Standard	200/Jar	BPDCXSBJR
7/16 in. White	Standard	50/Bag	BPS4-50

## 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	Qty./Package	Cat. No.
#6 SER & 1/2 in. EMT	50/Bag	BSER6-50
#6 & #8 SEU	50/Bag	BSEU6-50
#2 SER & 3/4 in. EMT	25/Bag	BSER2-25
#2 SEU	25/Bag	BSEU2-25
4/0 SER	5/Bag	BSER4/0-5
4/0 SEU	5/Bag	BSEU4/0-5

## Data Cable Staples

- Secures Category 3, 5 and other 4-pair twisted wire
- Blue plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Nail Type	Qty./Package	Cat. No.
Data Staple	Standard	25/Clamshell	772880
	Standard	250/Jar	BPDATAS-JR
	Masonry	250/Clamshell	772881

## Sound Straps

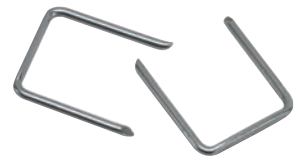
- Use with smaller insulated wire and cord applications such as lamps, thermostats, telephones and sound systems
- Smooth plastic saddle prevents damage to wires
- Zinc-plated nails resist rust and corrosion



Description	Nail Type	Qty./Package	Cat. No.
3/16 in. White	Standard	25/Clamshell	772804
		100/Clamshell	772805
		250/Jar	BPLVSW-JR
3/16 in. Black	Standard	25/Clamshell	772810
		250/Jar	BPLVSB-JR
3/16 in. Tan	Standard	25/Clamshell	772881
3/16 in. White	Masonry	25/Clamshell	772813

## 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



Description	Qty./Package	Cat. No.
1-5/16 in. x 3/4 in.	100/Box	BMSE150-1
1-1/2 in. x 1-1/16 in.	100/Box	BMSE175-1



## Heat Shrinkable Tubing

### Thermo-Shrink® UF Splice Kits

- Direct burial rated
- 14/3 with and without ground thru 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



Description	Cat. 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



Description	Cat. No.
Underground Splice Kit - 8 to 2 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® Copper Butt Splice Kits

- UL Listed
- Provides a fully-insulated butt splice
- 600V Maximum, 105°C rating



Description	Cat. No.
Butt Splice Kit - Copper 14-8 AWG	46-404
Butt Splice Kit - Copper 8-2 AWG	46-405

### 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	Cat. No.
Self Sealing UF Splice Kit	46-411

### Thermo-Shrink® Torch

- Self-igniting trigger, starts fast and easy
- Fully adjustable regulator valve and air inlet port to achieve the ideal flame setting
- 1 in. wide brass burn-tip accommodates a variety of heat shrink applications
- Heavy duty, stainless steel burn tube, combined with a cast aluminum body with epoxy finish, creates a durable long lasting tool for almost any environment
- 1 - 20 threads screw directly onto 14 oz. and 16 oz. propane gas tanks

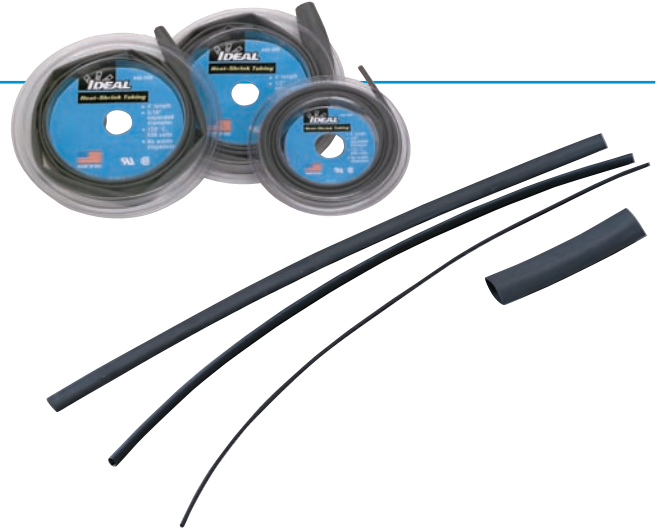


Description	Cat. No.
Heat Shrink Torch	46-420



## 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 224 125°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



Technical Data		
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	10 <sup>14</sup> Ω.cm
Copper corrosion	UL 224	Pass
Chemical resistance	UL 224	Pass
Longitudinal shrinkage	UL 224	0±5%
Eccentricity	UL 224	30%

Normal Size (In.)	Expanded I.D. (Min.)	Nominal Recovered I.D. (Max.)	Recovered Wall Thickness +/-10%	Cable Range*	Length	Pkg. Type	Cat. No.
3/64	0.063"/1.6mm	0.024"/0.6mm	0.013"/0.33mm	22-18 AWG	4 ft.	Disk	46-600
1/16	0.079"/2.0mm	0.031"/0.8mm	0.014"/0.36mm	16 AWG	4 ft.	Disk	46-601
3/32	0.122"/3.1mm	0.047"/1.2mm	0.017"/0.44mm	14-12 AWG	4 ft.	Disk	46-602
1/8	0.146"/3.7mm	0.063"/1.6mm	0.017"/0.44mm	24-20 AWG	6 in. 4 ft. 1,000 ft.	Bag Disk Spool	46-310 46-603 46-312
3/16	0.205"/5.2mm	0.094"/2.4mm	0.020"/0.50mm	20-14 AWG	6 in. 4 ft. 1,000 ft.	Bag Disk Spool	46-313 46-604 46-315
1/4	0.268"/6.8mm	0.126"/3.2mm	0.022"/0.56mm	14-8 AWG	6 in. 4 ft. 500 ft.	Bag Disk Spool	46-316 46-605 46-318
5/16	0.346"/8.8mm	0.157"/4.0mm	0.022"/0.56 mm	10-6 AWG	4 ft.	Disk	46-606
3/8	0.421"/10.7mm	0.185"/4.7mm	0.022"/0.56mm	8-4 AWG	6 in. 4 ft. 200 ft.	Bag Disk Spool	46-319 46-607 46-321
1/2	0.539"/13.7mm	0.252"/6.4mm	0.026"/0.65mm	4-1 AWG	6 in. 4 ft. 200 ft.	Bag Disk Spool	46-322 46-608 46-324
3/4	0.807"/20.5mm	0.374"/9.5mm	0.027"/0.69mm	2-250 MCM	6 in. 4 ft. 200 ft.	Bag Disk Spool	46-325 46-609 46-327
1	1.043"/26.5mm	0.500"/12.7mm	0.031"/0.80mm	2/0-500 MCM	6 in. 4 ft. 100 ft.	Bag Disk Spool	46-328 46-610 46-330

\*Reference only - Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

**CA**® US

Heat Shrink



## 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 retardancy
- 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
- Continuous operating temperature from -55°C to 110°C
- Rated for 600V, 90°C continuous use
- Shrink temperature of 120°C



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	.150	.060	12-6 AWG	6 9 48	<b>46-343</b> <b>46-344</b> <b>46-346</b>
TS-46-750	.750	.240	.090	8-1/0 AWG	6 9 48	<b>46-347</b> <b>46-348</b> <b>46-350</b>
TS-46-1100	1.100	.350	.120	2-4/0 AWG	6 9 48	<b>46-351</b> <b>46-352</b> <b>46-354</b>
TS-46-1500	1.500	.470	.160	3/0 AWG-400 KCMIL	9 12 48	<b>46-356</b> <b>46-357</b> <b>46-358</b>
TS-46-2000	2.000	.630	.160	250-750 KCMIL	9 18 48	<b>46-369</b> <b>46-371</b> <b>46-372</b>

\*Reference only. Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

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	10 <sup>13</sup> ohm-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 End Caps

- Creates a watertight seal to protect the ends of power and control cords
- Effectively offers protection 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 polyolefin, coated with specially designed hot melt adhesive



Technical Data		
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/cm <sup>3</sup>
Elongation of break after aging	150°C, 168 hrs.	>300%
Dielectric Strength	IEC 243	>15KV/mm
Volume Resistance	IEC 93	10 <sup>14</sup> Ω.cm

Expanded I.D. (Min.)	Recovered I.D. (Max.)	Recovered Wall Thickness +/-10%	Cable Dia. Range*	Length (In.)	Cat. No.
0.55"/14mm	0.18"/4.5mm	0.079"/2.0mm	0.20"/5mm - 0.47"/12mm	1.77/45mm	<b>46-381</b>
0.98"/25mm	0.31"/8mm	0.091"/2.3mm	0.39"/10mm - 0.71"/18mm	2.76/70mm	<b>46-382</b>
1.38"/35mm	0.59"/15mm	0.118"/3.0mm	0.67"/17mm - 1.18"/30mm	3.35/85mm	<b>46-383</b>
2.95"/75mm	1.38"/35mm	0.138"/3.5mm	1.77"/45mm - 2.76"/70mm	5.12/130mm	<b>46-384</b>
4.72"/120mm	2.36"/60mm	0.157"/4.0mm	2.95"/75mm - 4.33"/110mm	6.10/155mm	<b>46-387</b>

\*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation.

1-800-435-0705 for Customer Service



## Thermo-Shrink® Heat Shrink Kit

Kit includes:

- Heat Elite Pro Heat Gun
- Eleven sizes of thin-wall heat shrinkable tubing disks (3/64 in. – 1 in.)
- Small deflector
- Premium T®-Cutter Wire Cutter



Description	Cat. No.
Kit includes: 46-203, 45-223, 46-941, & 46-600 through 46-610	46-007

## Heat Elite Heat Gun Kit

- Temperature range – 930°F (500°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use



Description	Cat. No.
Heat Elite Kit - Includes #46-202 Heat Gun, #46-941 Small Deflector, and #46-954 Wide-Slot Adapter	46-202



## Heat Elite Pro Heat Gun Kit

- Temperature range – 180°F - 1020°F (100 - 550°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use
- Potentiometer for infinitely temperature adjustment



Description	Cat. No.
Heat Elite Pro Kit - Includes #46-203 Heat Gun, #46-941 Small Deflector, #46-950 Reduction Adapter and #46-954 Wide-Slot Adapter	46-203



## Heat Elite Plus LCD Heat Gun Kit

- Temperature range – 180°F - 1200°F (80 - 650°C)
- Double-insulated power cord
- Ergonomical 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	Cat. No.
Heat Elite Plus LCD Kit - Includes #46-204 Heat Gun, #46-941 Small Deflector, #46-952 Welding Adapter, #46-953 Solder Reflector Adapter, #46-955 Overlap Welding Adapter, #46-956 Pressure Roller	46-204



## Heat Gun Accessories



Description	Cat. No.
Small Deflector, 1-1/4 in. diameter (For use with all Heat Elite Heat Guns)	46-941
Reduction Adapter (For use with 46-203 and 46-204)	46-950
Glass Protection Adapter (For use with all Heat Elite Heat Guns)	46-951
Welding Adapter (For use with 46-203 and 46-204)	46-952
Solder Reflector Adapter (For use with 46-204)	46-953
Wide-Slot Adapter (For use with all Heat Elite Heat Guns)	46-954
Overlap Adapter (For use with 46-203 and 46-204)	46-955
Pressure Roller (For use with 46-204)	46-956



## Wire Marker Booklets



- Convenient pocket-size booklets
- Plastic-impregnated 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

## Load Centers

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



Description	Cat. No.
Load Center Wire Marker Booklet	<b>44-154</b>

## Legend Assortments\*

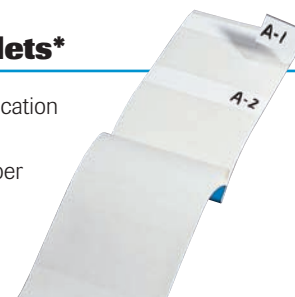
Legend	Qty.	Cat. No.
0-9	45 Markers each	<b>44-101</b>
A-Z 0-15 +, -, /	10 Markers each	<b>44-102</b>
1-45	10 Markers each	<b>44-103</b>
46-90	10 Markers each	<b>44-104</b>
1, 2, 3	150 Markers each	<b>44-105</b>
A, B, C	150 Markers each	<b>44-106</b>
A-Z**	45 Markers each	<b>44-148</b>
T1, T2, T3	150 Markers each	<b>44-107</b>
L1, L2, L3	150 Markers each	<b>44-108</b>
1-15 16-90 A-Z +, -, /, 0	6 Markers each 4 Markers each 2 Markers each 2 Markers each	<b>44-109</b>
1, 2, 3 A, B, C T1, T2, T3 L1, L2, L3	45 Markers each 45 Markers each 30 Markers each 30 Markers each	<b>44-110</b>
+, -, AC, DC POS, NEG, GND NEUT SPARE, BLANK	45 Markers each 33 Markers each 27 Markers each 21 Markers each	<b>44-111</b>

\*Ten pages per booklet with each page bearing the legend assortment indicated. All booklets (except 44-111) 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.

## Write-On Marker Booklets\*

- Use for developing personal identification systems
- Surface accepts pen, pencil or rubber stamp



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

\*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. Adhesion: .25 oz./in. width ultimate



## Write-On Marker Cards

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



Marker Size (In.)	Markers per card	Cat. No.
5/8 x 1-1/2	14	44-753

## Marking Pens



- Fast-drying, permanent ink will not smear
- Use on write-on marker cards and write-on cable-tie marker plates
- Color-coded in red or black

Description	Cat. No.
Marking Pen w/black ink	41-697
Marking Pen w/red ink	41-698

## Wire Marker Cards

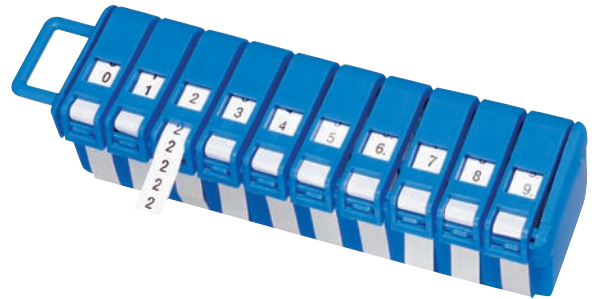
- Use for positive identification and keying of wires, terminal blocks, etc.
- Convenient pocket-size cards
- Bold, easy-to-read black characters
- Self-sticking on wire and cable
- Polyester film over laminate/cloth construction for long-term durability
- Resists abrasion, moisture, dirt and oil
- Individual markers measure approximately 1/4 in. x 1-1/2 in.

### Specifications:

Temperature Range: -40°F to 180°F (-40°C to 82°C); Adhesion: 45 oz./in. width ultimate

Legend	Markers per legend	Markers per card	Cat. No.
0-9 (Repeated)	3	30	43-953

## Wire Marker Dispenser



- Convenient pocket-size case holds 10 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: 25 oz./in. width ultimate

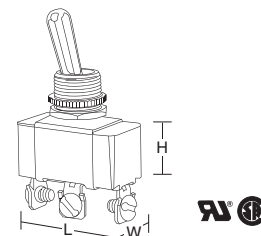
Description	Cat. No.
Dispenser w/0 through 9 legend rolls	42-301
Refill pack with 1 each of 0-9 legend rolls	42-399









## Standard and 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
- Bulk packaging of 100 available upon request








Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" × W" × H" )	Cat. No.
						Amps 125 VAC	Amps 277 VAC	HP 125-250 VAC		
	Toggle Switch with On-Off Faceplate	SPST	On-Off	Screw	2	20	10	3/4	1.13 x .57 x .61	774011
				Spade						774011BK†
			774008							
	Toggle Switch		On-Off	"O" Ring & Screw						774008BK†
			(On)-Off	Screw						774010
			On-(Off)	Screw						774093
										774088
										774088BK†
	Toggle Switch w/boot	SPST	On-Off	Wire leads w/boot	2	20	20	1-1/2	1.18 × .68 × .75	774111
										774111BK†
	Toggle Switch	SPDT	On-On	Screw	3	20	10	3/4	1.13 × .57 × .61	774012
	Toggle Switch	SPDT	On-On	Spade	3	20	10	3/4	1.13 × .57 × .61	774100
	Toggle Switch	SPDT	On-Off-On	Screw	3	20	10	3/4	1.13 × .57 × .61	774013
										774013BK†
	Toggle Switch	SPDT	On-Off-On	Spade	3	20	10	3/4	1.13 × .57 × .61	774027
	Toggle Switch	SPDT	On-Off-(On)	Screw	3	20	10	3/4	1.13 × .57 × .61	774094
	Toggle Switch	SPDT	(On)-Off-(On)	Screw	3	20	10	3/4	1.13 × .57 × .61	774009
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	20	10	1-1/2	1.30 x .76 × .80	774014
										774014BK†
	Heavy-Duty Toggle Switch	DPST	On-Off	Spade	4	20	10	1-1/2	1.30 × .76 × .80	774005
										774005BK†
	Heavy-Duty Toggle Switch	DPST	(On)-Off	Screw	4	20	10	1-1/2	1.30 × .76 × .80	774103
	Heavy-Duty Toggle Switch	DPST	On-(Off)	Screw	4	20	10	1-1/2	1.30 × .76 × .80	774105

( ) denotes momentary action

†Bulk Package of 100



## Standard and Heavy-Duty Toggle Switches

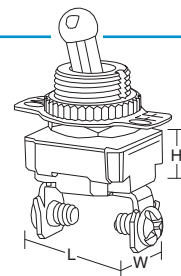
Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" × W" × H" )	Cat. No.
						Amps 125 VAC	Amps 277 VAC	HP 125-250 VAC		
	Heavy-Duty Toggle Switch	DPDT	On-On	Screw	6	20	10	1-1/2	1.30 × .76 × .80	774015 774015BK†
	Heavy-Duty Toggle Switch	DPDT	On-On	Spade	6	20	10	1-1/2	1.30 × .76 × .80	774091 774091BK†
	Heavy-Duty Toggle Switch	DPDT	(On)-On	Screw	6	20	10	1-1/2	1.30 × .76 × .80	774028 774028BK†
	Heavy-Duty Toggle Switch	DPDT	On-Off-On	Screw	6	20	10	1-12	1.30 × .76 × .80	774016 774016BK†
	Heavy-Duty Toggle Switch	DPDT	On-Off-On	Spade	6	20	10	1-1/2	1.30 × .76 × .80	774003 774003BK†
	Heavy-Duty Toggle Switch	DPDT	(On)-Off-On	Screw	6	20	10	1-12	1.30 × .76 × .80	774104
	Heavy-Duty Toggle Switch	DPDT	(On)-Off-(On)	Screw	6	20	10	1-12	1.30 × .76 × .80	774000
	Heavy-Duty Toggle Switch	DPDT	(On)-Off-(On)	Spade	6	20	10	1-1/2	1.30 × .76 × .80	774115 774115BK†
	Toggle Switch	3PST	On-Off	Screw	6	15	10*	3/4	1.31 × 1.09 × .80	774106
	Toggle Switch	3PDT	On-On	Screw	9	15	10*	3/4	1.31 × 1.09 × .80	774089 774089BK†
	Toggle Switch	3PDT	On-Off-On	Screw	9	15	10*	3/4	1.31 × 1.09 × .80	774092
	Toggle Switch	4PST	On-Off	Screw	8	15	10*	3/4	1.31 × 1.44 × .80	774108
	Toggle Switch	4PDT	On-On	Screw	12	15	10*	3/4	1.31 × 1.44 × .80	774109
	Toggle Switch	4PDT	On-Off-On	Screw	12	15	10*	3/4	1.31 × 1.44 × .80	774110



\*250VAC, Dielectric strength: 1000V ( ) denotes momentary action †Bulk Package of 100



## Medium and 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
- Bulk packaging available upon request



Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating	Dimensions (L" × W" × H")	Cat. No.
	Bat Toggle with On-Off Faceplate	SPST	On-Off	Screw	2	6 Amps 120 VAC, 3 Amps 240 VAC	.69 × .55 × .34	774017
	Bat Toggle with On-Off Faceplate	SPST	On-Off	Wire Leads	2	4 Amps 250VAC/DC, 8 Amps 125VAC/DC, 10 Amps 125 VAC, 1/4 HP 125 VAC	.98 × .64 × .62	774017BK†
	Bat Toggle*	SPST	On-Term Ground	Spade	1	21 Amps 14 VDC	.69 × .55 × .34	774007
	Short Ball Toggle Switch	SPST	On-Off	Screw	2	6 Amps 120 VAC, 3 Amps 240 VAC	.69 × .55 × .34	774001
	Short Ball Toggle Switch	SPST	On-Off	Wire Leads	2	6 Amps 125 VAC, 3 Amps 250 VAC	.89 × .47 × .55	774002
								774002BK†

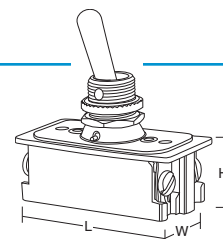



†Bulk Package of 100

\*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, it will withstand the abuses of virtually any application
- Bulk packaging of 100 available upon request



Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" × W" × H" )	Cat. No.
						Amps 125V	Amps 250V	HP 125-250V		
	Heavy-Duty Toggle Switch	SPST	On-Off	Screw	2	16	8	1	1.75 × .84 × .76	774095
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	16	8	1	1.75 × .84 × .76	774095BK†
	Heavy-Duty Toggle Switch	DPST	On-Off	Screw	4	20	10	1-1/2	2.09 × 1.00 × .90	774097







†Bulk Package of 100



## Toggle Switch Accessories

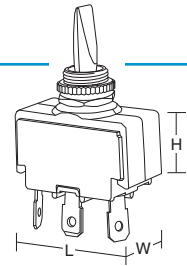
- These neoprene covers are great for outdoor and other environmentally tough conditions. They screw onto toggle switches to protect switches from moisture, dust and dirt.
- Nickel indicator plate fits easily on most toggle switches to identify the On-Off positions





Product	Description	Mounting	Dimensions	Qty./Card	Cat. No.
	Toggle Switch Cover	15/32 - 32 NS-2B	.93 Height x .62 Base Dia.	2	774020
				100	774020BK†
	Push Button Switch Cover (Clear)	3/8 - 27 NS-2B	.59 Height x .60 Base Dia. x .34 ID	2	774117
	Push Button Switch Cover (Gray)	15/32 - 32 NS-2B	.72 Height x .62 Base Dia. x .42 ID	2	774087
	Indicator Plate	15/32 in. Diameter	1.03 x .62 Hole Diameter	10	774099

†Bulk Package of 100

## 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
- Bulk packaging available upon request



Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating		Dimensions (L" x W" x H")	Cat. No.
						Amps 125 VAC	Amps 250 VAC		
	Double Insulated, Plastic Toggle Switch	SPST	On-Off	Screw	2	20	10	1.37 x .76 x .94	774019
	Double Insulated, Plastic Toggle Switch	SPST	On-Off	Spade	2	20	10	1.37 x .76 x .94	774098
	Double Insulated, Plastic Toggle Switch	SPDT	(On)-Off-(On)	Spade	3	20	10	1.37 x .76 x .94	774004
									774004BK†
	Double Insulated, Plastic Toggle Switch	DPDT	(On)-Off-(On)	Spade	6	20	10	1.37 x .76 x .94	774006



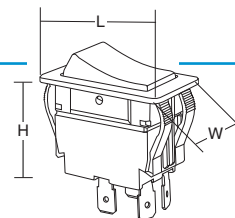
†Bulk Package of 100





( ) Denotes momentary action



## 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)
- Bulk packaging available upon request



Product	Description	Poles	Circuitry	Termination Style	No. of Terminals	Rating			Dimensions (L" × W" × H")	Cat. No.
						Amps 125 VAC	Amps 277 VAC	HP 110-250 VAC		
	Black Rocker Switch	SPST	On-Off	Spade	2	20	15	2	1.70 × .97 × 1.09	774045
										774045BK†
	Black Rocker Switch	DPST	(On)-Off	Spade	4	20	15	2	1.70 × .97 × 1.09	774120
	Black Rocker Switch	DPST	On-(Off)	Spade	4	20	15	2	1.70 × .97 × 1.09	774121
	Black Rocker Switch	DPDT	On-On	Spade	6	20	15	2	1.70 × .97 × 1.09	774050
	Black Rocker Switch	DPDT	(On)-On	Spade	6	20	15	2	1.70 × .97 × 1.09	774122
	Black Rocker Switch	DPDT	On-Off-On	Spade	6	20	15	2	1.70 × .97 × 1.09	774040
										774040BK†
	Black Rocker Switch	DPDT	(On)-Off-On	Spade	6	20	15	2	1.70 × .97 × 1.09	774123
	Black Rocker Switch***	DPDT	(On)-Off-(On)	Spade	6	15	10*	3/4**	1.70 × .97 × 1.09	774054
										774054BK†
	Red Lighted Rocker*** Switch	DPST	On-Off	Spade	4	15	10*	3/4**	1.70 × .97 × 1.09	774056
	Amber Lighted Rocker*** Switch	DPST	On-Off	Spade	4	15	10*	3/4**	1.70 × .97 × 1.09	774055



( ) Denotes momentary action

\*Amps 250 VAC

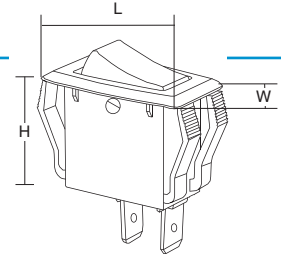
\*\*HP 125-250VAC




†Bulk package of 100



## 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
- Miniature Rockers fit .520 in. × .776 in. panel cut outs
- Plain and lighted versions available
- Operating temperature: 32°F to 185°F (0°C to 85°C)
- Bulk packaging of 100 available upon request



Product	Description	Rocker	Poles	Circuitry	Termination Style	No. of Terminals	Ratings	Dimensions (L" × W" × H")	Cat. 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 × 68 × .77	774038
			SPDT	On-On	Spade	3			774049
			SPDT	On-Off-On	Spade	3			774049BK†
									774059
									774059BK†
	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 × 68 × .77	774039
	Appliance Rocker Switch**	Visi-Red, Printed On-Off Vertical	SPST	On-Off	Spade	2	16 Amp 125 VAC, 10 Amp 250 VAC, 3/4 HP 125-250 VAC	1.24 × 68 × .72	774047
	Appliance Rocker Switch**	Visi-Red	SPST	On-Off	Spade	2	16 Amp 125 VAC, 10 Amp 250 VAC, 3/4 HP 125-250VAC	1.24 × 68 × .72	774052
	Miniature Rocker Switch	Red Lighted	SPST	On-Off	Spade	3*	16 Amp 1/3 HP 125 VAC, 10 Amp 1/2 HP 250 VAC	.83 × .59 × .50	774048

\*\*  

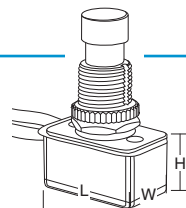
†Bulk Package of 100

\*3rd terminal to power lighted rocker



## 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
- Bulk packaging of 100 available upon request

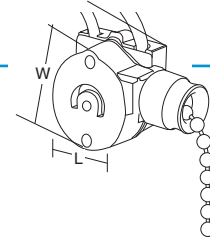







Product	Description	Actuator	Poles	Circuitry	Termination Style	No. of Terminals	Ratings	Dimensions (L" × W" × H")	Cat. No.
	Miniature Push-Button Switch*	Black Plastic	SPST	On-Off	Wire Lead	2	6 Amp 125VAC, 1 Amp 250VAC, 10 Amp 14VDC	.66 × .53 × .32	<b>774082</b>
	Round Body Push-Button Switch**	Black Plastic	SPST NO	(On)-Off	Screw	2	3/4 Amp 125VAC/DC, 1/4 Amp 250VAC/DC	.66 Dia. × 1.89	<b>774083</b>
	Round Body Push-Button Switch**	Black Plastic	SPST NC	On-(Off)	Screw	2	3/4 Amp 125VAC/DC, 1/4 Amp 250VAC/DC	.66 Dia. × 1.89	<b>774084</b>
	Momentary Contact Push-Button Switch	Black Plastic	SPST NO	(On)-Off	Screw	2	6 Amp 120VAC, 3 Amp 240VAC	.88 × .54 × .35	<b>774022</b>
	Momentary Contact Push-Button Switch	Red Plastic	SPST NC	On-(Off)	Screw	2	3 Amps 120VAC, 1.5 Amp 240VAC	.88 × .54 × .35	<b>774023</b>
	Maintained Contact Push-Button Switch	Black Plastic	SPST	On-Off	Wire Leads	2	8 Amp 125VAC/DC, 4 Amp 250VAC/DC, 10 Amp 125VAC, 1/3 HP 125VAC	.98 × .64 × .62	<b>774021</b>
	Maintained Contact Push-Button Switch*	Nickel Plated	SPST	On-Off	Wire Leads	2	6 Amp 125VAC, 3 Amp 250VAC	.97 × .80 × .36	<b>774024</b>
	Maintained Contact Push-Button Switch*	Brass Plated	SPST	On-Off	Wire Leads	2	6 Amp 125VAC, 3 Amp 250VAC	.97 × .80 × .36	<b>774025</b>
	Maintained Contact Push-Button Switch**	Nickel Plated	SPST	On-Off	Screw	2	6 Amp 125VAC/DC, 3 Amp 250VAC/DC	1.18 × .52 × .54	<b>774080</b>
	Maintained Contact Push-Button Switch**	Nickel Plated	SPST	On-Off	Screw	2	15 Amp 125VAC, 10 Amp 250VAC	.92 × .66 × .46	<b>774081</b>
	Momentary Contact Push-Button Switch**	Nickel Plated	SPST NO	(On)-Off	Screw	2	15 Amp 125VAC, 10 Amp 250VAC	1.38 × .58 × .60	<b>774085</b>
	Momentary Contact Push-Button Switch**	Nickel Plated	SPST NC	On-(Off)	Screw	2	15 Amp 125VAC, 10 Amp 250VAC	1.38 × .58 × .60	<b>774086</b>



## Lever and 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
- Bulk packaging of 100 available upon request

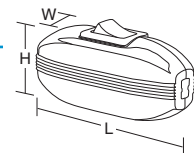




Product	Description	Pull-Chain Color	Poles	Circuitry	Termination Type	Circuit	Rating			Dimensions (L" x W" x H")	Cat. No.
							Amps 125 VAC	Amps 250 VAC	Amps 125 VL		
	All-Angle Lever Switch*	Nickel	SPST	On-Off	Wire Leads	2 Pos - 2 Wire	6	3	—	1.50 x 1.28 x .50	774035
	Pull Chain	Nickel	SPST	On-Off	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
	2-Speed Pull Chain*	Brass	SPDT	Off-On-On	Push-In	3 Pos - 3 Wire	6	3	6	1.43 x 1.25 x .73	774033
	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
											774037BK†



## Cord Switches

- Place your lighting controls in a convenient location with a lamp cord toggle switch
- Available in brown or ivory
- Bulk packaging available upon request



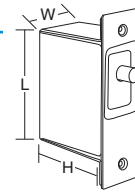
Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Cat. No.
	Cord Switch	Ivory	SPST	On-Off	Pass Thru	6 Amp 125VAC, 3 Amp 250VAC, 3 Amp 125VT	1.38 x .62 x .73	774072
	Cord Switch	Brown	SPST	On-Off	Pass Thru	6 Amp 125VAC, 3 Amp 250VAC, 3 Amp 125VT	1.38 x .62 x .73	774071
	Cord Toggle Switch	Ivory	SPST	On-Off	Pass Thru	10 Amp 125VAC, 5 Amp 250VAC	2.50 x .83 x 1.28	774074
	Cord Toggle Switch	Brown	SPST	On-Off	Pass Thru	10 Amp 125VAC, 6 Amp 250VAC	2.50 x .83 x 1.28	774073




†Bulk Package of 100



## Door and Slide Switches

- 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

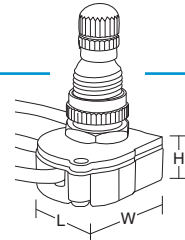






Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Cat. No.
	Slide Switch	Black Slide	SPST	On-Off	Solder Terminals	10 Amp 125VAC, 5 Amp 250VAC	1.38 x .44 x .30	<b>774051</b>
	AC/DC Door Switch Kit	White Button	SPST	Normally On-(Off)	Wire Leads	10 Amp 1/3 HP 125/250VAC	1.25 x 2.75 x 2.0	<b>774026K</b> <b>774026KBK†</b>
	Door Replacement Switch	White Button	SPST	Normally On-(Off)	Wire Leads	10 Amp 1/3 HP 125/250VAC	1.17 x .69 x .98	<b>774026</b> <b>774026BK†</b>

  ( ) Denotes momentary action †Bulk package of 25

## 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
- Bulk packaging available upon request



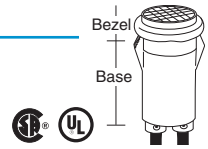
Product	Description	Color	Poles	Circuitry	Termination Style	Ratings	Dimensions (L" x W" x H")	Cat. No.
	Rotary Switch	Black Plastic	SPST	On-Off	Wire Leads	3 Amp 125VAC, 1.5 Amp 250VAC	.60 Dia x .730 overall height	<b>774063B</b> <b>774063BK†</b>
	Rotary Switch	Brass Plated	SPST	On-Off	Wire Leads	6 Amp 125VAC, 3 Amp 250VAC	.97 x .80 x .39	<b>774061</b>
	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	<b>774062</b>
	Rotary Switch	Black Plastic	SPST	On-Off	Wire Leads	6 Amp 125VAC, 3 Amp 250VAC	.89 x .79 x .31	<b>774069</b>


†Bulk Package of 100



## 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



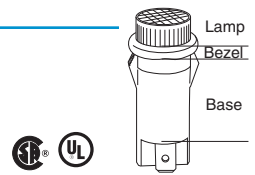
Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs)	Lamp Type	Termination Style	Height (Base" x Bezel")	Cat. No.
	Flush Indicator Light	Red	14V	1.2	.08	50,000	Incandescent	6" Wire Leads	.91 x .10	775121*
	Flush Indicator Light	Red	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10	776121*
	Flush Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10	777121*
										777121BK†
	Flush Indicator Light	Green	125V	1/3	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10	777221*
										777221BK†
	Flush Indicator Light	Amber	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10	777321*
										777321BK†



\*VDE certified

†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  
Polycarbonate lens: 135°C



Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs)	Lamp Type	Termination Style	Height (Base" x Bezel")	Cat. No.
	Raised Indicator Light	Red	14V	1.2	.08	50,000	Incandescent	6" Wire Leads	.91 x .10 x .20	775111*
	Raised Indicator Light	Red	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	776111*
	Raised Indicator Light	Green	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	776211*
	Raised Indicator Light	Amber	28V	1.2	.04	25,000	Incandescent	6" Wire Leads	.91 x .10 x .20	776311*
	Raised Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	777111*
										777111BK†
	Raised Indicator Light	Green	125V	1/3	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10 x .20	777211*
										777211BK†
	Raised Indicator Light	Amber	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	777311*
	Raised Indicator Light	Blue	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	777411*
	Raised Indicator Light	Clear	125V	1/3	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	777511*
	Raised Indicator Light	Red	250V	1/2	2mA Max.	25,000	Neon	6" Wire Leads	.91 x .10 x .20	778111*
	Raised Indicator Light	Green	250V	1/2	2mA Max.	15,000	Neon	6" Wire Leads	.91 x .10 x .20	778211*
	Raised Indicator Light	Green	28V	1.2	.04	25,000	Incandescent	.187" Spade	1.09 x .10 x .20	776212BK†
										776112
	Raised Indicator Light	Red	28V	1.2	.04	25,000	Incandescent	.187" Spade	1.09 x .10 x .20	776112BK†
	Raised Indicator Light	Amber	28V	1.2	.04	25,000	Incandescent	.187" Spade	1.09 x .10 x .20	776312BK†
	Raised Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	.187" Spade	1.09 x .10 x .20	777112
										776112BK†
	Raised Indicator Light	Green	125V	1/3	2mA Max.	15,000	Neon	.187" Spade	1.09 x .10 x .20	777212
										777212BK†
	Raised Indicator Light	Amber	125V	1/3	2mA Max.	25,000	Neon	.187" Spade	1.09 x .10 x .20	777312BK†

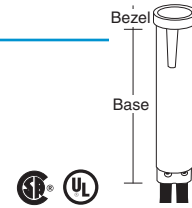
\*VDE certified


†Bulk Package of 100



## Miniature Indicator Lights

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



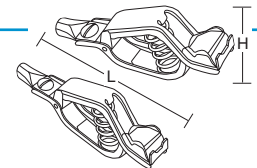
Product	Description	Lens Color	Lamp Voltage	Watts	Amp Rating	Average Life (hrs)	Lamp Type	Termination Style	Height (Base" × Bezel")	Cat. No.
	Miniature Indicator Light	Red	125V	1/3	2mA Max.	25,000	Neon	6 in. Wire Leads	1.43 × .13	<b>777131</b>
	Miniature Indicator Light	Green	125V	1/3	2mA Max.	15,000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






## Indicator Light Part No. System

Series	Voltage	Color	Mounting Diameter Lens Style	Terminators
<b>77</b>	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	—	—

## Battery Clips

- Great for testing and many other electrical applications
- Insulated grips are color-coded for positive (red) and negative (black) identification
- For screw and/or crimp connections



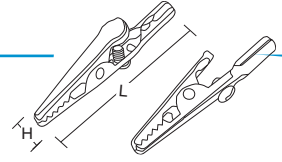
Product	Description	Amps	Dimensions (L" × H")	Jaw Opening	Wire Diameter	Qty.	Cat. No.
	Miniature General Purpose Clip	5	1-17/32 x 15/32	5/16 in.	9/64 in.	2	<b>770218L</b>
	General Purpose Clip	10	2 x 5/8	1/2 in.	3/16 in.	1 Red/1 Black	<b>170207L</b>
	Test and Battery Clip	20	2-1/2 x 5/8	5/8 in.	3/16 in.	1 Red/1 Black	<b>170208L</b>
	Test and Battery Clip	30	2-1/2 x 5/8	5/8 in.	3/16 in.	1 Red/1 Black	<b>170209L</b>
	Copper Test & Battery Clips*	40	2-7/16 x 11/16	5/8 in.	3/16 in.	2	<b>770217L</b>
	Copper Test & Battery Clips*	75	3 x 15/16	3/4 in.	9/32 in.	2	<b>770216L</b>
	Copper Test & Battery Clips*	100	4-7/64 x 19/16	1-1/16 in.	11/30 in.	2	<b>770215L</b>
	Insulated Grips for 770217L	—	3-1/2 x 3/4 ID	—	—	1 Red/1 Black	<b>770223L</b>
	Insulated Grips for 770216L	—	3-7/8 x 11/64 ID	—	—	1 Red/1 Black	<b>770219L</b>
	Insulated Grips for 770215L	—	5 x 1-13/32 ID	—	—	1 Red/1 Black	<b>770221L</b>




\*Insulators sold separately



## Alligator Clips

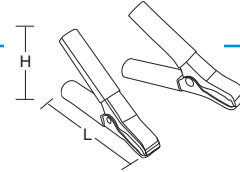
- Great for temporary connections, testing wires and troubleshooting projects
- Spring-loaded, grab-tight jaws make these clips quick and easy-to-use
- For screw and/or crimp connections




Product	Description	Amps	Dimensions (L × H)	Jaw Opening	Wire Gauge	Qty.	Cat. No.
	Non-Insulated	—	2 in. × 7/16 in.	5/16 in.	#22 - #14	4	770200L
	Insulated Barrel	—	2-1/2 in. × 7/16 in.	5/16 in.	#22 - #14	1 Red/1 Black	770204L
	Fully Insulated	—	2-1/2 in. × 7/16 in.	5/16 in.	#22 - #14	1 Red/1 Black	770205L

## Plier-Type Battery Clamps

- Great for battery charging and test equipment
- Insulated grips are color-coded for positive (red) and negative (black) identification
- For crimp or solder connections



Product	Description	Amps	Dimensions (L" × H")	Jaw Opening	Wire Dia.	Qty.	Cat. No.
	Plier-Type Battery Clip, Steel	50	2-7/8 in. x 2 in.	1-1/8 in.	9/32 in.	1 Red/1 Black	770213L
	Plier-Type Battery Clip, Copper	75	2-7/8 in. x 2 in.	1-1/8 in.	9/32 in.	1 Red/1 Black	770212L
	Plier-Type Battery Clip, Copper	400	6 in. x 4-1/2 in.	1-9/16 in.	9/16 in.	1 Red/1 Black	770225L



## How to Select Resurfacer Grade

### Small Motor and Pocket Resurfacers

Grade code letters designate the following grade combinations:

- |                        |                        |
|------------------------|------------------------|
| <b>A</b> Medium/Finish | <b>G</b> Coarse/Medium |
| <b>B</b> Coarse/Finish | <b>H</b> Medium/Polish |
| <b>D</b> Finish/Polish |                        |

### All Other Resurfacers

Resurfacers for commutators and copper-alloy slip rings are made in five grades:

- X** Extra coarse—very fast cutting, for “hogging” off excessive copper
- 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

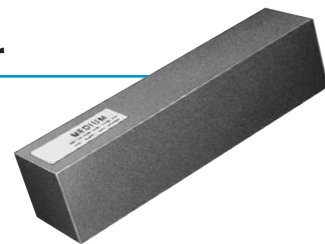


Size (In.)	Grades	Cat. No.
3/4 x 1/2 x 3/8	A, B, D	80-012*

\*Add grade letter suffix to Cat. No. Please allow 2-3 weeks for delivery.

## Tool-Type Resurfacer

- For use in lathe-turning device
- Two resurfacers required for each grinder



Sizes (In.)	Grades	Cat. No.
3/4 x 3/4 x 3	C, M, F	80-504*
1 x 1-1/2 x 6-1/2		80-454*
1 x 2 x 8		80-461*
2 x 2 x 8		80-475*

\*Add grade letter suffix to Cat. No. Please allow 2-3 weeks for delivery.

## Pencil-Type Resurfacer

- For use on fans, signal motors, auto generators, locomotive headlight motors and other fractional horsepower motors

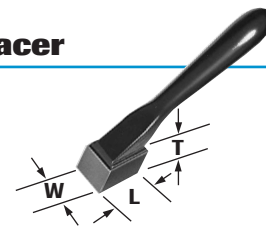


Size (In.)	Grades	Cat. No.
5/8 x 3/8 x 6	C, M, F, P	80-075*

\*Add grade letter suffix to Cat. No. Please allow 2-3 weeks for delivery.

## Tramway-Handle Resurfacer

- Handle shaped to ensure secure grip
- 10-1/2 in. handle permanently mounted at 45° angle



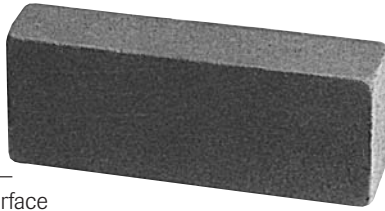
Sizes (In.)	Grades	Cat. No.
2 x 1-1/2 x 2	C, M, F	80-255*
2 x 2 x 2		80-265*

\*Add grade letter suffix to Cat. No. Please allow 2-3 weeks for delivery.



## Powr-Polish™ Flexible Abrasive

- 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



Sizes (In.)	Cat. No.
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 2-3 weeks for delivery.

## Brush Seater and Commutator Cleaner



- 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

Sizes (In.)	Grades	Cat. No.
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, H	23-003*
1/2 x 3/8 x 4-3/4	M	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 4	—	23-039S
3 x 2 x 6	—	23-041S
3 x 2 x 8	—	23-042S

\*Add grade letter suffix to Cat. No.

Please allow 2-3 weeks for delivery.

## Commutator Smoothie® Resurfacing Tool

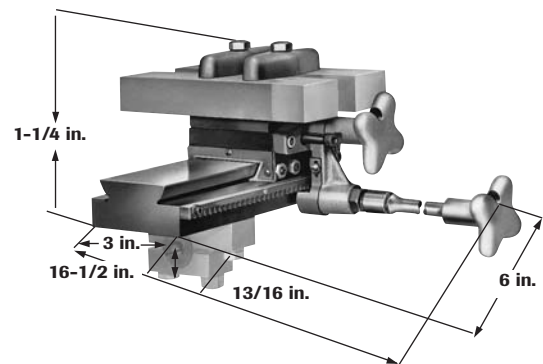


- Designed to smooth commutators of auto generators, starting motors and other similar equipment
- 8-1/2 in. plastic handle with a 5/16 in. x 7/8 in. x 11/16 in. resurfacer on each end
- Features one polish-grade and one finish-grade resurfacer
- Bent handle reaches into any motor frame
- Non-conductive for user safety

Description	Cat. No.
Commutator Smoothie® Resurfacing Tool	80-033

Please allow 2-3 weeks for delivery.

## Midget Precision Grinder



- Right-angle rack and pinion allows for operation in small areas
- 6 in. base — recommended for commutator widths up to 9-1/4 in. (includes extra 1 in. travel obtained by setting resurfacers at slight angle)
- Includes convenient carrying case
- Two tool-type resurfacers required — 80-454 recommended

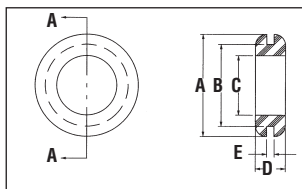
Description	Cat. No.
Midget Precision Grinder	24-033

Order tool-type resurfacers and brush arm supports separately.



## Grommets\*

- 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

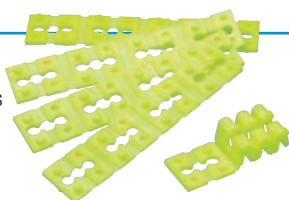


Description	A	B	C	D	E	Qty.	Cat. No.
1/4" Grommets	9/16	.37	1/4	.28	3/32	6	774114
1/4" Grommets	9/16	.37	1/4	.28	3/32	25	774116
1/4" Grommets	9/16	.37	1/4	.28	3/32	1,000	774114BK
3/8" Grommets	43/64	.49	3/8	.28	1/16	5	774138
3/8" Grommets	43/64	.49	3/8	.28	1/16	25	774137
1/2" Grommets	55/64	.69	1/2	.25	1/16	4	774112
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	3	774134
3/4" Grommets	15/64	1.0	3/4	.31	1/16	25	774136

\*Buchanan branded

## 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
- Also works as a shim

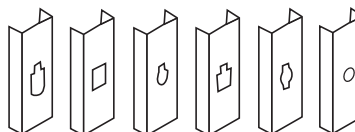
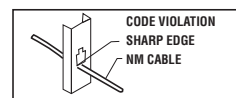
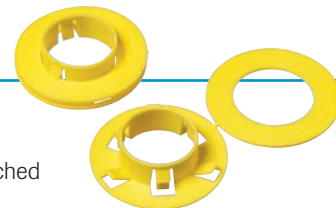


Description	Qty.	Cat. No.
Caterpillar	5	772450
Caterpillar	25	172451
Caterpillar	500	772451

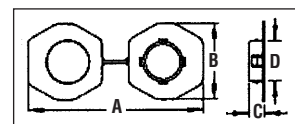
\*Buchanan branded

## 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



Common hole configurations in metal studs.



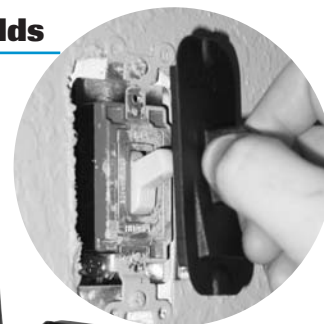
Description	A	B	C	D	Qty.	Cat. No.
Stud Bushing	5.670	2.50	.505	1.30	25	772271

## EZ Mask™ Paint Shields

#20-100  
#20-110



#20-200  
#20-210



- Reusable cover saves masking time and clean up
- Snap-on to protect from paint drips and overspray
- Works in side-by-side (multi-gang) applications
- Protects entire device when rolling, brushing or spraying

Shields are intended to cover most standard outlets, GFCI outlets, standard switches and decorator switches to protect them from paint.



Description	Qty.	Cat. No.
Switch Paint Cover	10	20-110
Switch Paint Cover	100	20-100
Receptacle Paint Cover	10	20-210
Receptacle Paint Cover	100	20-200






**Test & Measurement**





## Multimeter Selection Guide

	310		320 Series			340		360		490		600	610	
	61-310	61-312	61-320	61-322	61-324	61-340	61-342	61-360	61-361	61-494	61-495	61-605	61-610	61-614
<b>MULTIMETER SELECTION GUIDE</b>														
<b>MEASUREMENT FUNCTIONS</b>														
AC & DC Voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC Current		•		•	•	•	•	•	•	•	•			
DC Current	•	•	•	•	•	•	•	•	•	•	•		•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LV Resistance										•	•			
Audible Continuity	•	•	•	•	•	•	•	•	•	•	•	•		•
Diode Test	•	•	•	•	•	•	•	•	•	•	•	•		
Capacitance		•	•	•	•	•	•		•	•	•			
Frequency		•	•	•	•	•	•		•	•	•			
Temperature	•	•				•	•			•	•			
Duty Factor						•	•			•	•			
Battery Test	•												•	•
Decibels										•	•			
Phase Rotation								•						
<b>FEATURES</b>														
Display Type (Digital or Analog)	D	D	D	D	D	D	D	D	D	D	D	D	A	A
True RMS			•	•		•		•	•	•				
Auto/Manual Ranging		•	•	•	•	•	•			•	•	•		
Data Hold/Auto Hold	D	D	D	D	D	D	D	D		A	A	D		
Max Hold						•								
Peak Hold			•	•						•	•			
Min/Max			•	•	•	•	•							
Min/Max/Avg										•	•			
Peak Min/Max			•	•	•					•	•			
Relative Mode			•	•	•	•	•			•	•			
High Speed Analog Bar Graph			•	•	•					•	•			
Auto Power Off		•	•	•	•	•	•	•	•	•	•	•		
Backlight			•	•	•	•	•	•	•	•	•			
Low Battery Indication		•	•	•	•	•	•	•	•	•	•	•		
Dual Display										•	•			
Overload Protection on All Ranges	•	•	•	•	•	•	•	•	•	•	•	•		
Data Logging										•	•			
Data Acquisition					•					•	•			
Memory Storage & Recall										•	•			
Optical USB Interface					•					•	•			
Optional ProVision™ Software					•					•	•			
Warranty (years)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>CERTIFICATIONS</b>														
UL 61010 Listed 	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CAT Rating	II	II	IV	IV	IV	III	III	III	III	III	III	II	II	II
CE	•	•	•	•	•	•	•	•	•	•	•	•	•	•



## PlatinumPro®

### Contractor-Grade Multimeters

#### Features

- AC/DC voltage
- Capacitance
- Frequency
- Auto/manual ranging
- Peak min/max
- Max/min
- Relative mode
- Data hold
- Low battery indicator
- Auto power off
- 2-year warranty



61-322  
True RMS,  
AC/DC current



61-320



61-324

True RMS, AC/DC  
current, backlight data  
acquisition and  
USB interface



Data acquisition and analysis with  
320 ProVision™ software for 324.

320 Series

320 Series Specifications		61-320	61-322	61-324
	RANGE & RESOLUTION	BASIC ACCURACY		
AC VOLTAGE	400.0m/4.000/40.00/400.0/750 V	1.3%	1.3%	1.3%
DC VOLTAGE	400.0m/4.000/40.00/400.0/1000 V	0.5%	0.5%	0.5%
AC CURRENT	400.0μ/4000μ/40.00m/400.0m A	—	1.5%	1.5%
DC CURRENT	400.0μ/4000μ/40.00m/400.0m A	1.5% (μA range only)	1.5%	1.5%
RESISTANCE	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	0.7%	0.7%	0.7%
CAPACITANCE	4.000n/40.00n/400.0n/4.000μ/40.00μ/ 400.0μ/4.000m/40.00m F	1.9%	2.0%	2.0%
FREQUENCY	4.000k/40.00k/400.0k/4.000M/40.00M Hz	0.01%	0.1%	0.1%

#### Accessories

Includes	
Test Leads w/Alligator Clips*	
Optional	
Carrying Case	C-290
Current Clamp Adapters (page E-31)	
Magnetic Strap	61-565
ProVision™ Software	61-904
USB Cable	61-905

\*See chart on page F-34 for replacement test leads and fuses.



61-904

320 Series ProVision™  
Software



61-905

Optical USB Cable  
For 320 Series  
Meters



61-565

Magnetic hand strap fits  
Platinum Pro® and 350  
Series Multimeters

Optional magnetic strap  
frees up your hands  
to help you work safe.



# PlatinumPro®

## Industrial-Grade Multimeters

### Features



- True RMS
- Data acquisition
- Data logging
- Data storage
- Frequency
- Capacitance
- Temperature
- Low voltage Ω
- Duty factor
- dBm/dB
- Auto/manual ranging
- Dual display
- Analog bar graph
- Auto power off
- Peak hold
- Min/max/avg
- Relative mode
- 20,000 count high resolution mode
- Backlight
- Low battery indication
- 2-year warranty



61-495

Data logging (40,000 records), thermocouple, software and USB cable interface included



Data acquisition and analysis with 490 ProVision™ software.



61-494

Data logging (6,000 records)



61-565

Magnetic Strap

### Accessories

Includes	
Carrying Case	
Test Leads with Alligator Clips**	
Optional	
Current Clamp Adapters (page E-31)	
Magnetic Strap	61-565
ProVision™ 490 Software*	61-900
USB Cable*	61-902

\*Included with 61-495.

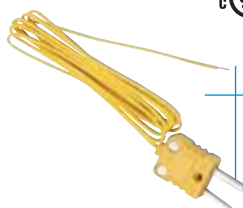
\*\*See chart on page F-34 for replacement test leads and fuses.

490 Series Specifications		61-494	61-495
	RANGE & RESOLUTION	BASIC ACCURACY	
AC VOLTAGE	20.000m/200.00m/2.0000/20.000/200.00/750.0 V	0.7%	0.7%
DC VOLTAGE	20.000m/200.00m/2.0000/20.000/200.00/1000.0 V	0.06%	0.06%
AC CURRENT	20.000m/200.00m/2.0000/10.000 A	0.1%	0.1%
DC CURRENT	20.000m/200.00m/2.0000/10.000 A	0.3%	0.2%
RESISTANCE	200.00/2.0000k/20.000k/200.00k/2.0000M/20.000M/200.00M/2.0000G Ω	0.6%	0.6%
LV RESISTANCE	2.0000k/20.000k/200.00k/2.0000M/20.000M/200.00M Ω	0.3%	0.3%
CAPACITANCE	4.000n/40.00n/400.0n/4.000μ/40.00μ/400.0μ/4.000m/40.00mF	0.9%	0.9%
FREQUENCY	20.000/200.00/2.0000k/20.000k/200.00k/1.0000M Hz	0.01%	0.01%
DUTY FACTOR	20% - 80%	1.0%	1.0%
TEMPERATURE	-150° F to 2200° F (-100° C to 1200° C)	0.1%	0.1%



61-465

Thermocouple Adapter



61-461

Beaded K-type thermocouple



61-902

Optical USB Cable



61-900

490 Series ProVision™ Software



## 340 Series Meters

### Features



- AC/DC voltage
- AC/DC current
- Resistance
- Audible continuity
- Capacitance
- Frequency
- Temperature
- Relative mode
- Backlight
- Min/max
- Data hold
- Low battery indicator
- Auto power off
- 2-year warranty



61-342  
True RMS



61-340

### Accessories

Includes	
Test Leads*	
Thermocouple	TC-340
Optional	
Carrying Case	C-290
600A AC/DC Clamp Adapter	61-334
Current Clamp Adapters	61-451

\*See chart on page F-34 for replacement test leads and fuses.

490 Series Specifications		61-340	61-342
	RANGE & RESOLUTION	BASIC ACCURACY	
AC VOLTAGE	4.000/40.00/400.0/1000 V	1.5%	1.5%
DC VOLTAGE	400.0m/4.000/40.00/400.0/1000 V	0.5%	0.5%
CURRENT	400.0μ/4000μ/40.00m/400.0m/4.000/10.00A AC/DC	1.5%	1.5%
RESISTANCE	400.0/4.000k/40.00k/400.0k/4.000M/40.00M Ω	1.0%	1.0%
CAPACITANCE	40.00n/400.0n/4.000μ/ 40.00μ/400.0μ F	3.0%	3.0%
FREQUENCY	10.000/100.00/1.000k/10.00k/100.0k/1.000M/4.000M Hz	0.3%	0.3%
TEMPERATURE	-4° F to 1382° F (-20° C to 750° C)	3.0%	3.0%





## Test-Pro® Contractor-Grade Multimeters

### Features



- AC/DC voltage
- AC/DC current
- Resistance
- Audible continuity
- Manual ranging
- Rugged construction
- Auto power off
- Low battery indication
- 2-year warranty



61-361

True RMS,  
phase rotation,  
capacitance,  
frequency



61-360

Max hold,  
data hold

### Accessories

Includes	
Test Leads* w/Alligator Clips	
Optional	
Carrying Case	C-290
Current Clamp Adapters (page E-31)	
Magnetic Strap	61-565

\*See chart on page F-34 for replacement test leads and fuses.

360 Series Specifications		61-360	61-361	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	200.0m/2000m/20.00/200.0/600 V	1.0%	200.0m/2000m/20.0/600 V	2.0%
DC VOLTAGE	200.0m/2000m/20.00/200.0/600 V	0.5%	200.0m/2000m/20.00/200.0/600 V	1.2%
AC CURRENT	200.0μ/20.00m/200.0m/10.00 A	1.5%	2.000 A	3.0%
DC CURRENT	200.0μ/20.00m/200.0m/10.00 A	1.0%	2.000 A	2.5%
RESISTANCE	200.0/2.000k/20.00k/200.0k/2.000M/20.00M Ω	1.0%	200.0/2.000k/20.00k/200.0k/20.00M/200.0M Ω	1.0%
CAPACITANCE	—	—	20.00μ/200.0μ/2.000m/20.00m F	4.0%
FREQUENCY	—	—	10.0-100.0k Hz	0.50%
PHASE ROTATION	—	—	80-500V (50-500Hz)	—



61-565

Magnetic Strap



## Pocket Meter

### Features



- Low cost, multi-function
- Convenient pocket size
- Built-in test stand
- Overload protection on all ranges
- 2-year warranty



61-605

Audible continuity, auto power off, test lead storage



Specifications 61-605		
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	200.0m/2.000/20.00/200.0/600 V	4.0%
DC VOLTAGE	200.0m/2.000/20.00/200.0/600 V	2.0%
RESISTANCE	200.0/2.000k/20.00k/200.0k/2.000M/20.00M $\Omega$	3.0%

## 310 Series Residential Meters

### Features



- AC/DC voltage
- Current
- Resistance
- Audible continuity
- Temperature
- Data hold
- Diode test
- Large numbers displayed
- Overload protection on all ranges
- Rubber boot
- 2-year warranty

61-310

Manual ranging, tests batteries, DC current



61-312

Auto ranging, AC/DC current, capacitance, frequency, auto power off, low battery indication



### Accessories

Includes	
Test Leads*	
Thermocouple	TC-310

\*See chart on page F-34 for replacement test leads and fuses.

310 Series Specifications 61-310			61-312		
	RANGE & RESOLUTION	ACCURACY		RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	200.0/600 V	1.2%		4.000/40.00/400.0/600 V	1.2%
DC VOLTAGE	200.0m/2.000/20.00/200.0/600 V	0.5%		400.0m/4.000/40.00/400.0/600 V	0.5%
CURRENT	200.0m/10.00 ADC	1.5%		400.0 $\mu$ /4.000mA/40.00mA/400.0mA AC/DC	1.5%
RESISTANCE	200.0/2.000k/20.00k/200.0k/20.00M $\Omega$	1.0%		400.0/4.000k/40.00k/400.0k/4.000M/40.00M $\Omega$	1.0%
CAPACITANCE	—	—		40.00n/400.0n/4.000 $\mu$ /40.00 $\mu$ /400.0 $\mu$ F	3.0%
FREQUENCY	—	—		10.00/100.0/1.000k/10.00k/100.0k/1.000M/10.00M Hz	0.3%
TEMPERATURE	-4-1382°F (-20-750°C)	2.5%		-4-1382°F (-20-750°C)	2.5%





## Analog Multimeters

### Features

- Multi-color analog display with mirrored scale
- High-impact thermoplastic case
- Battery test
- 2-year warranty

61-614

Audible continuity,  
built-in stand



61-610

Pocket size,  
diode protected



### Accessories

#### Includes

Test Leads\*


\*See chart on page F-34 for replacement test leads and fuses.

610 Series Specifications			61-610		61-614	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY		
AC VOLTAGE	10/50/250/500 V	+/- 4.0% Full Scale	10/50/250/1000 V	+/- 4.0% Full Scale		
DC VOLTAGE	10/50/250/500 V	+/- 3.0% Full Scale	2.5/10/50/250/1000 V	+/- 3.0% Full Scale		
DC CURRENT	500 $\mu$ /50m/250m A	+/- 3.0% Full Scale	5m/50m/500m/20 A	+/- 3.0% Full Scale		
RESISTANCE	1 M $\Omega$ Full Scale 5 k $\Omega$ Mid Scale	+/- 3.0% Arc Length	10k/100k/10M $\Omega$ Full Scale 50/500/50k $\Omega$ Mid Scale	+/- 3.0% Arc Length		
DECIBELS	-20 to +56 dB	—	-8 to +62 dB	—		
BATTERY TEST	—	—	1.5 , 9.0 VDC	—		





## Clamp Meter Selection Guide

	450	700 Series			61-710	740		760 Series			770	
	61-452	61-701	61-702	61-704	61-710	61-744	61-746	61-764	61-766	61-768	61-772	61-774
<b>CLAMP METER SELECTION GUIDE</b>												
<b>MEASUREMENT FUNCTIONS</b>												
AC Voltage	•	•	•	•	•	•	•	•	•	•	•	•
DC Voltage		•	•	•		•	•	•	•	•	•	•
AC Current	•	•	•	•	•	•	•	•	•	•	•	•
DC Current										•		•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•
Audible Continuity	•	•	•	•		•	•	•	•	•	•	•
Diode Test		•	•	•								
Capacitance		•	•	•					•			•
Frequency		•							•			
Leakage Current	•											
<b>FEATURES</b>												
Display Type (Analog or Digital)	D	D	D	D	A	D	D	D	D	D	D	D
AC Current Capacity	60	200	200	200	600	600	600	660	660	660	1000	1000
DC Current Capacity										660		1000
True RMS			•				•	•	•	•	•	•
Auto/Manual Ranging						•	•	•	•	•	•	•
Data Hold	•	•	•	•		•	•	•	•	•	•	•
Max Hold	•	•	•									
Inrush Current	•							•	•	•	•	•
Min/Max							•	•	•	•	•	•
DCA Zero									•			•
Pointer Lock					•							
Auto Power Off	•	•	•	•		•	•	•	•	•	•	•
Non-Contact Voltage Indication		•	•	•		•	•					
Harmonics Indicator			•	•								
Vibration Mode			•	•								
Backlight			•			•	•	•	•	•	•	•
Low Battery Indication	•	•	•	•		•	•	•	•	•	•	•
High Voltage Warning		•	•	•				•	•	•	•	•
Overload Protection	•	•	•	•		•	•	•	•	•	•	•
Conductor Size - Inches (mm)	1.2" (30)	1.3" (33)	1.3" (33)	1.3" (33)	1.2" (30)	1.5" (38)	1.5" (38)	1.4" (36)	1.4" (36)	1.4" (36)	2.0" (51)	2.0" (51)
Warranty (years)	2	2	2	2	2	2	2	2	2	2	2	2
<b>CERTIFICATIONS</b>												
UL 61010 Listed 		•	•	•		•	•	•	•	•	•	•
CAT Rating		III	III	III		III	III	IV	IV	IV	IV	IV
CE	•	•	•	•	•	•	•	•	•	•	•	•



## 4-in-1 Test Tools

### Features

- 200AAC current capability
- Non-contact voltage (40-600VAC)
- Capacitance
- Low battery indication
- Overload protection on all ranges
- Integral lead storage
- Audible dangerous voltage warning on all ranges
- Auto power off
- Ergonomic hourglass shape
- Compact clamp head
- 2-year warranty

61-704

True RMS, backlight, vibration mode to verify AC voltage, harmonics indicator, max hold



### 200 Amp Clamp/Multimeter

Use it for testing a variety of electrical parameters on branch circuits or at receptacles.



### Non-Contact Voltage Tester

Use it for one-touch indication of power without test leads.



### Voltage Tester with Shaker

Use it for tactile feel of AC voltage.



### Harmonics Tester

Use it to ensure that a circuit contains clean power, free of harmonic distortion.

61-702

Vibration mode to verify AC voltage, harmonics indicator, data hold, max hold



61-701

Frequency, data hold, max hold



### Accessories

#### Includes

Carrying Case

Silicone Test Leads\*

\*See chart on page F-34 for replacement test leads and fuses.

700 Series Specifications		61-701		61-702 & 61-704	
	RANGE & RESOLUTION	BASIC ACCURACY	RANGE & RESOLUTION	BASIC ACCURACY	
AC VOLTAGE	200.0/600 V	1.2%	2000m/200.0/750 V	1.2%	
DC VOLTAGE	20.00/200.0/600 V	0.5%	2000m/200.0/1000 V	0.5%	
AC CURRENT	200.0 A	3.0%	200.0 A	3.0%	
RESISTANCE	200.0/200.0k $\Omega$ Scale	1.0%	200.0/200.0k $\Omega$	1.0%	
CAPACITANCE	200.0 $\mu$ F	3.0%	200.0 $\mu$ F	3.0%	
FREQUENCY	2.000k/20.00k/40.00k Hz (Auto)	0.1%	—	—	

Jaw opening is 1.3" (33mm).





## 600 Amp Clamp Meters

### Features



- Measures up to 600AAC
- Non-contact voltage indicator (70V-600VAC)
- Tapered jaws with hook tip
- Auto/manual ranging
- Data hold
- Auto power off
- Low battery indicator
- 2-year warranty

61-746  
True RMS



61-744



### Accessories

#### Includes

Carrying Case  
Standard Test Leads

\*See chart on page F-34 for replacement test leads and fuses.

740 Series Specifications		61-744	61-746
	RANGE & RESOLUTION	BASIC ACCURACY	
AC CURRENT	40.00/400.0/600A	1.7%	1.7%
AC VOLTAGE	400.0/600 V	1.2%	1.2%
DC VOLTAGE	400.0/600 V	0.5%	0.5%
RESISTANCE	400.0/4.000k/ 40.00k 400.0k/4.000M/40.00M Ω	1.0%	1.0%

Jaw opening is 1.25" (32mm).



*Compact jaw for use in tight locations.*



## 660 Amp Clamp Meters w/TightSight™ bottom display

### Features



- Measures up to 660AAC
- Voltage-presence warning on all lead functions (selectable audible)
- Bright, bold backlit display
- Tapered jaws with hook tip
- Max/min
- Inrush current
- Audible continuity
- Selectable auto power off
- Data hold
- Low battery indicator
- 2-year warranty



61-764



61-766



True RMS,  
Capacitance,  
Frequency  
measurement via  
clamp head or leads,  
66AAC low range

61-768



660 ADC current  
measurements,  
True RMS

760 Series	61-764	Range & Resolution 61-766	61-768	Accuracy
AC CURRENT		66.00/660.0 A	660.0 A	1.7%
DC CURRENT	—	—	660.0 A	1.5%
AC VOLTAGE		660m/6.600/66.00/660.0/750 V		1.2%
DC VOLTAGE		660m/6.600/66.00/660.0/1000 V		0.5%
RESISTANCE		660.0/6.600k/66.00k/660.0k/6.6M/10M Ω		1.0%
CAPACITANCE	—	6.600μ/66.00μ/660.0μ F	—	3.0%
FREQUENCY	—	20 - 400 Hz Sensitivity: ≥5A for 20-100 Hz ≥10A for 100-400 Hz	—	0.1%

Jaw Size 1.42" (36 mm)



### Accessories

Includes	
Carrying Case	C-760
Test Leads w/Alligator Clip	TL-104

### Safety First!

The complete line of industrial clamps from IDEAL was designed to set a new standard for safety technology. It starts with the revolutionary TightSight™ display. It allows an electrician to keep his head and face out of potentially dangerous panels while viewing the measurement. The high voltage indicator is another feature not to be taken for granted. It indicates the presence of voltage through the test leads even with the dial set to the wrong function. The CAT III and IV ratings, rugged construction and UL listing should give every electrician the confidence to go about the job without worrying about equipment safety.



## 1000 Amp Clamp Meters w/TightSight™ bottom display

### Features



- Measures up to 1000AAC
- Voltage-presence warning on all lead functions (selectable audible)
- Bright bold backlit display
- Tapered jaws with hook tip
- True RMS
- Max/min
- Inrush current
- Audible continuity
- Selectable auto power off
- Data hold
- Low battery indicator
- 2-year warranty



61-774

AC/DC current,  
capacitance

Exclusive TightSight™  
Display

770 Series	Range & Resolution		Accuracy
	61-772	61-774	
AC CURRENT	66.00/660.0/1000 A		1.7%
DC CURRENT	—	660.0/1000 A	1.5%
AC VOLTAGE	660m/6.600/66.00/660.0/750 V		1.2%
DC VOLTAGE	660m/6.600/66.00/660.0/1000 V		0.5%
RESISTANCE	660.0/6.600k/66.00k/660.0k/ 6.6M/10M Ω		1.0%
CAPACITANCE	—	6.600μ/66.00μ/ 660.0μ F	3.0%

Jaw Size 2" (51 mm)



### Accessories

#### Includes

- Carrying Case
- Test Leads w/Alligator Clip Lead

\*See chart on page F-34 for replacement test leads and fuses.



61-772

770 Series



## Analog Clamp Meter

### Features

- 600AAC current capability
- Ohms scale
- Rotary drum
- Broad frequency response (50-400Hz)
- Analog display
- Pointer lock
- 2-year warranty

Includes carrying case



61-710

### Accessories

#### Includes

Carrying Case  
Test Leads

\*See chart on page F-34 for replacement test leads and fuses.

Meter Specifications		61-710
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	150/300/600 V	3.0% F.S.
AC CURRENT	6/20/60/200/600 A	3.0% F.S.
RESISTANCE	2k $\Omega$	3.0% F.S.



## Leakage Current Clamp Meter

### Features



- 0.01mA - 400.0mA  
0.01A - 60.0A
- Data hold
- Analog bar graph
- Min/max
- 2-year warranty

Includes carrying case



61-452

Low AC Current  
Clamp, determines  
leakage at low  
levels

### Accessories

#### Includes

Carrying Case  
Test Leads

\*See chart on page F-34 for replacement test leads and fuses.

Meter Specifications		61-452
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	400.0 V	1.5%
AC CURRENT	40.00m/400.0m/4.000/40.00/60.0 A	2.0%
RESISTANCE	400.0 $\Omega$	1.0%





## Combo Cases™

### Features

- Top selling tools in rugged cases
- Unmatched value
- Large storage compartments
- 2-year warranty

### 61-2000

#### Tester Combo Case™ Includes:

- #61-086 Vol-Con® XL Voltage Tester (E-27)
- #61-534 Circuit Breaker Finder (E-24)
- #61-063 Non-Contact Voltage Tester (E-29)



### 61-2001

#### Meter Combo Case™ Includes:

- #61-340 Multimeter (E-5)
- #61-744 600 Amp Clamp (E-11)



### 61-2002

#### Clamp Combo Case™ Includes:

- #61-766 TightSight™ Clamp Meter (E-12)
- #61-521 Phase Rotation Tester (E-30)





## SureTest® Open/Closed Circuit Tracers

### Features



- Identifies breakers and fuses
- Pinpoints opens and shorts
- Traces wires
- "0-99" display of signal strength
- Audible intensifies in tone/pitch
- Can be used on circuits 0-600V AC/DC
- Works on energized or de-energized circuits
- Four modes of sensitivity – search high, search low, trace and breaker
- Peak bar graph
- 2-year warranty



### 61-954

Standard LED receiver, transmitter, test lead set



### 61-958

Super bright rotating OLED display receiver, transmitter, test lead set, inductive clamp, battery pack



The only circuit tracer with SwivelDisplay™



### 61-956

Super bright rotating OLED display, transmitter, test lead set



The only circuit tracer with SwivelDisplay™



### Exclusive Rotating Display

Revolutionary technology in the SureTest® 958 rotates the display in 90° increments so that you always receive an upright reading. Even when the receiver is pointing down, you can keep up.



Transmitter will work on a de-energized circuit and won't affect GFCIs and sensitive equipment on an energized circuit.

AA batteries provide the transmitter and receiver 4x the power.





## SureTest® Circuit Tracers



### In Breaker Mode

receiver identifies the correct circuit to which the transmitter is connected.



### Inductive Clamp

allows you to induce a tracer signal on the cable without affecting the low voltage signals on the circuit.



### Sorting Wires

Individual wires can be sorted, opens can be located and shorts can be isolated.



### IC-958, BP-958

Inductive Clamp w/ Battery Pack



### RC-954

Receiver Red LED display



### TR-958

Transmitter



### RC-958

Receiver Bright OLED rotating display



### CR-958

Cradle for Receiver For use with extension pole for ceilings and flooring

## Kit Components

Kit Contents	61-954	61-956	61-958
Transmitter	TR-958	TR-958	TR-958
Receiver	RC-954	RC-958	RC-958
Tracer Test Lead Set	TL-956	TL-956	TL-956
Inductive Clamp			IC-958
Battery Pack			BP-958
Magnetic Hanging Strap			61-565
Hard Carrying Case	C-954	C-954	C-958
Batteries	•	•	•
Instruction Manual	•	•	•

### Circuit Tracer Specifications

#### TRANSMITTER:

OPERATING VOLTAGE	0 - 600V AC/DC
BATTERY POWER	1.5V x (4) AA batteries (NEDA 15A, IEC LR6)
BATTERY LIFE	40 hours open circuit testing/25 hours short circuit tracing
INDICATORS	On/Off, Line energized, low battery

#### RECEIVER:

SENSING	Magnetic
BATTERY POWER	1.5V x (3) AA batteries (NEDA 15A, IEC LR6)
BATTERY LIFE	20 hours

### Accessories

Includes	
Fuse - High-energy, Fast-acting, 1A/1000V	F-956
Magnetic Strap	61-565
Tracer Test Lead Set (includes 1-6 below)	TL-956
1. Outlet Plug Adapter for Transmitter	TLOP-956
2. Blade Prongs for Lead Adapters (2/set)	TLBP-956
3. Ground Prong for Lead Adapter	TLGP-956
4. Alligator Clips for Lead Adapters (2/set)	TLAC-956
5. 3 ft. Lead Adapters for Transmitter (2/set)	TLA1-956
6. 25 ft. Lead Adapter for Transmitter	TLA2-956
Optional	
Cradle for Receiver	CR-958

### TL-956

Test Lead Kit





## Features

- Auto ranging
- Auto power off
- Hard case included
- 2-year warranty



### 61-920

#### Ground Resistance Clamp Meter

Large clamp size\*, backlight, saves up to 99 measurements



### 61-796

#### Earth Ground Resistance Tester

2- & 3-point fall of potential methods, lead set (TL-796) included



### TL-796

#### Earth Resistance Lead Set Kit

Kit includes three test leads with alligator clips (5, 33, 33m) on reels, (2) auxiliary grounding spikes



Specifications	61-920		61-796	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
GROUND RESISTANCE	0/120/1200 $\Omega$	1.5%	20.00/200.0/2000 $\Omega$	2.0%
GROUND LEAKAGE CURRENT	100m/1000m/15/30 A	2.0%	—	—

\*Clamp accommodates conductor size up to 1.25 in. (32mm).





## Insulation Tester

### Features



- Checks new installations for proper insulation
- Checks existing installations and motor windings for breakdowns in insulation
- 2-year warranty



### 61-795

**Hand-held Insulation Tester**  
Test voltage: 250/500/1000V, test inhibition >25V, default voltmeter to 600V AC/DC, digital display with analog arc, auto discharge, auto power off, auto ranging, protective rubber boot, continuity, low battery indication, Cat IV – 600V, includes carrying case

### Accessories

Includes	
Test Leads	TL-795
Carrying Case	C-795

Specifications	61-795	
	RANGE & RESOLUTION	ACCURACY
TEST VOLTAGE	250/500/1000 V	—
INSULATION RESISTANCE	0-4.000/40.00/400.0/4000 MΩ	2.0%
CONTINUITY	0.01-20.00 Ω	2.0%
RESISTANCE	0-200.0 Ω	2.0%
AC VOLTAGE	0-600.0 V	0.8%
DC VOLTAGE	0-600.0 V	0.5%



Tests insulation on motor windings





## 3-Phase Power Analyzer (800 Series)

### Features



- True RMS
- Single- or three-phase measurements
- Data logging (1MB memory)
- Up to one month of recording time
- 4-channels for voltage measurements
- 4-channels for current measurements\*
- Auto ranging
- Min/max/avg.
- Energy and Harmonics Program
- PowerVision™ Software
- Lightweight, portable design
- Easy-to-use push-button operation
- Backlit display\*
- Customized data collection
- Optional FIFO memory
- Real-time clock
- Programmable trigger-points and start/stop time
- Intelligent battery charging system
- Easy set-up
- Interactive demo CD
- 2-year warranty

### POWER & ENERGY MEASUREMENTS

- Kilowatts (kW)
- Volt-amperes (VA)
- Inductive reactive power (kvarL)
- Capacitive reactive power (kvarC)
- Power factor (PF)
- Frequency
- Kilowatt hours (kWh)
- Reactive power per hour (kvarhL, kvarhC)

### HARMONICS MEASUREMENT

- Total harmonic distortion (% THD)
- Harmonic factorization (FFT) to 51st harmonic

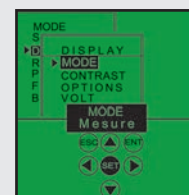
\*Models 806/807

The IDEAL Power Quality Analyzer is a versatile and easy-to-use tool that will give you the information you need to get the job done. The unit measures and analyzes power quality on both single-and three-phase electrical systems. Instantaneous readouts of current, voltage, power and harmonics including tables, bar graphs and even individual waveforms, make job site data interpretation easy. With a real-time clock and 1MB of memory, the Power Analyzer stores data that can be downloaded to a personal computer for in-depth analysis using PowerVision™ software.

It's everything a professional needs for monitoring and analysis in a single unit: rugged, versatile and easy to use. Models available with 3 or 4 current channels to meet your needs and budget.

### Power Analyzer Specifications 61-805, 61-806, 61-807

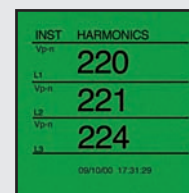
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	20 to 600 V (phase-neutral)	0.5%
	20 to 866 V (phase-phase)	0.5%
AC CURRENT	10 to 1000 A (with supplied clamp adapters)	1.0%
ACTIVE POWER	866 kW (with supplied clamp adapters)	1.0%
REACTIVE POWER	866 kW (with supplied clamp adapters)	1.0%
POWER FACTOR	0.5 to 1.0	1.0%



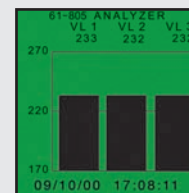
Program Setup

61-805 ANALYZER			
INST.	L1	L2	L3
Vp-n	235	233	237
A	31.26	30.99	30.70
kW	7.376	7.247	7.299
kvarL	0.729	0.667	0.768
kvarC	0	0	0
P.F.	1.00	1.00	1.00
Hz	50.0		
kVA		450	159
kvarhL		92	640
kvarhC			0.029

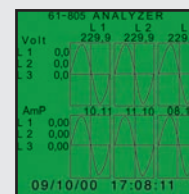
Table



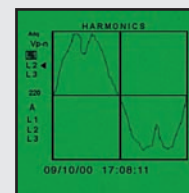
Exploded View



Bar Graph



Scope View



Waveform Zoom





## Standard Equipment



### Accessories

Optional	
1000AAC Clamps (set of 3)	61-811
100AAC Neutral Clamp (1)	61-813
5AAC Compact Neutral Clamp (blue)	61-814
2000AAC Clamps (set of 3)	61-810
500AAC Clamps (set of 3)	61-812
5AAC Compact Clamps (set of 3)	61-819
100AAC Compact Clamps (set of 3)	61-820
100AAC Compact Neutral Clamp (blue)	61-821
200/2000/20000AAC Flexible Clamp adapters (set of 3)	61-457
Voltage Leads with Alligator Clips	TL-806



200/2000/20000AAC Flexible Clamp Adapters

Standard Equipment	61-805	61-806	61-807
1000AAC Clamps (61-811)	•	•	•
100AAC Neutral Clamp (61-813)	—	optional	•
Voltage leads with Alligator Clips (TL-806)	•	•	•
Power supply with RS-232 Interface and cables	•	•	•
PowerVision™ Analysis Software	•	•	•
Demonstration CD and Instructions	•	•	•
Protective Carrying Case	•	•	•

Note:

Model 805 has 3 current channels

Models 806/807 have 4 current channels

Model 807 includes neutral clamp



5AAC Compact Current Clamp



100AAC Compact Current Clamp



100AAC Current Clamp



500AAC Current Clamp

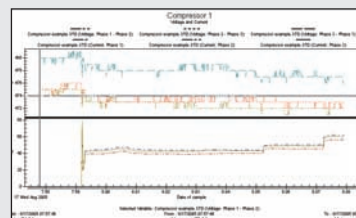


2000AAC Current Clamp

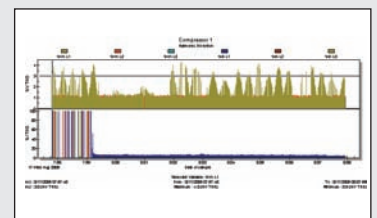
## PowerVision™ Software

PowerVision™ software provides intuitive analysis of data and automatic generation of useful tables and graphs. Files are easily downloaded from any 800 series unit.

PowerVision™ provides multiple ways to view basic and detailed information, allowing you to customize readouts according to your troubleshooting needs. Compare up to 12 variables simultaneously. Easily scroll through, expand and collapse data over time. Compare data from multiple files to show before and after studies. Data can be exported to text files, databases; graphs and tables can be pasted into Excel or Word reports. Highly-trained technical support people are always a phone call away. The software can be downloaded at [www.idealindustries.com](http://www.idealindustries.com)



Current and Voltage



Harmonic Distortion



## Voltage Performance Monitor (VPM)

### Features



- Real-time TRMS voltage, frequency and harmonics monitoring
- Logs voltage, sags, swells and impulses
- Measures %THD and logs periods over 3% (line to neutral)
- Selectable thresholds based on the most accepted international standards, defaults to ITIC\*
- Custom programmable event thresholds
- Invertible display, when it is necessary to plug in upside down
- 2-year warranty

\*Captures events that would affect equipment on branch circuit



61-830

### Voltage Performance Monitor Display Screens

5 2 4 3  
SAG SWL IMP THD  
129V 60.0Hz 2.3%  
08:39 06-22-2006

**Monitor Screen:** Real-time information on voltage, voltage events and harmonics.

1.0 kV  
72 μS  
08:43:40  
08-24-06

**Impulse Detail:** Fast response catches positive and negative impulses up to 4kV.

Set Nominal  
120V  
Set Standard  
ITIC

**Set Standard:** Select from more than a dozen threshold options based on existing standards or customize your own (defaults to ITIC).

### Applications

#### Monitor voltage near sensitive equipment

- Installation and Service Technicians
  - Monitor voltage at point of equipment connection
- Electricians
  - Eliminate guesswork on service calls
- Building Maintenance Technicians
  - Identify voltage caused equipment failures
- Equipment Manufacturers
  - Eliminate unnecessary warranty costs
- Hospital/IT Maintenance Engineers
  - Monitor voltage quality to critical equipment

### Accessories

Includes	
Adapters (set of 4)	PA-830
Carrying Case	61-179
Optional	
Alligator Clip Adapters (2-wire)	TL-532A
1 ft. US Extension Cord	61-177
Kit with (1) SureTest® 61-164, (2) VPM 61-830, Soft Case C-2004	61-2003
Kit with (1) SureTest® 61-164, (4) VPM 61-830, Soft Case C-2004	61-2004

61-179  
Replacement  
Carrying Case



PA-830  
Replacement  
Adapters  
(set of 4)



61-2004



Specifications		61-830
OPERATING RANGE		15-265V
MEMORY		512 events
SAMPLING METHOD		Continuous (128 samples per cycle)
VOLTAGE ACCURACY		1%
IMPULSE DETECTION		6μs, 4kV
THD		FFT calculation



### See voltage through the eyes of your equipment

Poor voltage quality increases facility expenses, warranty costs and downtime plus shortens the life of equipment. The IDEAL VPM identifies only those voltage conditions that can damage equipment or cause equipment failure.



## SureTest® Circuit Analyzers

### Features



- ELL estimates load on line up to 15A
- Super-bright display
- High accuracies
- Measures voltage drop under load\*
- True RMS
- Line voltage
- Peak voltage
- Frequency
- Ground to neutral voltage
- Ground impedance
- Hot and neutral conductor impedances
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Tests GFCIs and EPDs for proper operation
- Conducts testing without disturbing sensitive loads
- Verifies isolated grounds (with 61-176 adapter)
- 2-year warranty

\*12A, 15A, 20A load tests



61-164



61-165

Tests AFCIs for proper operation, tests for shared neutrals

61-175  
Ground Continuity Adapter



61-176  
Isolated Ground Adapter



61-182  
1-ft. Extension Cord



61-183  
Alligator Clip Adapter



### Accessories

Includes	
Carrying Case	61-179
1' Extension Cord	61-182
Optional	
Ground Continuity Adapter	61-175
Isolated Ground Adapter	61-176
Alligator Clip Adapter	61-183

SureTest® 160 Series Specifications		
	RANGE & RESOLUTION	BASIC ACCURACY
AC VOLTAGE	85.0 - 265.0 VAC	1.0%
FREQUENCY	45.0 - 65.0 Hz	1.0%
IMPEDANCE	0.00 - 1.99 Ω	5.0%
GROUND-NEUTRAL VOLTAGE	0.0 - 24.0 VAC	2.0%
% VOLTAGE DROP	0.1% - 50.0%	5.0%
12A, 15A, 20A load tests		
GFCI TEST CURRENT	6.0 - 9.0 mA	2.0%
Times out after 6.5 seconds	0.0 - 6500 mS	



Troubleshoots branch circuit problems with a variety of tests at the receptacle.



AFCI testing with alligator clips on an installed device.



## Circuit Breaker Finders

### Features

- Fully automatic operation
- Positively identifies circuit breakers and fuses without service interruption
- Self calibrating
- Visual and audible indicators
- 2-year warranty



**61-534**

**Circuit Breaker Finder with Digital Receiver**  
Microprocessor controlled sensitivity level, verifies proper wiring, checks GFCI operation, non-contact voltage, works on 120 and 240V circuits



**61-532**

**Circuit Breaker Finder with Analog Receiver**

### Specifications

	61-532	61-534
OPERATING VOLTAGE	100 - 140 VAC	100 - 250 VAC
OPERATING FREQUENCY	47 - 63 Hz	47 - 63 Hz



### Accessories

Optional	
Carrying Case	C-290
Alligator Clip Adapter	TL-532A

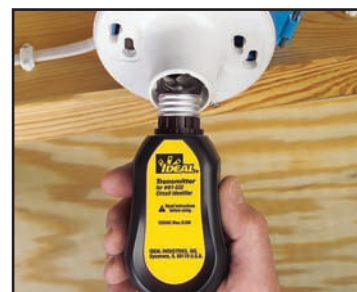


**TL-532A**

**Alligator Plug/Lighting Adapter**



Alligator clip adapter allows connections to exposed wiring.



Lighting adapter allows connection to light fixtures.



## Mini Arc Fault Tester

### Features

- Tests AFCIs for proper operation
- Tests GFCIs for proper operation
- Tests for shared neutrals
- Verifies wiring configuration
- Compact size fits comfortably in pocket
- 1-year warranty



**61-059**  
**AFCI/GFCI Circuit Tester**



**61-177**  
**1 ft. Cord Adapter**



**TL-532**  
**Alligator Clip Adapter (2-wire)**



**61-184**  
**Alligator Clip Adapter (3-wire)**

### Accessories

Optional	
1' Cord Adapter	61-177
Alligator Clip Adapter (3-wire)	61-184
Alligator Clip Adapter (2-wire)	TL-532
Carrying Case with Belt Clip	C-50



**C-50**  
**Carrying Case**



## E-Z Check® Circuit Testers

### Features

- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot, and ground fault interruption in 3-wire, 120VAC circuits
- No-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough, impact-resistant case
- 2-year warranty



**61-051**  
**E-Z Check® Plus GFCI Circuit Tester**  
Tests GFCI receptacles for proper operation



**61-035**  
**E-Z Check® Circuit Tester**



## Receptacle Testers

### Features

- Warns against faulty wiring in 3-wire receptacles
- For use on 120VAC circuits
- 1-year warranty



**61-501**  
**GFCI Receptacle Tester**  
Tests GFCI receptacles for proper operation



**61-500**  
**Receptacle Tester**



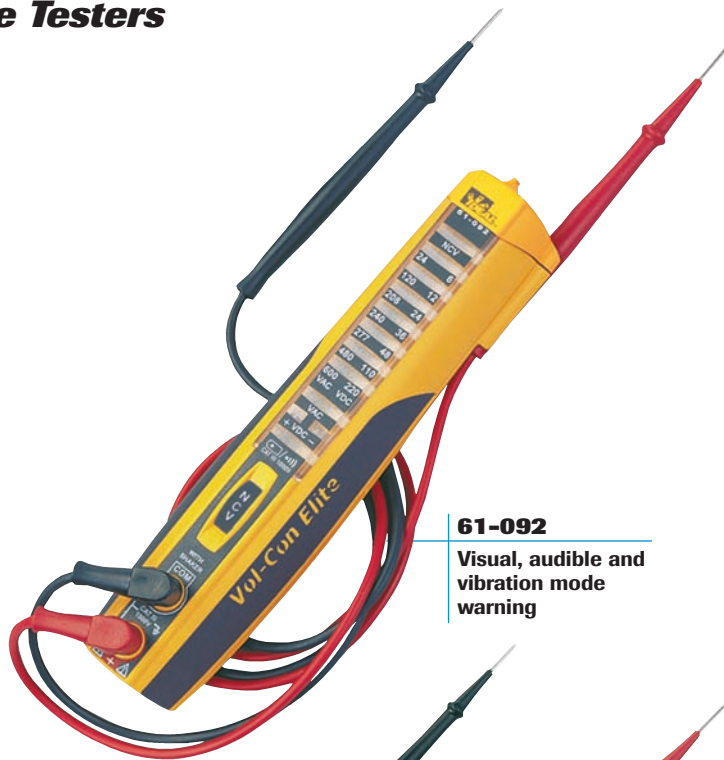


## Vol-Con® Elite Digital Voltage Testers

### Features



- AC/DC circuitry
- Tests for AC Voltage from 24-600VAC
- Tests for DC Voltage from 6-220VDC
- Audible continuity
- Non-contact voltage indication
- Low impedance to eliminate ghost voltages
- Low battery indicator (40-600VAC)
- Replaceable silicone test leads
- Integral lead storage
- 2-year warranty



**61-092**

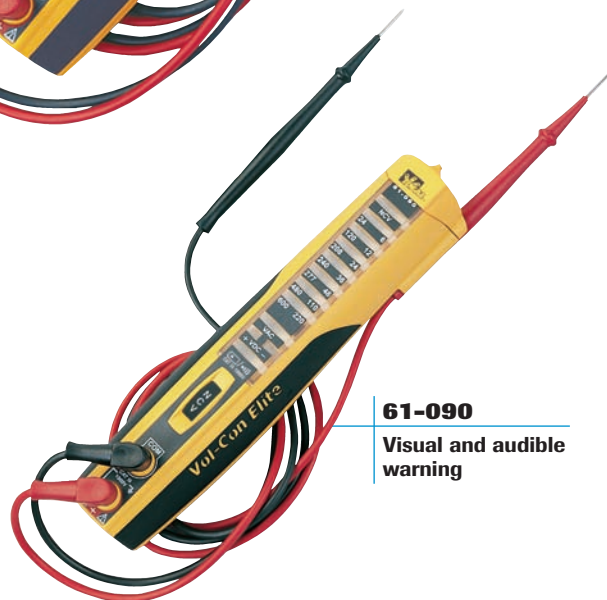
Visual, audible and vibration mode warning

### Accessories

Includes	
Silicone Test Leads	TL-102
Optional	
Carrying Case	C-90



Vibration mode gives a tactile indication of the voltage level.



**61-090**

Visual and audible warning



Non-contact voltage sensor easily locates breaks in power cords.



## Solenoid Voltage Testers

### Features

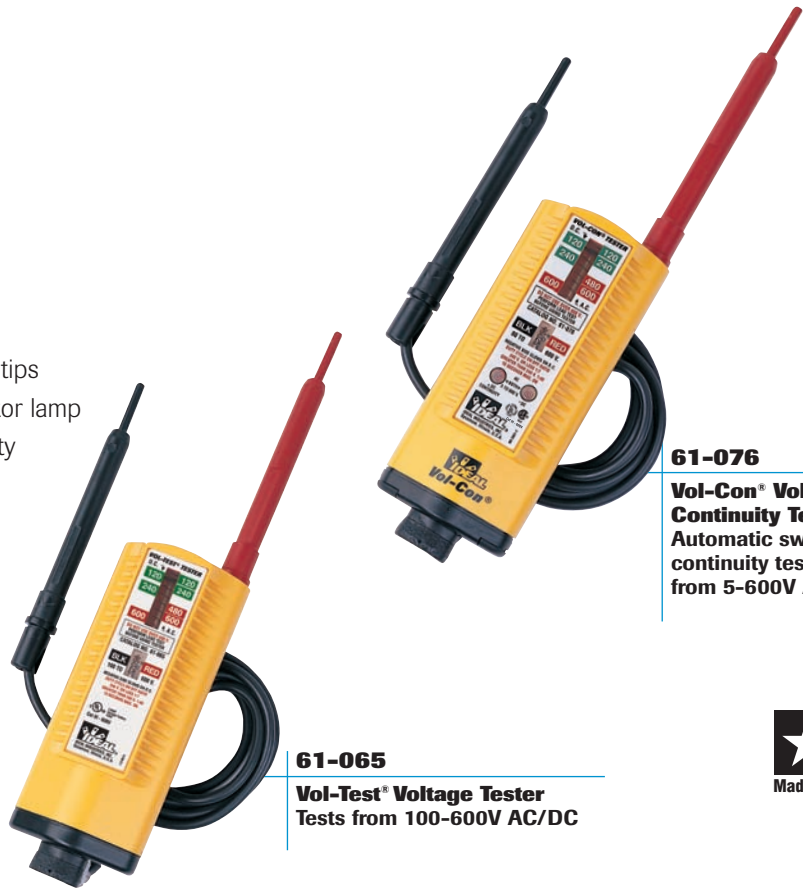


- Extremely rugged and reliable
- Vibrates when voltage is present
- Tests for AC Voltage
- Tests for DC Voltage
- Replaceable leads with shielded probe tips
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- 2-year warranty

### Accessories

Includes	
Standard Test Leads	61-070
Optional	
Resistor-fused Leads*	61-072
Padded Nylon Case	C-90
Leather Case	61-010
Batteries	61-201

\*Special, current-limiting resistor in each lead acts as a fuse to open in a short-circuit situation.



**61-065**

**Vol-Test® Voltage Tester**  
Tests from 100-600V AC/DC

**61-076**

**Vol-Con® Voltage/Continuity Tester**  
Automatic switching continuity tester, tests from 5-600V AC/DC



## XL-Series Solenoid Voltage Testers

### Features



- Extremely rugged and reliable tester
- Vibrates when voltage is present
- Tests AC/DC Voltage
- Replaceable leads with shielded probe tips
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- Compact size
- 2-year warranty



**61-086**

**Vol-Con® XL Voltage/Continuity Tester**  
Audible continuity, audible voltage indication, tests from 6-600V AC/DC

### Accessories

Includes	
Standard Test Leads	TL-80
Optional	
Resistor-fused Leads*	TL-82
Padded Nylon Case	C-90
Leather Case	61-010

\*Special, current-limiting resistor in each lead acts as a fuse to open in a short-circuit situation.



**61-085**

**Vol-Test® XL Voltage Tester**  
Tests from 80-600V AC/DC





## Split-Jaw™ Smart Meter

### Features



- Measures 0.9-200AAC\*
- Measures 1.3-750VAC
- Measures 2.1-1000VDC
- Measures 0.0-9999Ω
- Audible continuity
- Data hold
- Integral lead storage
- Replaceable test leads
- Auto power off
- Low battery indication
- 2-year warranty

61-096  
Split-Jaw™



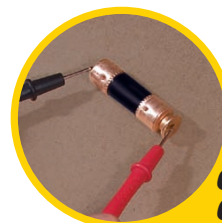
**EASY  
NO DIAL  
TO USE**



AC/DC Volts



AC Amps



Ohms/  
Continuity

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### Accessories

Includes	
Test Leads	TL-95
Optional	
Padded Nylon Case	C-90

Specifications	61-096	
AC VOLTAGE	1.3 - 750 V	1.5%
DC VOLTAGE	1.8 - 1000 V -0.6 - 1000 V	1.0%
AC CURRENT	0.6 - 200.0 A	3.0%
RESISTANCE	0 - 2000 Ω	1.0%

\*Note: Jaw opening is 0.6 in. (16mm) - up to 1/0 copper cable



## VoltAware™ Non-Contact Voltage Tester

### Features

- Indicates presence of voltage from 40-1000VAC
- Visual indication of voltage
- Selectable audible indication of voltage
- Sleek, compact design
- Green LED indicates power on
- Low battery indicator
- Battery replacement (AAA size)
- 2-year warranty



**61-025**

**VoltAware™ NCV Tester**  
Overmolded cushion grip



Convenient button turns audible voltage indication on or off.

## Volt-Sensor™ Non-Contact Voltage Tester

### Features

- Tests for voltage from 40-600VAC
- Audible and visual indication
- Locates breaks along live insulated wires
- Tests for energized circuits
- Battery replacement (LR44/61-201)
- 1-year warranty



**61-063**

**Volt-Sensor™ NCV Tester**  
Overmolded cushion grip



## Continuity Tester

### Features

- Checks continuity of dead circuits and ground on conduit systems and identifies wires in multi-wire cables
- Light signal indicates completed circuit
- Bulb-in end can serve as flashlight
- Pocket clip functions as probe
- Removable 4-ft. test lead with alligator clip
- 1-year warranty



**61-030**  
**Continuity Tester**

## Test-Glo™ Circuit Tester

### Features

- Industrial-quality tester checks voltage from 80V to 600V AC/DC
- Neon test lamp at front of probe
- Resistors reduce voltage reaching leads
- 24-in. lead — rated 1,000V
- 1-year warranty



**61-040**  
**Test-Glo™ Circuit Tester**

## Twin Lead Voltage Tester

### Features

- Check voltage from 80-500V AC/DC
- Heavy-duty test probes
- 1-year warranty



**61-503**

**Twin Lead Tester**





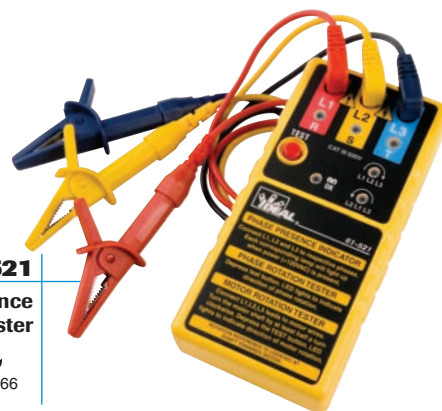
## 3-Phase/Motor Rotation Testers

### Features



- Identifies three-phase sequence
- Indicates motor rotation
- Checks for open phases
- For use up to 600V
- 2-year warranty

Includes carrying case



**61-521**  
3-Phase Sequence  
and Rotation Tester



### Features



- For use up to 600V
- Color-coded insulators over alligator clips
- Shock resistant housing
- Easy to read
- 2-year warranty

Includes carrying case



**61-520**  
3-Phase  
Sequence



## Digital Light Meter

### Features

- Wide lighting range
- Foot candle and lux measurement
- Remote light sensor
- Cosine and color corrected
- Peak hold
- Low battery indication
- 2-year warranty

Includes carrying case



**61-681**  
Digital Light Meter



Specifications		61-681
	RANGE & RESOLUTION	ACCURACY
FOOT CANDLES	20.00/200.00/2000.0/200000	2%
LUX	20.00/200.00/2000.0/200000	2%

## Infrared Thermometer

### Features

- Measurement range: -76°F to 932°F
- Distance spot: 12:1
- Modes: Ave., Difference, Hi/Low limits w/alarm, Max, Min, Lock
- Emissivity Range: Adjustable from 0.1 to 1
- Precision K-type thermocouple (optional)
- Backlight
- Auto power off
- Low battery indicator
- 2-year warranty



**61-685**  
Infrared Thermometer



### Accessories

Optional	
K-type Thermocouple	<b>61-461</b>

Specifications		61-685
	RANGE & RESOLUTION	ACCURACY
TEMPERATURE OF OBJECT	-27 to 932°F (.33 to 500°C)	+/- 4°F (+/-2°C) of reading or whichever is greater
AMBIENT TEMPERATURE	73 +/-5°F (23 +/-3 °C)	



## Current Clamp Adapters

### Features

- Provide safe, easy measurement of AC current
- Extend the current measurement capabilities of digital multimeters
- AC milli-volt output (1mVAC = 1mA)



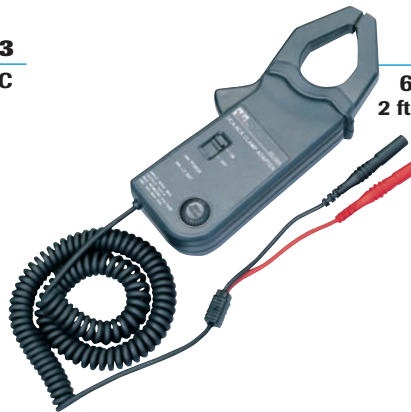
**61-332**  
200AAC



**61-451**  
300AAC



**61-333**  
500AAC



**61-334**  
600A AC/DC  
2 ft. lead length



**61-436**  
1000AAC  
2 ft lead length

## Flexible Clamp Adapters

### Features

- Provide safe, easy measurement of high AC currents
- Large opening and flexible materials to wrap around conductors and bus bars
- Shape Memory allows pre-forming before installation
- Extend the current measurement capabilities of digital multimeters



**61-330**  
1000AAC



**61-331**  
300/3000AAC

Specifications	61-330	61-331	61-332	61-333	61-334	61-436	61-451
AC CURRENT	1000 A	300/3000 A	200 A	500 A	600 A	1000 A	300 A
DC CURRENT	—	—	—	—	600 A	—	—
OUTPUT SIGNAL	1mV/A	1mV/A/10mV/A	1mV/A	1mV/A	1mV/A	1mV/A	1mV/A
MAX CONDUCTOR SIZE	8" (19cm)	8" (19cm)	0.78" (19.8mm)	1.18" (30mm)	1.125" (28.5mm)	2.25" (57.1mm)	0.91" (23mm)
SENSOR LENGTH	24" (61cm)	36" (91cm)	—	—	—	—	—

CE N12966

## Line Splitter



**61-561**  
Line splitter with direct  
and 10x sensitivity



## Carrying Cases



**61-010**

Leather case for use with voltage testers

**61-020**  
Premium leather case for use with voltage testers



**C-90**

Nylon carrying case for use with all Vol-Con® and Vol-Test® Testers



**C-290**

Nylon carrying case for use with DMM's



**61-445**

Small nylon carrying case with four convenient pockets



## Carrying Case Selection Guide

CLAMP METER CARRYING CASE SELECTION GUIDE		700 Series			740		760 Series			770	
		61-701	61-702	61-704	61-744	61-746	61-764	61-766	61-768	61-772	61-774
C-90	Nylon Carrying Case				•	•					
C-700	Nylon Carrying Case	•	•	•							
C-760	Carrying Case						•	•	•		
C-770	Nylon Carrying Case									•	•

MULTIMETER CARRYING CASE SELECTION GUIDE		310		320 Series			340		360		490		610	
		61-310	61-312	61-320	61-322	61-324	61-340	61-342	61-360	61-361	61-494	61-495	61-610	61-614
C-290	Nylon Carrying Case	•	•	•	•	•	•	•	•	•	•	•	•	•

TESTER CARRYING CASE SELECTION GUIDE		Voltage Testers								160	
		61-059	61-065	61-076	61-085	61-086	61-090	61-092	61-096	61-164	61-165
61-010	Leather Tester Case		•	•	•	•					
61-020	Premium Leather Tester Case		•	•							
61-179	Nylon Carrying Case									•	•
C-50	Nylon Carrying Case	•									
C-90	Nylon Carrying Case		•	•	•	•	•	•	•		



## Test Lead Kits



### TL-435

#### Industrial Test Lead Kit

Kit contains: 1.5m silicone lead set, probes w/SS tips, rigid alligator clips, flex pincer clips, insulated alligator clips, insulated spade lugs and padded zipper pouch, 1000V, 10A rating



### TL-436

#### Electrical Test Lead Kit

Kit contains: 1.5m silicone lead set, probes w/SS tips, insulated alligator clips and tri-fold pouch, 1000V, 10A rating

## Test Leads



### TLF-252

Fused test leads with alligator clips, 10A/600V, CAT III - 1000V

### TL-102 Silicone Test Leads



### TL-100

Premium Test Leads with alligator clips

## Thermocouples

### Features

- Measures up to 1500° F (816° C)
- K-type thermocouple plugs into digital multimeter or clamp meter voltage ports with 61-465 adapter



### 61-465

Thermocouple Adapter



### 61-461

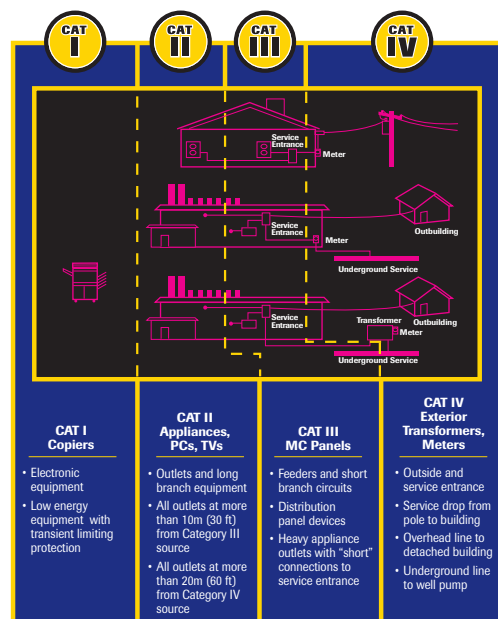
Beaded K-type Thermocouple



## Replacement Parts Selection Guide

METER REPLACEMENT PARTS SELECTION GUIDE			090	310	320 Series	340	360	450	490	600	610	700 Series	710	740	760 Series	770
			61-096	61-310 61-312	61-320 61-322 61-324	61-340 61-342	61-360 61-361	61-452	61-494 61-495	61-605	61-610 61-614	61-701 61-702 61-704	61-710	61-744 61-746	61-764 61-766 61-768	61-772 61-774
FUSES																
F-1	0.5A (250V)	6.35 x 32mm											•			
F-102	1A (600V)	6.35 x 38mm			• •				• •							
F-103	15A (600V)	6.35 x 38mm						•	•							
F-310	250mA (250V)	5 x 20mm		•							•					
F-312	500mA (250V)	5 x 20mm			•											
F-314	10A (250V)	5 x 20mm			•											
F-340	0.5A (500V)	6.35 x 32mm				• •										
F-341	10A (1000V)	10 x 38mm				• •										
LA-3893	2A (600V)	6.35 x 25.4mm					•									
LA-3896	0.5A (500V)	6.35 x 32mm					•									
LA-3897	10A (600V)	6.35 x 25.4mm					•									
LA-3898	0.25A (500V)	5 x 32mm						•								
BATTERIES																
61-201	1.5V (LR44)									•						
—	1.5V (AA)				•				•		• •		•			
—	1.5V (AAA)			•										• •		
—	9V		•	•	• •		• •		• •			• • •			• • •	• •
TEST LEADS																
TL-34	Leads w/pin connectors										•					
TL-54	Test leads											•				
TL-95	Test leads	•														
TL-100	Test leads w/alligator clips				• • •	• •	• •	•	• •				•	• •		
TL-102	Silicone test leads											• • •				
TL-104	Test leads w/ large alligator clip														• • •	• •
TL-310	Test leads		• •													

## Safety in the Field



The power demands of today's high-tech world have caused a marked increase in occurrences and levels of transient overvoltages. The International Electrotechnical Commission (IEC) has developed a safety standards model for measurement, control and laboratory use.

**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 a 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** (proposed) – The primary supply level for the highest levels of transient overvoltage. 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.





**DataComm**



## LANTEK® 6/6A/7G LAN Cable Certification Testers

LANTEK offers a family of high performance cable certification testers to support a full range of LAN cable testing. The LANTEK family of certification testers uses the IDEAL patented measurement system that removes the effects of ordinary patchcords, thus making channel and permanent link certification of a cable standard such as CAT6A or ISO-F possible without changing adapters. The same patented technology also makes DUALmode Testing possible so the users can get any two test results simultaneously. As a result, the LANTEK Cable Certification Testers save you money and time on the job.



- **LANTEK 7G 1GHz** is the world's first independently verified Level IV accurate LAN cable certification tester capable of testing installations up to 1 GHz, exceeding the requirements for CAT6A/7/ISO-F.
- **LANTEK 6A 500MHz** is a Level IIIe verified certification tester designed to support the NEW CAT6A Standard to certify LAN cabling to support applications up to 10G Ethernet.
- **LANTEK 6 350MHz** is a Level III verified LAN certification tester designed to support up to CAT6/ISO-E cabling.

### Features of LANTEK® Products

- **High-Performance LANTEK 7G/6A/6** – sweeps to 1 GHz and supports testing requirements up to CAT 6/6A/7/ISO-F and beyond
- **Level IV/IIIe/III Accuracy** – independently verified by ETL for baseline, channel and permanent link
- **DUALmode Testing to Save Time** – reports channel and permanent link test results simultaneously
- **Test with Patchcords to Save Money** – performs CAT6A/6/5e/ISO-Ea/E/D testing with standard patchcords to achieve the lowest cost of ownership
- **Largest Internal/External Memory Capacity** – makes record management easy
- **Convenient FIBERTEK™ Accessory** – simultaneously tests two fibers for attenuation and length
- **Innovative TRACETEK™ Accessory** – performs advanced fiber fault location and troubleshooting functions



**The only  
certifier  
to sweep  
to 1GHz**



# DataComm Equipment

## Kits Include:

PACKAGE AND ACCESSORIES	LANTEK6B Basic	LANTEK6ABAS Basic	LANTEK6APREM Premium	LANTEK6ATRV Travel	LANTEK7GBAS Basic	LANTEK7GPREM Premium	LANTEK7GTRV Travel
Soft Carrying Case	✓	✓	—	—	✓	—	—
Deluxe Hard Shell Case	—	—	✓	—	—	✓	—
Airline Grade Travel Case with Wheels	—	—	—	✓	—	—	✓
64MB Compact-Flash Memory Card	—	—	✓	✓	—	✓	✓
Category 6 Universal Adapters & Reference Cables	✓	—	—	—	—	—	—
Category 6A Universal Adapters & Reference Cables	—	✓	✓	✓	✓	✓	✓
Batteries	2	2	4	4	2	4	4
DUAL Bay Rapid Battery Charger	—	—	✓	✓	—	✓	✓
Headsets (2), AC Adapters (2), Hanging Straps (2), Serial Cable (1), USB Cable (1), LANTEK Reporter Software (1)	✓	✓	✓	✓	✓	✓	✓

**Note:** Delivery content may vary outside of US. Please contact your local IDEAL sales office for details.  
The airline grade Travel Case fits in most airline overhead storage compartments.

FEATURES	LANTEK6 Basic	LANTEK6A Premium	LANTEK7G Premium
Frequency Range	350 MHz	500 MHz	1 GHz
Supports CAT7 & ISO-F	Upgradeable	Upgradeable	✓
Supports CAT6A	Upgradeable	✓	✓
Support CAT6/5e/3 and ISO-E/D/C	✓	✓	✓
Accuracy Level III/IIe (Draft)/IV (LANTEK6/6A/7G) verified by	ETL	ETL	ETL
Support DUALmode Testing to Save Time	✓	✓	✓
Test with Patchcords to Save Money	✓	✓	✓
Screen Display Area	Best	Best	Best
CAT6 Test Storage with Graphs	500	500	500
Standard External Compact Flash Memory	Option	64MB	64MB
USB/Serial Port	✓	✓	✓
Copper TDR Trace	✓	✓	✓
Fiber Loss Measurement (FIBERTEK)	Option	Option	Option
Fiber Distance to Break (TRACETEK)	Option	Option	Option
Talk over Fiber & Copper (Full Duplex)	✓	✓	✓
Display Screen on Remote	✓	✓	✓
Troubleshooting Tone Generator on Remote	✓	✓	✓
External Rapid Battery Charger & Extra Batteries	Option	✓	✓

Other Accessories	LANTEK6/6A/7G
Soft Carry Case	3010-12-0096
Deluxe Hard Carry Case	3010-12-0092
Batteries	1219-00-1604
Serial Cable	6011-50-0031
64 MB CompactFlash Card	2112-27-0605
CompactFlash Card Reader for PC	2112-27-0604
LANTEK CAT 6/5e Channel Adapters (ea.)	0012-00-0629
LANTEK CAT 6A/6/5e Channel Adapters (ea.)	0012-00-0656
LANTEK CAT 6A/6/5e Reference Patchcords (ea.)	6011-50-0029
Talkset (2)	3010-70-0015
Dual Bay Battery Charger	0012-00-0642
LANTEK CAT 7 TERA Testing Kit	1019-00-1105
LANTEK CAT 7 NEXANS Testing Kit	1019-00-1110
Coax Testing Adapter Kit	1019-00-0343
110 Block Testing Adapter Kit	1019-00-1112
BIX Block Testing Adapter Kit	1019-00-1114
66 Block Testing Adapter Kit	1019-00-1115





## FIBERTEK™ and TRACETEK™ Advanced Fiber Test Options

### Features of FIBERTEK™ Products

- Measures signal loss and length
- 850nm VCSEL light source enables Gigabit Ethernet certification on Multimode fiber
- Enables bi-directional, dual wavelength measurements
- Full duplex talkset capability
- Provides easy switching of LANTEK® Cable Tester between Copper and Fiber LAN testing
- Separate loopback testing method for high precision length
- Outstanding Temperature Compensation provides highly accurate test results in a wide variety of environments



### FIBERTEKMMP Multimode Fiber Testing Premium Kit

- All of the features of the FIBERTEKMMB plus TRACETEKMM (below):

### FIBERTEKSMP Singlemode Fiber Testing Premium Kit

- All of the features of the FIBERTEFKSMB Plus TRACETEKSM (below):

### Features of TRACETEK™ Products

- Enables LANTEK® certification testers to provide an event trace at a fraction of the price of an OTDR
- Provides easy switching of LANTEK® certification tester between FIBERTEK™ loss and length measurement and TRACETEK™
- Includes event plots that pinpoint significant losses along the fiber
- Provided with launch cable and appropriate connectors

FIBERTEK/TRACETEK PACKAGES	FIBERTEKMMB	FIBERTEKMMP	FIBERTEKSMB	FIBERTEKSMP	FIBERTEKALLB	FIBERTEKALLP	TRACETEKMM	TRACETEKSM
FIBERTEK – 850nm MM Adapter	✓	✓			✓	✓		
FIBERTEK – 1300nm MM Adapter	✓	✓			✓	✓		
FIBERTEK – 1310nm SM Adapter			✓	✓	✓	✓		
FIBERTEK – 1550nm SM Adapter			✓	✓	✓	✓		
TRACETEK – 1300nm MM Adapter		✓				✓	✓	
TRACETEK – 1310NM SM Adapter				✓		✓		✓
Fiber Cleaning Starter Kit	✓	✓	✓	✓	✓	✓	✓	✓
62.5/50µm, MM, ST-ST Cable Kit	✓	✓			✓	✓		
62.5/50µm, MM, FC-ST/FC-SC Cable Kit		✓				✓	✓	
9µm, SM, FC-ST Cable Kit			✓	✓	✓	✓		
9µm, SM, FC-ST/FC-SC Cable Kit				✓		✓		✓

**See your IDEAL representative for additional specifications on all certification products.**



## SIGNALTEK™ Gigabit Ethernet Certifier

SIGNALTEK™ provides a technically innovative method to test and document performance of voice, data, video and VoIP applications for cabling installers and network technicians. It tests the link's ability to support applications by transmitting Ethernet packets on the wire and measuring the link performance according to IEEE 802.3ab Gigabit Ethernet standard. By monitoring transmitted and received data packets, it can report the BERT (Bit Error Rate Test) for the link. It uses the latest generation of Gigabit Ethernet technology to provide the best performance to this new class of testers.

### Features of SIGNALTEK™

- **Unique** - Simulate real world network traffic with full-duplex gigabit performance testing
- **Unique** - User selectable 10/100/1000 Bit Error Rate Testing (BERT) to ensure performance for all Ethernet devices
- **Unique** - Smart autotest function detects line condition and automatically chooses appropriate test to run to allow testing cable that is terminated with a SIGNALTEK remote, a network device or unterminated
- **Unique** - Save time using the remote to perform 10/100 or gigabit service detection AND initiate an Autotest when main unit is connected
- **Unique** - Maximum flexibility with two USB ports. Connect to a computer to upload test results, connect directly to a printer, or connect a USB memory drive for unlimited storage
- **Unique** - Get maximum coverage with a full two-year warranty
- **Unique** - Configure multiple target IP addresses for pinging several network devices to ensure communications with servers, printers, IP cameras, home automation controls, etc.
- Offers network interrogation tools such as link establishment, port LED blink and ping
- TDR to accurately measure length and locate shorts and opens
- ARP test discovers active network devices
- Exceeds 100m measurement distance required by IEEE 802.3ab gigabit Ethernet standard
- Easy-to-read Pass/Fail performance reports that can be stored and printed for customer documentation
- Multiple BERT configurations for VoIP, data, and video-over-IP specific testing
- Brilliant high-resolution color display visible in any lighting condition
- Uses readily available AA batteries
- Wiremap faults easily with selectable 568 A/B color coding



Description	Cat. No.
SIGNALTEK™ Kit	33-974
Universal 120-240V Power Adapter	4010-00-0136
RJ-45 to 8 Head Alligator Clip	K-7920
Replacement Cable Accessory Kit - contains all original cables in SIGNALTEK™ Kit	1219-91-0003

### #33-974



### SIGNALTEK™ Specifications

#### Cable Types

- Voice/phone cable - USOC/RJ-11/RJ-12 interface
- Data Cable - STP/UTP (RJ-45) for CAT 3/5e/6/6a/7 cabling
- Coax cable - via RJ-45 to F Patchcord, series 6, 59, 58 cabling (50/75 Ohm)

#### Physical Dimensions

- Display handset: 7.9" L x 3.6" W x 1.5" D
- Remote handset: 6.8" L x 3.5" W x 1.5" D
- Near-end Weight: 12.5 oz.

#### Ports/Connections

- RJ-45 test interface port
- Mini USB "A" port
- Standard USB "B" port
- DC power input for long-term network monitoring



## SIGNALTEK™-FO Multimedia Ethernet Certifier

SIGNALTEK-FO is the first active ethernet certifier that offers both copper and fiber optic testing; and SIGNALTEK-FO does it for less than the price of an Optical Test Set alone.

- Fiber Optic and Copper Gigabit Certification – Qualify copper and fiber-optic cabling to IEEE 802.3 standards
- Multimedia Gigabit Certification (Multimode and Single Mode capability) – Qualify short and long range cabling to a distance of up to 10km
- BERT and Optical Attenuation Measurements – Perform Bit Error Rate Testing and decibel (dB) loss measurements of optical links.
- Dual Wavelength Capability – available in both 850nm and 1300nm wavelengths to support virtually all LAN and campus fiber applications.
- Small Form factor Pluggable (SFP) modules are compact, light-weight and field changeable.
- Storage and Reporting for Thousands of Reports – Store and print Qualification reports for copper and fiber jobs using internal memory or USB “thumb-drives”.



#33-983



Description	Cat. No.
SIGNALTEK™-FO w/850 Modules	33-981
SIGNALTEK™-FO w/13X0 Modules	33-982
SIGNALTEK™-FO w/850 & 13X0 Modules	33-983
SIGNALTEK™-FO w/o Modules (Fiber-Ready)	33-987

## 10 Gigabit Alien Crosstalk Testing Kit

Perform a standard 6-around-1 cable test with PS ANEXT and PS AACR-F results for both ends of the cable in as little as 5 1/2 minutes compared to over 20 minutes for some competitive models.

- Add Alien Crosstalk testing capability to any LANTEK® 6A or 7G
- Perform PS Alien NEXT and Attenuation to Alien Crosstalk Ratio measurements
- Unique Dual-port AXT adapter allows PSANEXT testing with just one handset for quick initial site testing
- Dual-handset mode allows complete AXT certification 4 times faster than other AXT test systems
- No PC required in the field – all test results calculated on-the-fly for instant pass/fail indication
- Kit includes 2 Dual-port AXT adapters, 12 AXT terminators, shielded patch cords, manual, firmware update and PC reporting software



Description	Cat. No.
Alien Crosstalk Testing Kit for LANTEK	LANTEK10GBKIT



## SecuriTEST™ PRO CCTV/Security Tester

SecuriTEST™ PRO adds to the already impressive capabilities of the SecuriTEST™ by including all the features of the original, plus IRE testing (video and sync levels), audio level testing, a high-capacity lithium ion battery in a package that's smaller and lighter than before. The SecuriTEST™ PRO has all the features and functionality that CCTV technicians need to install, test and maintain analog security camera systems. SecuriTEST™ PRO also includes a custom carrying case (optional with the standard SecuriTEST™).

### Features of SecuriTEST™ PRO

- All the same features of the SecuriTEST™ plus:
- **NEW** - IRE video level and sync tests
- **NEW** - Sound level test through integrated speaker and on screen level indicator
- **NEW** - High capacity lithium ion battery
- **NEW** - Support for additional PTZ protocols
- **NEW** - Carrying case included

Description	Cat. No.
SecuriTEST™ PRO CCTV/Security Tester only	33-892
SecuriTEST™ Tester Pouch only	62-891

UTP Test Port

Audio Input

**NEW**

Carrying Case (62-891)



## SecuriTEST™ CCTV/Security Tester

CCTV installers often need to carry a variety of testing tools to complete their work. SecuriTEST combines the most-needed tools in one easy-to-carry package. Since all connections (video/communications/DMM) attach to a single unit, SecuriTEST eliminates the need to juggle several devices while on a ladder or lift, making working conditions safer and increasing productivity.

- **Seven Essential CCTV Tools** – Combines a CCTV video tester, PTZ camera controller, Digital Multi-Meter, 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 2.5in (6.3cm) 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	Cat. No.
SecuriTEST™ CCTV/Security Tester only	33-891
SecuriTEST™ Tester Pouch only	62-891

Includes: Rechargeable batteries, AC charger, car charger, test leads, wiremap terminator, neck strap and manual.



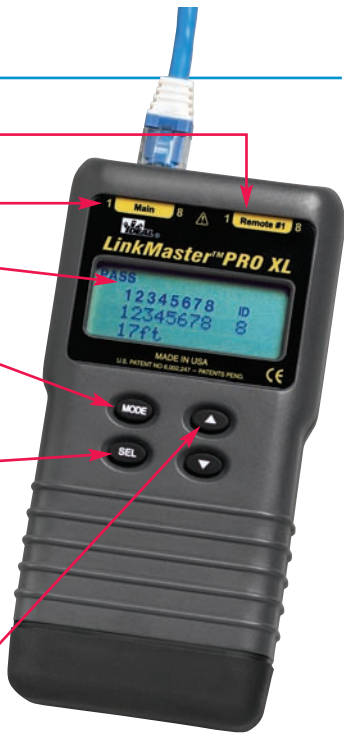


## LinkMaster™ PRO and LinkMaster™ PRO XL Testers

The LinkMaster™ PRO & LinkMaster™ PRO XL Testers enable installers, contractors and maintenance technicians to map, test and troubleshoot data and voice communication cable and coax runs. Rugged, versatile, and easy-to-use, they have mastered the link between performance, simplicity and value for both commercial and residential applications.

### Features

Description	LinkMaster™ PRO	LinkMaster™ PRO XL
Blinks the hub		■
Displays length measurement with test results		■
Remotes have both RJ-11 and RJ-45 jacks		■
Backlight LCD screen		■
Measures length on UTP, STP and coax	■	■
Tests UTP for shorts, opens, miswires, reversals, split pairs and shield continuity	■	■
Test coax for opens, shorts and continuity	■	■
Shows wiring errors	■	■
Tests and identifies with all eight twisted pair and coax remotes	■	■
Sends tone with four different signals	■	■
Displays test results in wire map format	■	■
Snap-off battery cap	■	■
9 volt battery included	■	■

- 
- Remote Jack for Patch Cords
  - Main Jack for all Testing
  - Larger Backlit LCD Screen
  - Six Modes of Operation
    - Cable Test
    - Hub Blink
    - Tone
    - Length
    - Coax
    - Setup Mode
  - Press SEL to:
    - Turn on back-light (Hold 2 sec)
    - Execute current displayed mode
    - Start new test cycle
    - Select one of four tones
    - Change pair being measured for length
    - Change user selectable options
      - Beep On/Off
      - Unshielded or Shielded Cable
      - Units—Feet or Meters
  - Arrow Keys
    - To change length constant
    - To change pair or pin selection for tone
    - To scroll through setup selectable options

### Accessories

	Description	Cat. No.
	RJ-45 to RJ-11 Jack Adapter (2/card), POP Packaging	LA-4233
	RJ-45 to F-Connector Adapter (2/card), POP Packaging	LA-4234
	LinkMaster™ Pro XL Remotes UTP/STP, 2-8 only (white carton)	LA-4235
	LinkMaster™ Pro XL Large Replacement Case	H-3412
	Security/Speaker Kit – 8-Position Modular Adapter and eight RJ-45 to Alligator Clip Lead Sets	LA-4157
	BNC Accessory Kit	LA-4173
	Set of Eight Color-Coded F-Terminators for LinkMaster™ Pro or Pro XL	LA-4159
	LinkMaster™ Pro Large Replacement Case	H-3324
	Replacement Economy Kit Case	H-4868

### Kits

	LinkMaster™ PRO XL Kit w/eight remotes	33-880
	LinkMaster™ PRO XL Kit w/eight remotes and Tone & Probe	33-881
	LinkMaster™ PRO XL Kit w/eight remotes – International Packaging	33-886
	LinkMaster™ PRO XL Economy Kit w/one remote	33-887
	LinkMaster™ PRO Kit w/eight remotes – Unshielded Jumper Cables	33-825
	LinkMaster™ PRO Kit w/eight remotes – Shielded Jumper Cables	33-826
	LinkMaster™ PRO Economy Kit w/one remote – Unshielded Jumper Cables	33-835
	LinkMaster™ PRO Economy Kit w/one remote – Shielded Jumper Cables	33-836



## VDV MultiMedia Cable Tester

Easy-to-use tester for installers working with voice, data and video applications. One tester for all applications!

- **Voice** — supports 3-pair USOC and 6-position RJ-11/12 jacks for telephone cable testing
- **Data** — supports both shielded and unshielded cable testing to T568A/B (RJ-45)
- **Video** — tests coax cable for opens and shorts with F-connector interface
- Tests for opens, shorts, miswires, reversals and split pairs. Also indicates correct wiremap. Has automatic shut off (to prolong battery life) and low battery indicator.
- Easy-to-read LCD display with "PASS/FAIL" indicator after each test
- Tone generator supports four different tones making fault isolation easier
- One remote wiremap and testing unit is stored inside tester — easier to keep all parts together
- Uniquely designed remote accommodates RJ-11, RJ-45 and F-style connectors



Description	Cat. No.
Kit with integrated remote and accessories	33-856

## TRACETone™ Tone Generator & Amplifier Probe

- Test continuity and locate signal of installed wire and cable
- Two selectable tone styles
- Tone Generator & Amplifier Probe fit together for easy storage
- Extra-deep serrations grip wire better
- RJ-11 Alligator Clip, RJ-11 Cable Assembly included



Description	Cat. No.
TRACETone™ Tester and Accessories	62-140

**Also available in these kits:**

33-916



33-917



## Amplifier Probe and Tone Generator



**NEW Design**

### Amplifier Probe

- Identifies and traces wire or cables within a group
- Battery low indicator

### Tone Generator

- Emits three different types of tones
- Auto-off after three hours of non-use
- F-Connector port for toning & tracing coaxial CATV cabling systems
- Tone can be added in any status

Description	Cat. No.
Amplifier Probe	62-164
Tone Generator	62-160
Amplifier Probe & Tone Generator Kit - includes 62-164, 62-160, Lead Set, Cable Assembly & Standard Replacement Tip	33-864

## LinkMaster™ Tester

Tests wiring configurations on UTP/STP cables. Checks for shorts, miswires, reversals and split pairs. Debug feature, automatic shut-off and low battery LED indication.

- Designed to test installed twisted pair wiring
- Tests unshielded and shielded modular plugs
- Main unit and remote allow one person testing

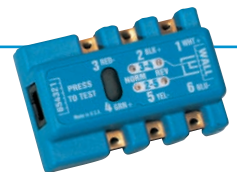


**NEW Design**

Description	Cat. No.
LinkMaster™ Tester and Remote	62-200

## Smart6™ Modular Tester

- 6-position Tester
- Incoming call identification



Description	Cat. No.
Smart6™ Modular Tester	62-096



## OmniSeal™ Pro Compression Tools

The new IDEAL OmniSeal™ Compression Tools now offer additional features and increased connector compatibility in a smaller, more compact tool designed to meet the demands of the professional installer. (OmniSeal requires no accessory attachment to terminate IDEAL branded compression connectors.) Most other manufacturers compression connectors can be terminated with an easy plunger depth adjustment. The simple intuitive design combined with its size and universal connector acceptance makes this the only compression tool needed by professional installers.

- Factory preset to work with IDEAL compression connectors
- Compresses F-type, RCA, BNC and Mini connectors
- Adjustable to fit other manufacturer's connectors – no accessory adapters required
- Connectors approved for use by satellite and cable TV companies

Description	Qty.	Cat. No.
OmniSeal™ Pro XL Compression Tool	1	<b>30-793</b>
OmniSeal™ Pro Compression Tool	1	<b>30-603</b>

	BNC	F-Type	RG11	RCA	Mini Coax
OmniSeal™ Pro XL 30-793	✓	✓	✓	✓	✓
OmniSeal™ Pro 30-603		✓	✓	✓	✓



**OmniSeal Pro  
30-603**



**OmniSeal Pro XL  
30-793**

User-friendly spring loaded handle

Textured Santoprene™ slip resistant comfort grip

Convenient handle lock for easy fit in pouch

Handy 7/16" hex socket for easy connector to cable installation

High strength aluminum body for durability and long life



For BNC connectors (Model 30-793)

Adjustable to fit multiple cables and connectors

### Also available in these kits:

33-630



33-624



33-945



## Economy Compression Tool

- Easily compresses series 6 and 59 coax compression F-connectors
- Permanent connection – never comes loose
- Works with most brands of compression connectors

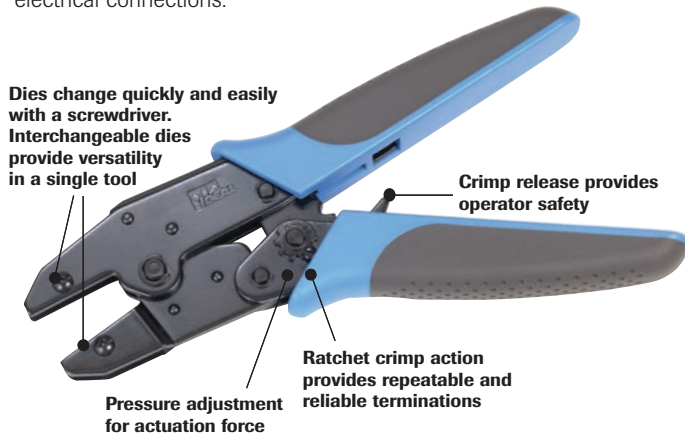


Description	Cat. No.
Economy Compression Tool	<b>30-633</b>
Economy Compression Tool Kit - Includes four RG-6 Connectors	<b>33-633</b>



## Crimpmaster™ Crimp Tools & Die Sets

High quality ratchet-type crimp tool for electricians, contractors and installers who require guaranteed repeatability of good mechanical and electrical connections.



Description	Cat. No.
Crimpmaster™ Crimp Tool Frame	30-506

### Also available in these kits:

33-400



33-917



#### 30-556

RJ-11 Crimp Tool for two, four or six-position modular plugs  
Tool w/die N/A



#### 30-559

RJ-45 Eight-position Crimp Tool for keyed or non-keyed modular plugs  
Tool w/die 30-522



#### 30-560

RJ-45 Eight-position Crimp Tool for AMP RJ-45 modular plugs  
Tool w/die 30-521



#### 30-570

RG-6, RG-174, Belden-Type RG-8281 cables (Hex. 0.324 (8.23mm), 0.178 (4.52mm), 0.068 (1.73mm))  
Tool w/die N/A



#### 30-572

16-26 AWG (1.31mm<sup>2</sup> - 128mm<sup>2</sup>) miniature insulated rings, spade and butt splices  
Tool w/die N/A



#### 30-573

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))  
Tool w/die 30-481



#### 30-576

RG-174, Mini 59 BNC/TNC Connectors (Hex. 0.178 (4.52mm), 0.128 (3.25mm), 0.068 (1.73mm))  
Tool w/die 30-485



#### 30-577

N-Series and RG-8/11 Connectors (Hex. 0.429 (10.90mm), 0.100 (2.54mm), 0.080 (2.03mm))  
Tool w/die 30-482



#### 30-578

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))  
Tool w/die 30-483



#### 30-579

22-10 AWG (.324mm<sup>2</sup> - 5.261mm<sup>2</sup>) insulated terminals/color coded nests  
Tool w/die 30-500



#### 30-580

22-8 AWG (.3mm<sup>2</sup> - 8mm<sup>2</sup>) non-insulated terminals  
Tool w/die N/A



#### 30-581

RG-58, RG-59/62, BNC/TNC Coax Connectors (Hex. 0.255 (6.48mm), 0.213 (5.41mm), 0.068 (1.73mm))  
Tool w/die 30-502



#### 30-582

F-type CATV RG-59, RG-6 Connectors (Hex. 0.350 (8.89mm), 0.320 (8.13mm), 0.255 (6.48mm))  
Tool w/die 30-503



#### 30-586

22-12 AWG (.324mm<sup>2</sup> - 3.31mm<sup>2</sup>) Non Insulated Open Barrel Connectors, Commercial Type  
Tool w/die N/A



#### 30-587

RG-58, RG-174 and RG-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))  
Tool w/die N/A



#### 30-591

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))  
Tool w/die N/A



#### 30-593

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))  
Tool w/die N/A



#### 30-594

Fully Insulated quick disconnect terminals with thinner wire barrels 22-10 AWG (.324mm<sup>2</sup> - 5.261mm<sup>2</sup>)  
Tool w/die N/A



#### 30-599

30-18 AWG (.205mm<sup>2</sup> - 2.08mm<sup>2</sup>) Open Barrel Pins and Sockets  
Tool w/die N/A



#### 30-479 (Tool w/die)

For insulated terminals, 22-10 AWG with built-in locator



## Punch Down Tools



Impact Turn-Lock™ Punch Down Tools	Cat. No.
Punchmaster™ II Punch Down Tool - body only	35-483
Punchmaster™ II Punch Down Tool w/110 blade	35-485
Punchmaster™ II Punch Down Tool w/66 blade	35-487
Non-Impact Turn-Lock™ Punch Down Tools	Cat. No.
Punch Down Tool w/110 blade	35-492
Punch Down Tool w/66 blade	35-493
Economy Punch Down Tool	Cat. No.
Non-impact Tool w/permanent non-cut blade	35-185

Removable Blades*	Cat. 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

\*Not applicable for Economy Punch Down tool.

Bix® is a registered trademark of Nortel. Krone® is a registered trademark of Krone, Inc.

## Ratchet Telemaster™

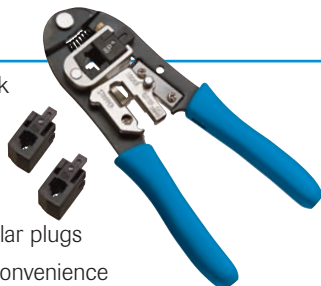
- For paired conductors
- Ratchet version of popular Telemaster™ Tool for RJ-45 and RJ-11 modular plugs
- Repeatable crimp action for consistent, high quality connections



Description	Cat. No.
Ratchet Telemaster™	30-696
Replacement Cut & Strip Blade Set for 30-696	LA-4102

## Modular Plug Tool Kit

- Multi-function telephone/network tool; cuts, strips and crimps
- Steel frame construction for durability
- Interchangeable dies allow for crimping RJ-45 and RJ-11 modular plugs
- Tool-less die change for added convenience
- Spring return handle for comfort



Description	Cat. No.
Modular Plug Tool Kit	33-296



## Also available in these kits:

33-505



33-705



## Telemaster™ Telephone Tools

- For paired conductors
- Multi-function telephone tool cuts, strips and crimps for easy one-tool application
- Steel frame for long-term durability. (Crimps primary modular plug strain relief only)



Description	Kit Cat. No.	Tool Only Cat. No.
Tool for RJ-11 (1, 2, 3 pair) and RJ-45 (4 pair) Plugs	33-700*	30-496
Tool for RJ-45 (4 pair) & DECconnect MMJ (RJ-11, 3 pair)	N/A	30-497
Tool for RJ-11 (1, 2, 3 pair) & DECconnect MMJ (RJ-11, 3 pair)	N/A	30-498
Tool for RJ-22 (handset) and RJ-11 (1, 2, 3 pair)	N/A	30-499
Replacement Cut and Strip Blade Set for Telemaster™	N/A	LB-1747

Kit includes 10 each, RJ-45 8P8C, RJ-11 6P6C and RJ-11 6P4C modular plugs.

## Also available in these kits:

33-704



33-750





## Kinetic Super™ Wire Stripper/Crimper

- Easily cuts and strips 22 to 24 AWG solid wire



Description	Cat. No.
Kinetic Super™ Wire Stripper/Crimper	45-719

## 4-Way Indent Crimp Tools

Crimp solid barrel contacts for RS232 interface connectors. Feature four-way indent dies (per MS22520 specifications), full cycle ratchet, built-in pin and socket locator and comfort-grip handles.



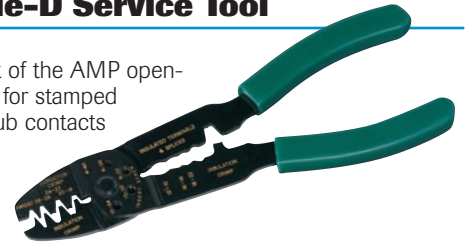
35-465

- High-grade steel construction for outstanding performance

Description	Cat. No.
20-26 AWG (.519 mm <sup>2</sup> - .128 mm <sup>2</sup> ) RS232 D-sub Round Barrel Contacts, Pins or Sockets	35-465
16-22 AWG (1.31 mm <sup>2</sup> - .324 mm <sup>2</sup> ) Round Barrel Contacts, Pins, Sockets and Deutsch 16 Pin Contacts	35-466
Trompeter BNC Connector Center Pins	35-468

## D-Sub/Double-D Service Tool

- Exact replacement of the AMP open-barrel service tool for stamped contacts and D-Sub contacts
- Also crimps Double-D, high density, miniature contacts
- Includes openings for crimping insulated terminals and cutters for machine screws



Description	Cat. No.
D-Sub/Double-D Service Tool	30-426

## 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
- Cushioned, comfort-grip handles



Description	Cat. No.
Coax Strip & Crimp Tool	30-433
Coax Strip & Crimp Tool Kit w/ten RG-6 F-Connectors	30-433F



## UTP/STP/Coaxial Cable Strippers

- Adjustable blades can be set for any depth to help ensure nick-free stripping and slitting of cables

Works Great  
on CAT 5  
Cabling



Description	Typical RG Cables	Cat. No.
Coaxial Cable Stripper, up to 1/8 in. (3.2mm) O.D.	RG-174, RG-187	<b>45-162</b> (Gray)
Coaxial Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D.	RG-58,CB Mini Coax	<b>45-163</b> (Blue)
Coaxial Cable Stripper, 1/4 in. (6.4mm) to 9/16 in. (14.3mm) O.D.	RG-11, RG-8	<b>45-164</b> (Blue)
Cable Stripper, 3/16 in. (4.8mm) to 5/16 in. (8mm) O.D.	RG-59, UTP Cable	<b>45-165</b> (Black)
Replacement Blade Set* for 45-162, 45-163, 45-165	—	<b>L-9225</b>
Replacement Blade Set* for 45-164	—	<b>L-9226</b>

\*A set of blades consists of three straight blades and one round blade.

## RG-11 Coax Strippers

- RG-11 45-011 Coax Stripper - for use with IDEAL RG-11 push-on connectors, provides a 1/4 in. x 1/8 in. strip
- RG-11 45-111 Coax Stripper - for use with IDEAL RG-11 compression connectors, provides 1/4 in. x 1/4 in. strip

Description	Cat. No.
RG-11 Coax Stripper for Push-On Connectors	<b>45-011</b>
RG-11 Coax Stripper for Compression Connectors	<b>45-111</b>

## Multi-Strip Coax/UTP Cable Stripper

- Strips UTP, RG-59 and RG-6 coax cable
- Provides a 1/4 in. (minimum) x 1/4 in. strip on coax
- Spare cartridge compartment provided
- Push-on ring for easy connector termination



Description	Cat. No.
Coax/UTP Cable Stripper	<b>45-603</b>
RG-6/59 Replacement Cartridge	<b>LB-2726</b>
RG-7/11 Replacement Cartridge	<b>LB-2728</b>
UTP Replacement Cartridge	<b>LB-2727</b>

## Coax Stripmaster® Wire Strippers

- Provides precision stripping with easy spring cushion grip
- Knife-type blades feature multiple hole diameters sized for two step removal of outer jacket insulation and center conductor



Description	Coax Cable Type (RGU)	Repl. Blade Cat. No.	Cat. No.
Coax Stripmaster® for RG-6	RG-6	<b>LB-740</b>	<b>45-262</b>
Coax Stripmaster® for RG-59	RG-59	<b>LB-743</b>	<b>45-265</b>
Coax Stripmaster® for RG-6 Quad Shield	RG-6 Quad Shield	<b>LA-3953</b>	<b>45-282</b>

## Mini Coax Stripper

- Adjustable stripper for mini coax cable
- Provides a 1/4 in. x 1/4 in. strip



Description	Cat. No.
Mini Coax Stripper	<b>45-529</b>

NEW





## Coax Cable Stripper

- For RG-6, RG-6 Quad and RG-59
- No adjustment required
- Strips center conductor and cable jacket



Description	Cat. No.
Coax Cable Stripper	45-320
Coax Connector Kit w/four Push-On F-Connectors	33-320

## UTP Cable Stripper

- Strips Cat 3, 5, 5e & 6 cables
- One-step stripping



Description	Cat. No.
UTP Cable Stripper	45-167

## Round Cable Slitting and 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	Cat. No.
Round Cable Slitting and Ringing Tool	45-144
Replacement Blades for 45-144 (2/pkg.)	LB-1748

## Coax Strippers

- Specific adjustments needed for each cable size



Description	Replacement Cassette	Cat. No.
Coax Stripper - 2 Step <ul style="list-style-type: none"> <li>• For most IDEAL compression connectors and single crimp/twist-on BNC/TNC</li> <li>• Strips 0.250 in. or 6.35mm</li> </ul>	45-524 (Blue)	45-526
Coax Stripper - 3 Step <ul style="list-style-type: none"> <li>• For crimp BNC and TNC connectors</li> <li>• Strips braid 0.240 in. or 6mm and Dielectric 0.240 in. or 6mm</li> </ul>	45-522 (Black)	45-520
Coax Stripper - 3 Step <ul style="list-style-type: none"> <li>• For dual crimp BNC/TNC and Thinnert BNC conn.</li> <li>• For 735A Belden® cable</li> <li>• Strips braid 0.328 in. or 8.2mm and dielectric 0.109 in. or 2.7mm</li> </ul>	45-523 (Brown)	45-521

## Toggle® Coax Strippers

- Toggle® Tools for stripping Ethernet, Thinnert, RG-62 or RG-59 coax cable and other cable sizes



Description	Cat. No.
Coax Stripper for RG-8/11U	45-510
Coax Stripper for RG-6	45-513

## Cyclops® Data Cable Stripper

- Fast, easy removal of outer sheath insulations (PVC and Plenum types, UTP & STP)



Description	Cat. No.
Data Cable Stripper for unshielded and shielded twisted pair cable	45-514

## Simplex/Duplex 3mm Jacket Stripper

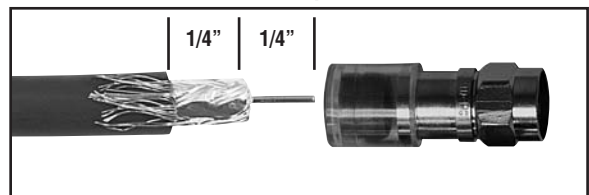


- Designed to remove the jacket from 3mm Simplex or Duplex (zip cord) fiber optic cable
- Form-ground, knife-type blades for accurate easy stripping without damaging the fiber or Kevlar® strength member
- Contoured, comfort-grip handles to reduce operator fatigue

Description	Cat. No.
Simplex/Duplex 3mm Jacket Stripper	45-349

Note: Kevlar® is a registered trademark of DuPont.

1/4 in. x 1/4 in. standard strip.





## Data T®-Cutter



45-074



45-075



- 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
- Locking latch keeps tool closed in pouch
- Data T®-Cutter II designed for RG-59 and RG-6 coaxial cable

Description	Cat. No.
Data T®-Cutter	45-074
Data T®-Cutter II	45-075

## Electrician's Scissors



35-088



35-093



35-089

- 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
- Electrician's Scissors with stripping notches strip 19 and 23 AWG wire

Description	Cat. No.
Electrician's Scissors w/stripping notches	35-088
Electrician's Scissors	35-089
Cable Splicing Knife and Leather Holder	35-091
Leather Knife Holder Only	35-092
Cable Splicing Kit (Scissors, Splicing Knife, Leather Holder)	35-093
Leather Holder only for Scissors and Knife	35-094

## Lever™ -Snips Electrician's Scissors with Stripping Notches

- Ergonomic design gives added leverage
- Spring-action, mechanical advantage increases stripping leverage and reduces operator fatigue
- Double plated for added rust protection
- Extra-deep serrations grip wire better



Description	Cat. No.
Electrician's Scissors with Stripping Notches	35-087

## Economy Round Cable and Wire Cutter

- Cuts multi-conductor cable up to .500 in. (12.7mm) and solid or stranded wire up to #8 AWG (10mm<sup>2</sup>)
- Built-in return spring, locking latch
- Stamped, hardened steel frame with curved cutting blades



Description	Cat. No.
Multi Conductor Cable to .500 in. (12.7mm) Solid or Stranded	35-051

## Center Conductor Cutter

- Trims coax center conductor to 3/16 in. (4.8 mm) length for proper installation into a dual crimp coax connector.



Description	Cat. No.
Center Conductor Cutter	35-060

## Also available in these kits:

33-917



33-623



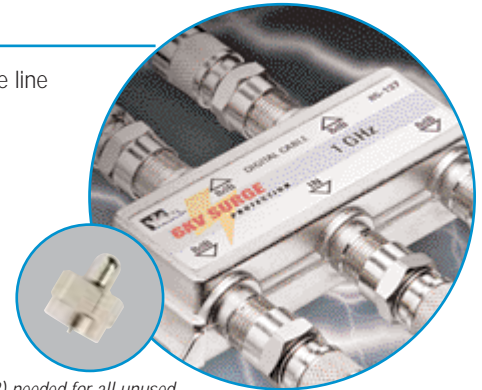


## Surge Suppression Cable Splitters

4-Way Digital Surge Suppression Cable Splitters withstand a one-time surge up to 6KV on cable line

- Bandwidth: 5 MHz - 1 GHz
- Impedance: 75 ohm
- Over 130 dB of RFI Shielding
- Low 8 db Insertion Loss
- PCB Printed Circuit Board Design
- Nickel Plated Housing
- Splits signals up to 4 outlets

Description	Cat. No.
2-Way Surge Suppression Splitter	85-135
4-Way Surge Suppression Splitter	85-137



Terminators (85-038) needed for all unused ports for optimal performance

## Grounding Blocks



85-311



85-313

- Solid zinc alloy, nickel plated and chromate finished
- High Performance beryllium copper contact
- Excellent electrical performance 0 - 3,000 MHz
- Dual grounding holes can accept up to #6 wire
- UL/CSA approved

Description	Qty.	Cat. No.
3 GHz Double Grounding Block	1/card	85-311
3 GHz Quad-Square Grounding Block	1/card	85-313

## Satellite and Digital TV Splitters



85-332



85-333



85-334

- Designed for easy mounting over cable
- All ports are F female connectors, 75Ω
- Two grounding screws eliminate the need for grounding block
- Single port power pass

Description	Qty.	Cat. No.
2-Way, 5MHz - 2.3GHz	1	85-332
3-Way, 5MHz - 2.3GHz	1	85-333
4-Way, 5MHz - 2.3GHz	1	85-334

## Diplexer, 2.3 GHz

- Combine or split cable/antenna signals with satellite signals
- High quality PCB design
- Nickel-plated die-cast zinc housing
- Grounding hole for up to 6 AWG wire



Description	Cat. No.
Diplexer, 2.3 GHz, SATV/TV Combiner Splitter - 2 Amp	85-323

## Splitters

85-132



85-133

85-134



Description	Quantity	Cat. No.
CATV Cable Splitter, 5-900 MHz, 2-Way	Card of 1	85-032
CATV Cable Splitter, 5-900 MHz, 3-Way	Card of 1	85-033
CATV Cable Splitter, 5-900 MHz, 4-Way	Card of 1	85-034
High Performance Cable Splitter, 5MHz-1GHz 2-Way	Card of 1	85-132
	Box of 10	86-132
High Performance Cable Splitter, 5MHz-1GHz 3-Way	Card of 1	85-133
	Box of 10	86-133
High Performance Cable Splitter, 5MHz-1GHz 4-Way	Card of 1	85-134
	Box of 10	86-134

## Digital Cable Splitter

- Nickel-plated housing
- High-performance impedance-balanced Printed Circuit Board design
- Bandwidth: 5MHz - 1 GHz Impedance: 75 Ohm; over 120 dB of RFI shielding; Splits signals up to 8 outlets



Description	Cat. No.
Digital Cable Splitter, 8-Way	85-138



## Compression Connectors for Every Application

**NEW**



### Reg/Tri/Quad & Plenum F-Connectors

- Fits 60% regular, tri-shield and quad cables
- Nickel-plated, brass-construction for superior corrosion resistance
- Approved for use by satellite and cable TV companies
- Approved for indoor and outdoor use
- Use 30-603, 30-793 or 30-633 Compression Tools

### RG-11 F-Connectors

- Fits 60% regular RG-11 cable
- Nickel-plated, brass-construction for superior corrosion resistance
- Approved for use by satellite and cable TV companies
- Approved for indoor and outdoor use
- Use 30-603 or 30-793 Compression Tools

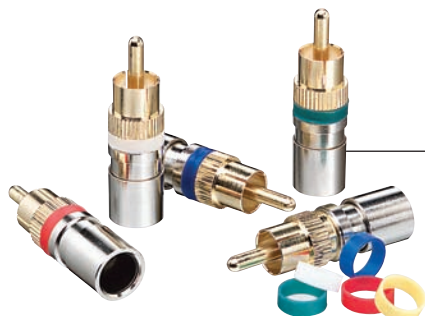


### BNC Connectors

- Nickel-plated, brass-construction for superior corrosion resistance
- Moisture-inhibiting design
- Approved for indoor and outdoor use
- Use 30-793 Compression Tool
- 75 Ohm nominal impedance
- Gold-plated pin contact area

### OmniCONN™ F-Connectors

- Non corrosive nickel plated brass body and polycarbonate bushing
- Delrin/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
- Bandwidth up to 3 GHz



### RCA Connectors

- Constructed of nickel plated brass and gold plated head
- 75 ohm nominal impedance
- Bandwidth up to 3 GHz
- Compatible with 30-603 and 30-793 Compression Tools

### Mini RCA Connectors

- For use with most 21-25 AWG mini coax cable
- Body is nickel plated for outstanding corrosion resistance
- Mini RCA head is gold plated for superior contact performance
- Bandwidth is 5 MHz - 3 GHz, Impedance is 75 Ohms (nominal), return loss min. -30 dB @ 3 GHz















F-Connector



RCA Connector



## Compression Connectors

	Connector Type	Cable Type	Qty.	Cat. No.
	F	RG-6 Reg/Tri/Quad	Card of 4	<b>92-654</b>
			Card of 10	<b>92-651</b>
			Jar of 50	<b>92-650</b>
			Jar of 100	<b>92-656</b>
			Box of 1,500	<b>92-659</b>
	F	RG-6 Plenum	Jar of 50	<b>92-660</b>
			Box of 1,500	<b>92-669</b>
	F	RG-59 Reg/Tri/Quad	Jar of 50	<b>92-610</b>
			Box of 1,500	<b>92-619</b>
	F	RG-11	Card of 10	<b>89-211</b>
			Box of 500	<b>89-1211</b>
	F	RG-6	Card of 4	<b>89-017</b>
			Jar of 50	<b>89-044</b>
	F	RG-6 Quad	Card of 4	<b>89-018</b>
			Jar of 50	<b>89-045</b>
	BNC	RG-6	Card of 15	<b>89-048</b>
			Jar of 35	<b>89-5048</b>
	BNC	RG-59	Card of 15	<b>89-047</b>
			Jar of 35	<b>89-5047</b>
	RCA	RG-6	Card of 10	<b>89-582</b>
			Jar of 35	<b>89-580</b>
	RCA	RG-59	Card of 10	<b>89-572</b>
			Jar of 35	<b>89-570</b>
	F	Mini	Card of 10	<b>89-014SM</b>
	RCA	Mini	Card of 10	<b>89-014SMRCA</b>

## Compression Port Seals

- Used with compression F-connectors to weatherproof connector by placing onto the female port
- Made from EPDM for superior sealing

Description	Qty.	Cat. No.
Short Sleeve Compression F-Connector Port Seals	Bag of 100	<b>89-126</b>
Long Sleeve Compression F-Connector Port Seals	Bag of 100	<b>89-127</b>



### Also available in these kits:

33-635



33-630



33-620





## F-Type Coaxial Connectors

F-Series Connectors utilize threaded couplings and cable conductors as contacts for CATV and other UHF applications.

	Connector Type	Cable Type	Termination Type	Quantity	Cat. No.
	F	RG-6	Crimp	Card of 4	<b>84-017</b>
				Card of 10	<b>85-037</b>
				Card of 50	<b>85-017</b>
				Box of 100	<b>86-017</b>
	F	RG-6 Quad	Crimp	Card of 4	<b>84-030</b>
				Card of 10	<b>85-057</b>
				Card of 50	<b>85-030</b>
				Box of 100	<b>86-030</b>
	F	RG-59	Crimp	Card of 4	<b>84-016</b>
				Card of 10	<b>85-036</b>
				Card of 50	<b>85-016</b>
				Box of 100	<b>86-016</b>
	F	RG-6	Twist-On	Card of 4	<b>84-039</b>
				Card of 10	<b>85-053</b>
				Card of 50	<b>85-039</b>
				Box of 100	<b>86-039</b>
	F	RG-59	Twist-On	Card of 4	<b>84-018</b>
				Card of 10	<b>85-035</b>
	F	N/A	N/A	Card of 10	<b>85-031</b>
	F	N/A	N/A	Card of 10	<b>85-038</b>

### Push-On F-Connectors, RG-6 & RG-59

- Tool-less design - cuts, strips and pushes on to cable
- All brass nickel-plated construction
- Knurled nut for superior grip
- For indoor use



Connector Type	Cable Type	Qty.	Cat. No.
F	RG-6	Card of 4	<b>85-065</b>
		Jar of 50	<b>85-165</b>
		Box of 1,500	<b>85-1165</b>
F	RG-6 Quad	Card of 4	<b>85-066</b>
		Jar of 50	<b>85-166</b>
		Box of 1,500	<b>85-1166</b>
F	RG-59	Card of 4	<b>85-067</b>
		Jar of 50	<b>85-167</b>
		Box of 1,500	<b>85-1167</b>

#### Description

Coax Connector Kit w/Economy Coax Stripper and four RG-6 Push-on Connectors

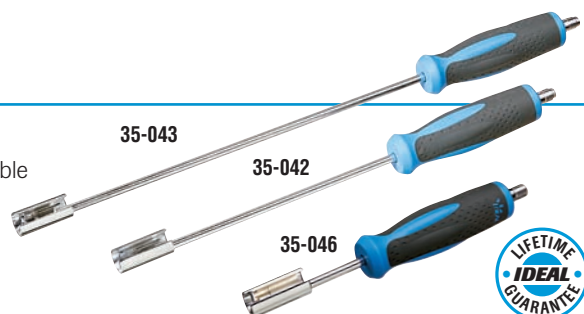
#### Cat. No.

**33-320**

### Connector Removal Tools

- Works on compression and hex connectors
- New comfort grip handle aids in installing and removing connectors on coax cable

Description	Cat. No.
F & BNC Coax Connector Removal Tool - 8 in.	<b>35-046</b>
F & BNC Coax Connector Removal Tool - 12 in.	<b>35-042</b>
F & BNC Coax Connector Removal Tool - 16 in.	<b>35-043</b>



35-043

35-042

35-046



### Push-On F-Connectors, RG-11

- Fits regular RG-11 cable
- Innovative design does not require a compression or crimp tool
- Integral pin with center conductor seizing mechanism
- Manufactured from solid brass, nickel-plated for durability
- 9/16 in. hex nut
- Use 45-011 1/4 in. x 1/8 in. Coax Stripper



**NEW**








Description	Qty.	Cat. No.
RG-11 Push-on F-Connector	Card of 10	<b>85-111</b>
RG-11 Push-on F-Connector	Box of 500	<b>85-0111</b>



## BNC Coaxial Connectors

IDEAL coaxial connectors are available in two grades. A premium specification grade features precision machined brass bodies with nickel plating. The commercial grade consists of machined diecast components with nickel plating. A variety of connectors handle different termination types, cable size, impedance rating and attachment means.

- Connector construction covers both plenum and non-plenum cable jackets
- Captive gold center contacts provide maximum conductivity and minimal resistance
- Nickel plating resists corrosion, tarnish and ensures signal quality
- Meets military specifications. MS39012 and MIL202 where applicable.
- Available in both small and bulk quantities to suit a range of application requirements

	Connector Type	Cable Type	Center Conductor	Jacket	Connector Impedance	Connector Grade	Insulation	Model	Qty.	Cat. No.
	BNC Plug	RG-58	20 AWG Solid	Non-Plenum	50 Ohm	Commercial	Delrin	IA-3620	Bag of 5	<b>85-490</b>
						Specification		IA-3621	Bag of 5	<b>85-491</b>
	BNC Plug	RG-59	20 AWG Solid	Non-Plenum	75 Ohm	Commercial	Delrin	IA-3617	Bag of 5	<b>85-502</b>
				Plenum				IA-3618	Bag of 5	<b>85-512</b>
			22-23 AWG Solid	Non-Plenum				IA-3624	Bag of 5	<b>85-513</b>
				Plenum				IA-3626	Bag of 5	<b>85-515</b>
				Non-Plenum	50 Ohm	Specification		IA-3592	Bag of 5	<b>85-517</b>
	BNC Plug	RG-6	18 AWG Solid	Non-Plenum	75 Ohm	Specification	Delrin	IA-3634	Bag of 5	<b>85-545</b>
		Belden 8281	20 AWG Solid					IA-3636	Bag of 5	<b>85-550</b>
	BNC Jack	RG-59	22-23 AWG Solid	Non-Plenum	75 Ohm	Specification	Teflon	IA-3638	Bag of 5	<b>85-553</b>
	BNC Terminator	—	—	—	50 Ohm	Specification	Delrin	IA-3641	Bag of 5	<b>85-556</b>
	BNC Tee Adapter	—	Jack to Plug	—	50 Ohm	Commercial	Delrin	IA-3667	Bag of 5	<b>85-588</b>
	BNC Adapter	—	Jack to Jack	—	50 Ohm	Specification	Delrin	IA-3668	Bag of 5	<b>85-590</b>
	BNC Twist-on Plug	RG-59	22-23 AWG Solid	Non-Plenum	50 Ohm	Commercial	Delrin	IA-3677	Bag of 5	<b>85-480</b>



## Wall Plates

Telephone Wall Plates are listed and approved by the Underwriter's Laboratories and contain 50 micro inches of gold plating on the contacts.

### Telephone Wall Plates - Standard Size - (2-3/4 in. x 4-1/5 in.)

Description	Color	Qty.	Cat. No.
RJ-11, 2 Pair	Ivory	Card of 1	85-206
		Box of 100	86-206
	White	Card of 1	85-207
		Box of 100	86-207
	Almond	Card of 1	85-223
		Box of 100	86-223
RJ-11, 2 Pair Wall Mount Plate	White	Box of 100	86-219
CATV Coax	White	Box of 100	86-201
Combo CATV/RJ-11	White	Card of 1	85-205
		Box of 100	86-205

### Telephone Wall Plates — Mid-Size (3-1/8 in. x 4-7/8 in.)

Description	Color	Qty.	Cat. No.
RJ-11, 2 Pair	White	Box of 100	86-237
Combo CATV/RJ11	White	Box of 100	86-236
CATV Coax	White	Box of 100	86-234



## Cables

- Customizable bulk cable
- Bulk CAT 5e solid 4-pair, CMR rated, 24 AWG, 350 MHz cable
- Bulk 2-conductor in-wall, 16 AWG speaker wire

Description	Cat. No.
CAT 5e Cable - 100 ft.	85-780
In-wall Speaker Wire - 50 ft.	85-770

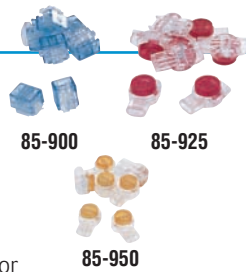




## Insulation Displacement Connectors (IDC)

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
- Kinetic Super™ Wire Stripper/Crimper easily cuts and strips 22 to 24 AWG solid wire



Description	Qty.	Cat. No.
UB-I, 2-Wire Tap Splice IDC	25	<b>85-900</b>
UR-I, 3-Wire Butt Splice IDC	25	<b>85-925</b>
UY-I, 2-Wire Butt Splice IDC	25	<b>85-950</b>
UR-I, 2-Wire Butt Splice IDC	100	<b>86-925</b>
UY-I, 2-Wire Butt Splice IDC	100	<b>86-950</b>
UB-I, 2-Wire Tap Splice IDC	1,000	<b>87-900</b>
UR-I, 3-Wire Butt Splice IDC	1,000	<b>87-925</b>
UY-I, 2-Wire Butt Splice IDC	1,000	<b>87-950</b>
IDC Combo Pack	25	<b>85-960</b>
Kinetic Super™ Wire Stripper/Crimper	1	<b>45-719</b>

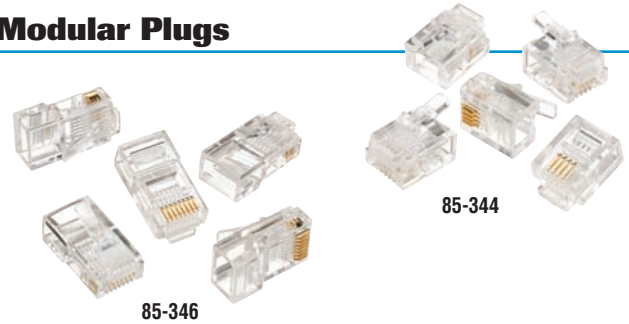
## CAT 6 Modular Plugs

- Supports CAT 6
- Unique three-piece design provides easy installation and optimal performance
- Crimps with a standard RJ-45 crimp die
- 50 micron gold contacts, 8-position, 8-contact
- Suitable for solid or stranded conductors



Description	Qty.	Cat. No.
CAT 6 Modular Plugs	25	<b>85-366</b>

## Modular Plugs



- All plugs comply with FCC 86 guidelines and are UL Listed
- Plugs are capable of supporting the latest EIA/TIA cable system performance categories when installed in compliance with appropriate EIA/TIA standards and methods
- Plugs offered for round cable with solid conductors and for flat cable and stranded conductors
- Position and contact configurations cover popular styles

Description	Qty.	Cat. No.
6-Position 4-Contact Flat Stranded	25	<b>85-351</b>
	50	<b>85-401</b>
	100	<b>86-401</b>
6-Position 6-Contact Flat Stranded	25	<b>85-352</b>
	50	<b>85-402</b>
	100	<b>86-402</b>
4-Position 4-Contact Flat Stranded (Handset)	100	<b>86-398</b>
8-Position 8-Contact Flat Stranded	25	<b>85-353</b>
	50	<b>85-403</b>
	100	<b>86-403</b>
6-Position 4-Contact Round Solid	25	<b>85-344</b>
	50	<b>85-394</b>
	100	<b>86-394</b>
6-Position 6-Contact Round Solid	100	<b>86-395</b>
8-Position 8-Contact CAT 6 Modular Plug	25	<b>85-366</b>
8-Position 8-Contact Round Solid	25	<b>85-346</b>
	50	<b>85-396</b>
	100	<b>86-396</b>

Also available in these kits:

33-750



33-704



33-652





## Economy Data and CATV Kit - 33-915

### Kit Includes:

- 30-496 Telemaster™ Telephone Tool
- 30-633 Economy Compression Tool
- 35-492 Non-Impact Turn-Lock™ Tool w/110 Blade
- 35-535 Mechanics Bag
- 45-074 Data T®-Cutter
- 45-167 Economy UTP Stripper
- 45-320 Economy Coax Stripper



## Basic Data and Video Kit - 33-916

### Kit Includes:

- 30-793 OmniSeal™ Pro XL Compression Tool
- 33-856 VDV Multimedia Cable Tester
- 35-462 Journeyman Electrician's Tote™
- 35-485 Punchmaster™ II Punch Down Tool w/110 Blade
- 45-074 Data T®-Cutter
- 45-165 UTP Stripper
- 45-262 Stripmaster® Wire Stripper for RG-6
- 62-140 TRACETone™ Tone Generator & Amplifier Probe



## Data/Video Kit - 33-917

### Kit Includes:

- 30-522 Crimpmaster™ Crimp Tool for RJ-45 Modular Plugs
- 30-793 OmniSeal™ Pro XL Compression Tool
- 33-856 VDV MultiMedia Cable Tester
- 35-046 Coax Connector Tool - F & BNC
- 35-088 Electrician's Scissors w/Stripping Notch
- 35-407 110/66 Blade Combo Punch Down Blade
- 35-410 Large Mouth Bag — 13 in.
- 35-473 Probe Pic and Spudger
- 35-485 Punchmaster™ II Punch Down Tool w/110 Blade
- 35-908 Twist-a-Nut™ 7-in-1 Screwdriver
- 45-074 Data T®-Cutter
- 45-165 UTP Stripper
- 45-526 Coax Stripper w/Replaceable Cartridge
- 62-164 Amplifier Probe



## Economy CATV Compression Kit - 33-621

### Kit Includes:

- 30-633 Economy Compression Tool
- 35-402 Zipper Pouch
- 45-074 Data T®-Cutter
- 45-320 Economy Coax Stripper
- 92-654 RG-6, RG-6 Quad Compression F-Connectors, qty. 4





## Residential Compression Kit - 33-625

### Kit Includes:

- 30-603 OmniSeal™ Pro Compression Tool
- 35-535 Mechanic's Tool Bag
- 45-074 Data T®-Cutter
- 45-262 Coax Stripmaster® Wire Stripper for RG-6
- 92-650 RG-6 RTQ Compression Connector, 50/jar
- LA-3953 Stripmaster® RG-6 QuadShield Repl. Blade



## Economy Compression Kit - 33-620

### Kit Includes:

- 30-633 Economy Tool
- 45-074 Data T®-Cutter
- 45-526 Coax Stripper
- 92-610 RG-59 RTQ Compression Connectors, 50/jar
- 92-650 RG-6 RTQ Compression Connector, 50/jar



## Service Compression Kit - 33-630

### Kit Includes:

- 30-793 OmniSeal™ Pro XL Compression Tool
- 45-074 Data T®-Cutter
- 45-262 Coax Stripmaster® Wire Stripper for RG-6
- 89-026 Compression F-Connector Port Seals, qty. 5
- 89-057 BNC RG-6 Compression Connectors, qty. 10
- 89-058 BNC RG-59 Compression Connectors, qty. 10
- 92-650 RG-6 RTQ Compression Connector, 50/jar
- 92-660 RG-6 Plenum Compression Connector, 50/jar
- LA-3953 Replacement Blade for 45-262



## RJ-45/11 Four, Six and Eight-Position Combination TelCom Termination Kit - 33-704

### Kit Includes:

- 30-496 Telemaster™ for RJ-11/RJ-45 Plugs
- 85-351 4-Position, RJ-11 Stranded Modular Plugs, qty. 15
- 85-352 6-Position, RJ-11 Stranded Modular Plugs, qty. 15
- 85-353 8-Position, RJ-45 Stranded Modular Plugs, qty. 15





## Economy 10Base-T Kit - 33-750

### Kit Includes:

- 30-496 Telemaster™ RJ-11/RJ-45 Crimp Tool
- 45-165 UTP/Coax Stripper
- 85-346 8-Position RJ-45 Non-keyed Solid Plugs, qty. 50



## Crimpmaster™ 10Base-T RJ-45 Crimping Kit - 33-652

### Kit Includes:

- 30-506 Crimpmaster™ Crimp Tool Frame only
- 30-559 8-Position Die Set for RJ-45 Plugs
- 45-074 Data T®-Cutter
- 45-165 UTP/Coax Stripper
- 86-396 8-Position RJ-45 Non-Keyed Solid Plugs, qty. 200



## RG-6 Push-on Connector Kit - 33-320

### Kit Includes:

- 45-320 2-Step 59 & 6 Series Stripper
- 85-065 RG-6 Push-On Connectors, qty. 4



## Compression Connector Installation Kit - 33-623

### Kit Includes:

- 45-074 Data T®-Cutter
- 45-320 Coax Cable Stripper
- 45-633 Economy Compression Tool
- Pouch w/belt clip





## Cable Service Kit - 33-605

### Kit Includes:

- 35-088 Electrician's Scissors w/Stripping Notches
- 35-462 Journeyman's Electrician's Tote™
- 35-473 Probe Pic & Spudger
- 35-485 Punchmaster™ Punch Down Tool w/110 Blade
- 35-497 66 Blade Only
- 35-905 5-in-1 Screwdriver
- 45-165 UTP/STP Stripper
- 62-160 Tone Generator
- 62-164 Amplifier Probe



## Deluxe Cable Service Kit - 33-705

### Kit Includes:

- 30-496 Telemaster™ Telephone Tool
- 35-088 Electrician's Scissors w/Stripping Notches
- 35-462 Journeyman's Electrician's Tote™
- 35-473 Probe Pic & Spudger
- 35-485 Punchmaster™ Punch Down Tool w/110 Blade
- 35-497 66 Blade Only
- 35-905 5-in-1 Screwdriver
- 45-165 UTP/STP Stripper
- 62-160 Tone Generator
- 62-164 Amplifier Probe
- 62-200 LinkMaster™ Tester and Remote



## Technician's Service Kit - 33-505

### Kit Includes:

- 35-088 Electrician's Scissors w/Stripping Notches
- 35-473 Probe Pic & Spudger
- 35-485 Punchmaster™ Punch Down Tool w/110 Blade
- 35-497 66 Blade Only
- 35-908 7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver
- 45-165 UTP/STP Stripper
- 62-205 Nylon case



## Crimpmaster™ F-Type (CATV) Connectors Kit - 33-400

### Kit Includes:

- 30-503 Crimpmaster™ CATV Crimp Tool
- 85-016 F-Connector, Crimp-on RG-59 Plugs, qty. 20
- 85-017 F-Connector, Crimp-on RG-6 Plugs, qty. 20





## Pro Installer Kit - 33-945

### Kit Includes:

- **30-427** Large Mouth Bag – 18 in.
- **30-603** OmniSeal™ Compression Tool
- **30-696** Ratchet Telemaster™
- **35-046** F-Connector Tool
- **35-087** Lever™-Snips Electrician's Scissors
- **35-091** Cable Splicing Knife
- **35-205** Torpedo Level
- **35-238** Mag-Tape™ Tape Measure
- **35-275** Jab Saw
- **35-407** 110/66 Blade
- **35-420** Tongue & Groove Pliers – 9-1/2 in.
- **35-473** Probe Pic and Spudger
- **35-485** Punchmaster™ II 110 Blade only
- **35-497** 66 Blade only
- **35-908** 7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver
- **35-3037** Smart-Grip™ Long-Nose Pliers – 7-3/4 in.
- **35-3430** Smart-Grip™ Tongue & Groove Pliers – 10 in.
- **45-074** Data T®-Cutter
- **45-165** UTP/STP Stripper
- **45-526** Coax Stripper - 2-Step
- **62-160** Tone Generator
- **62-164** Amplifier Probe



## Coax Termination Hip Kit - 33-624

### Kit Includes:

- **30-793** OmniSeal™ Pro XL Compression Tool
- **45-074** Data T®-Cutter
- **45-603** Coax/UTP Cable Stripper
- **92-651** Compression F-Connector, RG-6,10/card



## RCA Compression Connector Kit - 33-635

### Kit Includes:

- **30-793** OmniSeal™ Pro XL Compression Tool
- **45-074** Data T®-Cutter
- **45-603** Coax/UTP Cable Stripper
- **89-044** OmniCONN™ RG-6 Compression Connectors
- **89-572** OmniCONN™ RCA RG-59 Compression Connectors
- **89-582** OmniCONN™ RCA RG-6 Compression Connectors

**NEW**



## Telemaster™ Crimp Kit - 33-700

### Kit Includes:

- **30-496** Telemaster Tool for RJ-11 (1, 2, 3 pair) and RJ-45 Plugs
- **85-346** RJ-45 8P8C, qty. 10
- **86-395** RJ-11 6P6C, qty. 10
- **85-344** RJ-11 6P4C, qty. 10

**NEW**





## Coaxial Selection Chart

### Compression Style



Cable	Cutter	Stripper	Compression Tool	Compression Connector	Tester
<b>CATV/SATV/F-type</b>					33-856, 33-880 33-881, 33-887*
RG-59 Reg/Tri/Quad	45-074, 45-075	45-265, 45-603, 45-526	30-603, 30-793, 30-633	92-610, 92-619	
RG-6 Reg/Tri/Quad	45-074, 45-075	45-262, 45-603, 45-526	30-603, 30-793, 30-633	92-654, 92-651, 92-650, 92-656, 92-659	
RG-6 Plenum	45-074, 45-075	45-282, 45-603, 45-526	30-603, 30-793, 30-633	92-660, 92-669	
RG-11	45-074, 45-075	45-111, 45-510	30-603, 30-793	89-211, 89-1211	
Minis	45-074, 45-075	45-529, 45-163	30-603, 30-793	89-014SM, 89-014SMRCA	
<b>BNC</b>					
RG-59	45-074, 45-075	45-265, 45-603, 45-526	30-793	89-047, 89-5047	
RG-6	45-074, 45-075	45-265, 45-603, 45-526	30-793	89-048, 89-5048	

\*Need LA-4173 adapter.

### Crimp Style



Cable	Cutter	Stripper	Crimping Tool	Connector	Tester
<b>CATV/SATV/F-Type</b>					33-856, 33-880 33-881, 33-887*
RG-59	45-074, 45-075	45-265, 45-603, 45-320	30-503	85-036, 85-016, 86-016	
RG-6	45-074, 45-075	45-262, 45-603, 45-320	30-503	85-037, 85-017, 86-017	
RG-6 Quad Shield	45-074, 45-075	45-282, 45-603, 45-320	30-503	85-057, 85-030, 86-030	
RG-6 Plenum	45-074, 45-075	45-282, 45-603	30-503	N/A	
RG-11	45-074, 45-075	45-164, 45-510, 45-111	30-482	N/A	
<b>BNC</b>					
RG-59, Non-Plenum	45-074, 45-075	45-520	30-502, 30-483	85-513, 85-517, 85-502	
RG-6 Non-Plenum	45-074, 45-075	45-520	30-483	85-545	

\*Need LA-4173 adapter.



## FiberMASTER™ Fiber Optic Test Kit

Measure fiber optic power in milliwatts (mW) and decibel-milliwatts (dBm) to test and troubleshoot active LANs. Quickly measure cabling loss with the automatic calibration feature that stores reference power from any light source for quick dB loss calculations. Plus, the 1490nm wavelength measurement mode is perfect for troubleshooting emerging Fiber-To-The-Home cabling systems.

- **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.

### FiberMASTER Kit Includes:

- 33-926 Light source, 850nm LED with ST®, SC and FC adapters
- 33-927 Power meter, 4 wavelength with universal 2.5mm and fixed FC adapter
- 2x FC-SC 62.5um multimode cables
- 1 SC calibration coupler
- Carrying case
- English, Spanish, German, French, Portuguese, Italian and Chinese user's manual

### Power Meter Specifications

Wavelength	850, 1300/1310, 1490, 1550nm
Detector	InGaAs
Measurement Range	-60 to +3dBm
Accuracy	±5%
Display Resolution	.01
Connector	Universal 2.5mm w/FC adapter
Power Supply	AAA Alkaline Battery x 3
Operating Time	360 hours
Operating Temp	-10 to +60°C
Storage Temp	-25 to +70°C

### Light Source Specifications

Wavelength	850nm LED
Output Power	-6 to -7 dBm Typical
Stability	.05dB after 15min, 0.1dB over 8 hrs
Connector	2.5mm w/ST®, SC, FC adapters
Power Supply	AAA Alkaline Battery x 3
Operating Time	40 hours
Operating Temp	-10 to +60°C
Storage Temp	-25 to +70°C

Note: ST® is a registered trademark of AT&T.



Description	Cat. No.
Kit with integrated remote and accessories	33-928



## Fiber Inspection Microscope



- 100X magnification for viewing multimode connectors
- Includes 2.5mm connector "Universal Adapter" for FC, ST® and SC style connectors
- Oblique illumination provides excellent view of ferrule cleanliness and core condition
- Rugged, rubberized metal housing, precision glass optics and a built-in laser safety filter
- White LED illumination delivers 100,000 hours bulb life
- Soft padded carrying case included
- Battery life 48+ hours
- Compact size 7.5 in. x 1.96 in. x 1.18 in.
- Optional 200X Conversion Eyepiece threads on for viewing finish/polish of singlemode connectors

Description	Cat. No.
Fiber Inspection Microscope	45-332
1.25mm Connector Adapter	45-334
MTRJ-Style Connector Adapter	45-335
200X Conversion Eyepiece for Singlemode Connectors	45-336

Note: ST® is a registered trademark of AT&T.

## VFF Visual Fault Finder

Laser light source used to locate breaks, faulty splices and crimps

- **NEW** 2.5mm Universal Adapter for all ST®, SC and FC connectors
- Useful over a distance of 5km (3 miles)
- Two AA batteries provide over 30 hours of continuous use
- Slim, pocket-sized tool in rugged metal housing
- Nylon carrying case with belt loop included



Description	Cat. No.
Visual Fault Finder	VFF5

Note: ST® is a registered trademark of AT&T.

## Serrated Cutter (For Kevlar®) with Breaker Notch



- Two-Step process significantly increases the life of this rugged tool
- Superior quality high-carbon stainless steel with molybdenum and vanadium provides the super-hard edges needed to stand up to the demands of today's market
- Textured cushioned-grip handles
- Value-priced for contractors, cable assembly houses, fiber installers/technicians and tool kits

Description	Cat. No.
Serrated Cutter w/Breaker Notch (Patent pending)	45-344

Note: Kevlar® is a registered trademark of DuPont.

## DualScribe™ Double-Ended Fiber Optic Scribes

- Three professional quality blade styles to choose from to meet your specific needs – Ruby, Sapphire, Carbide
- Color-coded handles for quick, easy identification  
Red – Ruby  
Blue – Sapphire  
Black – 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	Handle Color	Cat. No.
Ruby Blade Fiber Optic Scribe	Red	45-357
Sapphire Blade Fiber Optic Scribe	Blue	45-358
Carbide Blade Fiber Optic Scribe	Black	45-359

## 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



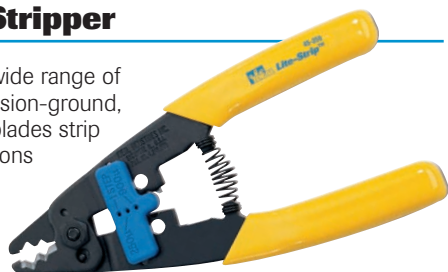
- Larger round strip notch machined to remove the 3mm outer jacket
- Strip notches pre-set and locked, no field adjustment necessary

Description	Cat. No.
MiniLite-Strip™ Optical Fiber Stripper	45-352



## Lite-Strip™ Optical Fiber Stripper

V-notch blades strip a wide range of outer cable jacket. Precision-ground, replaceable knife-type blades strip tight buffer tube insulations (900µm). Also strips mechanically strippable coatings from 250 microns to 900 microns.



- Replaceable precision-ground blades cleanly strip buffer coatings
- New funneled hole makes cable insertion easier
- Improved spring mounting returns handles to original position after every application
- One-step, 900 micron stripping hole provides broader stripping range
- Extra durable to withstand normal drops without requiring tool realignment
- New gauge color makes fiber and hole identification easier
- Improved comfort-grip handles for an easier, more comfortable stripping process

Description	Fiber Sizes	Cat. No.
Lite-Strip™ Optical Fiber Stripper (900µm/250µm)	125µm, 140µm	45-350

## Stripmaster® Ribbon Fiber Jacket Stripper

- Removes jacket from Ribbon Fiber without damage to the Kevlar® strength member of the Ribbon Fiber

Note: Frame and blade-set sold separately.

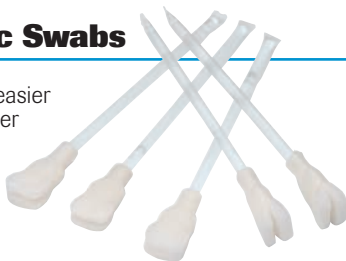


Description	Cat. No.
Stripmaster® Wire Stripper Frame only	L-5620
Blade-set for use with Corning Plenum and Riser Ribbon Fiber Cable	LB-1152
Blade-set for use with Corning "Fanout" Ribbon Cable	LB-1153

Note: Kevlar® is a registered trademark of DuPont.

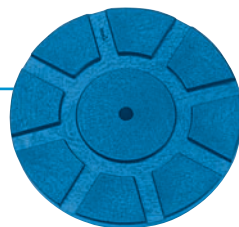
## Split-Tip Fiber Optic Swabs

- Split-tip design cleans fiber easier and more efficiently than other methods
- Tube/handle is pre-loaded with 99% isopropyl alcohol
- A single swab can be used for many cleanings or until the alcohol is gone



Description	Qty.	Cat. No.
Split-Tip Fiber Optic Swabs	Bag of 20	45-360

## Plastic Polishing Fixture



- Universal fitting accepts all ST®, SC and FC connectors with 2.5mm ferrules
- Economically priced
- Grooved face for polishing efficiency
- Precision tool used by manufacturers, contractors and in tool kits

Description	Cat. No.
Plastic Polishing Fixture	45-342

Note: ST® is a registered trademark of AT&T.

## Stainless Steel Polishing Fixture for Optical Fiber ST® and SC Type Connectors

Produces polished fiber optic ST® and SC type connectors for optimum connector performance.



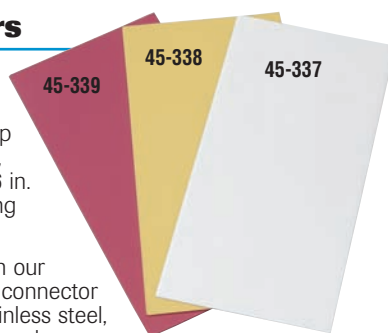
- Precision-machined, stainless-steel disk provides accurate polishing angle for desired end face finish
- Stainless-steel hardness maintains long life and resists uneven wear
- Stepped surface reduces drag and friction for easier polishing

Description	Qty.	Cat. No.
Polishing Fixture for Optical Fiber SC/ST® Type Connectors	1	45-341

Note: ST® is a registered trademark of AT&T.

## Polishing Films for Fiber Optic Connectors

- For optimum connector polishing results, we recommend a three-step procedure using 0.5µm, 3µm and 12µm 3 in. x 6 in. aluminum oxide polishing films
- Lot-to-lot consistency in our films means repeatable connector finishes on ceramic, stainless steel, plastic and composite ferrules
- A single sheet will typically yield 10 to 20 connectors when using the recommended 3-step procedure



Description	Color	Qty.	Cat. No.
0.5µm, 3" x 6", Aluminum Oxide	Ivory	20 films/sleeve	45-337
3.0µm, 3" x 6", Aluminum Oxide	Lt. Yellow	20 films/sleeve	45-338
12µm, 3" x 6", Aluminum Oxide	Lt. Red	20 films/sleeve	45-339





**DANGER**

**DO NOT REMOVE**  
USE THIS LOCKOUT DEVICE  
AS SHOWN BELOW WITH  
SECURE PADLOCK

**PLUG LOCKOUT**  
**DISPOSITIVO DE ENCHUFE**  
**BLOQUEO DE VERROUIL-**  
**SYSTEME DE VERROUIL-**  
**LAGE DE FICHE**

**NO RETIRAR**  
USE ESTE DISPOSITIVO  
DE BLOQUEO COMO SE  
MUESTRA ABAJO CON UN  
CANDADO DE SEGURIDAD

**NE PAS ENLEVER**  
UTILISER CE DISPOSITIF DE  
VERROUILLAGE DE LA FACON  
ILLUSTREE CI-DESSOUS AVEC  
UN CADENAS DE SURETE



**Safety**



## 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		Cat. No.
Basic Lockout/Tagout Kit		<b>44-970</b>
Kit 44-970 Includes:	Qty.	Cat. No.
Hinged Single-Pole Breaker Lockout	2	<b>44-810</b>
Universal 277V Breaker Lockout/Single Pole	1	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	1	<b>44-789</b>
3/4 in. Red Padlock	1	<b>44-906</b>
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Lockout Tags – Do Not Operate (striped)	5	<b>44-849</b>
Universal Multi-Pole Breaker Lockout	1	<b>44-783</b>
110V Plug Lockout	1	<b>44-818</b>
Zipper Pouch	1	<b>IA-3240</b>

Quantities listed in kit description are for individual pieces, not carded packages.

## Personal Lockout Pouch Kit

- Easy to carry, zippered pouch holds a worker's personal padlocks and other small devices



## 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		Cat. No.
Starter Lockout/Tagout Kit		<b>44-973</b>
Kit 44-973 Includes:	Qty.	Cat. No.
Universal 277V Breaker/Single-Pole Lockout	1	<b>44-809</b>
Universal Multi-Pole Lockout	1	<b>44-783</b>
3/4 in. Shackle Red Padlock	1	<b>44-906</b>
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Lockout Tags – Do Not Operate (striped)	2	<b>44-849</b>
110V Plug Lockout	1	<b>44-818</b>
Zipper Pouch	1	<b>IA-3240</b>

Quantities listed in kit description are for individual pieces, not carded packages.

Description		Cat. No.
Personal Lockout Pouch Kit		<b>44-969</b>
Kit 44-969 Includes:	Qty.	Cat. No.
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Lockout Tags	12	<b>44-833*</b>
Red Safety Padlocks - Keyed Alike	3	<b>44-916**</b>
Personal Lockout Pouch	1	—

\*Masterlock equivalent.

\*\*Keyed alike and master keyed padlocks can be special ordered by contacting IDEAL Customer Service.



## 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	Cat. No.	
Standard Lockout/Tagout Kit	<b>44-971</b>	
Kit 44-971 Includes:	Qty.	Cat. No.
Hinged Single-Pole Breaker Lockout	3	<b>44-810</b>
Universal 277V Breaker Lockout/Single Pole	2	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	1	<b>44-789</b>
110V Small Plug Lockout	1	<b>44-818</b>
2 in. Shackle Red Padlocks	2	<b>44-907</b>
1 in. Safety Lockout Hasps	2	<b>44-800</b>
Lockout Tags – Do Not Operate	5	<b>44-848</b>
Lockout Tags – Do Not Operate (striped)	5	<b>44-849</b>
Cleat for 277V Breaker Lockout	1	<b>44-785</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Universal Multi-Pole Breaker Lockout	2	<b>44-783</b>
Zipper Pouch	1	<b>IA-3240</b>

Quantities listed in kit description are for individual pieces, not carded packages.

## 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	Cat. No.
Group Lock Box	<b>44-804</b>

## 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	Cat. No.	
Plant Facility Lockout/Tagout Kit	<b>44-972</b>	
Kit 44-972 Includes:	Qty.	Cat. No.
Hinged Single-Pole Breaker Lockout	5	<b>44-810</b>
Universal 277V Breaker/Single Pole Lockout	3	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	2	<b>44-789</b>
110V Plug Lockout	1	<b>44-818</b>
1 in. Safety Lockout Hasps	3	<b>44-800</b>
Red Labeled Lockout	1	<b>44-791</b>
220/550V Plug Lockout	1	<b>44-819</b>
Lockout Tags – Do Not Operate (striped)	10	<b>44-849</b>
Fuse Blockout	1	<b>44-815</b>
Fuse Blockout	1	<b>44-816</b>
Gate Valve Lockout	1	<b>44-824</b>
Cleat for 277V Breaker Lockout	1	<b>44-785</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Universal Multi-Pole Breaker Lockout	3	<b>44-783</b>
Tool Box*	1	<b>IA-3241</b>

Quantities listed in kit description are for individual pieces, not carded packages.

\*Tool box color may vary.

## Lockout/Tagout Large Mouth Bag

- Ideal for both storage and portability of your lockout/tagout needs
- Top opens completely for easy access and re-inforced to hold itself open
- Durable multi-ply construction with removable shoulder strap



Description	Cat. No.
Lockout/Tagout Embroidered Bag - 16 in. long	<b>44-980</b>



## Industrial Lockout/Tagout Kit



- An industrial selection of lockout/tagout devices
- Polypropylene plastic tool box resists oil and chemicals

Description	Cat. No.	
Industrial Lockout/Tagout Kit	<b>44-974</b>	
<b>Kit 44-974 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	3	<b>44-810</b>
Universal 277V Breaker/Single Pole Lockout	2	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	1	<b>44-789</b>
110V Small Plug Lockout	1	<b>44-818</b>
Ball Valve Lockout	1	<b>44-820</b>
1 in. Safety Lockout Hasp	2	<b>44-800</b>
Red Labeled Lockout	1	<b>44-791</b>
220/550V Plug Lockout	1	<b>44-819</b>
Lockout Tags – Do Not Operate (striped)	10	<b>44-849</b>
Fuse Blockout	1	<b>44-815</b>
Fuse Blockout	1	<b>44-816</b>
Gate Valve Lockout	1	<b>44-824</b>
Cleat for 277V Breaker Lockout	1	<b>44-785</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Red Lockout Padlocks	4	<b>44-916</b>
Universal Multi-Pole Breaker Lockout	2	<b>44-783</b>
Tool Box*	1	<b>IA-3241</b>

Quantities listed in kit description are for individual pieces, not carded packages.

\*Tool Box color may vary.

## Job Site Lockout/Tagout Kit



- Perfect kit for an individual worker; padlocks are keyed-alike for added worker convenience
- Excellent selection of lockout/tagout devices, tags and keyed-alike padlocks for most applications

Description	Cat. No.	
Job Site Lockout/Tagout Kit	<b>44-979</b>	
<b>Kit 44-979 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Circuit Breaker Lockout - tall and wide toggles	2	<b>44-956</b>
Circuit Breaker Lockout - standard single and double toggles	3	<b>44-957</b>
Circuit Breaker Lockout Padlock	1	—
Red Lockout Padlocks	3	<b>44-916**</b>
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Red Labeled Lockout	1	<b>44-791*</b>
Universal Wall Switch Lockout	1	<b>44-772</b>
Lockout Tags - Do Not Operate (striped)	12	<b>44-833*</b>
Tool Box	1	<b>IA-3241*</b>

\*Masterlock equivalent.

\*\*Reference part number is keyed-different, keyed-alike and master-keyed products can be special ordered by contacting IDEAL Customer Service at 800-435-0705.

## Lock Stations

- 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	Cat. No.
Four-Lock Station (board only)	<b>44-777</b>
Four-Lock Station Kit includes four red Safety Padlocks (44-916), 12 Heavy-Duty Lockout Tags and two 1 in. Safety Lockout Hasps (44-800)	<b>44-778*</b>
Ten-Lock Station (board only)	<b>44-805</b>
Ten-Lock Station Kit includes ten red Safety Padlocks (44-916), 24 Heavy-Duty Lockout Tags and two 1 in. Safety Lockout Hasps (44-800)	<b>44-806</b>

\*Not shown.



## Industrial Lockout/Tagout Station



- Large Lockout/Tagout Station can be wall mounted or easily transported
- All metal, lockable cabinets come with two adjustable shelves (extra shelves available)
- Lockout safety tips are conveniently located inside of door for frequent reminders of proper lockout procedures

Description	Cat. No.	
Industrial Lockout/Tagout Station – 16" H x 14" W x 6" D	44-975	
Kit 44-975 Includes:	Qty.	Cat. No.
Hinged Single-Pole Breaker Lockout	2	44-810
Universal Single-Pole Breaker Lockout	2	44-809
Cleat for Universal Single-Pole Lockout	2	44-785
Universal Multi-Pole Breaker Lockout	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 Hasp	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 w/two shelves	1	IA-4989

Description	Qty.	Cat. No.
Extra shelf	1	IA-4990

## Lockout/Tagout Training Programs and Compliance Manuals

### Lockout/Tagout Video Training Program for Employee Safety and OSHA Compliance.

- 10-minute video effectively conveys the importance of Lockout/Tagout in the workplace.
- Demonstrates the seven steps to properly apply and five steps to re-energize from Lockout/Tagout
- Provides instructions for maintaining Lockout/Tagout during shift changes
- Shows how to apply, remove and maintain lockout devices
- Also suitable for employee-refresher training sessions
- Includes video, ten Lockout/Tagout Procedure Employee Reference Cards, instructor's guide and employee quiz
- Additional Employee Reference Cards also available (44-954)

### Compliance Manual to assist your facility in complying with Federal Lockout/Tagout Regulations

- 1 – Reviews the OSHA Standard in understandable, everyday language
- 2 – Provides a step-by-step program to help you develop your "Lockout/Tagout" Compliance Program
- 3 – Outlines the type of information required for employee training

### The Real, Real Life Lockout/Tagout Training DVD

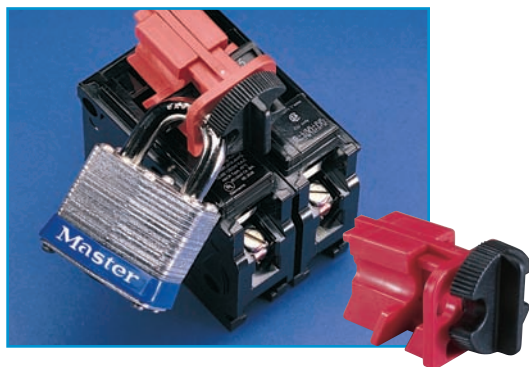
- 1 – Information you and your employees need to assist you in complying with OSHA's Lockout/Tagout Standards presented in an easy to understand and entertaining format
- 2 – This video comes in a plastic storage case and includes a leaders guide, training handbook with quiz, and wallet card reminder of the six steps to "Lock It and Tag It."



Description	Cat. No.
Lockout/Tagout Video Training Program	44-942
Lockout/Tagout Video Training Program Reference Cards	44-954
Lockout/Tagout Compliance Manual	44-940
Real, Real Life Lockout/Tagout Training DVD	44-941
Real, Real Life Lockout/Tagout Handbooks, 10/pack	44-953



## Multi-Pole Breaker Lockout

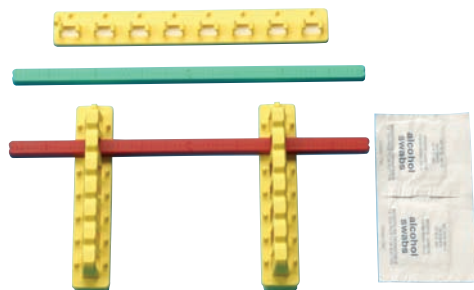


- Works with most major multi-pole breakers with tie-bar type switches including GE, ITE Sylvania, Challenger, Bryant, Westinghouse, Square D (2/3 poles) and General Switch Co.
- Easy to install — thumbscrew secures and locks tie bar in place; no cable ties or tools required
- Please see breaker guide for your application

Description	Qty.	Cat. No.
Multi-Pole Breaker Lockout	1	44-783

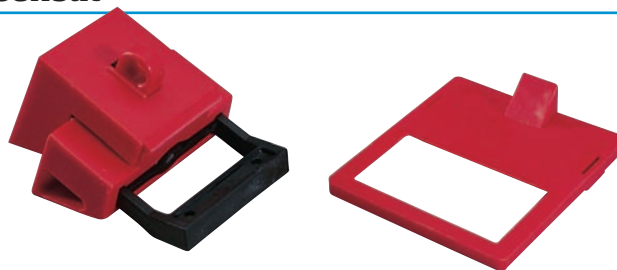
## Oversized Circuit Breaker Lockout System

- Unique Lockout system for oversized 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	Qty.	Cat. No.
Oversized Circuit Breaker System — 480-600 Volt	1	44-822

## 480/600V Single/Multi-Pole Breaker Lockout



- 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
- New blade design provides tighter grip with less torque on thumbscrew

Description	Qty.	Cat. No.
480/600V Single/Multi-Pole Breaker Lockout	1	44-807
480/600V Single/Multi-Pole Breaker Lockout	50	44-1807
Cleat for 480/600V Single/Multi-Pole Lockout	1	44-786

## Large Breaker Lockout

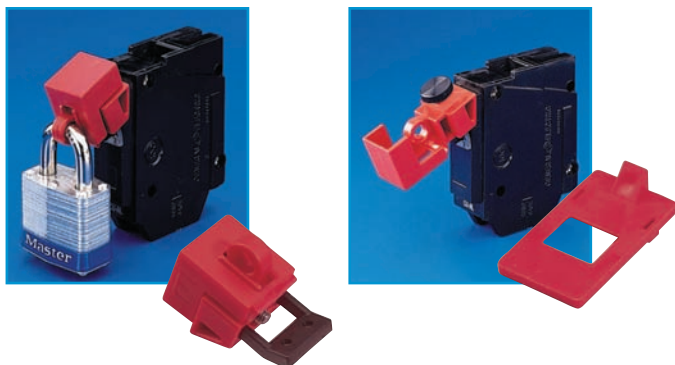
- Designed to lockout large 480/600V breaker switches up to 2-1/2 in. wide and 7/8 in. thick
- Easy to install — no tools required



Description	Qty.	Cat. No.
Large Breaker Lockout	1	44-823



## Universal 120/277V Breaker Lockout



- 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
- New blade design provides tighter grip with less torque on thumbscrew

Description	Qty.	Cat. No.
Single-Pole Breaker Lockout	3	<b>44-809</b>
Cleat for Single-Pole Breaker Lockout	3	<b>44-785</b>
Single-Pole Breaker Lockout	50	<b>44-1809</b>

## Hinged Single-Pole Breaker Lockout



- 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
- Please see breaker guide for your application

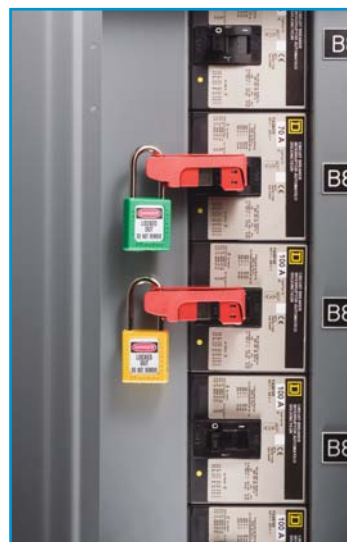
Description	Qty.	Cat. No.
Hinged Single-Pole Breaker Lockout	3	<b>44-810</b>
Hinged Single-Pole Breaker Lockout	100	<b>44-1810</b>

## Circuit Breaker Lockout

- 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	Cat. No.
Circuit Breaker Lockout, wide & tall toggles	<b>44-956</b>
Circuit Breaker Lockout, standard toggles	<b>44-957</b>





## Circuit Breaker Lockout System

- Covers most 120V - 277V breakers!
- Works on wide range of breakers, including single- and multi-pole configurations
- 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

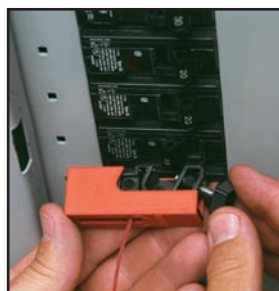
### Technical Information

- 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

### How the System Works



1. Peel liner off bottom of the lock rail, exposing super-bond adhesive. Permanently affix to any location on the panel. No drilling required.



2. Attach the lockout device to the breaker and snap into locked position.



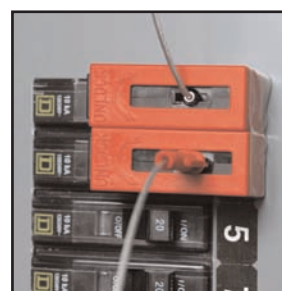
3. Pass plastic key through lock rail and attach lock, preventing key from sliding down cable and opening lockout device.



4. For group lockouts, run key through multiple loops in lock rail and apply locks. No hasps required!



5. Lockout device is unlocked by inserting and turning the red plastic key.



Perfect when locking out adjacent breaker lockouts.

### 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.



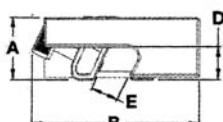
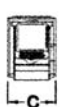
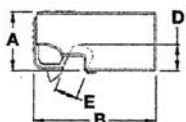
### Clamp-on

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 thumbwheel from being loosened.



### "No Shackle" Locks

Especially useful when lockout devices will be kept at the panel in accordance with NEC regulations. Everything you need to lockout breakers is kept conveniently right at the point of need!



Description	Outer Dimensions (In.)			Switch Clearance (In.)	
	A	B	C	D	E
Snap-On	0.90	1.88	0.74	0.40	0.35
Clamp-On	0.95	2.56	0.74	0.35	0.42

Description:	Qty.	Cat. 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
No shackle lock	1	444.001



## Miniature Circuit Breaker Lockouts

Pins Out Standard



Pins In Standard



Pins Out Wide



Tie Bar



- A safe and effective method for locking out miniature circuit breakers, commonly used in European and Asian equipment
- Miniature Breaker Lockouts require NO TOOLS to install! The Lockout easily installs with the aid of a push button. The Tie Bar Style Lockout has a convenient thumb wheel for quick application.
- Recommended to lock with lightweight Xenoy padlocks (see page G-20) or other padlocks, the lockouts can take padlocks with a shackle diameter up to 9/32 in.
- Material: Glass-filled nylon

Description	Qty.	Cat. No.
Pins Out Standard	1	44-779
Pins In Standard	1	44-780
Pins Out Wide	1	44-784
Tie Bar	1	44-787

## Wall Switch Lockouts

- Our patent pending universal Wall Switch Lockout locks out both toggle and decora wall switches
- The universal design assures switch is locked on or off. It also hinges open for unobstructed normal switch operation
- The standard wall switch lockout fits most wall-mounted single or three-way electrical switches



Description	Qty./Card	Cat. No.
Universal Wall Switch Lockout	1	44-772
Standard Wall Switch Lockout (not shown)	1	44-789

## 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	Cat. No.
Electric Plug Lockout	44-782

## Plug Lockouts

- Accommodate 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	Cat. No.
Plug Lockouts – 110V	2 in. x 2 in. x 3-1/2 in.	44-818
Plug Lockouts – 220/550V	3-1/4 in. x 3-1/4 in. x 7 in.	44-819

## 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	Cat. No.
Plug Lockout – up to 3 in. diameter	44-792
Plug Lockout – 110V/20V	44-793



## 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 Xenoy® 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	Cat. No.
Adjustable Cable Lockout	44-808

## Cable Lockout

- 44-829 Unique hasp lockout device accepts up to six 9/32 in. padlocks and comes with a 6 ft. plastic-coated steel cable



Description	Cat. No.
Cable Lockout, 6 ft. cable	44-829

## Gate Valve Lockouts

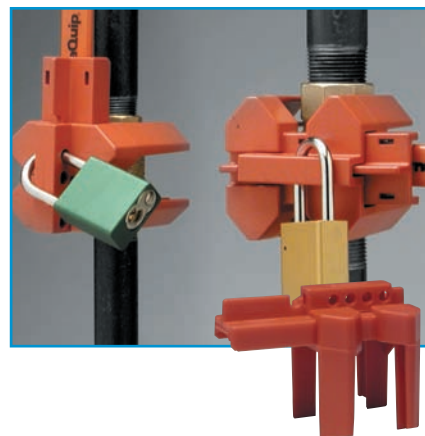
- Unique patent pending rotating design allows for easier installation in confined space applications
- Each size rotates into itself and nests within the next larger size to save space in storage
- Up to four workers can apply their personal safety locks
- Complete with high-visibility permanent safety labels (English, French & Spanish) that can be written on to identify the responsible person, then erased for the next job
- Tough, lightweight, dielectric Xenoy thermoplastic bodies withstand chemicals and perform effectively in extreme conditions, temperature range: -50°F (-46°C) to +350°F (177°C)



Valve Size	Qty.	Cat. 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.)	—	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



Valve Size (In.)	Max. Shackle Length	Material	Cat. No.
1/2 to 1-1/4	—	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



## Aluminum Safety Lockout Padlocks



- High visibility, baked-on powder coated finish stays bright
- Ideal for corrosive and tough environments
- 1-1/16 in. shackle clearance
- 1-9/16 in. wide lock with 1/4 in. shackle clearance
- Hardened shackles for superior resistance to cutting
- Keyed alike, master-keyed, additional colors and engraving available by special order

Bumper Color	Cat. No.
Blue	44-920
Black	44-921
Red	44-922
Yellow	44-923

## 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-Keyed locks available by special order



Bumper Color	3/4 In. Shackle Clearance Cat. No.	2 In. Shackle Clearance Cat. No.
Blue	44-900	44-901
Black*	44-902	44-903
White*	44-904	44-905
Red	44-906	44-907
Green*	44-908	44-909
Yellow*	44-910	44-911

\*Special order thru Customer Service.

## Xenoy 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 Xenoy® body
- 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
- Four colors for easy identification
- Keyed alike, Master-Keyed, 2nd key, additional colors and engraving available by special order



Bumper Color	Cat. No.
Blue	44-912
Black	44-914
Red	44-916
Yellow	44-918

## Lock Labels



- Easy identification of employees' locks
- Write-on, vinyl labels with peel-off adhesive backing
- Polyester over laminate protects label

Description	Qty.	Cat. No.
Lock Labels	8 labels	44-898

## Marking Pens

- Fast-drying, permanent ink will not smear
- Use on write-on marker cards and write-on cable-tie marker plates
- Color-coded in red or black



Description	Cat. No.
Marking Pen w/black ink	41-697
Marking Pen w/red ink	41-698



## Heavy-Duty Lockout Tags



- High-visibility lettering
- Laminated plastic tags have non-fade legends, resist corrosive and harsh environmental conditions and a 7/8 in. grommet
- Vinyl tags are silk screened with a metal grommet; fastener included
- Exceeds OSHA's 50-lb. pullout requirement

Legend	Type	Qty.	Cat. No.
Do Not Operate	Heavy-Duty Laminated	Card of 5	<b>44-830</b>
	Heavy-Duty Laminated	Box of 100	<b>44-1830</b>
	Economy Vinyl	Bag of 25	<b>44-848</b>
Do Not Operate – Maintenance Department	Economy Vinyl	Bag of 25	<b>44-844</b>
Do Not Operate – Electricians at Work	Heavy-Duty Laminated	Card of 5	<b>44-832</b>
	Economy Vinyl	Bag of 25	<b>44-843</b>
Do Not Operate – (red striped background)	Heavy-Duty Laminated	Card of 5	<b>44-833</b>
	Heavy-Duty Laminated	Box of 100	<b>44-1833</b>
	Economy Vinyl	Bag of 25	<b>44-849</b>
Do Not Operate (Photo ID - Self Sealant)	Heavy-Duty Laminated	Card of 5	<b>44-834</b>

## Bilingual Lockout Tags



- Spanish/English tags provide extra safety and information in bilingual situations
- High-visibility lettering
- Laminated plastic 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

Legend	Qty./Card	Cat. No.
Do Not Operate (striped)	5	<b>44-841</b>

## 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

### Safety Lockout Hasps

Jaw Diameter	Qty.	Cat. No.
1 in.	3	<b>44-800</b>
1 in.	50	<b>44-1800</b>
1-1/2 in.	2	<b>44-801</b>

### Labeled Safety Lockout Hasps

Legend	Color	Qty.	Cat. No.
Do Not Operate	Blue	1	<b>44-790</b>
	Red	1	<b>44-791</b>
	Red	50	<b>44-1791</b>



## Lockout Signs

- Resistant to both chemicals and abrasion – protected graphics for indoor and outdoor use



Legend	Material	Size (In.)	Cat. No.
OSHA Regulation 36 in. clearance	Self-sticking polyester	3-1/2 x 10	44-877
OSHA Regulation – Bilingual 36 in. clearance	Self-sticking polyester	7 x 10	44-878
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.)	Cat. No.
Danger – High Voltage	Fiberglass	10 x 14	44-862
Danger – High Voltage	Self-Sticking Polyester	7 x 10	44-863
Danger – High Voltage – Keep Out	Fiberglass	10 x 14	44-880
Danger – High Voltage – Keep Out	Self-Sticking Polyester	7 x 10	44-881
Danger High Voltage – Spanish	Self-Sticking Polyester	7 x 10	44-865

## 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.

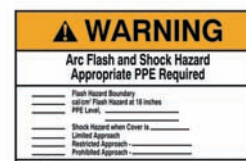
Required Labels –  
44-892/44-893/44-892BK



Arc Flash Labels  
44-894/44-895



Recommended Signs –  
44-896

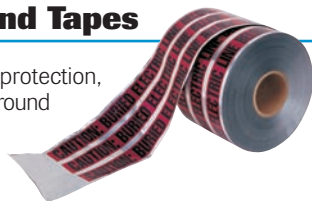


Description	Type	Size	Qty./Bag	Cat. No.
NEC Arc Flash, Warning	Self-Sticking polyester	3-1/2 in. x 5 in.	5	44-892
NEC Arc Flash, Warning		3-1/2 in. x 5 in.	100	44-892BK
NEC Arc Flash, Warning		5 in. x 7 in.	5	44-893
NEC Arc Flash, Danger		5 in. x 7 in.	5	44-894
NEC Arc Flash, Danger		4 in. x 6 in.	5	44-895
NEC Arc Flash, Warning		7 in. x 10 in.	1	44-896



## Detectable Underground Tapes

- 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



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	35 lbs./in. (15,000 PSI)

Legend	Color	Size	Cat. No.
Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	<b>42-201</b>
		6 in. x 1,000 ft.	<b>42-251</b>
Caution Buried Fiber Optic Line Below	Orange	6 in. x 1,000 ft.	<b>42-252</b>

## Non-Detectable Underground Tapes

- 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



Property	Method	Value
Thickness	ASTMD2103	4.0 Mils
Elongation	ASTMD882-75B	500%
Composition	IDEAL Specs.	LDPE
Tensile Strength	ASTMD882	2,750 PSI

### Recommended Burial Depth

3 in. Tape – 4 in. to 6 in.

6 in. Tape – less than 12 in.

Legend	Color	Size	Cat. No.
Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	<b>42-101</b>
		3 in. x 250 ft.	<b>42-131</b>
	Yellow	3 in. x 1,000 ft.	<b>42-102</b>
Caution Buried Telephone Line Below	Orange	3 in. x 1,000 ft.	<b>42-103</b>
Caution Buried Fiber Optic Line Below	Orange	3 in. x 1,000 ft.	<b>42-104</b>
Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	<b>42-151</b>
	Yellow	6 in. x 1,000 ft.	<b>42-152</b>

## Barricade Tapes



- High-visibility safety yellow or red polyethylene construction with bold black letters
- Meets OSHA specifications Section 1010.144 for marking physical hazards

Property	Method	Value
Elongation	ASTM D88-75B	≥ 400%
Composition	IDEAL Specs.	LDPE
Tensile Strength	ASTM D882	2,350 PSI TD 1,893 PSI MD

Legend	Color	Size	Thickness	Cat. No.
Caution	Yellow	3 in. x 1,000 ft.	4.0 Mils	<b>42-001</b>
Caution Do Not Enter	Yellow		4.0 Mils	<b>42-002</b>
Caution High Voltage	Yellow		4.0 Mils	<b>42-003</b>
Danger	Red		4.0 Mils	<b>42-051</b>
Danger High Voltage Keep Out	Red		4.0 Mils	<b>42-052</b>

Legend	Color	Size	Thickness	Cat. No.
Caution	Yellow	3 in. x 250 ft.	2.0 Mils	<b>42-031</b>
Caution	Yellow	3 in. x 1,000 ft.	2.0 Mils	<b>42-011</b>
Caution Do Not Enter	Yellow		2.0 Mils	<b>42-012</b>
Danger	Red		2.0 Mils	<b>42-015</b>



## Python™ Adjustable Locking Cable

Python™ Adjustable Locking Cable secures anything within its grasp. It's the only locking cable that is always the right length for your application. This exclusive, patented product holds the flexible steel cable tight at any position for infinite possibilities.

- Infinite Locking Positions – The patented lock holds the cable tight at any position 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	Cat. No.
Master Lock Python Kit with 6 ft. Cable-keyed different	<b>44-990</b>
Master Lock Python Kit with 6 ft. Cable-keyed alike*	<b>44-991</b>
12 ft. (3.7m) x 3/8 in. (10mm) Cable for Python Lock*	<b>44-992</b>

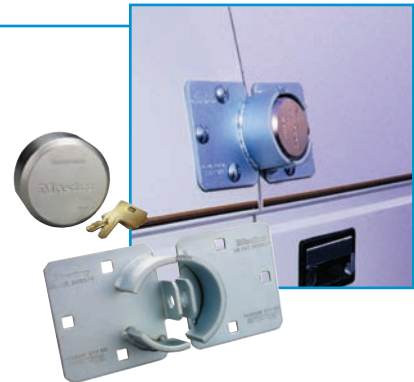
\*Special order thru Customer Service.

## Pro-Series® Shackless Lock and Hasp

- Ideal for vans, trucks, gates and vending
- Defeats attempts to pry and cut
- Hardened solid steel lock body withstands forcible attacks
- Complete with high security 6-pin Pro Series® Cylinder

Description	Cat. No.
Hidden Shackle Solid Steel Padlock*	<b>44-994</b>
Solid Steel Hasp for use with 44-994*	<b>44-993</b>

\*Special order thru Customer Service.



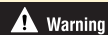
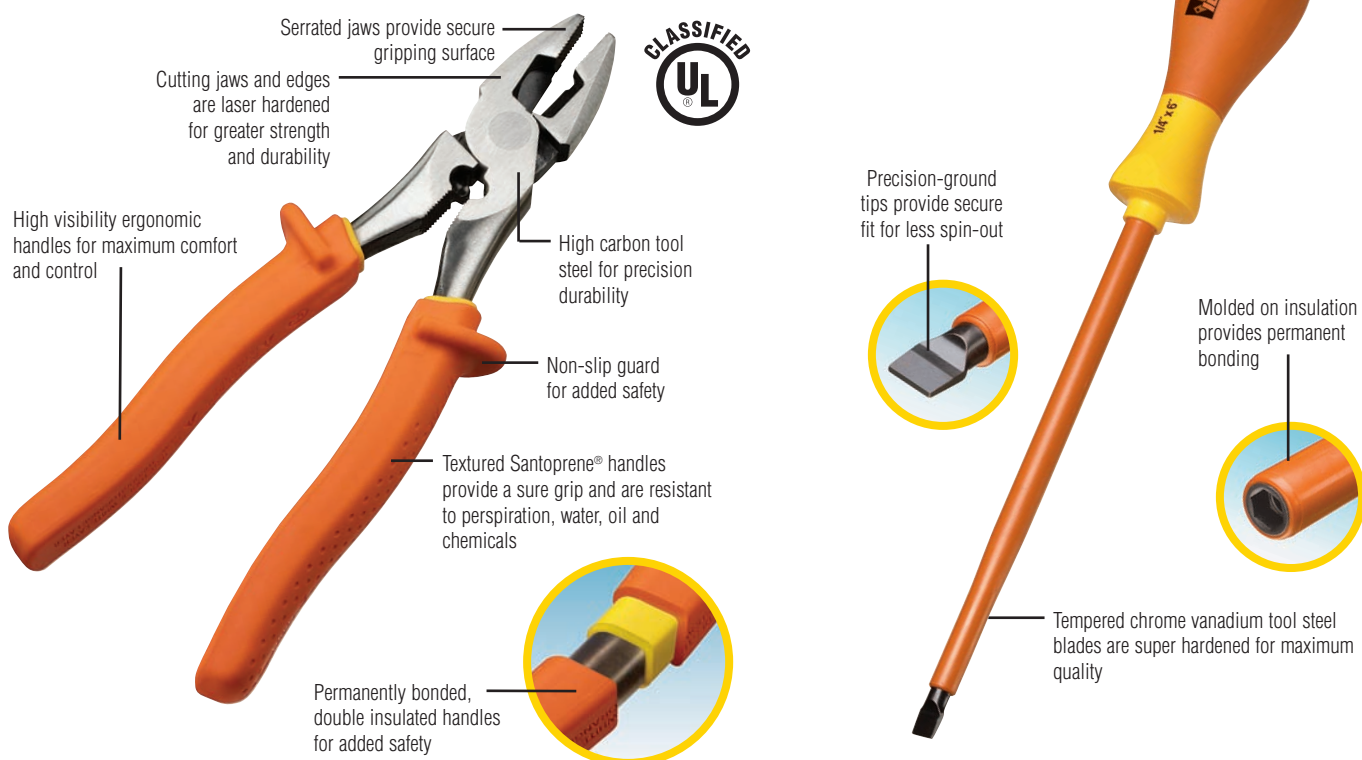


## Insulated Tools

The IDEAL insulated tool line creates a perfect blend of safety, comfort and precision functionality. Each tool features double insulated Santoprene® handles with a soft, easy-to-grip outer surface. In addition to the ergonomic qualities found in our tools, the insulated coating process acts as an 'at-a-glance' safety check. If the orange outer coating reveals any of the inner yellow surface, an electrician will know that this tool needs to be replaced.

### Tools feature:

- First UL tested and classified insulated pliers
- Each one designed and tested to meet ASTM F1505-01, EN DIN, and IEC 60 900 test standards
- Individually tested and VDE certified to 1000V AC (1500V DC)
- Meets OSHA requirements for insulated tools



### 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.**

### REGULATIONS

#### Testing:

- Every 1000V insulated tool we sell is individually tested to ensure no failure when subjected to live current.

#### UL and VDE Certification:

Listed below are some of the tests we perform in order to pass certification:

- Tools are immersed in water for 24 hours, then tested under current for 3 minutes to ensure no current leakage or sparkover occurs.
- After being stored for 168 hours at -40° C (-40° F), tools are dropped to ensure no damage from impact.
- After being stored for 168 hours at +70° C (158° F), a tensile load is applied to ensure the grip is firmly bonded to the tool.
- Tools are subjected to flame for 10 seconds to ensure no flammability of the insulating material.

#### OSHA Regulations:

OSHA 1910.335(a)(2)(i) When working near exposed energized conductors or circuit parts, **each employee shall use insulated tools** or handling equipment if the tools or handling equipment might make contact with such conductors or parts.

OSHA 1910.335 (a)(1)(i) Employees working in areas where there are potential electrical hazards **shall be provided with, and shall use**, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed.

**Make sure you are in compliance by providing and using IDEAL insulated tools!**



## 26-Piece Journeyman Kit - #35-9302



### Kit Includes:

- Four insulated pliers (9-1/4 in. Linesman w/crimper, 8 in. Offset diagonal, 8-1/2 in. Long Nose, 10 in. Tongue and Groove)
- Eight insulated screwdrivers ( 1/8 x 3 in. slotted, 3/16 x 5 in. slotted, 1/4 x 6 in. slotted, 5/16 x 6 in. slotted, 3/8 x 8 in. slotted, #1 x 3 Phillips, #2 x 4 in. Phillips, #3 x 6 in. Phillips)
- Six insulated nutdrivers (3/16 x 5 in., 1/4 x 5 in., 5/16 x 5 in., 3/8 x 5 in., 7/16 x 5 in., 1/2 x 5 in.)
- 9-1/2 in. insulated High-Leverage Cable Cutter
- 9-3/4 in. insulated Multi-Crimp Tool
- Insulated Reflex™ Super T®-Stripper Wire Stripper
- Insulated Wire Stripper Cutter
- Insulated Electrician's Skinning Knife
- Volt-Sensor® NCV Tester
- 7-1/2 in. Non-Conductive Fuse Puller
- Heavy-Duty Soft Tool Case



## 18-Piece Standard Kit - #35-9301



### Kit Includes:

- Four insulated pliers (9-1/4 in. Linesman w/crimper, 8 in. Offset diagonal, 8-1/2 in. Long Nose, 10 in. Tongue and Groove)
- Eight insulated screwdrivers ( 1/8 x 3 in. slotted, 3/16 x 5 in. slotted, 1/4 x 6 in. slotted, 5/16 x 6 in. slotted, 3/8 x 8 in. slotted, #1 x 3 Phillips, #2 x 4 in. Phillips, #3 x 6 in. Phillips)
- 9-1/2 in. Insulated High-Leverage Cable Cutter
- Insulated Reflex™ Super T®-Stripper Wire Stripper
- Insulated Electrician's Skinning Knife
- Volt-Sensor® NCV Tester
- 7-1/2 in. Non-Conductive Fuse Puller
- Heavy-Duty Soft Tool Case



## 10-Piece Basic Kit - #35-9300



### Kit Includes:

- Three insulated pliers (9-1/4 in. Linesman w/crimper, 8 in. Offset diagonal, 8-1/2 in. Long Nose)
- Three insulated screwdrivers ( 3/16 x 5 in. slotted, 1/4 x 6 in., #2 x 4 in. Phillips, #3 x 6 in. Phillips)
- 9-1/2 in. Insulated High-Leverage Cable Cutter
- Insulated Reflex™ Super T®-Stripper Wire Stripper
- 7-1/2 in. Non-Conductive Fuse Puller
- Heavy-Duty Soft Tool Case





## Insulated Pliers

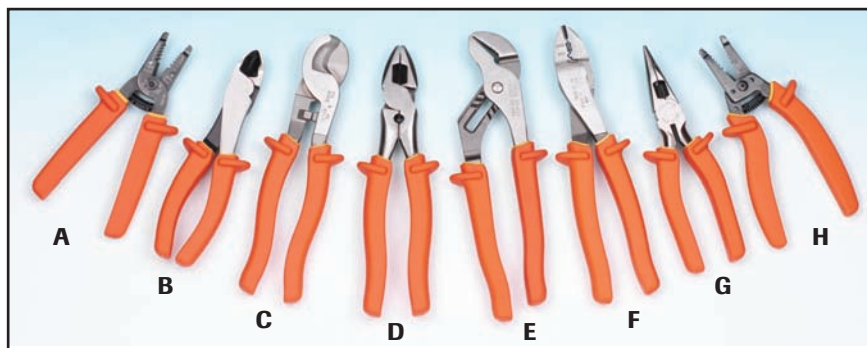


Fig.	Description	Cat. No.
A	Premium T <sup>®</sup> -Stripper Wire Stripper	45-9120
B	8 in. Diagonal Cutting Pliers w/angled head	35-9029
C	9-1/2 in. High-Leverage Cable Cutter	35-9052
D	9-1/4 in. Side Cutting Linesman Pliers	30-9430

Fig.	Description	Cat. No.
E	10 in. Tongue and Groove Pliers	35-9430
F	9-3/4 in. Multi-Crimp Tool	30-9429
G	8-1/2 in. Long-Nose Pliers	35-9038
H	Reflex <sup>™</sup> Super T <sup>®</sup> -Stripper Wire Stripper	45-9615

## Insulated Screwdrivers



## Insulated Nutdrivers



Description	Shaft Length	Cat. No.
#1 Phillips Screwdriver	3 in.	35-9310
#2 Phillips Screwdriver	4 in.	35-9311
#3 Phillips Screwdriver	6 in.	35-9312
1/8 in. Slotted Screwdriver	4 in.	35-9320
3/16 in. Slotted Screwdriver	5 in.	35-9321
7/32 in. Slotted Screwdriver	7 in.	35-9322
1/4 in. Slotted Screwdriver	6 in.	35-9323
5/16 in. Slotted Screwdriver	7 in.	35-9324
3/8 in. Slotted Screwdriver	8 in.	35-9325

Screwdriver Kit	Cat. No.
9-Piece Insulated Screwdriver Kit with hard case (Includes all nine screwdrivers listed above.)	35-9303

Description	Shaft Length	Cat. No.
3/16 in. Hex Nutdriver	5 in.	35-9330
1/4 in. Hex Nutdriver		35-9331
5/16 in. Hex Nutdriver		35-9332
3/8 in. Hex Nutdriver		35-9333
7/16 in. Hex Nutdriver		35-9334
1/2 in. Hex Nutdriver		35-9335
9/16 in. Hex Nutdriver		35-9336

Nutdriver Kit	Cat. No.
7-Piece Insulated Nutdriver Kit with hard case (Includes all seven Nutdrivers listed above.)	35-9304

## Insulated Knife



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

## Cases



Description	Cat. No.
Soft Zipper Case for Basic Kit (35-9300)	35-9350
Soft Zipper Case for Standard Kit (35-9301)	35-9351
Soft Zipper Case for Journeyman Kit (35-9302)	35-9352
Hard Case for Screwdriver Kit (35-9303) & Nutdriver Kit (35-9304)	35-9353



## Fuse Puller and 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
- For use on fuses to 100A/250V and 60A/600V
- Test capacity from 100V to 600V AC/DC



Description	Cat. No.
Fuse Puller & Test Light only	34-012

## Safe-T-Grip® Fuse Pullers

- 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	Cat. No.
Small Puller for 250V, 9/32 in. to 1/2 in. dia. fuses; 5 in. long	34-001
Medium Puller for 0 to 100A/250V & 600V, 1/2 in. to 1 in. dia. fuses; 7-1/2 in. long	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. long	34-003

## Tuff-Grip™ Fish Tapes

- Large 16 in. case accommodates long tape lengths
- Large, comfortable, durable handle provides secure grip and ease of use
- Durable impact-resistant case

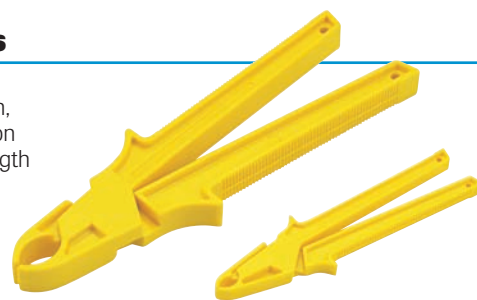


16 in.

Description	Cat. No.	Replacement Tape Cat. No.
S-Class® Fish Tape with Leader – 200 ft.	31-064	31-155
S-Class® Fish Tape with Eyelet – 200 ft.	31-065	31-165
Zoom™ – 200 ft.	31-096	31-097

## Fuse Pullers

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



Description	Cat. No.
Small Puller for 0 to 30A/250V, 1/4 in. to 1/2 in. dia. fuses; 5 in. long	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. long	34-016

## 5-in-1 Non-Conductive Screwdriver/Nutdriver



- 1000V AC, 1500V DC rated per ASTM F 1505-01 and EN 60900 (IEC900)
- Contains: 1/4 in. slotted, 3/16 in. slotted, #1 Phillips, #2 Phillips and 1/4 in. nutdriver
- Accommodates most standard 1/4 in. hex bits
- Powerful magnet securely holds bits in place
- Handle will store up to eight standard bits
- Strong 6 in. non-conductive composite material shank

Description	Cat. No.
5-in-1 Non-Conductive Screwdriver/Nutdriver	35-9905
1/4 in. Slotted Replacement Bit	LA-4125
3/16 in. Slotted Replacement Bit	LA-4126
#1 Phillips Replacement Bit	LA-4127
#2 Phillips Replacement Bit	LA-4128

## 1000V Insulated Screw-Holding Screwdriver

- Split blade wedges into screw slot when collar is extended
- Holds screw in place when installing in hard to reach areas
- Easy to start screw when wearing gloves



Description	Cat. No.
1000V Insulated Screw Holding Screwdriver, 3/16 x 6 in. slotted Tip	35-9406



Circuit Breaker Mfg.	Breaker Type	# of Poles	Standard Breaker Lockouts					Circuit Breaker LO Sys.		Mini Circuit Breaker Lockouts			
			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SQD 00) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
Airpax	Airpax	1		X*									
Allen Bradley	1492-CB1F	1								X			
Allen Bradley	1492-CB2F	2								X			
Allen Bradley	1492-CB3F	3								X			
Allen Bradley	1492-CB1G	1								X			
Allen Bradley	1492-CB2G	2								X			
Allen Bradley	1492-CB3G	3								X			
Allen Bradley	1492-CB1H	1								X			
Allen Bradley	1492-CB2H	2								X			
Allen Bradley	1492-CB3H	3								X			
Allen Bradley	1492-CB1DF	1								X			
Allen Bradley	1492-CB1DG	1								X			
Allen Bradley	1492-CB1DH	1								X			
Allen Bradley	1492-CB2DF	2								X			
Allen Bradley	1492-CB2DG	2								X			
Allen Bradley	1492-CB2DH	2								X			
ABB	JS	2-3			X**								
ABB	S1	3		X									
ABB	S3	3			X**								
ABB	F362	2								X			
ABB	F364	4								X			
ABB	F374	4								X			
ABB	E221	1								X			
ABB	E222	2								X			
ABB	E241	1								X			
ABB	E271	1								X			
ABB	E242	2								X			
ABB	E272	2								X			
ABB	E243	3								X			
ABB	E273	3								X			
ABB	E244	4								X			
ABB	E274	4								X			
ABB	S201-B	1								X			
ABB	S202-B	2								X			
ABB	S203-B	3								X			
ABB	S204-B	4								X			
ABB	S201-C	1								X			
ABB	S202-C	2								X			
ABB	S203-C	3								X			
ABB	S204-C	4								X			
ABB	S201-D	1								X			
ABB	S202-D	2								X			
ABB	S203-D	3								X			
ABB	S201-K	1								X			
ABB	S202-K	2								X			
ABB	S203-K	3								X			
ABB	S204-K	4								X			
ABB	S201P-K	1								X			
ABB	S202P-K	2								X			
ABB	S203P-K	3								X			
ABB	S222-K	4								X			
ABB	S221	1								X			
ABB	S222	2								X			
ABB	S223	3								X			
ABB	S224	4								X			
ABB	S251	1								X			
ABB	S252	2								X			
ABB	S253	3								X			
ABB	S261-B	1								X			
ABB	S262-B	2								X			
ABB	S263-B	3								X			
ABB	S264-B	4								X			
ABB	S261-C	1								X			

\*Use with cleat #44-785

\*\*Use with cleat #44-786



Circuit Breaker Mfg.	Breaker Type	# of Poles	Standard Breaker Lockouts					Circuit Breaker LO Sys.		Mini Circuit Breaker Lockouts			
			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SOD 00) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
ABB	S262-C	2								X			
ABB	S263-C	3								X			
ABB	S264-C	4								X			
ABB	S261-D	1								X			
ABB	S262-D	2								X			
ABB	S263-D	3								X			
ABB	S271-K	1								X			
ABB	S272-K	2								X			
ABB	S273-K	3								X			
ABB	S274-K	4								X			
ABB	S281-K	1								X			
ABB	S282-K	2								X			
ABB	S283-K	3								X			
ABB	S503UC-K	3										X	
ABB	S504UC-K	4										X	
Cutler Hammer	BA	1		X					X				
Cutler-Hammer	BAB	1	X	X					X				
Cutler-Hammer	BAB	2-3					X						
Cutler-Hammer	BD	1	X	X					X				
Cutler-Hammer	BR	1	X	X					X				
Cutler-Hammer	BR	2-3					X		X				
Cutler-Hammer	BRH	1	X	X					X				
Cutler-Hammer	BRH	2-3					X		X				
Cutler-Hammer	BRHH	2					X		X				
Cutler-Hammer	CC	3		X*									
Cutler-Hammer	CH	1	X	X				X	X				
Cutler-Hammer	CH	2-3					X		X				
Cutler-Hammer	CHH	3		X*									
Cutler-Hammer	CH2	4					X		X				
Cutler-Hammer	CHB	1	X	X				X	X				
Cutler-Hammer	CHB	2-3					X		X				
Cutler-Hammer	CHKD	2-3			X								
Cutler-Hammer	CHLD	2-4				X							
Cutler-Hammer	CHMDL	2-3				X							
Cutler-Hammer	CHND	2-4			X**								
Cutler-Hammer	CHP	1	X	X				X	X				
Cutler-Hammer	CHP	2-3					X		X				
Cutler-Hammer	CHQ	1						X	X				
Cutler-Hammer	CHQ	2					X		X				
Cutler-Hammer	CHSW	2-3					X		X				
Cutler-Hammer	CKD	2-3			X								
Cutler-Hammer	CL	1	X	X				X	X				
Cutler-Hammer	CL	2					X		X				
Cutler-Hammer	CLD	2-4				X							
Cutler-Hammer	CLDC	2-4				X							
Cutler-Hammer	CMDL	2-3				X							
Cutler-Hammer	CND	2-4			X**								
Cutler-Hammer	CNDC	2-4			X**								
Cutler-Hammer	CSR	1		X					X				
Cutler-Hammer	DK	2-3			X								
Cutler-Hammer	E125B	1-4		X					X				
Cutler-Hammer	E125E	1-4		X					X				
Cutler-Hammer	E125H	1-4		X					X				
Cutler-Hammer	E125S	1-4		X					X				
Cutler-Hammer	ED	2-4		X					X				
Cutler-Hammer	EDC	2-4		X					X				
Cutler-Hammer	EDH	2-4		X					X				
Cutler-Hammer	EFH	1-4		X					X				
Cutler-Hammer	EGB	1-4		X					X				
Cutler-Hammer	EGE	1-4		X					X				
Cutler-Hammer	EGS	1-4		X					X				
Cutler-Hammer	EHC	1-4		X					X				
Cutler-Hammer	EHD	1-4		X					X				

\*Use with cleat #44-785

\*\*Use with cleat #44-786

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www.idealindustries.com

H-21



Circuit Breaker Mfg.	Breaker Type	# of Poles	Standard Breaker Lockouts					Circuit Breaker LO Sys.		Mini Circuit Breaker Lockouts			
			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SOD OD) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
Cutler-Hammer	FB	2-3		X					X				
Cutler-Hammer	FC	1-4		X					X				
Cutler-Hammer	FD	1-4		X					X				
Cutler-Hammer	FDB	2-4		X					X				
Cutler-Hammer	FDC	2-4		X					X				
Cutler-Hammer	FS	2-3		X					X				
Cutler-Hammer	GB	1-3		X					X				
Cutler-Hammer	GC	1-3		X					X				
Cutler-Hammer	GD	1-3		X					X				
Cutler-Hammer	GDB	1-3		X					X				
Cutler-Hammer	GHB	1-3		X					X				
Cutler-Hammer	GHBGFEP	1		X					X				
Cutler-Hammer	GHC	1-3		X					X				
Cutler-Hammer	HJD	2-4			X								
Cutler-Hammer	HKD	2-4			X								
Cutler-Hammer	HLD	2-4				X							
Cutler-Hammer	HMCP	2-3		X	X	X							
Cutler-Hammer	HMDL	2-3				X							
Cutler-Hammer	HMDLB	2-3				X							
Cutler-Hammer	HMPL	3			X**	X							
Cutler-Hammer	HND	2-4			X**								
Cutler-Hammer	HQP	1	X	X					X				
Cutler-Hammer	HQP	2					X						
Cutler-Hammer	PB	2-3				X							
Cutler-Hammer	QBGF	1		X									
Cutler-Hammer	QBGF	2							X				
Cutler-Hammer	QBGFEP	1		X									
Cutler-Hammer	QBGFEP	2							X				
Cutler-Hammer	QBHGF	1		X									
Cutler-Hammer	QBHGFEP	1		X									
Cutler-Hammer	QBHW	1	X	X					X				
Cutler-Hammer	QBHW	2-3					X						
Cutler-Hammer	QC	1	X	X					X				
Cutler-Hammer	QC	2-3					X		X				
Cutler-Hammer	QCD	1	X	X					X				
Cutler-Hammer	QCD	2-3					X		X				
Cutler-Hammer	QCGF	1		X									
Cutler-Hammer	QCGFEP	1		X									
Cutler-Hammer	QCHGF	1		X									
Cutler-Hammer	QCHGFEP	1		X									
Cutler-Hammer	QCHW	1	X	X					X				
Cutler-Hammer	QCHW	2-3					X		X				
Cutler-Hammer	QHCW	1	X	X					X				
Cutler-Hammer	QHCW	2-3					X		X				
Cutler-Hammer	QHCX	1	X	X					X				
Cutler-Hammer	QHCX	2-3					X		X				
Cutler-Hammer	QHPW	1	X	X					X				
Cutler-Hammer	QHPW	2-3					X						
Cutler-Hammer	QHPX	1	X	X					X				
Cutler-Hammer	QHPX	2-3					X						
Cutler-Hammer	QPGF	1		X									
Cutler-Hammer	QPGF	2							X				
Cutler-Hammer	QPGFEP	1		X									
Cutler-Hammer	QPGFEP	2							X				
Cutler-Hammer	QPHGF	1		X									
Cutler-Hammer	QPHGFEP	1		X									
Cutler-Hammer	QPHW	1	X	X					X				
Cutler-Hammer	QPHW	2-3					X						
Fed. Pacific Elec.	2B	2											
Fed. Pacific Elec.	BAB	1		X					X				
Fed. Pacific Elec.	NA-single	3			X**				X				
Fed. Pacific Elec.	NA-tie bar	2							X				
Fed. Pacific Elec.	NB	1		X*					X				

\*Use with cleat #44-785

\*\*Use with cleat #44-786



Circuit Breaker Mfg.	Breaker Type	# of Poles	Standard Breaker Lockouts					Circuit Breaker I.O. Sys.		Mini Circuit Breaker Lockouts			
			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SOD 00) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
Fed. Pacific Elec.	NBH GFI	1		X					X				
Fed. Pacific Elec.	NE/NEF	1-3		X*									
Fed. Pacific Elec.	NEJ	1-3		X*									
Fed. Pacific Elec.	NFJ	1-3		X									
Fed. Pacific Elec.	NJJ	1-3			X								
Fed. Pacific Elec.	NJL	1-3			X								
Fed. Pacific Elec.	NM	1-3			X								
Fed. Pacific Elec.	NP-single	1		X					X				
General Electric	V	1-3									X		
General Electric	EH400	3			X								
General Electric	HQC	3		X					X				
General Electric	SED	2-3		X					X				
General Electric	SEH	2-3		X					X				
General Electric	SEL	2-3		X					X				
General Electric	SEP	2-3		X					X				
General Electric	SFH	2-3		X					X				
General Electric	SFL	2-3		X					X				
General Electric	SFP	2-3		X					X				
General Electric	SGD	2-3			X								
General Electric	SGH	2-3			X								
General Electric	SGL	2-3			X								
General Electric	SGLA	2-3			X								
General Electric	SGP	2-3			X								
General Electric	SRPG	3			X								
General Electric	TB	2		X*					X				
General Electric	TBC	2		X*					X				
General Electric	TE	1-3		X*					X				
General Electric	TEB	1-3		X*					X				
General Electric	TED	1-3		X*					X				
General Electric	TEF	1-3		X*					X				
General Electric	TEL	3		X*					X				
General Electric	TEML	3		X*					X				
General Electric	TEY	1-3		X					X				
General Electric	TF	1-3		X					X				
General Electric	TFC	3		X*					X				
General Electric	TFJ	2-3			X								
General Electric	TFK	2-3			X								
General Electric	TFL	3			X								
General Electric	THED	1-3		X*					X				
General Electric	THEF	1-3		X*					X				
General Electric	THFK	2-3			X								
General Electric	THHQB	2-3					X		X				
General Electric	THHQB-A	1	X	X					X				
General Electric	THHQB-S	1		X					X				
General Electric	THHQC	1-3					X		X				
General Electric	THHQC-A	1	X	X					X				
General Electric	THHQC-S	1		X					X				
General Electric	THHQL	2-3					X		X				
General Electric	THHQL-A	1	X	X					X				
General Electric	THHQL-S	1		X					X				
General Electric	THJK4	2-3			X**								
General Electric	THJK6	2-3			X**								
General Electric	THKM12	2-3				X							
General Electric	THKM8	2-3				X							
General Electric	THLC1	3		X*									
General Electric	THQB	2-3					X		X				
General Electric	THQB GF	1-2											
General Electric	THQB-A	1	X	X					X				
General Electric	THQB-S	1		X					X				
General Electric	THQC	2-3					X		X				
General Electric	THQC-A	1	X	X					X				
General Electric	THQC-AL	2-3					X		X				
General Electric	THQC-S	1		X					X				

\*Use with cleat #44-785      \*\*Use with cleat #44-786  
1-800-435-0705 for Customer Service



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			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SQD 00) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
General Electric	THQD	2-3		X*					X				
General Electric	THQDBL	3							X				
General Electric	THQL	2-3					X		X				
General Electric	THQL-A	1	X	X					X				
General Electric	THQL-S	1		X					X				
General Electric	TJ2	2-3			X**	X							
General Electric	TJ4	3			X								
General Electric	TJC	2-3		X*					X				
General Electric	TJD	2-3			X**								
General Electric	TJJ	2-3			X**								
General Electric	TJK	2-3			X**								
General Electric	TJS	2-3			X**								
General Electric	TK4V	3			X								
General Electric	TKC	3		X*					X				
General Electric	TKM	2-3				X							
General Electric	TKMA8	3				X							
General Electric	TQB	2-3					X		X				
General Electric	TQB-A	1	X	X					X				
General Electric	TQB-S	1		X					X				
General Electric	TQC	2-3					X		X				
General Electric	TQC-A	1	X	X					X				
General Electric	TQC-S	1		X					X				
General Electric	TQD	2-3		X									
General Electric	TQL	1-3											
General Electric	TQL	2-3											
General Electric	TQL-A	1	X	X					X				
General Electric	TQL-S	1		X					X				
General Electric	V	1-4									X		
Merlin Gerin	B100A	2										X	X
Merlin Gerin	C32N	1-3								X			
Merlin Gerin	C45AD	3								X			
Merlin Gerin	C60a	1-4								X			
Merlin Gerin	C60H	1-4								X			
Merlin Gerin	C60N	1-4								X			
Merlin Gerin	C80A	3										X	X
Merlin Gerin	NC100H	1-3										X	
Merlin Gerin	NC125H	1-3										X	
Merlin Gerin	NC100L	1-4										X	
Merlin Gerin	NC100LH	1-4										X	
Merlin Gerin	NC100L MA	3										X	
Merlin Gerin	NC100N	1-4										X	
Merlin Gerin	C801N	3				X							
Merlin Gerin	C1251N	3				X							
Merlin Gerin	CE104N	3		X*									
Merlin Gerin	CK1200NA	3				X							
Merlin Gerin	CJ	3			X**								
Siemens ITE	5SX11	1										X	
Siemens ITE	5SX12	2											X
Siemens ITE	5SX13	3											X
Siemens ITE	5SX21	1										X	
Siemens ITE	5SQ11	1										X	
Siemens ITE	5SQ12	2											X
Siemens ITE	5SQ13	3											X
Siemens ITE	5SQ16	4											X
Siemens ITE	5SN22	2											X
Siemens ITE	BL	1	X	X				X	X				
Siemens ITE	BL	2-3					X		X				
Siemens ITE	BLF-GFI	2					X		X				
Siemens ITE	BLH	1	X	X					X				
Siemens ITE	BLH	2-3					X		X				
Siemens ITE	BQ	1	X	X					X				
Siemens ITE	BQ	2-3					X		X				
Siemens ITE	BQCH	1-3		X					X				

\*Use with cleat #44-785

\*\*Use with cleat #44-786



Circuit Breaker Mfg.	Breaker Type	# of Poles	Standard Breaker Lockouts					Circuit Breaker LO Sys.		Mini Circuit Breaker Lockouts			
			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SOD 00) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
Siemens ITE	BQD	1-3		X					X				
Siemens ITE	BQH	1	X	X					X				
Siemens ITE	BQH	2-3					X		X				
Siemens ITE	CFD6	2-3			X**								
Siemens ITE	HBL	1	X	X					X				
Siemens ITE	HBL	2-3					X		X				
Siemens ITE	HBQ	1	X	X					X				
Siemens ITE	HBQ	2-3					X		X				
Siemens ITE	HE4	1-3		X					X				
Siemens ITE	HED4	1-3		X					X				
Siemens ITE	HED6	2-3		X					X				
Siemens ITE	HFD6	2-3			X**								
Siemens ITE	HFXD6	2-3			X**								
Siemens ITE	HHED6	2-3		X					X				
Siemens ITE	HHFD6	2-3			X**								
Siemens ITE	HHJD6	2-3			X								
Siemens ITE	HHJXD6	2-3			X								
Siemens ITE	HJD6	2-3			X								
Siemens ITE	HJXD6	2-3			X								
Siemens ITE	HMD6	2-3				X							
Siemens ITE	HMXD6	2-3				X							
Siemens ITE	HN3	2				X							
Siemens ITE	HND6	2-3				X							
Siemens ITE	HNXD6	2-3				X							
Siemens ITE	HPD6	3				X							
Siemens ITE	HPXD6	3				X							
Siemens ITE	HQJ2-H	3		X					X				
Siemens ITE	HQP	1	X	X					X				
Siemens ITE	HQP	2-3					X		X				
Siemens ITE	HQPP	1	X	X					X				
Siemens ITE	HQPP	2-3					X		X				
Siemens ITE	HQPPH	2					X		X				
Siemens ITE	HRD6	3				X							
Siemens ITE	HRXD6	3				X							
Siemens ITE	JD2	3				X							
Siemens ITE	JD6-A	2-3			X								
Siemens ITE	JJ3				X								
Siemens ITE	JJ6	3				X							
Siemens ITE	JL3	3			X								
Siemens ITE	NXD6	2-3				X							
Siemens ITE	PD6	3				X							
Siemens ITE	PXD6	3				X							
Siemens ITE	QJ2	2-3		X*					X				
Siemens ITE	QJ2-H	2-3		X*					X				
Siemens ITE	QJH2	2-3		X*					X				
Siemens ITE	QP	1	X	X					X				
Siemens ITE	QP	2-3					X		X				
Siemens ITE	QP1	1		X					X				
Siemens ITE	QPH	1	X	X					X				
Siemens ITE	QPH	2-4					X		X				
Siemens ITE	QPP	1	X	X					X				
Siemens ITE	QPP	2-3					X		X				
Siemens ITE	QPPH	1	X	X					X				
Siemens ITE	QPPH	2-3					X		X				
Siemens ITE	RD6	3				X							
Siemens ITE	RXD6	3				X							
Square D	EDB	1-3		X					X				
Square D	EGB	1-3		X					X				
Square D	EH4	1-3		X					X				
Square D	EHB	1-3		X					X				
Square D	EHB	2-3					X		X				
Square D	EJB	1-3		X					X				
Square D	EZ	3				X							

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Circuit Breaker Mfg.	Breaker Type	# of Poles	Standard Breaker Lockouts					Circuit Breaker LO Sys.		Mini Circuit Breaker Lockouts			
			120V Snap On (w/hole) 44-810	120/277V Clamp On (no hole) 44-809	480/600V Clamp On (no hole) 44-807	Oversize 480/600V 44-823	Multi-Pole (tie bar) 44-783	Snap On (SQD QO) 44-768	Clamp On (Universal) 44-764	Pin Out Standard 44-779	Pin In Standard 44-780	Pin Out Wide 44-784	Multi-Pole w/Tie Bar 44-787
Square D	FA	1-3		X*									
Square D	FAL	1-3		X*									
Square D	FC	3		X*									
Square D	FCL	2-3		X*									
Square D	FDA			X					X				
Square D	FGA	3							X				
Square D	FH	1-3		X*									
Square D	FHL	1-3		X*									
Square D	FHL-DC	3		X*									
Square D	FHP	3		X*									
Square D	FI	3		X*									
Square D	FIL	3		X*									
Square D	FY	1		X*									
Square D	GJL	3		X*									
Square D	KA	2-3		X*									
Square D	KAL	2-3		X*									
Square D	KAP				X								
Square D	KC	2-3		X*									
Square D	KCL	2-3		X*									
Square D	KH	2-3		X*									
Square D	KHL	3		X*									
Square D	KI	2-3		X*									
Square D	KIL	2-3		X*									
Square D	LA	2-3			X**								
Square D	LAL	2-3			X**	X							
Square D	LAP	3			X**	X							
Square D	LC	3				X							
Square D	LCP	3				X							
Square D	LH	2-3			X**								
Square D	LHL	3			X**	X							
Square D	LHP				X**	X							
Square D	L2	3				X							
Square D	LXL	3				X							
Square D	Q1B	2-3		X					X				
Square D	Q1L	2-3		X					X				
Square D	Q2	2-3		X*									
Square D	Q2H	2-3		X*									
Square D	Q2L	2-3		X*									
Square D	Q2MT	2-3		X*									
Square D	Q4	2-3			X**								
Square D	Q4L	2-3			X**								
Square D	QO	1						X					
Square D	QO	2-3	X	X				X	X				
Square D	QOB	1						X					
Square D	QOB	2-3	X	X				X	X				
Square D	QOB-H	2						X					
Square D	QOB-VH	1	X	X				X					
Square D	QOB-VH	2-3					X						
Square D	QO-H	2						X					
Square D	QOM1-VH	2		X					X				
Square D	QOM2-VH	2		X					X				
Square D	QO-SWN	2-3	X	X				X	X				
Square D	QOU	1						X					
Square D	QOU	2-3		X				X	X				
Square D	QOU w/tie bar	2-3					X		X				
Square D	QO-VH	1						X					
Square D	QO-VH	2-3	X	X				X	X				
Square D	QYU	1						X					
Square D	Y1				X								
Westinghouse	RE			X					X				
Westinghouse	RH	3			X								
Westinghouse	WPHX	1	X	X					X				

\*Use with cleat #44-785

\*\*Use with cleat #44-786



# Alphabetical Index

Item	Page	Item	Page	Item	Page	Item	Page
10 Gigabit Alien Crosstalk Testing Kit .....G-6		Anchor Kits .....E-9		BNC Coaxial Connectors .....G-21		Cable Stripper, Multi-Strip Coax/UTP .....G-14	
1000 Amp Clamp Meter.....F-13		Anchors, Flange-Type Plastic ...E-9		BNC Connectors .....G-18		Cable Stripper, Ringer™ Shielded .....C-5	
1000V Insulated Screw-Holding Screwdriver .....C-35		Anti-Oxidant, Noalox® ...A-29, B-12		Booklets, Wire Marker .....E-16		Cable Stripper, UTP .....G-15	
10-in-1 Screwdriver .....C-21		Appliance Rocker Switches ...E-23		Booklets, Write-On Wire .....E-16		Cable Strippers, UTP/STP/Coaxial .....G-14	
310 Series Digital Meter .....F-7		Apron, Supplies .....C-30		Box, Group Lock .....H-3		Cable Tie Assortment .....E-2	
340 Series Meters .....F-5, F-15		Aqua-Gel® CW Cable Pulling Lubricant .....B-11		Breaker Lockout, Hinged Single-Pole .....H-7		Cable Tie Bag .....E-2	
3-Phase/Motor Rotation Tester .....F-30, F-15		Aqua-Gel® II Cable Pulling Lubricant .....B-11		Breaker Lockout, Large .....H-6		Cable Tie Installation Tool .....A-62	
4-in-1 Test Tool .....F-10		Aqua-Gel® IIP Cable Pulling Lubricant .....B-11		Breaker Lockout, Multi-Pole ...H-6		Cable Tie Installation Tools .....E-2	
5-in-1 Screwdriver .....C-21		Arbor Extension, Hole Saw ...C-41		Breaker Lockout, Single-Pole ...H-6		Cable Tie Material Specifications .....E-7	
600 Amp Clamp Meter ...F-11, F-15		Arbors, Hole Saw .....C-41		Breaker Lockout, Universal .....H-7		Cable Ties, Assorted .....A-62	
600 Series Pocket Meter .....F-7		Auger Bit Extensions .....C-46		Brush Seater & Commutator Cleaner .....E-31		Cable Ties, Multi-Purpose .....A-62	
660 Amp Clamp Meter ...F-12, F-15		Auger Bits, Nailbiter™ Ship ...C-46		B-TAP® Connectors .....A-40		Cable Ties, Powr-Tie™ .....E-4, E-5	
6-in-1 Twist-a-Nut™ Tapping Tool .....C-17		Augers .....C-46		Bucket Bag Tool Carrier.....C-30		Cable, USB .....F-3, F-4	
7-in-1 Twist-a-Nut™ Screwdriver .....C-16		Augers, RESI-MASTER™ Heavy-Duty Ship .....C-46		BULZ-EYE™ Kits .....C-45		Cables.....G-22	
9-in-1 Ratch-a-Nut™ Screwdriver .....C-16		Automatic Blade Lock Measuring Tape .....C-25		BULZ-EYE™ Self Feed Wood Boring Bits .....C-44		Can Light Hole Saw, Adjustable .....C-41	
		Aviation Tin Snips .....C-48		Bushings, Universal Metal Stud .....E-32		Carbide Hole Cutter Kit .....C-38	
		Awl .....C-20		Butt Splices .....A-22, A-23		Carbide Hole Cutters .....C-38	
<b>A</b>						Carbon Steel Service Entrance Staples .....E-11	
Abrasive, Powr-Polish™ Flexible .....E-31		<b>B</b>		<b>C</b>		Carbon Steel Staples .....E-10	
Accessories, Grounding .....A-16		Bag, Cable Tie .....E-2		Cabinet Tip Screwdrivers .....C-19		Cards, Wire Marker .....E-17	
Accessories, Heat Gun .....E-15		Bag, Lockout/Tagout .....H-3		Cable Certification Testers, LANTEK® .....G-2, G-3		Cards, Write-On Marker.....E-17	
Accessories, Toggle Switch ...E-21		Bags, Large Mouth .....C-31		Cable Cutter, Ratcheting .....C-22		Carriers, Foam .....B-16	
Accessory Kits, Tuff-Rod™ Fishing Pole .....B-7		Ball Valve Lockout Devices ...H-10		Cable Cutter, Telco Ratcheting .....C-22		Carrying Case .....F-5, F-10, F-11, F-12, F-19, F-23	
Adapter, Alligator Clip ...F-23, F-24		Barricade Tapes .....H-14		Cable Cutters .....C-11, C-15		Carrying Case Selection Guide .....F-32	
Adapter, Cord .....F-24		Barrier Strips .....A-27		Cable Cutters, Long-Arm .....C-22		Carrying Case, C-290 .....F-6, F-24	
Adapter, Ground Continuity ...F-23		Bases, Screw Mounting .....E-6		Cable Lockout .....H-10		Carrying Case, C-50 .....F-24	
Adapter, Isolated Ground .....F-23		Basic Data & Video Kit .....G-25		Cable Pulling Lubricant, Aqua-Gel® CW .....B-11		Carrying Case, C-90 .....F-26	
Adapter, Thermocouple ...F-4, F-33		Batteries .....F-27		Cable Pulling Lubricant, Aqua-Gel® II .....B-11		Carrying Cases .....F-32	
Adapters, Alligator Clip .....F-22		Battery Clamps, Plier-Type .....E-29		Cable Pulling Lubricant, Aqua-Gel® IIP .....B-11		Case, Leather .....F-27	
Adapters, Current Clamp .....F-3, F-4, F-5, F-6, F-31		Battery Clips .....E-28		Cable Ripper.....C-7		Case, Padded Nylon .....F-27, F-28	
Adapters, Flexible Clamp .....F-21, F-31		B-CAP® Wire Connectors .....A-36		Cable Service Kit .....G-27		Cases, Carrying .....F-32	
Adjustable Cable Lockout .....H-10		Belt Bag™ Supplies Pouch ...C-30		Cable Slitting Tool, Round .....G-15		Cases, Fish Tape .....B-3	
Adjustable Can Light Hole Saw .....C-41		Belts .....C-29		Cable Splicing Kit .....G-16		Cases, Fish Tape Replacement .....B-6	
Adjustable Wrenches.....C-24		Bender Handles .....B-13		Cable Splicing Knife .....G-16		Cases, Insulated Hand Tool ...H-18	
Alligator Clip Adapter .....F-22, F-23, F-24		Bender Putter .....B-12		Cable Splitter, Digital .....G-17		CAT 6 Modular Plugs.....G-23	
Alligator Clips .....E-29		Bender, Pocket Guide .....B-14		Cable Splitters, Surge Suppression .....G-17		CCTV/Security Tester, SecurITEST™ PRO .....G-7	
Aluminum Benders .....B-13		Benders, Aluminum .....B-13		Cable Stacker .....E-10		Center Conductor Cutter .....G-16	
Aluminum Safety Lockout Padlocks .....H-11		Benders, Conduit .....B-13		Cable Stacker, Plastic Insulated .....E-10		Certifier SIGNALTEK™-FO Multimedia Ethernet .....G-6	
Amplifier Probe .....G-9		Benders, Ductile Iron .....B-13		Cable Staples .....E-10		Certifier, SIGNALTEK™ Gigabit Ethernet Certifier .....G-5	
Amplifier Probe & Tone Generator Kit .....G-9		Bilingual Lockout Tags .....H-12		Cable Staples, Data .....E-11		Certifier, SIGNALTEK™-FO Multimedia Ethernet .....G-6	
Amplifier Probe, TRACETone™ Tone Generator .....G-9		Bits, Flexible Drill .....C-47		Cable Straps, Coaxial .....E-11		Channel Clamps.....A-60	
Analog Clamp Meter .....F-14		Bits, Installer .....C-47		Cable Strippers, Coax .....G-15		Circuit Analyzers, SureTest® ...F-23	
Analog Multimeters .....F-8		Blades, Die-Type .....D-5, D-6		Cable Stripper, Cyclops® Data .....G-15			
		Blades, Hacksaw .....B-14, C-48					
		Blades, Knife-Type .....D-2, D-3					
		Blades, Punch Down Tool .....G-12					
		Blades, Reciprocating ...C-42, C-43					
		Blocks, Grounding .....G-17					
		Blued-Steel Fish Tapes .....B-4					



Item	Page	Item	Page	Item	Page	Item	Page
Circuit Breaker Finders ...F-24, F-15		Combo Tool .....C-6		Crimp Tools, 4-Way Indent ...G-13		<b>E</b>	
Circuit Breaker Lockout System .....H-8		Commutator Smoothie® Resurfacing Tool .....E-31		Crimp Tools, Crimpmaster™ ...G-11		Earth Ground Resistance Tester .....F-18	
Circuit Breaker Lockout System, Oversized .....H-6		Compression Connector Installer Kit .....G-26		Crimpmaster™ 10Base-T Kit ...G-26		Earth Resistance Lead Set Kit .....F-18	
Circuit Breaker Lockouts .....H-7		Compression Connectors .....G-18, G-19		Crimpmaster™ Crimp Tools ...G-11		Economy 10Base-T Kit .....G-26	
Circuit Tester .....F-29		Compression Port Seals .....G-19		Crimpmaster™ Die Sets .....G-11		Economy CATV Compression Kit .....G-25	
Circuit Testers, E-Z Check® ...F-25		Compression Tool, Economy ...G-10		Crimpmaster™ F-Type Connector Kit .....G-27		Economy Compression Kit ...G-25	
Circuit Tracers, SureTest® ...F-17		Compression Tools, OmniSeal™ .....G-10		Current Clamp Adapters ...F-3, F-4, F-5, F-6, F-31		Economy Compression Tool ...G-10	
Circuit Tracers, SureTest® Open/Closed .....F-16		Compression Tools, OmniSeal™ Pro.....G-10		Custom Stripmaster® Lite Wire Strippers .....D-4, D-5		Economy Compression Tool Kit .....G-10	
Clamp Adapter, 600A A/C .....F-5		Conduit Benders .....B-13		Custom Stripmaster® Wire Strippers .....D-4, D-5		Economy Data & CATV Kit ...G-24	
Clamp Adapters, Current .....F-31		Conduit Deburring Tool, Twist-a-Nut™ .....B-12		Cutter, Center Conductor .....G-16		Economy Round Cable and Wire Cutter .....G-16	
Clamp Adapters, Flexible .....F-31		Conduit Measuring Tape .....B-15		Cutter, PowerBlade™ Cable ...C-22		Electric Plug Lockout .....H-9	
Clamp Meter Selection Guide ...F-9		Connector Removal Tools .....G-20		Cutter, Serrated .....G-31		Electrician's Hole Saw Kit .....C-41	
Clamp Meter, 1000 Amp .....F-13		Connectors, BNC .....G-18		Cutter, Sir Nickless .....C-7, C-23		Electrician's Knife .....C-25	
Clamp Meter, 600 Amp...F-11, F-15		Connectors, BNC Coaxial .....G-21		Cutters, Cable .....C-11, C-15		Electrician's Scissors .....G-16	
Clamp Meter, 660 Amp...F-12, F-15		Connectors, B-TAP® .....A-40		Cutters, T®-Cutter Wire .....C-6		Electrician's Step Bit Kit.....C-37	
Clamp Meter, Analog .....F-14		Connectors, Compression .....G-18, G-19		Cyclops® Data Cable Stripper .....G-15		Electrician's Tool Pouch .....C-29	
Clamp Meter, Ground Resistance .....F-18		Connectors, Crimp .....A-28		<b>D</b>		End Caps, Thermo-Shrink® ...E-14	
Clamp Meter, Leakage Current .....F-14		Connectors, F-Type Coaxial ...G-20		Data Cable Staples.....E-11		Engraving Tools .....C-24	
Clamp, 100AAC .....F-21		Connectors, Grounding .....A-15		Data T®-Cutter .....G-16		Entrance Staples, Carbon Steel Service .....E-11	
Clamp, 5AAC .....F-21		Connectors, Insulation Displacement .....G-23		Data/Video Kit .....G-25		Entrance Straps, Plastic Insulated Service .....E-11	
Clamps .....A-33, E-9		Connectors, Mini RCA .....G-18		DataComm Kits .....G-24		Ergonomic Hacksaw ...B-14, C-48	
Clamps, 1000AAC .....F-21		Connectors, Powr-Connect™ Grounding .....A-33		Deburring Tools, Twist-a-Nut™ Conduit .....C-17		Ethernet Certifier, SIGNALTEK™ Gigabit .....G-5	
Clamps, 2000AAC .....F-21		Connectors, RCA .....G-18		Deluxe Cable Service Kit .....G-27		Extension Bar .....C-45	
Clamps, 500AAC.....F-21		Connectors, Tap .....A-40		Detectable Underground Tapes.....H-14		Extension Cord .....F-22, F-23	
Clamps, 5AAC.....F-21		Connectors, Tap Splice .....A-23		Diagonal-Cutting Pliers .....C-10, C-13		Extra Heavy-Duty AC/DC Toggle Switches .....E-20	
Clamps, Channel .....A-60		Connects, Quick.....A-26		Die Sets, Crimpmaster™ .....G-11		E-Z Check® Circuit Testers.....F-25	
Clamps, Plier-Type Batter .....E-29		Continuity Tester .....F-29		Die-Type Blades .....D-5, D-6		EZ Mask™ Paint Shields .....E-32	
Cleaner, Brush Seater & Commutator .....E-31		Contractor-Grade Multimeters .....F-3, F-6		Digital Cable Splitter .....G-17			
ClearGlide™ Wire Pulling Lubricant .....B-10		Cord Adapter .....F-24		Digital Light Meter .....F-30			
Clips, Alligator.....E-29		Cord Switches.....E-25		Digital Meter, 310 Series .....F-7		<b>F</b>	
Clips, Battery .....E-28		Cord, Extension .....F-22, F-23		Diplexer .....G-17		for, Visual.....G-31	
Coax Cable Stripper .....G-15		Covers.....A-60		Disconnect, PowerPlug Luminaire .....A-11, A-12		Fault Tester, Mini Arc .....F-24	
Coax Strip & Crimp Tool .....C-6, G-13		Covers, Terminal Strip .....A-26		Disconnects .....A-19 thru A-22		F-Connectors .....G-18	
Coax Strip & Crimp Tool Kit ...G-13		Crimp Connectors .....A-28		Dispenser, Wire Marker .....E-17		F-Connectors, OmniCONN™...G-18	
Coax Stripmaster® Wire Strippers .....G-14		Crimp Connectors, Pre-Insulated .....A-28		Divider Pouch™ Small Parts Bag .....C-30		F-Connectors, Push-On.....G-20	
Coax Stripper, Mini .....G-14		Crimp Connectors, Splice Cap .....A-39		Door Switches .....E-26		F-Connectors, RG-11 .....G-18	
Coax Strippers .....G-15		Crimp Terminals .....A-17		Double-Insulated Plastic Toggle Switches .....E-21		F-Connectors, RG-11 Push-On .....G-20	
Coax Strippers, RG-11 .....G-14		Crimp Tool .....C-11, C-23		Drill Bits .....C-37		F-Connectors, RG-59 Push-On .....G-20	
Coax Strippers, Toggle® .....G-15		Crimp Tool & Mechanical Indenter .....C-23		D-Sub/Double-D Service Tool .....G-13		F-Connectors, RG-6 Push-On .....G-20	
Coax Termination Hip Kit .....G-28		Crimp Tool, Coax Strip & .....G-13		Duct Seal .....B-12		Fiber Inspection Microscope...G-31	
Coax/UTP Cable Stripper, Multi-Strip .....G-14		Crimp Tool, Four-Way .....A-39		Ductile Iron Benders .....B-13		Fiber Optic Scribes .....G-31	
Coaxial Cable Straps .....E-11		Crimp Tool, Heavy-Duty.....C-23		Ductile Iron Hickeys .....B-14		Fiber Optic Swabs .....G-32	
Coaxial Connectors, BNC .....G-21		Crimp Tool, Ratchet .....C-23					
Coaxial Selection Chart .....G-29							
Combo Cases™ .....F-15							



# Alphabetical Index

Item	Page	Item	Page	Item	Page	Item	Page
Fiber Optic Test Kit, FiberMaster™ .....G-30		<b>G</b>		Heavy-Duty Crimp Tool .....C-23		Insulators, Splice Cap .....A-39	
Fiber Stripper, Lite-Strip™ Optical .....G-32		Gate Valve Lockouts .....H-10		Heavy-Duty Hacksaw ...B-14, C-48		Insulators, Wrap-Cap® .....A-28	
Fiber Stripper, MiniLite-Strip™ Optical .....G-31		Generator, Tone .....G-9		Heavy-Duty Lockout Tags .....H-12		In-Sure™ Push-In Wire Connectors .....A-13	
FiberMaster™ Fiber Optic Test Kit .....G-30		Gold-Fish® Fish Tapes .....B-5		Heavy-Duty Toggle Switches .....E-18, E-19		Isolated Ground Adapter .....F-23	
FIBERTEK™ .....G-4		Greenie® Grounding Connector .....A-5		Hex-Key Sets .....C-25		<b>J</b>	
Field Application Kits, Fish Tape.....B-6		Grinder, Midget Precision .....E-31		Hickey Handles .....B-14		Jab Saw .....C-48	
Films, Polishing .....G-32		Grip-N-Strip™ End Stripper.....C-7		Hickeys .....B-14		Jacket Stripper, Simplex/Duplex .....G-15	
Finders, Circuit Breaker...F-24, F-15		Gripper Pads .....D-7		Hickeys, Ductile Iron .....B-14		Jacket Stripper, Stripmaster® Ribbon Fiber.....G-32	
Fish Tape Cases .....B-3		Grips, Tenite .....C-15		High-Temperature Wire Connectors .....A-3		Jacks, Surface .....G-22	
Fish Tape Field Application Kits .....B-6		Grommets .....E-32		Hinged Single-Pole Breaker Lockout .....H-7		Journeyman Electrician's Tote™.....C-31	
Fish Tape Leaders .....B-6		Ground Continuity Adapter ...F-23		Hip Holster Tool Pouch .....C-29		Jumpers .....A-26, A-60	
Fish Tape Replacement Cases...B-6		Ground Resistance Clamp Meter.....F-18		Hole Cutters, Carbide .....C-38		<b>K</b>	
Fish Tape Swivel Ball .....B-6		Grounding Accessories .....A-16		Hole Saw Arbor Extension ...C-41		Keystone Tip Screwdrivers ...C-19	
Fish Tapes, Blued-Steel .....B-4		Grounding Blocks .....G-17		Hole Saw Arbor Replacement Bits .....C-41		Kinetic Super™ Wire Stripper/Crimper .....G-13	
Fish Tapes, Gold-Fish® .....B-5		Grounding Connector, Greenie® .....A-5		Hole Saw Arbors .....C-41		Kinetic™ Reflex™ T®-Stripper Wire Strippers.....C-3	
Fish Tapes, S-Class® .....B-5		Grounding Connectors .....A-15		Hole Saw Kit, Electrician's.....C-41		Kinetic™ Super Wire Strippers.....C-3	
Fish Tapes, Stainless Steel .....B-4		Grounding Connectors, Powr-Connect™ .....A-33		Hole Saw Kit, Master Electrician's .....C-41		Kit, Amplifier Probe & Tone Generator .....G-9	
Fish Tapes, Tuff-Grip™ .....H-19		Grounding Tails .....A-16		Hole Saw Kits.....C-41		Kit, Cable Splicing .....G-16	
Fish Tapes, Volt-Guard™ .....B-5		Group Lock Box .....H-3		Hole Saw, Adjustable Can Light .....C-41		Kit, Carbide Hole Cutter Kit ...C-38	
Fish Tapes, Zoom™ .....B-5		Guide, Pocket Bender .....B-14		Hole Saws .....C-40		Kit, Coax Strip & Crimp Tool ...G-13	
Fishing Poles, Tuff-Rod™ .....B-7		<b>H</b>		<b>I</b>		Kit, Economy Compression Tool Kit .....G-10	
Flange-Type Plastic Anchors ...E-9		Hacksaw Blades .....B-14, C-48		IDEAL Wipes™ .....B-12, C-24		Kit, Modular Plug Tool .....G-12	
Flash Protection Labels & Signs .....H-13		Hacksaw, Ergonomic ...B-14, C-48		Identification Ties .....E-6		Kit, Recessed Light .....C-21	
Flexible Bit Extension .....C-47		Hacksaw, Heavy-Duty ...B-14, C-48		Indicator Lights, Flush .....E-27		Kits, Anchor .....E-9	
Flexible Bit Replacement Tool C-47		Hacksaw, Mini .....C-48		Indicator Lights, Miniature.....E-28		Kits, BULZ-EYE™ .....C-45	
Flexible Bits, Masonry .....C-47		Halar® Ties .....E-3		Indicator Lights, Raised .....E-27		Kits, DataComm .....G-24	
Flexible Bits, Screw Point .....C-47		Hammer .....C-24		Industrial Lockout/Tagout Station .....H-5		Kits, Hole Saw .....C-41	
Flexible Bits, Serrated .....C-47		Hammer Holder .....C-29		Industrial-Grade Multimeters ...F-4		Kits, Insulated Hand Tool .....H-17	
Flexible Clamp Adapters .....F-21, F-31		Hand Tools, Insulated .....H-16		Installation Tool, Cable Tie.....A-62		Kits, LinkMaster™ PRO Tester...G-8	
Flexible Drill Bits.....C-47		Hand-held Insulation Tester ...F-19		Installation Tools, Cable Tie .....E-2		Kits, Lockout/Tagout .....H-2	
Flexible Tubing .....E-9		Handles, Bender.....B-13		Installer Bits .....C-47		Kits, Test Lead.....F-33	
Flush Indicator Lights.....E-27		Handles, Hickey .....B-14		Insulated Hand Tool Cases ...H-18		Knife, Cable Splicing .....G-16	
Foam Carriers .....B-16		Handling Ties .....E-3		Insulated Hand Tool Kits .....H-17		Knife, Electrician's .....C-25	
Folding Saw .....C-48		Hasps, Safety Lockout .....H-12		Insulated Hand Tools .....H-16		Knife, Hawkbill .....C-25	
Four-Way Crimp Tool .....A-39		Hawkbill Knife .....C-25		Insulated Knife .....C-34, H-18		Knife, Insulated .....C-34, H-18	
Four-Way Crimp Tool .....C-23		Heat Elite Heat Gun Kit .....E-15		Insulated Nutdrivers ...C-34, H-18		Knife, Lineman's Jack .....C-25	
Four-Way Indent Crimp Tool ...G-13		Heat Elite Plus Heat Gun Kit ...E-15		Insulated Pliers.....C-34, H-18		Knife, Utility .....C-25	
F-Type Coaxial Connectors ...G-20		Heat Gun Accessories .....E-15		Insulated Screwdrivers C-34, H-18		Knife-Type Blades .....D-2, D-3	
Full-Size Rocker Switches .....E-22		Heat Gun Kit, Heat Elite .....E-15		Insulated Screw-Holding Screwdriver .....H-19		Knives, Pocket .....C-25	
Fuse .....F-17		Heat Gun Kit, Heat Elite Plus...E-15		Insulated Staples .....E-10		K-type Thermocouple .....F-4, F-33	
Fuse Pull & Test Light .....C-35		Heat Gun Kit, Heat Elite Pro ...E-15		Insulated Tool Cases .....C-34		<b>L</b>	
Fuse Puller and Test Light .....H-19		Heat Shrink Kit, Thermo-Shrink® .....E-15		Insulated Tool Kits .....C-33		Labels, Flash Protection .....H-13	
Fuse Pullers .....C-35, H-19		Heat Shrink Tubing .....A-61		Insulation Displacement Connectors .....G-23		Labels, Lock .....H-11	
Fuse Pullers, Safe-T-Grip® .....H-19		Heat Shrinkable Tubing .....E-12, E-13, E-14		Insulation Tester, Hand-held ...F-19			



Item	Page
LANTEK® 6 Cable Certification Tester .....	G-2, G-3
LANTEK® 6A Cable Certification Tester .....	G-2, G-3
LANTEK® 7G Cable Certification Tester .....	G-2, G-3
Large Breaker Lockout .....	H-6
Large Mouth Bags .....	C-31
LASERedge™ Tool Kits .....	C-26, C-27
Lead Set Kit, Earth Resistance .....	F-18
Lead Set, Tracer .....	F-17
Leaders, Fish Tape .....	B-6
Leads, Resistor-Fused .....	F-27
Leads, Silicone Test .....	F-10, F-26
Leads, Standard Test .....	F-11
Leads, Test .....	F-5, F-19, F-28, F-33
Leads, Voltage .....	F-21
Leakage Current Clamp Meter .....	F-14
Leather Case .....	F-27
Level, Torpedo .....	C-25
Lever Switches .....	E-25
Lever™-Snips Electrician's Scissors .....	G-16
Light Meter .....	F-30
Light-Duty Toggle Switches .....	E-20
Lights, Flush Indicator .....	E-27
Lights, Miniature Indicator .....	E-28
Lights, Raised Indicator .....	E-27
Lil' Ripper Stripper™ .....	C-4
Line Packages .....	B-16
Line Splitter .....	F-31
Lineman's Jack Knife .....	C-25
LinkMaster™ PRO Tester .....	G-8
LinkMaster™ PRO Tester Kits .....	G-8
LinkMaster™ PRO XL Tester .....	G-8
LinkMaster™ Tester .....	G-9
Lite-Strip™ Optical Fiber Stripper .....	G-32
Load Centers .....	E-16
Lock Box, Group .....	H-3
Lock Labels .....	H-11
Lock Stations .....	H-4
Locking Cable, Python™ Adjustable .....	H-15
Lockout Devices, Ball Valve .....	H-10
Lockout Hasps, Safety .....	H-12
Lockout Padlocks .....	H-11
Lockout Padlocks, Aluminum Safety .....	H-11
Lockout Signs .....	H-13
Lockout System, Circuit Breaker .....	H-8
Lockout Tags, Bilingual .....	H-12

Item	Page
Lockout Tags, Heavy-Duty .....	H-12
Lockout, Adjustable Cable .....	H-10
Lockout, Cable .....	H-10
Lockout, Electric Plug .....	H-9
Lockout, Hinged Single-Pole Breaker .....	H-7
Lockout, Large Breaker .....	H-6
Lockout, Multi-Pole Breaker .....	H-6
Lockout, Single-Pole Breaker .....	H-6
Lockout, Universal Breaker .....	H-7
Lockout/Tagout Kit, Basic .....	H-2
Lockout/Tagout Kit, Industrial .....	H-4
Lockout/Tagout Kit, Job Site .....	H-4
Lockout/Tagout Kit, Personal .....	H-2
Lockout/Tagout Kit, Plant Facility .....	H-3
Lockout/Tagout Kit, Standard .....	H-3
Lockout/Tagout Kit, Starter .....	H-2
Lockout/Tagout Kits .....	H-2
Lockout/Tagout Large Mouth Bag .....	H-3
Lockout/Tagout Training Manuals .....	H-5
Lockouts, Circuit Breaker .....	H-7
Lockouts, Gate Valve .....	H-10
Lockouts, Miniature Circuit Breaker .....	H-9
Lockouts, Plug .....	H-9
Lockouts, Wall Switch .....	H-9
Long-Arm Cable Cutters .....	C-22
Long-Nose Pliers .....	C-10, C-14
Lugs, Termend® .....	A-39

## M

Magnetic Strap .....	F-3, F-4, F-6
Magnetic-Tip Measuring Tape .....	C-25
Marking Pens .....	E-17, H-11
Masonry Flexible Bits .....	C-47
Master Electrician's Hole Saw Kit .....	C-41
Master Electrician's Tote™ .....	C-31
Material Specifications, Cable Tie .....	E-7
Measuring Tape, Automatic Blade Lock .....	C-25
Measuring Tape, Conduit .....	B-15
Measuring Tape, Magnetic-Tip .....	C-25
Mechanical Indentor & Crimp Tool .....	C-23
Mechanical Lugs, Powr-Connect™ .....	A-30, A-32
Mechanic's Tool Bag .....	C-31
Medium-Duty Toggle Switches .....	E-20

Item	Page
Meter, 1000 Amp Clamp .....	F-13
Meter, 310 Series Digital .....	F-7
Meter, 600 Amp Clamp .....	F-11, F-15
Meter, 600 Series Pocket .....	F-7
Meter, 660 Amp Clamp .....	F-12, F-15
Meter, Analog Clamp .....	F-14
Meter, Ground Resistance Clamp .....	F-18
Meter, Leakage Current Clamp .....	F-14
Meter, Light .....	F-30
Meter, Split-Jaw™ Smart .....	F-28
Meters, 340 Series .....	F-5, F-15
Microscope, Fiber Inspection .....	G-31
Midget Precision Grinder .....	E-31
Mini Arc Fault Tester .....	F-24
Mini Hacksaw .....	C-48
Mini RCA Connectors .....	G-18
Miniature Circuit Breaker Lockouts .....	H-9
Miniature Indicator Lights .....	E-28
MiniLite-Strip™ Optical Fiber Stripper .....	G-31
Mini™ Augers .....	C-46
Modular Plug Tool Kit .....	G-12
Modular Plugs .....	G-23
Modular Plugs, CAT 6 .....	G-23
Modular Tester, Smart6™ .....	G-9
Mounting Bases, Screw .....	E-6
Mounting Channels .....	A-60
Mounting Head Ties .....	E-6
Mounting Pads .....	E-7
Multi-Crimp Strip Tool .....	C-6
Multi-Crimp Tools .....	C-11, C-15
Multimedia Cable Tester, VDV .....	G-9
Multimeter Selection Guide .....	F-2
Multimeters, Analog .....	F-8
Multimeters, Contractor-Grade .....	F-3, F-6
Multimeters, Industrial-Grade .....	F-4
Multimeters, PlatinumPro® .....	F-3, F-4
Multimeters, Test-Pro® .....	F-6
Multi-Pole Breaker Lockout .....	H-6
Multi-Purpose Cable Ties .....	A-62
Multi-Strip Coax/UTP Cable Stripper .....	G-14
Multi-Wire Pulling Leaders .....	B-6

## N

Nailbiter™ Ship Auger Bits .....	C-46
NM Cable T®-Stripper Wire Strippers .....	C-4

Item	Page
Noalox® Anti-Oxidant .....	A-29, B-12
Non-Conductive Screwdriver/Nutdriver .....	H-19
Non-Contact Voltage Tester .....	F-29
Non-Contact Voltage Tester, VoltAware™ .....	F-29, F-15
Non-Detectable Underground Tapes .....	H-14
Nutdriver Set .....	C-21
Nutdrivers, Insulated .....	C-34, H-18
Nutdrivers, Nutmaster® .....	A-10, C-20
Nutmaster® Nutdrivers .....	A-10, C-20

## O

OmniCONN™ F-Connectors .....	G-18
OmniSeal™ Compression Tools .....	G-10
OmniSeal™ Pro Compression Tools .....	G-10
Oversized Circuit Breaker Lockout System .....	H-6

## P

Packages, Line .....	B-16
Padded Nylon Case .....	F-27, F-28
Padlocks, Lockout .....	H-11
Padlocks, Steel .....	H-11
Pads, Gripper .....	D-7
Pads, Mounting .....	E-7
Paint Shields, EZ Mask™ .....	E-32
Parallel Splices .....	A-22, A-23
Pencil-Type Resurfacer .....	E-30
Pens, Marking .....	E-17, H-11
Pens, Marking .....	H-11
Phillips Screwdrivers .....	C-19
Pigtail Wire Connectors .....	A-14
Pigtail Wire Connectors, Term-a-Nut® .....	A-14
Pilot Drill, SmoothStart™ Replacement .....	C-38
Plastic Insulated Cable Stacker .....	E-10
Plastic Insulated Service Entrance Straps .....	E-11
Plastic Insulated Staples .....	E-10
Plastic Polishing Fixture .....	G-32
Plates, Wall .....	G-22
PlatinumPro® Multimeters .....	F-3, F-4
Plenum Ties .....	E-3
Pliers, Diagonal-Cutting .....	C-10, C-13
Pliers, Insulated .....	C-34
Pliers, Premium Electrician's Side-Cutting .....	C-9
Pliers, Side-Cutting .....	C-9, C-13



Item	Page	Item	Page	Item	Page	Item	Page
Pliers, Tongue & Groove .....	C-10, C-14	Push-In Wire Connectors, In-Sure™ .....	A-13	RG-6 Push-On F-Connectors .....	G-20	Screwdriver/Nutdriver, Non-Conductive .....	H-19
Pliers, Long-Nose .....	C-10, C-14	Push-On F-Connectors .....	G-20	Ring, Terminals .....	A-17, A-18	Screwdrivers, Insulated .....	C-34, H-18
Plier-Type Battery Clamps .....	E-29	Putter, Bender .....	B-12	Ringer™ Shielded Cable Stripper .....	C-5	Screwdrivers, Phillips .....	C-19
Plug Lockouts .....	H-9	Python™ Adjustable Locking Cable .....	H-15	Ringing Tool .....	G-15	Screwdrivers, Quick-Rotating .....	C-20
Plugs, CAT 6 Modular .....	G-23	<b>Q</b>		Ringing Tool, Round Cable Slitting & .....	C-7	Screwdrivers, Screw-Holding .....	C-20
Plugs, Modular .....	G-23	Quick Connects .....	A-26	Ripper, Cable .....	C-7	Screwdrivers, Slotted .....	C-19
Pocket Bender Guide .....	B-14	Quick-Rotating Screwdrivers .....	C-20	Rocker Switches, Appliance .....	E-23	Screwdrivers, Slotted Cabinet Tip .....	C-19
Pocket Knives .....	C-25	<b>R</b>		Rocker Switches, Full-Size .....	E-22	Screwdrivers, Slotted Keystone Tip .....	C-19
Pocket Meter, 600 Series .....	F-7	Raised Indicator Lights .....	E-27	Rope, Pro-Pull™ .....	B-15	Screwdrivers, Square Head .....	C-20
Pocket Pal™ Tool Holster .....	C-30	Ratch Wrench .....	A-10	Rotary Switches .....	E-26	Screwdrivers, Twist-a-Nut™ Pro .....	A-10
Polishing Films .....	G-32	Ratchet Crimp Tool .....	C-23	Round Cable Slitting & Ringing Tool .....	C-7	Screw-Holding Screwdrivers .....	C-20
Polishing Fixture, Plastic .....	G-32	Ratchet Telemaster™ .....	G-12	Round Cable Slitting Tool .....	G-15	Screws, Replacement Lead .....	C-45
Polishing Fixture, Stainless Steel .....	G-32	Ratcheting Cable Cutter .....	C-22	<b>S</b>		Scribes, Fiber Optic .....	G-31
Port Seals, Compression .....	G-19	RCA Compression Connector Kit .....	G-28	Safe-T-Grip® Fuse Pullers .....	C-35, H-19	Seal, Duct .....	B-12
Portable Band Saw Blades .....	C-43	RCA Connectors .....	G-18	Safety Lockout Hasps .....	H-12	SecuriTEST™ CCTV/Security Tester .....	G-7
Pouches, Tuff-Tote™ Cell Phone .....	C-29	Receptacle Testers .....	F-25	Safety Lockout Padlocks, Aluminum .....	H-11	SecuriTEST™ PRO CCTV/Security Tester .....	G-7
Pouches, Zipper .....	C-30	Recessed Light Kit .....	C-21	Safety Signs .....	H-13	Selection Chart, Coaxial .....	G-29
Power Quality Meters .....	F-20, F-21	Reciprocating Blades .....	C-42, C-43	Satellite & Digital TV Splitters .....	G-17	Selection Guide, Carrying Case .....	F-32
PowerBlade™ Cable Cutter .....	C-22	Reflex™ Premium T®-Stripper Wire Strippers .....	C-3	Saw Blades, Portable Band .....	C-43	Selection Guide, Clamp Meter .....	F-9
PowerPlug Luminaire Disconnect .....	A-11, A-12	Reflex™ Super T®-Stripper Wire Strippers .....	C-3, C-4	Saw, Folding .....	C-48	Selection Guide, Multimeter .....	F-2
Powr-Connect™ Grounding Connectors .....	A-33	Removal Tools, Connector .....	G-20	Saw, Jab .....	C-48	Selection Guide, Replacement Parts .....	F-34
Powr-Connect™ Mechanical Lugs .....	A-30, A-32	Remover, Slug .....	C-5	Saws, Hole .....	C-40	Selection Guide, T®-Stripper Wire Stripper .....	C-2
Powr-Connect™ Mechanical Solderless Lugs .....	A-34	Replacement Bits, Hole Saw Arbor .....	C-41	Scissors, Electrician's .....	G-16	Selection Guide, Wire Pulling Lubricant .....	B-8
Powr-Connect™ Tap Connectors .....	A-32	Replacement Cases, Fish Tape .....	B-6	Scissors, Lever™-Snips .....	G-16	Serrated Combination Flexible Bits .....	C-47
Powr-Fish® Pull-Line .....	B-15	Replacement Lead Screws .....	C-45	S-Class® Fish Tapes .....	B-5	Serrated Cutter .....	G-31
Powr-Polish™ Flexible Abrasive .....	E-31	Replacement Parts Selection Guide .....	F-34	Screw Mounting Bases .....	E-6	Service Compression Kit .....	G-25
Powr-Tie™ Cable Ties .....	E-4, E-5	Residential Compression Kit .....	G-25	Screw Point Flexible Bits .....	C-47	Service Tool, D-Sub/Double-D .....	G-13
Pre-Insulated Crimp Connectors .....	A-28	RESI-MASTER™ Heavy-Duty Ship Augers .....	C-46	Screwdriver Sets .....	C-18	Set-Screw Holder .....	A-29
Premium Electrician's Side-Cutting Pliers .....	C-9	Resistor-Fused Leads .....	F-27	Screwdriver, 1000V Insulated Screw-Holding .....	C-35	Set-Screw Wire Connectors .....	A-29
Pro Installer Kit .....	G-28	Resurfacer, Pencil-Type .....	E-30	Screwdriver, 7-in-1 Twist-a-Nut™ .....	C-16	Seven-in-1 Stripper .....	C-5
Probe, Amplifier .....	G-9	Resurfacer, Small Motor-Type .....	E-30	Screwdriver, 9-in-1 Ratch-a-Nut .....	A-10	Shackless Lock & Hasp, Pro-Series® .....	H-15
Pro-Pull™ Rope .....	B-15	Resurfacer, Tool-Type .....	E-30	Screwdriver, 9-in-1 Ratch-a-Nut™ .....	C-16	Sharpening File .....	C-45
Pro-Series® Shackless Lock & Hasp .....	H-15	Resurfacer, Tramway-Handle .....	E-30	Screwdriver, Insulated Screw-Holding .....	H-19	Shims, Spacer .....	E-32
ProVision™ Software .....	F-3, F-4	Resurfacing Tool, Commutator Maintenance .....	E-31	Screwdriver, Twist-a-Nut™ 7-in-1 .....	A-10	Shoulder Straps .....	C-29
Pull-Chain Switches .....	E-25	RG-11 Coax Strippers .....	G-14	Screwdriver, Twist-a-Nut™ Pro™ Electrician's .....	C-17	Side-Cutting Pliers .....	C-9, C-13
Pullers, Fuse .....	C-35	RG-11 F-Connectors .....	G-18	Screwdriver/Nutdriver, 10-in-1 .....	C-21	SIGNALTEK™ Gigabit Ethernet Certifier .....	G-5
Pullers, Safe-T-Grip® Fuse .....	C-35	RG-11 Push-On F-Connectors .....	G-20	Screwdriver/Nutdriver, 5-in-1 .....	C-21	SIGNALTEK™-FO Multimedia Ethernet Certifier .....	G-6
Pulling Leaders, Multi-Wire .....	B-6	RG-59 Push-On F-Connectors .....	G-20	Screwdriver/Nutdriver, 5-in-1 Non-Conductive .....	C-35	Signs, Flash Protection .....	H-13
Pull-Line, Powr-Fish® .....	B-15	RG-6 Push-On Connector Kit .....	G-26				
Pull-Line, Value-Line™ .....	B-15						
Punch Down Tool Blades .....	G-12						
Punch Down Tools .....	G-12						
Push-Button Switches .....	E-24						



Item	Page	Item	Page	Item	Page	Item	Page
Signs, Lockout .....	H-13	Staples, Carbon Steel Service Entrance .....	E-11	Strippers, Super T®-Stripper Wire .....	C-4	Technician's Service Kit .....	G-27
Signs, Safety .....	H-13	Staples, Data Cable .....	E-11	Super T®-Stripper Wire Strippers .....	C-4	Telco Ratcheting Cable Cutter .....	C-22
Silicone Test Leads .....	F-10, F-26	Staples, Insulated .....	E-10	Super T®-Stripper Wire Strippers, Static Dissipative .....	C-5	Telcom Termination Kit .....	G-25
Simplex/Duplex Jacket Stripper .....	G-15	Staples, Plastic Insulated .....	E-10	Supplies Apron .....	C-30	Telemaster™ Crimp Kit .....	G-28
Single-Pole Breaker Lockout .....	H-6	Station, Industrial Lockout/Tagout .....	H-5	SureTest® Circuit Analyzer .....	F-23	Telemaster™ Telephone Tool .....	G-12
Sir Nickless Cutter .....	C-7, C-23	Stations, Lock .....	H-4	SureTest® Circuit Tracers .....	F-17	Telephone Tool, Telemaster™ .....	G-12
Slide Switches .....	E-26	Steel Padlocks .....	H-11	SureTest® Open/Closed Circuit Tracers .....	F-16	Tenite Grips .....	C-15
Slim Electronics .....	C-21	Step Bit Kit, Electrician's .....	C-37	Surface Jacks .....	G-22	Term-a-Nut® Pigtail Wire Connectors .....	A-14
Slug Remover .....	C-5	Step Drill Bits .....	C-37	Surge Suppression Cable Splitters .....	G-17	Term-a-Nut® Terminal Wire Connectors .....	A-17
Small Motor-Type Resurfacers .....	E-30	Strap, Magnetic .....	F-3, F-4, F-6, F-17	Switches, Appliance Rocker .....	E-23	Termend® Lugs .....	A-39
Smart6™ Modular Tester .....	G-9	Straps, Coaxial Cable .....	E-11	Switches, Cord .....	E-25	Terminal Blocks .....	A-44 thru A-59
SmoothStart™ Replacement Pilot Drill .....	C-38	Straps, Plastic Insulated Service Entrance .....	E-11	Switches, Door .....	E-26	Terminal Strip Covers .....	A-26
Socket, Spin-Twist® Wire Connector .....	A-10	Straps, Shoulder .....	C-29	Switches, Double-Insulated Plastic Toggle .....	E-21	Terminal Strips .....	A-24, A-25
Socket, Wire-Nut® Wire Connector .....	A-10	Straps, Sound .....	E-11	Switches, Extra Heavy-Duty AC/DC Toggle .....	E-20	Terminals, Crimp .....	A-17
Software, ProVision™ .....	F-3, F-4	Streetlight Kits .....	A-41 thru A-43	Switches, Full-Size Rocker Toggle .....	E-18, E-19	Terminals, Ring .....	A-17, A-18
Solderless Lugs, Powr-Connect™ .....	A-34	Stripmaster® Lite Wire Stripper .....	C-12, D-2	Switches, Heavy-Duty Toggle .....	E-18, E-19	Terminals, Spade .....	A-18, A-19
Solenoid Voltage Testers .....	F-27	Stripmaster® Ribbon Fiber Jacket Stripper .....	G-32	Switches, Lever .....	E-25	Test Lead Kits .....	F-33
Sound Straps .....	E-11	Stripmaster® Wire Stripper .....	C-7, C-12, D-2	Switches, Light-Duty Toggle .....	E-20	Test Leads .....	F-5, F-19, F-28, F-33
Spacer Shims .....	E-32	Stripper, 7-in-1 .....	C-5	Switches, Medium-Duty Toggle .....	E-20	Test Leads w/Alligator Clips .....	F-3, F-4, F-6, F-12
Spade Terminals .....	A-18, A-19	Stripper, Grip-N-Strip™ .....	C-7	Switches, Pull-Chain Toggle .....	E-20	Test Leads, Silicone .....	F-26
Spin-Twist® Wire Connector Socket .....	A-10	Stripper, Lil' Ripper .....	C-4	Switches, Push-Button .....	E-24	Test Leads, Standard .....	F-27
Splice Cap Crimp Connectors .....	A-39	Stripper, Mini Coax .....	G-14	Switches, Rotary .....	E-26	Test Light, Fuse Puller & .....	C-35
Splice Cap Insulators .....	A-39	Stripper, Ringer™ Shielded Cable .....	C-5	Switches, Slide .....	E-26	Test Tool, 4-in-1 .....	F-10
Splice Kits, Thermo-Shrink® .....	E-12	Stripper, Stripmaster® Lite Wire .....	C-12, D-2	Switches, Standard Toggle .....	E-18, E-19	Tester Pouches, Tuff-Tote™ .....	C-29
Splices, Butt .....	A-22, A-23	Stripper, Stripmaster® Ribbon Fiber Jacket .....	G-32	Swivel Ball, Fish Tape .....	B-6	Tester, 3-Phase/Motor Rotation .....	F-30, F-15
Splices, Parallel .....	A-22, A-23	Stripper, Stripmaster® Wire .....	C-7, C-12, D-2			Tester, Circuit .....	F-29
Split Bolts .....	A-33	Stripper, T®-Stripper Wire .....	C-4			Tester, Continuity .....	F-29
Split-Jaw™ Smart Meter .....	F-28	Stripper, Underground Feeder Cable .....	C-7			Tester, Earth Ground Resistance .....	F-18
Splitter, Digital Cable .....	G-17	Stripper, V-Notch .....	C-5			Tester, LinkMaster™ .....	G-9
Splitter, Line .....	F-31	Strippers, Coax .....	G-15			Tester, LinkMaster™ PRO .....	G-8
Splitters .....	G-17	Strippers, Custom Stripmaster® .....	D-4, D-5			Tester, LinkMaster™ PRO XL .....	G-8
Splitters, Satellite & Digital TV .....	G-17	Strippers, Custom Stripmaster® Lite .....	D-4, D-5			Tester, Mini Arc Fault .....	F-24
Splitters, Surge Suppression Cable .....	G-17	Strippers, Kinetic™ Reflex™ T®-Stripper Wire .....	C-3			Tester, Non-Contact Voltage .....	F-29, F-15
Split-Tip Fiber Optic Swabs .....	G-32	Strippers, Kinetic™ Super Wire .....	C-3			Tester, SecuriTEST™ CCTV/Security .....	G-7
Square Head Screwdrivers .....	C-20	Strippers, NM Cable T®-Stripper Wire .....	C-4			Tester, SecuriTEST™ PRO CCTV/Security .....	G-7
Stacker, Cable .....	E-10	Strippers, Reflex™ Premium T®-Stripper Wire .....	C-3			Tester, Smart6™ Modular .....	G-9
Stacker, Plastic Insulated Cable .....	E-10	Strippers, Reflex™ Super T®-Stripper Wire .....	C-3, C-4			Tester, Twin Lead .....	F-29
Stainless Steel Fish Tapes .....	B-4	Strippers, RG-11 Coax .....	G-14			Tester, VDV Multimedia Cable .....	G-9
Stainless Steel Polishing Fixture .....	G-32					Tester, Vol-Con® Voltage/Continuity .....	F-27, F-15
Standard Test Leads .....	F-11, F-27					Tester, Vol-Con® XL Voltage/Continuity .....	F-27
Standard Toggle Switches .....	E-18, E-19					Tester, VoltAware™ Non-Contact Voltage .....	F-29, F-15
Staples, Cable .....	E-10					Tester, Vol-Test® Voltage .....	F-27
Staples, Carbon Steel .....	E-10					Tester, Vol-Test® XL Voltage .....	F-27



# Alphabetical Index

Item	Page	Item	Page	Item	Page	Item	Page
Testers, LANTEK® .....	G-2, G-3	Tool Kits, Insulated .....	C-33	UnderGround™		Wire Connector Socket,	
Testers, Receptacle .....	F-25	Tool Kits,		Wire Connectors .....	A-8	Wire-Nut® .....	A-10
Testers, Solenoid Voltage .....	F-27	LASERedge™ .....	C-26, C-27	Universal Breaker Lockout .....	H-7	Wire Connector Wrench,	
Test-Glo™ Circuit Tester .....	F-29	Tool Kits, WireMan™ .....	C-27	Universal Metal Stud		Wire-Nut® .....	A-10
Testing Kit, 10 Gigabit Alien		Tool Pouch, Electrician's .....	C-29	Bushings .....	E-32	Wire Connector, Twister® .....	A-6
Crosstalk .....	G-6	Tool Pouch, Hip Holster .....	C-29	USB Cable .....	F-3, F-4	Wire Connectors, B-CAP® .....	A-36
Test-Pro® Multimeters .....	F-6	Tool Pouches, Tuff-Tote™ .....	C-28	Utility Knife .....	C-25	Wire Connectors,	
Thermocouple .....	F-5	Tools, Multi-Crimp .....	C-11, C-15	UTP Cable Stripper .....	G-15	High-Temperature .....	A-3
Thermocouple Adapter .....	F-4, F-33	Tools, Punch Down .....	G-12	UTP/STP/Coaxial		Wire Connectors, In-Sure™	
Thermocouple, K-type .....	F-4, F-33	Tool-Type Resurfacers .....	E-30	Cable Strippers .....	G-14	Push-In .....	A-13
Thermometer .....	F-30	Torch, Thermo-Shrink® .....	E-12			Wire Connectors, Pigtail .....	A-14
Thermo-Shrink® Heat Shrink		Torpedo Level .....	C-25			Wire Connectors, Set-Screw .....	A-29
Kit .....	E-15	Tracer Lead Set .....	F-17			Wire Connectors,	
Thermo-Shrink® Heat		TRACETEK™ .....	G-4			Term-a-Nut® Pigtail .....	A-14
Shrinkable End Caps .....	E-14	TRACETone™ Tone Generator &				Wire Connectors, Term-a-Nut®	
Thermo-Shrink® Heat Shrinkable		Amplifier Probe .....	G-9			Terminal .....	A-17
Tubing .....	E-13, E-14	Training Manuals,				Wire Connectors, Twister®	
Thermo-Shrink® Splice Kits .....	E-12	Lockout/Tagout .....	H-5			Al/Cu .....	A-9
Thermo-Shrink® Torch .....	E-12	Tramway-Handle Resurfacers .....	E-30			Wire Connectors, Twister® Pro .....	A-7
Ties, Halar® .....	E-3	Triple-Tap Tools .....	C-24			Wire Connectors,	
Ties, Handling .....	E-3	Tubing, Flexible .....	E-9			UnderGround™ .....	A-8
Ties, Identification .....	E-6	Tubing, Heat				Wire Connectors,	
Ties, Mounting Head .....	E-6	Shrinkable .....	E-12, E-13, E-14			WeatherProof™ .....	A-8
Ties, Plenum .....	E-3	Tuff-Grip™ Fish Tapes .....	H-19			Wire Connectors, Wing-Nut® .....	A-4
Ties, Powr-Tie™ Cable .....	E-4, E-5	Tuff-Rod™ Fishing Poles .....	B-7			Wire Connectors,	
Tin Snips, Aviation .....	C-48	Tuff-Tote™ Tester Pouches .....	C-29			WingTwist™ .....	A-38
Toggle Switch Accessories .....	E-21	Tuff-Tote™ Tool Carriers .....	C-28			Wire Connectors, Wire-Nut® .....	A-2
Toggle Switches, Double-Insulated		Tuff-Tote™ Tool Pouches .....	C-28			Wire Connectors,	
Plastic .....	E-21	Tuff-Tote™ Ultimate Tool				WireTwist™ .....	A-37
Toggle Switches, Extra Heavy-Duty		Carriers .....	C-28			Wire Cutter, Economy	
AC/DC .....	E-20	Twin Lead Tester .....	F-29			Round Cable and .....	G-16
Toggle Switches,		Twist-a-Nut Pro™ Electrician's				Wire Cutter, T®-Cutter Lite .....	C-6
Heavy-Duty .....	E-18, E-19	Screwdriver .....	C-17			Wire Cutters, T®-Cutter .....	C-6
Toggle Switches, Light-Duty .....	E-20	Twist-a-Nut Tapping Tool .....	C-24			Wire Marker Booklets .....	A-61, E-16
Toggle Switches,		Twist-a-Nut™ 7-in-1				Wire Marker Cards .....	E-17
Medium-Duty .....	E-20	Screwdriver .....	A-10			Wire Marker Dispenser .....	E-17
Toggle Switches,		Twist-a-Nut™ Conduit				Wire Pulling Lubricant	
Standard .....	E-18, E-19	Deburring Tool .....	B-12			Selection Guide .....	B-8
Toggle® Coax Strippers .....	G-15	Twist-a-Nut™ Conduit				Wire Pulling Lubricant,	
Tone Generator .....	G-9	Deburring Tools .....	C-17			ClearGlide™ .....	B-10
Tone Generator, TRACETone™ &		Twist-a-Nut™ Conduit				Wire Pulling Lubricant,	
Amplifier Probe .....	G-9	Wiring Kit .....	C-17			Velocity™ .....	B-10
Tongue & Groove		Twist-a-Nut Pro Electricians				Wire Pulling Lubricant,	
Pliers .....	C-10, C-14	Screwdrivers .....	A-10			Yellow 77® .....	B-9
Tool Bag, Electrician's		Twister® Al/Cu				Wire Stops .....	C-5
Carrier™ .....	C-31	Wire Connectors .....	A-9			Wire Stripper, T®-Stripper .....	C-4
Tool Bag, Mechanic's .....	C-31	Twister® Pro Wire Connectors .....	A-7			Wire Stripper/Crimper,	
Tool Bag, Tool Carrier™ .....	C-31	Twister® Wire Connector .....	A-6			Kinetic Super™ .....	G-13
Tool Carrier, Bucket Bag .....	C-30					Wire Strippers, Coax	
Tool Carriers .....	C-28					Stripmaster® .....	G-14
Tool Carriers, Tuff-Tote™ .....	C-28					Wire Strippers, Kinetic™ Reflex™	
Tool Carriers, Tuff-Tote™						T®-Stripper .....	C-3
Ultimate .....	C-28					Wire Strippers,	
Tool Cases, Insulated .....	C-34					Kinetic™ Super .....	C-3
Tool Holsters, Pocket Pal™ .....	C-30					Wire Strippers, NM Cable	
Tool Kits .....	C-26, C-27					T®-Stripper .....	C-4
						Wire Strippers, Reflex™	
						Premium T®-Stripper .....	C-3

## V

Value-Line™ Pull-Line .....	B-15
VDV Multimedia Cable Tester .....	G-9
Velocity™ Wire Pulling	
Lubricant .....	B-10
Visual Fault Finder .....	G-31
V-Notch Stripper .....	C-5
Vol-Con® Elite	
Voltage Testers .....	F-26
Vol-Con® Voltage/Continuity	
Tester .....	F-27, F-15
Vol-Con® XL Voltage/Continuity	
Tester .....	F-27
Voltage Leads .....	F-21
Voltage Performance	
Monitor .....	F-22
Voltage Tester, Non-Contact .....	F-29
Voltage Tester, Vol-Test® .....	F-27
Voltage Tester, Vol-Test® XL .....	F-27
Voltage Testers, Solenoid .....	F-27
Voltage Testers,	
Vol-Con® Elite .....	F-26
Voltage/Continuity Tester,	
Vol-Con® .....	F-27
Voltage/Continuity Tester,	
Vol-Con® XL .....	F-27
VoltAware™ Non-Contact	
Voltage Tester .....	F-29, F-15
Vol-Test® Voltage Tester .....	F-27
Vol-Test® XL Voltage Tester .....	F-27
Volt-Guard™ Fish Tapes .....	B-5
VPM .....	F-22

## W

Wall Plates .....	G-22
Wall Switch Lockouts .....	H-9
WeatherProof™	
Wire Connectors .....	A-8
Wing-Nut® Wire Connectors .....	A-4
WingTwist™ Wire	
Connectors .....	A-38
Wipes .....	B-12, C-24
Wire Connector Chuck .....	A-10
Wire Connector Socket,	
Spin-Twist® .....	A-10



Item	Page	Item	Page	Item	Page	Item	Page
Wire Strippers, Reflex™							
Super T®-Stripper .....	C-3, C-4						
Wire Strippers, Super							
T®-Stripper .....	C-4						
Wire Strippers, Super T®-Stripper -							
Static Dissipative .....	C-5						
WireMan™ Tool Kits .....	C-27						
Wire-Nut® Wire Connector							
Socket .....	A-10						
Wire-Nut® Wire Connector							
Wrench .....	A-10						
Wire-Nut® Wire Connectors ...	A-2						
WireTwist™ Wire Connectors...	A-37						
Wiring Kit, Twist-a-Nut™							
Conduit .....	C-17						
Wood Boring Bits, BULZ-EYE™							
Self Feed .....	C-44						
Wrap-Cap® Insulators .....	A-28						
Wrench, Ratch .....	A-10						
Wrench, Wire-Nut®							
Wire Connector .....	A-10						
Wrenches, Adjustable .....	C-24						
Write-On Marker Cards .....	E-17						
Write-On Wire Marker							
Booklets .....	E-16						
<b>Y</b>							
Yellow 77® Plus Wire Pulling							
Lubricant .....	B-9						
Yellow 77® Wire Pulling							
Lubricant .....	B-9						
<b>Z</b>							
Zipper Pouches .....	C-30						



# Catalog Number Index

Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
11	A-60	772813	E-11	774082	E-24	777331	E-28	2006S	A-39
12	A-60	772880	E-11	774083	E-24	777411	E-27	2006SB	A-39
13	A-60	772881	E-11	774084	E-24	777511	E-27	2007B	A-39
23	A-60	772890	E-11	774085	E-24	778111	E-27	20-100	E-32
41	A-60	774000	E-19	774086	E-24	778211	E-27	20-110	E-32
42	A-60	774001	E-20	774087	E-21	30-633	G-29	2011S	A-39
43	A-60	774002	E-20	774088	E-18	30-793	G-29	2011SB	A-39
60	A-60	774003	E-19	774089	E-19	45-075	G-29	2014B	A-39
61	A-60	774004	E-21	774091	E-19	45-163	G-29	20-200	E-32
63	A-60	774005	E-18	774092	E-19	45-510	G-29	20-210	E-32
64	A-60	774006	E-21	774093	E-18	45-526	G-29	2112-27-0604	G-3
67	A-60	774007	E-20	774094	E-18	45-603	G-29	2112-27-0605	G-3
68	A-60	774008	E-18	774095	E-20	89-014SMRCA	G-29	23-001	E-31
70	A-60	774009	E-18	774096	E-20	89-1211	G-29	23-002	E-31
71	A-60	774010	E-18	774097	E-20	89-5047	G-29	23-003	E-31
115	A-44	774011	E-18	774098	E-21	89-5048	G-29	23-004	E-31
120	A-44	774012	E-18	774099	E-21	92-619	G-29	23-005	E-31
125	A-44	774013	E-18	774100	E-18	92-650	G-29	23-006	E-31
130	A-44	774014	E-18	774103	E-18	92-651	G-29	23-007	E-31
221	A-50	774015	E-19	774104	E-19	92-659	G-29	23-008	E-31
222	A-50	774016	E-19	774105	E-18	92-669	G-29	23-027	E-31
223	A-50	774017	E-20	774106	E-19	0012-00-0642	G-3	23-035S	E-31
230	A-50	774018	E-20	774108	E-19	0012-00-0656	G-3	23-036S	E-31
241	A-48	774019	E-21	774109	E-19	0012-00-0659	G-3	23-039S	E-31
242	A-48	774020	E-21	774110	E-19	0221	A-50	23-041S	E-31
243	A-48	774021	E-24	774111	E-18	0222	A-50	23-042S	E-31
250	A-48	774022	E-24	774112	E-32	0223	A-50	24-033	E-32
330	A-56	774023	E-24	774113	E-32	0230	A-50	26-270	C-45
351	A-56	774024	E-24	774114	E-32	0241	A-48	30-024	A-29, B-12
352	A-56	774025	E-24	774115	E-19	0242	A-48	30-026	A-29, B-12
358	A-56	774026	E-26	774116	E-32	0243	A-48	30-030	A-29, B-12
426	A-54	774027	E-18	774117	E-21	0250	A-48	30-031	A-29, B-12
427	A-54	774028	E-19	774120	E-22	0330	A-56	30-032	A-29, B-12
430	A-54	774031	E-25	774121	E-22	0351	A-56	30-040	A-29, B-12
444.001	H-8	774032	E-25	774122	E-22	0352	A-56	30-059	A-3
824	A-52	774033	E-25	774123	E-22	0358	A-56	30-060	A-8
830	A-52	774034	E-25	774134	E-32	0921	A-46	30-061	A-8
921	A-46	774035	E-25	774136	E-32	0924	A-46	30-062	A-8
924	A-46	774037	E-25	774137	E-32	0925	A-46	30-063	A-8
925	A-46	774038	E-23	774138	E-32	0930	A-46	30-064	A-8
930	A-46	774039	E-23	775101	A-61	1019-00-1105	G-3	30-065	A-9
1050	A-39	774040	E-22	775102	A-61	1019-00-1110	G-3	30-071	A-2
2007	A-39	774045	E-22	775103	A-61	1019-00-1112	G-3	30-072	A-2
2014	A-39	774047	E-23	775104	A-61	1019-00-1114	G-3	30-073	A-2
172451	E-32	774048	E-23	775111	E-27	1019-00-1115	G-3	30-073J	A-2
772240	E-9	774049	E-23	775121	E-27	10-398	C-29	30-074	A-2
772241	E-9	774050	E-22	776111	E-27	10-399	C-29	30-074J	A-2
772242	E-9	774051	E-26	776112	E-27	10-466	C-29	30-076	A-2
772243	E-9	774052	E-23	776121	E-27	11-111	C-24	30-082	A-12
772244	E-9	774054	E-22	776211	E-27	11-113	C-24	30-083	A-12
772245	E-9	774055	E-22	776311	E-27	11-200	C-24	30-084	A-13
772271	E-32	774056	E-22	777111	E-27	11-201	C-24	30-084J	A-13
772450	E-32	774059	E-23	777112	E-27	1219-00-1604	G-3	30-085	A-13
772451	E-32	774061	E-26	777121	E-27	1219-91-003	G-5	30-085J	A-13
772804	E-11	774062	E-26	777131	E-28	16-8-1/4	A-39	30-086	A-13
772805	E-11	774071	E-25	777211	E-27	16-8-10	A-39	30-086J	A-13
772806	E-11	774072	E-25	777212	E-27	16-8-10L	A-39	30-087	A-13
772807	E-11	774073	E-25	777221	E-27	16-8-10S	A-39	30-087J	A-13
772808	E-11	774074	E-25	777231	E-28	170207L	E-28	30-088	A-13
772809	E-11	774080	E-24	777311	E-27	170208L	E-28	30-088J	A-13
772810	E-11	774081	E-24	777321	E-27	170209L	E-28	30-090	A-13



Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
30-090J	A-13	30-310	A-29	30-383J	A-11	30-559	G-11, G-26	30-873	A-2
30-092	A-5	30-311	A-29	30-3901	A-17	30-560	G-11	30-874	A-2
30-092J	A-5	30-3170	A-14	30-401	A-28	30-560Y	A-8	30-876	A-2
3010-12-0036	G-3	30-3171	A-14	30-402	A-28	30-570	G-11	30-885	A-38
3010-12-0092	G-3	30-3172	A-14	30-405	A-28	30-572	G-11	30-886	A-38
30-102	A-11	30-3173	A-14	30-407	A-28	30-573	G-11	30-887	A-38
30-103	A-11	30-3180	A-14, A-15	30-410	A-28	30-576	G-11	30-890	A-38
3010-70-0015	G-3	30-3181	A-14	30-410J	A-28	30-577	G-11	30-891	A-37
30-141	A-6	30-3182	A-15	30-411	A-28	30-578	G-11	30-892	A-37
30-142	A-6	30-3183	A-16	30-412	A-28	30-579	G-11	30-893	A-37
30-148	A-28	30-3184	A-16	30-415	A-28	30-580	G-11	30-894	A-37
30-151	A-3	30-3194	A-16	30-417	A-28	30-581	G-11	30-896	A-37
30-152	A-3	30-322	A-29	30-425	C-11, C-23	30-582	G-11	30-902	A-10
30-153	A-3	30-3280	A-15	30-426	G-13	30-586	G-11	30-903	A-10
30-159	A-3	30-3284	A-16	30-427	G-28	30-587	G-11	30-904	A-10
30-160Y	A-8	30-3286	A-16	30-428	C-6	30-591	G-11	30-905	A-10
30-161	A-8	30-3287	A-16	30-429	C-11	30-593	G-11	30-906	A-10
30-162	A-8	30-3288	A-16	30-430	C-9	30-594	G-11	30-9429	C-34, H-18
30-163	A-8	30-3289	A-16	30-433	C-6, G-13	30-599	G-11	30-9430	C-34, H-18
30-164Y	A-8	30-3294	A-16	30-433F	C-6, G-13	30-603	G-10, G-25, G-28, G-29	30-WGRB	A-38
30-165	A-9	30-330	A-10, C-17	30-435	C-9	30-610	A-28	30-WGRC	A-38
30-171	A-2	30-331	A-10, C-17	30-4419	C-13	30-615	A-28	30-WGRJ	A-38
30-172	A-2	30-332	A-10, C-17	30-441J	A-6	30-615	A-28	30-WT1B	A-37
30-173	A-2	30-333	A-10, C-17	30-4420	C-13	30-633	G-10, G-24, G-25	30-WT1C	A-37
30-174	A-2	30-3365	A-16	30-4429	C-15	30-640	A-6	30-WT2B	A-37
30-176	A-2	30-3370	A-14	30-4430	C-13	30-640J	A-6	30-WT2C	A-37
30-184	A-13	30-3371	A-14	30-451	A-4	30-641	A-6	30-WT3B	A-37
30-185	A-13	30-3380	A-14, A-15	30-451J	A-4	30-642	A-6	30-WT3C	A-37
30-186	A-13	30-3385	A-16	30-452	A-4	30-644	A-7	30-WT41B	A-38
30-187	A-13	30-3386	A-15	30-452J	A-4	30-644J	A-7	30-WT41C	A-38
30-188	A-13	30-3390	A-16	30-454	A-4	30-645	A-28	30-WT41J	A-38
30-190	A-13	30-3392	A-16	30-479	G-11	30-648	A-28	30-WT4B	A-37
30-192	A-5	30-3394	A-16	30-481	G-11	30-649	A-28	30-WT4C	A-37
30-210	A-29	30-3395	A-16	30-482	G-11, G-29	30-651	A-4	30-WT51B	A-38
30-211	A-29	30-3399	A-16	30-483	G-11, G-29	30-651J	A-4	30-WT51C	A-38
30-222	A-29	30-340	A-6	30-485	G-11	30-652	A-4	30-WT51J	A-38
30-244J	A-7	30-3407	A-16	30-496	G-12, G-24, G-25, G-26, G-27, G-28	30-652J	A-4	30-WT52B	A-38
30-245	A-28	30-341	A-6	30-497	G-12	30-654	A-4	30-WT52C	A-38
30-249	A-28	30-3410	A-16	30-498	G-12	30-673	A-2	30-WT52J	A-38
30-251	A-3	30-341J	A-6	30-499	G-12	30-674	A-2	30-WT54B	A-38
30-252	A-3	30-342	A-6	30-500	G-11	30-682	A-12	30-WT54C	A-38
30-253	A-3	30-3429	C-11	30-502	G-11, G-29	30-683	A-12	30-WT6B	A-37
30-259	A-3	30-3430	C-9	30-503	G-11, G-27, G-29	30-684	A-13	30-WT6C	A-37
30-260	A-8	30-3470	A-14	30-506	G-11, G-26	30-685	A-13	31-010	B-4
30-261	A-8	30-3471	A-14	30-510	A-28	30-686	A-13	31-012	B-4
30-262	A-8	30-3480	A-14	30-511	A-28	30-687	A-13	31-033	B-4
30-263	A-8	30-3494	A-16	30-512	A-28	30-688	A-13	31-035	B-4
30-264	A-8	30-3496	A-16	30-515	A-28	30-690	A-13	31-036	B-4
30-265	A-9	30-352J	A-11	30-517	A-28	30-696	G-12, G-25	31-038	B-4
30-271	A-2	30-353J	A-11	30-521	G-11	30-760	A-8	31-050	B-4
30-272	A-2	30-360	A-8	30-522	G-11, G-24	30-760Y	A-8	31-051	B-4
30-273	A-2	30-360Y	A-8	30-541	A-6	30-764	A-8	31-052	B-4
30-274	A-2	30-361	A-8	30-5419	C-13	30-765	A-9	31-055	B-4
30-276	A-2	30-362	A-8	30-5420	C-13	30-793	G-10, G-24, G-25, G-28	31-056	B-4
30-292	A-5, A-10	30-363	A-8	30-5429	C-15	30-840	A-6	31-057	B-4
30-295	A-10	30-364	A-8	30-5430	C-13	30-841	A-6	31-058	B-4
30-3004	A-17	30-365	A-9	30-5431	C-15	30-851	A-4	31-059	B-4
30-3006	A-17	30-3680	A-15	30-551	A-4	30-852	A-4	31-060	B-5
30-3010	A-17	30-372	A-11	30-552	A-4	30-871	A-2	31-061	B-5
30-3012	A-17	30-382J	A-11	30-556	G-11	30-872	A-2	31-062	B-5
30-3014	A-17	30-383	A-11					31-063	B-5



# Catalog Number Index

Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
31-064	B-5, H-19	31-338	B-15	31-840	B-15	35-006	C-15	35-190	C-19
31-065	B-5, H-19	31-3380	B-4	31-841	B-15	35-007	C-15	35-191	C-19
31-066	B-4	31-340	B-15	31-844	B-15	35-008	C-15	35-193	C-19
31-067	B-4	31-340BP	B-15	31-845	B-15	35-012	C-9	35-194	C-19
31-073	B-4	31-343	B-15	31-846	B-15	35-020	C-32	35-195	C-19
31-074	B-4	31-344	B-15	31-849	B-15	35-021	C-32	35-200	C-20
31-081	B-4	31-347	B-15	31-850	B-15	35-028	C-10	35-202	C-20
31-085	B-6	31-351	B-9	31-851	B-15	35-029	C-10	35-203	C-20
31-090	B-5	31-355	B-9	31-853	B-15	35-031	C-22	35-205	C-25, G-28
31-091	B-5	31-355BP	B-9	31-854	B-15	35-031B	C-22	35-210	C-24
31-092	B-5	31-358	B-9	31-855	B-15	35-032	C-22	35-238	C-25, G-28
31-093	B-5	31-365	B-9	31-856	B-15	35-032B	C-22	35-242	C-25
31-094	B-6	31-371	B-11	31-857	B-15	35-033	C-22	35-259	C-48
31-096	B-5, H-19	31-375	B-11	32-277	B-10	35-033B	C-22	35-260	B-14, C-48
31-097	B-5, H-19	31-375BP	B-11	33-296	G-12	35-036	C-10	35-261	B-14, C-48
31-098	B-4	31-376	B-11	33-320	G-15, G-20, G-26	35-037	C-10	35-262	B-14, C-48
31-140	B-5	31-377	B-11	33-400	G-27	35-038	C-10	35-263	B-14, C-48
31-141	B-5	31-378	B-11	33-505	G-27	35-039	C-10	35-264	B-14, C-48
31-142	B-5	31-381	B-10	33-605	G-27	35-042	G-20	35-271	B-14, C-48
31-144	B-5	31-385	B-10	33-620	G-19, G-25	35-043	G-20	35-272	B-14, C-48
31-146	B-6	31-3855	B-11	33-621	G-24	35-046	G-20, G-24, G-28	35-273	B-14, C-48
31-147	B-6	31-385BP	B-10	33-623	G-16, G-26	35-051	G-16	35-274	C-48
31-148	B-6	31-388	B-10	33-624	G-28	35-052	C-11	35-275	C-48, G-28
31-150	B-5	31-391	B-9	33-625	G-25	35-053	C-22	35-285	C-25
31-152	B-5	31-395	B-9	33-630	G-19, G-25	35-054	C-22	35-286	C-25
31-155	B-5, H-19	31-395BP	B-9	33-633	G-10, G-25	35-055	C-22	35-287	C-25
31-156	B-6	31-398	B-9	33-635	G-19	35-056	C-22	35-290	C-20
31-158	B-6	31-421	B-11	33-652	G-23, G-26	35-057	C-22	35-291	C-20
31-159	B-6	31-425	B-11	33-700	G-12, G-28	35-060	G-16	35-292	C-20
31-160	B-5	31-435	B-11	33-704	G-12, G-23, G-25	35-075	B-12, C-17	35-293	C-20
31-162	B-5	31-466	B-16	33-705	G-27	35-078	C-22	35-294	C-20
31-164	B-6	31-467	B-16	33-750	G-12, G-23, G-26	35-083	B-12, C-17	35-295	C-20
31-165	B-5, H-19	31-468	B-16	33-825	G-8	35-085	C-22	35-296	C-20
31-166	B-6	31-469	B-16	33-826	G-8	35-087	G-16	35-297	C-18
31-186	B-5	31-470	B-16	33-835	G-8	35-088	G-16, G-24, G-27	35-298	C-18
31-187	B-5	31-471	B-16	33-856	G-8, G-9, G-24, G-30	35-089	G-16	35-299	C-21
31-189	B-5	31-472	B-16	33-864	G-9	35-091	G-16, G-28	35-300	C-25
31-190	B-5	31-473	B-16	33-880	G-8	35-092	G-16	35-301	C-25
31-206	B-5	31-475	B-16	33-881	G-8	35-093	G-16	35-3012	C-9
31-207	B-5	31-476	B-16	33-886	G-8	35-094	G-16	35-3028	C-10
31-2128	B-4	31-477	B-16	33-887	G-8	35-096	B-12, C-17	35-3029	C-10
31-2138	B-5	31-479	B-16	33-891	G-7	35-097	B-12, C-17	35-303	G-28
31-2143	B-10	31-480	B-16	33-892	G-7	35-098	B-12, C-17	35-3038	C-10
31-276	B-10	31-481	B-16	33-915	G-24	35-146	C-25	35-3052	C-11
31-278	B-10	31-542	B-5	33-916	G-24	35-147	C-25	35-316	C-29
31-278BP	B-10	31-544	B-5	33-917	G-16, G-24	35-150	C-19	35-325	C-29
31-279	B-10	31-552	B-5	33-945	G-28	35-151	C-19	35-338	C-29
31-282	B-10	31-554	B-5	33-974	G-5	35-152	C-19	35-339	C-29
31-283	B-10	31-601	B-12	33-981	G-6	35-153	C-19	35-340	C-40
31-291	B-11	31-605	B-12	33-982	G-6	35-154	C-19	35-341	C-40
31-295	B-11	31-611	B-7	33-983	G-6	35-156	C-19	35-342	C-40
31-298	B-11	31-612	B-7	33-987	G-6	35-158	C-19	35-343	C-40, G-28
31-2982	B-4	31-631	B-7	33-9905	H-19	35-161	C-19	35-3430	C-10
31-322	B-16	31-633	B-7	34-001	C-35, H-19	35-164	C-19	35-344	C-40
31-323	B-16	31-643	B-7	34-002	C-35, H-19	35-166	C-19	35-345	C-40
31-324	B-16	31-644	B-7	34-003	C-35, H-19	35-168	C-19	35-346	C-40
31-325	B-16	31-647	B-7	34-012	C-35, H-19	35-183	C-19	35-347	C-40
31-326	B-16	31-648	B-7	34-015	C-35, H-19	35-184	C-19	35-348	C-40
31-327	B-16	31-651	B-7	34-016	C-35, H-19	35-185	G-12	35-349	C-40
31-3373	B-11	31-652	B-7	35-001	C-48	35-186	C-19	35-350	C-40
31-3379	B-4	31-839	B-15			35-188	C-19	35-351	C-40



Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
35-352	C-40	35-410	C-31, G-24	35-691	C-20	35-913	C-16	36-058	C-42
35-353	C-40	35-411	C-32	35-692	C-20	35-914	C-16	36-058B	C-42
35-354	C-40	35-412	C-32	35-693	C-20	35-915	C-16	36-059	C-42
35-355	C-40	35-418	C-31	35-694	C-20	35-922	C-17, C-24	36-059B	C-42
35-356	C-40	35-420	C-10, G-28	35-695	C-20	35-923	C-17, C-24	36-060	C-42
35-357	C-40	35-421	C-24	35-696	C-20	35-926	C-17	36-065	C-42
35-358	C-40	35-422	C-24	35-698	C-21	35-927	C-17	36-065B	C-42
35-359	C-40	35-423	C-24	35-729	C-46	35-9300	C-32, H-16	36-066	C-42
35-360	C-40	35-426	C-10	35-730	C-46	35-9301	C-32, H-16	36-067	C-42
35-361	C-40	35-427	C-31	35-781	C-7, C-23	35-9302	C-32, H-16	36-070	C-43
35-362	C-40	35-430	C-10	35-782	C-7, C-23	35-9303	C-34, H-18	36-071	C-43
35-363	C-40	35-440	C-10	35-784BLK	C-29	35-9304	C-34, H-18	36-072	C-43
35-364	C-40	35-441	C-31	35-790	C-26	35-9310	C-34, H-18	36-073	C-43
35-365	C-40	35-4430	C-14	35-794	C-27	35-9311	C-34, H-18	36-075	C-42
35-366	C-40	35-4431	C-15	35-800	C-26	35-9312	C-34, H-18	36-076	C-43
35-367	C-40	35-460	C-10	35-805	C-27	35-9320	C-34, H-18	36-085	C-42
35-368	C-40	35-462	G-24, G-27, G-31	35-808	C-26	35-9321	C-34, H-18	36-086	C-42
35-369	C-40	35-465	G-13	35-809	C-26	35-9322	C-34, H-18	36-087	C-42
35-370	C-40	35-466	G-13	35-810	C-46	35-9323	C-34, H-18	36-088	C-42, C-48
35-371	C-40	35-468	G-13	35-811	C-46	35-9324	C-34, H-18	36-090	C-42
35-372	C-40	35-473	G-24, G-27, G-28	35-812	C-46	35-9325	C-34, H-18	36-095	C-42
35-373	C-40	35-474	C-30	35-813	C-46	35-9330	C-34, H-18	36-096	C-42
35-374	C-40	35-478	G-12	35-814	C-46	35-9331	C-34, H-18	36-240	C-21
35-375	C-40	35-479	G-12	35-815	C-46	35-9332	C-34, H-18	36-241	C-21
35-376	C-40	35-483	G-12	35-816	C-46	35-9333	C-34, H-18	36-242	C-21
35-377	C-40	35-485	G-12, G-27, G-27, G-28	35-817	C-46	35-9334	C-34, H-18	36-243	C-21
35-378	C-40	35-487	G-12	35-818	C-46	35-9335	C-34, H-18	36-244	C-21
35-379	C-40	35-492	G-12, G-24	35-819	C-45, C-46	35-9336	C-34, H-18	36-245	C-21
35-380	C-40	35-493	G-12	35-820	C-46	35-9340	C-34, H-18	36-246	C-21
35-381	C-40	35-495	G-12	35-821	C-46	35-9350	C-34, H-18	36-248	C-21
35-382	C-40	35-497	G-12, G-27, G-28	35-822	C-46	35-9351	C-34, H-18	36-249	C-21
35-383	C-40	35-5012	C-13	35-823	C-46	35-9352	C-34, H-18	36-250	C-44
35-384	C-40	35-5026	C-13	35-824	C-46	35-9353	C-34, H-18	36-251	C-44
35-385	C-40	35-5028	C-13	35-825	C-46	35-940	C-21	36-252	C-44
35-386	C-40	35-5029	C-13	35-826	C-46	35-9406	C-35, H-19	36-253	C-44
35-387	C-40	35-5035	C-14	35-827	C-46	35-941	C-21	36-254	C-44
35-388	C-40	35-5036	C-14	35-828	C-46	35-942	C-21	36-255	C-44
35-389	C-40	35-5038	C-14	35-829	C-46	35-943	C-21	36-256	C-44
35-390	C-40	35-505	C-30	35-862	C-46	35-9430	C-34, H-18	36-257	C-44
35-391	C-41	35-5052	C-15	35-864	C-46	35-950	C-29	36-258	C-44
35-392	C-41	35-511	C-37	35-866	C-46	35-950BLK	C-29	36-259	C-44
35-393	C-41	35-512	C-37	35-868	C-46	35-956	C-29	36-260	C-44
35-394	C-41	35-513	C-37	35-870	C-47	35-956BLK	C-29	36-261	C-44
35-396	C-41	35-514	C-37	35-871	C-47	35-964	C-29	36-262	C-44
35-397	C-41	35-515	C-37	35-872	C-47	35-965	C-29	36-265	C-45
35-398	C-41	35-516	C-37	35-892	C-46	35-965BLK	C-29	36-266	C-45
35-400	C-41	35-517	C-37	35-893	C-46	35-969	C-29	36-269	C-45
35-401	C-41	35-518	C-41	35-896	C-46	35-969BLK	C-29	36-271	C-45
35-4012	C-13	35-520	C-37	35-897	C-46	35-975	C-29	36-272	C-45
35-402	C-30, G-24	35-535	C-31, G-24, G-25	35-898	C-46	35-975BLK	C-29	36-273	C-44, C-45
35-4026	C-13	35-536	C-41	35-899	C-46	35-988	A-10, C-16	36-300	C-38
35-4028	C-13	35-537	C-41	35-9029	C-34, H-18	35-995	C-29	36-301	C-38
35-4029	C-13	35-538	C-41	35-903	C-29	35-995BLK	C-29	36-302	C-38
35-403	C-30	35-5430	C-14	35-9038	C-34, H-18	36-043	C-43	36-303	C-38
35-4035	C-14	35-5792	C-27	35-905	C-21, G-27, G-27	36-044	C-43	36-304	C-38
35-4036	C-14	35-5805	C-27	35-9052	C-34, H-18	36-046	C-43	36-305	C-38
35-4038	C-14	35-598	C-41	35-908	A-10, C-16, G-24, G-27, G-28	36-048	C-43	36-306	C-38
35-404	C-20	35-599	C-41	35-909	C-16	36-054	C-42	36-307	C-38
35-405	C-30	35-655	C-30	35-910	C-21	36-055	C-42	36-308	C-38
35-4052	C-15	35-665	C-30	35-911	C-16	36-056	C-43	36-309	C-38
35-406	C-20	35-690	C-20	35-912	C-16	36-057	C-42	36-310	C-38
35-407	G-12, G-24, G-28					36-057B	C-42	36-311	C-38



# Catalog Number Index

Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
36-312	C-38	44-782	H-9	44-892BK	H-13	45-098	D-2, D-3	45-334	G-31
36-819	C-44	44-783	H-2, H-3, H-4, H-5, H-6	44-893	H-13	45-098-341	D-3	45-335	G-31
38-500	B-12, C-24	44-784	H-9	44-894	H-13	45-099	D-2, D-3	45-336	G-31
4010-00-036	G-5	44-785	H-3, H-4, H-5, H-7	44-895	H-13	45-101	C-5	45-337	G-32
41-697	E-17, H-11	44-786	H-3, H-4, H-5, H-6	44-896	H-13	45-111	G-14, G-29	45-338	G-32
41-698	E-17, H-11	44-787	H-9	44-898	H-11	45-118	C-7	45-339	G-32
41-990	E-2	44-789	H-2, H-3, H-4, H-5, H-9	44-900	H-11	45-120	C-2, C-4	45-341	G-32
41-995	E-2	44-790	H-12	44-901	H-11	45-120-341	C-4	45-342	G-32
42-001	H-14	44-791	H-3, H-4, H-12	44-902	H-11	45-121	C-2, C-4	45-344	G-31
42-002	H-14	44-792	H-9	44-903	H-11	45-123	C-2, C-6	45-349	G-15
42-003	H-14	44-793	H-9	44-904	H-11	45-124	C-2, C-4	45-350	G-32
42-011	H-14	44-800	H-2, H-3, H-4, H-5, H-12	44-905	H-11	45-125	C-2, C-4	45-352	G-31
42-012	H-14	44-801	H-12	44-906	H-2, H-11	45-125-341	C-4	45-358	G-31
42-015	H-14	44-804	H-3	44-907	H-11	45-128	C-7	45-359	G-31
42-031	H-14	44-805	H-4	44-908	H-11	45-129	C-7	45-360	G-32
42-051	H-14	44-806	H-4	44-909	H-11	45-144	G-15	45-372-341	D-3
42-052	H-14	44-807	H-2, H-3, H-4, H-5, H-6	44-910	H-11	45-162	G-14	45-400	C-5
42-101	H-14	44-808	H-10	44-911	H-11	45-163	G-14	45-401	C-5
42-102	H-14	44-809	H-2, H-3, H-4, H-5, H-7	44-912	H-11	45-164	G-14, G-29	45-402	C-5
42-103	H-14	44-810	H-2, H-3, H-4, H-5, H-7	44-914	H-11	45-165	G-14, G-24, G-26, G-27, G-28	45-403	C-5
42-104	H-14	44-815	H-3, H-4	44-916	H-2, H-4, H-5, H-11	45-167	G-15, G-24	45-404	C-5
42-131	H-14	44-816	H-3, H-4	44-918	H-11	45-169	D-4	45-415	C-2, C-3
42-151	H-14	44-817	H-10	44-920	H-11	45-170	D-4, D-5	45-416	C-2, C-3
42-152	H-14	44-818	H-2, H-3, H-4, H-5, H-9	44-921	H-11	45-171	D-4, D-5	45-417	C-2, C-3
42-201	H-14	44-819	H-3, H-4, H-5, H-9	44-922	H-11	45-172	D-4, D-5	45-418	C-2, C-3
42-251	H-14	44-820	H-4, H-5, H-10	44-923	H-11	45-173	D-4, D-5	45-423	C-6
42-252	H-14	44-821	H-11	44-940	H-5	45-174	D-4, D-5	45-425-341	C-3
42-301	E-17	44-822	H-6	44-941	H-5	45-175	D-4, D-5	45-510	G-15, G-29
42-399	E-17	44-823	H-6	44-942	H-5	45-176	D-4, D-5	45-513	G-15
43-953	E-17	44-824	H-3, H-4, H-5, H-10	44-953	H-5	45-177	D-4, D-5	45-514	G-15
44-101	E-16	44-825	H-5, H-10	44-954	H-5	45-178	D-4, D-5	45-520	G-15, G-29
44-102	E-16	44-829	H-10	44-956	H-4, H-7	45-179	D-4, D-5	45-521	G-15
44-103	E-16	44-830	H-12	44-957	H-4, H-7	45-2108-1	C-5	45-522	G-15
44-104	E-16	44-832	H-12	44-970	H-2	45-227	C-7	45-523	G-15
44-105	E-16	44-833	H-2, H-4, H-12	44-971	H-3	45-235	C-7	45-524	G-15
44-106	E-16	44-834	H-12	44-972	H-3	45-247	C-4	45-526	G-15, G-24, G-25, G-28
44-107	E-16	44-841	H-12	44-973	H-2	45-248	C-4	45-529	G-14, G-29
44-108	E-16	44-843	H-12	44-974	H-4	45-249	C-4	45-537	G-31
44-109	E-16	44-844	H-12	44-975	H-5	45-260	C-6	45-537	G-31
44-110	E-16	44-846	H-10	44-979	H-4	45-262	C-7, D-2, G-14, G-24, G-25, G-29	45-603	G-14, G-28, G-29
44-111	E-16	44-847	H-10	44-980	H-3	45-264	D-2	45-615	C-2, C-3
44-148	E-16	44-848	H-12	44-990	H-15	45-265	D-2, G-14, G-29	45-616	C-2, C-3
44-151	E-16	44-849	H-2, H-3, H-4, H-5, H-12	44-991	H-15	45-266	D-2	45-618	C-2, C-3
44-152	E-16	44-862	H-13	44-992	H-15	45-282	D-2, G-14, G-29	45-621	C-3, C-4
44-154	E-16	44-863	H-13	44-993	H-15	45-290	D-2, D-3	45-622	C-3, C-4
44-1791	H-12	44-865	H-13	44-994	H-15	45-290-341	D-3	45-631	D-5, D-6
44-1800	H-12	44-877	H-13	45-011	G-14	45-292	C-7, D-2	45-632	D-5, D-6
44-1807	H-6	44-878	H-13	45-025	C-4	45-292-241	D-3	45-633	D-5, D-6, G-26
44-1809	H-7	44-880	H-13	45-074	C-6, G-16, G-24, G-25, G-26, G-28, G-29	45-298-341	D-3	45-634	D-5, D-6
44-1810	H-7	44-881	H-13	45-075	C-6, G-16, G-29	45-310-341	C-4	45-635	D-5, D-6
44-1830	H-12	44-888	H-13	45-089	D-2	45-315	C-2, C-4	45-636	D-5, D-6
44-1833	H-12	44-890	H-13	45-090	D-2, D-3	45-316	C-2, C-5	45-637	D-5, D-6
44-753	E-17	44-892	H-13	45-090-341	D-3	45-317	C-2, C-5	45-638	D-5, D-6
44-764	H-8			45-091	D-2, D-3	45-317-341	C-4	45-639	D-5, D-6
44-768	H-8			45-092	C-7, D-2, D-3	45-318	C-2, C-4	45-640	D-5, D-6
44-769	H-8			45-092-341	D-3	45-320	G-15, G-24, G-26, G-29	45-641	D-5, D-6
44-772	H-4, H-9			45-093	D-2, D-3	45-332	G-31	45-671	D-2, D-3
44-774	H-5			45-095	D-2	45-333	C-5	45-671-341	D-3
44-777	H-4			45-097	D-2, D-3			45-672	D-2, D-3
44-778	H-4							45-673	D-2, D-3
44-779	H-9							45-674	D-2, D-3
44-780	H-9							45-675	D-2, D-3



Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
45-714	C-2	46-410	E-12	61-331	F-31	61-811	F-21	772-3/16-BL	A-61
45-715	C-2, C-3	46-411	E-12	61-332	F-31	61-812	F-21	772-3/32-BL	A-61
45-716	C-2, C-3	46-420	E-12	61-333	F-31	61-813	F-21	772-3/4-BL	A-61
45-718	C-2, C-3	46-600	E-13	61-334	F-5, F-31	61-814	F-21	772-3/8-BL	A-61
45-719	G-13, G-23	46-601	E-13	61-340	F-2, F-5, F-15, F-32, F-34	61-819	F-21	774002BK	E-20
45-777	C-5	46-602	E-13	61-342	F-2, F-5, F-32, F-34	61-820	F-21	774003BK	E-19
45-778	C-6	46-603	E-13	61-360	F-2, F-6, F-32, F-34	61-821	F-21	774004BK	E-21
45-890	D-7	46-604	E-13	61-361	F-2, F-6, F-32, F-34	61-830	F-22	774005BK	E-18
45-891	D-7	46-605	E-13	61-436	F-31	61-900	F-4	774008BK	E-18
45-892	D-7	46-606	E-13	61-445	F-32	61-902	F-4	774011BK	E-18
45-893	D-7	46-607	E-13	61-451	F-5, F-31	61-904	F-3	774013BK	E-18
45-894	D-7	46-608	E-13	61-452	F-9, F-14, F-34	61-905	F-3	774014BK	E-18
45-895	D-7	46-610	E-13	61-457	F-21	61-920	F-18	774015BK	E-19
45-9120	C-34, H-18	46-941	E-15	61-461	F-4, F-30, F-33	61-954	F-16, F-17	774016BK	E-19
45-915	C-2, C-3	46-950	E-15	61-465	F-4, F-33	61-956	F-16, F-17	774017BK	E-20
45-918	C-2, C-3	46-951	E-15	61-494	F-2, F-4, F-32, F-34	61-958	F-16, F-17	774020BK	E-21
45-9615	C-34, H-18	46-952	E-15	61-495	F-2, F-4, F-32, F-34	62-096	G-9	774026BK	E-26
46-007	E-15	46-953	E-15	61-500	F-25	62-140	G-9, G-24	774026K	E-26
46-202	E-15	46-954	E-15	61-501	F-25	62-160	G-9, G-27, G-28	774026KBK	E-26
46-203	E-15	46-955	E-15	61-503	F-29	62-164	G-9, G-24, G-27, G-28	774028BK	E-19
46-204	E-15	46-956	E-15	61-520	F-30	62-200	G-9, G-27	774037BK	E-25
46-310	E-13	6011-50-0029	G-3	61-521	F-15, F-30	62-205	G-27	774040BK	E-22
46-312	E-13	6011-50-0031	G-3	61-532	F-24	62-891	G-7	774045BK	E-22
46-313	E-13	61-010	F-27, F-32	61-534	F-15, F-24	74-001	B-13	774049BK	E-23
46-315	E-13	61-020	F-32	61-561	F-31	74-002	B-13	774054BK	E-22
46-316	E-13	61-025	F-29	61-565	F-3, F-4, F-6, F-17	74-003	B-13	774059BK	E-23
46-318	E-13	61-030	F-29	61-602	F-32	74-006	B-13	774063B	E-26
46-319	E-13	61-035	F-25	61-603	F-32	74-010	B-14	774063BK	E-26
46-321	E-13	61-040	F-29	61-605	F-2, F-7, F-34	74-011	B-14	774071BK	E-25
46-322	E-13	61-051	F-25	61-609	F-32	74-012	B-14	774072BK	E-25
46-323	E-13	61-059	F-25, F-32	61-610	F-2, F-8, F-32, F-34	74-013	B-14	774074BK	E-25
46-324	E-13	61-063	F-15, F-29	61-614	F-2, F-8, F-32, F-34	74-019	B-13, B-14	774085BK	E-24
46-325	E-13	61-065	F-27, F-32	61-681	F-30	74-020	B-13, B-14	774088BK	E-18
46-327	E-13	61-070	F-27	61-682	F-30	74-021	B-13, B-14	774089BK	E-19
46-328	E-13	61-072	F-27	61-685	F-30	74-022	B-13	774091BK	E-19
46-330	E-13	61-076	F-27, F-32	61-701	F-9, F-10, F-32, F-34	74-026	B-13	774095BK	E-20
46-343	E-14	61-085	F-27, F-32	61-702	F-9, F-10, F-32, F-34	74-027	B-13	774111BK	E-18
46-344	E-14	61-086	F-15, F-27, F-32	61-704	F-9, F-10, F-32, F-34	74-028	B-13	774114BK	E-32
46-346	E-14	61-090	F-26, F-32	61-710	F-9, F-14, F-34	74-031	B-13	774115BK	E-19
46-347	E-14	61-092	F-26, F-32	61-744	F-9, F-11, F-15, F-32, F-34	74-032	B-13	776112BK	E-27
46-348	E-14	61-096	F-28, F-32, F-34	61-746	F-9, F-11, F-32, F-34	74-034	B-13	776212BK	E-27
46-350	E-14	61-164	F-22, F-32	61-764	F-9, F-12, F-32, F-34	74-046	B-13	776312BK	E-27
46-351	E-14	61-165	F-22, F-32	61-772	F-9, F-13, F-32, F-34	74-047	B-13	777111BK	E-27
46-352	E-14	61-175	F-23	61-774	F-9, F-13, F-32, F-34	74-999	B-12	777121BK	E-27
46-354	E-14	61-176	F-23	61-795	F-19	770200L	E-29	777211BK	E-27
46-356	E-14	61-177	F-22, F-25	61-796	F-18	770204L	E-29	777212BK	E-27
46-357	E-14	61-179	F-22, F-23	61-805	F-20, F-21	770205L	E-29	777221BK	E-27
46-358	E-14	61-182	F-23	61-806	F-20, F-21	770212L	E-29	777312BK	E-27
46-369	E-14	61-183	F-23	61-807	F-20, F-21	770213L	E-29	777321BK	E-27
46-371	E-14	61-184	F-25	61-810	F-21	770215L	E-28	777331BK	E-28
46-372	E-14	61-2000	F-15			770216L	E-28	80-012	E-30
46-381	E-14	61-2001	F-15			770217L	E-28	80-033	E-31
46-382	E-14	61-2002	F-15			770218L	E-28	80-075	E-30
46-383	E-14	61-2003	F-22			770219L	E-28	80-255	E-30
46-384	E-14	61-2004	F-22			770221L	E-28	80-265	E-30
46-387	E-14	61-201	F-27			770223L	E-28	80-454	E-30
46-400	E-12	61-310	F-2, F-7, F-32, F-34			770225L	E-29	80-461	E-30
46-401	E-12	61-312	F-2, F-7, F-32, F-34			772-1/16-BL	A-61	80-475	E-30
46-402	E-12	61-320	F-2, F-3, F-32, F-34			772-1/2-BL	A-61	80-504	E-30
46-403	E-12	61-322	F-2, F-3, F-32, F-34			772-1/4-BL	A-61	82-001	E-31
46-404	E-12	61-324	F-2, F-3, F-32, F-34			772-1/8-BL	A-61	82-002	E-31
46-405	E-12	61-330	F-31			772-1-BL	A-61	82-003	E-31



# Catalog Number Index

Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
82-004	E-31	83-7171	A-18	84-6171	A-19	85-215	G-22	86-017	G-20, G-29
82-005	E-31	83-7201	A-18	84-7111	A-18	85-217	G-22	86-030	G-20, G-29
82-006	E-31	83-7211	A-18	84-7161	A-18	85-218	G-22	86-039	G-20
83-001	C-23	83-7221	A-18	84-7171	A-18	85-219	G-22	86-132	G-17
83-005	C-23	83-7231	A-18	84-7221	A-18	85-220	G-22	86-133	G-17
83-0131	A-18	83-8001	A-21	84-9011	A-22	85-222	G-22	86-134	G-17
83-0141	A-18	83-8011	A-21	84-9021	A-22	85-223	G-22	86-200	G-22
83-0221	A-18	83-8101	A-21	84-9031	A-22	85-225	G-22	86-201	G-22
83-0231	A-18	83-8111	A-21	84-9081	A-22	85-227	G-22	86-202	G-22
83-0241	A-18	83-9001	A-22	84-9091	A-22	85-229	G-22, G-22	86-203	G-22
83-0331	A-18	83-9011	A-22	84-9281	A-23	85-230	G-22	86-204	G-22
83-0341	A-18	83-9021	A-22	84-9291	A-23	85-232	G-22	86-205	G-22
83-0351	A-18	83-9031	A-22	84-9301	A-23	85-233	G-22	86-206	G-22
83-0421	A-18	83-9041	A-22	84-9581	A-20	85-234	G-22	86-207	G-22
83-0431	A-18	83-9051	A-22	84-9781	A-21	85-236	G-22	86-208	G-22
83-0441	A-18	83-9071	A-22	84-9791	A-21	85-237	G-22	86-209	G-22
83-0451	A-18	83-9081	A-22	85-0111	G-20	85-239	G-22	86-212	G-22
83-0511	A-18	83-9091	A-22	85-016	G-20, G-27, G-29	85-241	G-22	86-213	G-22
83-0521	A-18	83-9281	A-23	85-017	G-20, G-27, G-29	85-242	G-22	86-214	G-22
83-0531	A-18	83-9291	A-23	85-030	G-20, G-29	85-244	G-22	86-215	G-22
83-0541	A-18	83-9301	A-23	85-031	G-20	85-245	G-22	86-217	G-22
83-0611	A-18	83-9351	A-23	85-032	G-17	85-246	G-22	86-218	G-22
83-0621	A-18	83-9361	A-23	85-033	G-17	85-310	G-17	86-219	G-22
83-0631	A-18	83-9371	A-23	85-034	G-17	85-311	G-17	86-220	G-22
83-2121	A-17	83-9401	A-22	85-035	G-20	85-312	G-17	86-222	G-22
83-2131	A-17	83-9411	A-20	85-036	G-20, G-29	85-313	G-17	86-223	G-22
83-2141	A-17	83-9421	A-20	85-037	G-20, G-29	85-323	G-17	86-225	G-22
83-2151	A-17	83-9441	A-20	85-038	G-17, G-20	85-332	G-17	86-227	G-22
83-2221	A-17	83-9451	A-20	85-039	G-20	85-333	G-17	86-229	G-22
83-2231	A-17	83-9471	A-20	85-053	G-20	85-334	G-17	86-230	G-22
83-2241	A-17	83-9481	A-20	85-057	G-20, G-29	85-344	G-23, G-28	86-232	G-22
83-2251	A-17	83-9501	A-20	85-065	G-20, G-26	85-346	G-23, G-26, G-28	86-233	G-22
83-2331	A-17	83-9511	A-20	85-066	G-20	85-351	G-23, G-25	86-234	G-22
83-2341	A-17	83-9521	A-20	85-067	G-20	85-352	G-23, G-25	86-235	G-22
83-2351	A-17	83-9541	A-20	85-111	G-20	85-353	G-23, G-25	86-236	G-22
83-2361	A-17	83-9551	A-20	85-1165	G-20	85-366	G-23, G-23	86-237	G-22
83-2371	A-17	83-9571	A-20	85-1166	G-20	85-394	G-23	86-239	G-22
83-3261	A-23	83-9581	A-20	85-1167	G-20	85-396	G-23	86-241	G-22
83-3271	A-23	83-9591	A-20	85-1310	G-17	85-401	G-23	86-242	G-22
83-3281	A-23	83-9601	A-20	85-1311	G-17	85-402	G-23	86-394	G-23
83-6111	A-19	83-9611	A-19	85-1312	G-17	85-403	G-23	86-395	G-23, G-28
83-6121	A-19	83-9621	A-19	85-1313	G-17	85-480	G-21	86-396	G-23, G-26
83-6131	A-19	83-9631	A-19	85-132	G-17	85-490	G-21	86-398	G-23
83-6161	A-19	83-9771	A-21	85-133	G-17	85-491	G-21	86-401	G-23
83-6171	A-19	83-9781	A-21	85-134	G-17	85-502	G-21, G-29	86-402	G-23
83-6211	A-19	83-9791	A-21	85-135	G-17	85-512	G-21	86-403	G-23
83-6221	A-19	83-9801	A-22	85-137	G-17	85-513	G-21, G-29	86-502	G-21
83-6231	A-19	83-9911	A-21	85-138	G-17	85-515	G-21	86-925	G-23
83-7011	A-19	83-9921	A-21	85-165	G-20	85-517	G-21, G-29	87-002	A-30
83-7021	A-19	83-9931	A-21	85-166	G-20	85-545	G-21, G-29	87-005	A-30
83-7031	A-19	83-9971	A-20	85-167	G-20	85-550	G-21	87-007	A-30
83-7051	A-19	83-9981	A-20	85-200	G-22	85-553	G-21	87-008	A-30
83-7061	A-19	83-9991	A-20	85-201	G-22	85-556	G-21	87-009	A-30
83-7071	A-19	84-016	G-20	85-204	G-22	85-588	G-21	87-010	A-30
83-7081	A-19	84-017	G-20	85-205	G-22	85-590	G-21	87-011	A-30
83-7091	A-19	84-018	G-20	85-206	G-22	85-770	G-22	87-012	A-30
83-7101	A-19	84-0241	A-18	85-207	G-22	85-780	G-22	87-015	A-30
83-7111	A-18	84-030	G-20	85-208	G-22	85-900	G-23	87-016	A-30
83-7121	A-18	84-0341	A-18	85-209	G-22	85-925	G-23	87-017	A-30
83-7131	A-18	84-039	G-20	85-212	G-22	85-950	G-23	87-018	A-30
83-7151	A-18	84-2241	A-17	85-213	G-22	85-960	G-23	87-040	A-30
83-7161	A-18	84-2341	A-17	85-214	G-22	86-016	G-29	87-042	A-30



Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
87-044	A-30	89-045	G-19	89-438	A-26	92-656	G-19, G-29	BGR-25	A-36
87-046	A-30	89-047	G-19, G-29	89-439	A-26	92-659	G-19	BGR-B	A-36
87-048	A-30	89-048	G-19, G-29	89-504	A-25	92-660	G-19, G-29	BICS1-125	E-10
87-126	A-31	89-054	G-25	89-5047	G-19	92-669	G-19	BICS2-125	E-10
87-129	A-31	89-055	G-25	89-5048	G-19	96-950	G-23	BMP-1000-9-C	A-62
87-132	A-31	89-056	G-25	89-505	A-25	B102	A-58	BMP-750-9-C	A-62
87-135	A-31	89-057	G-25	89-506	A-25	B104	A-58	BMSE150-1	E-11
87-138	A-31	89-058	G-25	89-507	A-25	B106	A-58	BMSE175-1	E-11
87-141	A-31	89-060	G-25	89-508	A-25	B108	A-58	BPCSRB-JR	E-11
87-143	A-31	89-1211	G-19	89-509	A-25	B1-1	A-36	BPCXMB-JR	E-11
87-144	A-31	89-126	G-19	89-512	A-25	B112	A-58	BPCXSB-JR	E-11
87-145	A-31	89-127	G-19	89-513	A-25	B-11-50-0-C	A-62	BPCXSW-JR	E-11
87-150	A-32	89-202	A-24	89-514	A-26	B-11-50-0-D	A-62	BPDATAS-JR	E-11
87-152	A-32	89-203	A-24	89-516	A-26	B-11-50-35-C	A-62	BPDCXSB-JR	E-11
87-156	A-32	89-204	A-24	89-518	A-26	B-11-50-9-C	A-62	BPS2-1	E-10
87-180	A-32	89-206	A-24	89-520	A-26	B-11-50-9-D	A-62	BPS2-30K	E-10
87-182	A-32	89-208	A-24	89-525	A-26	B1-25	A-36	BPS2-5	E-10
87-186	A-32	89-210	A-24	89-570	G-19	B1-250JR	A-36	BPS2-50	E-10
87-190	A-32	89-211	G-19, G-29	89-572	G-19, G-28	B-14-120-0-L	A-62	BPS2-5M	E-10
87-194	A-32	89-212	A-24	89-580	G-19	B-14-120-9-C	A-62	BPS2B-JR	E-10
87-370	A-32	89-224	A-26	89-582	G-19, G-28	B-14-50-0-C	A-62	BPS2-JRL	E-10
87-372	A-32	89-229	A-26	89-608	A-27	B-14-50-0-D	A-62	BPS3-1	E-10
87-374	A-32	89-230	A-26	89-610	A-27	B-14-50-9-C	A-62	BPS3-2	E-10
87-563	A-33	89-233	A-26	89-612	A-27	B-14-50-9-D	A-62	BPS3-50	E-10
87-564	A-33	89-234	A-26	89-614	A-27	B-14-50MT-0-C	A-62	BPS3-JRL	E-10
87-583	A-34	89-235	A-26	90-041	E-9	B-14-50MT-9-C	A-62	BPS4-50	E-11
87-585	A-34	89-236	A-26	90-042	E-9	B1-500JR	A-36	BPSTCKR-15	E-10
87-650	A-33	89-237	A-26	90-044	E-9	B1-B	A-36	BR-5	A-10
87-651	A-33	89-238	A-26	90-051	E-9	B1-SK	A-36	BSER2-25	E-11
87-652	A-33	89-239	A-26	90-052	E-9	B2-1	A-36	BSER4/0-5	E-11
87-653	A-33	89-302	A-24	90-053	E-9	B2-25	A-36	BSER6-50	E-11
87-654	A-33	89-304	A-24	90-054	E-9	B2-350JR	A-36	BSEU2-25	E-11
87-655	A-33	89-306	A-24	90-055	E-9	B-24-175-0-L	A-62	BSEU4/0-5	E-11
87-656	A-33	89-308	A-24	90-066	C-47	B-24-175-9-L	A-62	BSEU6-50	E-11
87-657	A-33	89-310	A-24	90-067	C-47	B2-500JR	A-36	BTC1/0-10	A-40
87-658	A-33	89-312	A-24	90-070	C-47	B2-B	A-36	BTC2/0-14	A-40
87-681	A-33	89-314	A-26	90-073	C-47	B2-SK	A-36	BTC250-4	A-40
87-682	A-33	89-317	A-26	90-080	C-47	B-36-175-0-L	A-62	BTC350-1/0	A-40
87-683	A-33	89-323	A-26	90-081	C-47	B-36-175-9-L	A-62	BTC4/0-10	A-40
87-685	A-33	89-324	A-26	90-082	C-47	B4-1	A-36	BTC4/0-2	A-40
87-686	A-33	89-330	A-26	90-083	C-47	B-4-18-0-C	A-62	BTC4/0-6	A-40
87-687	A-33	89-334	A-26	90-084	C-47	B-4-18-9-C	A-62	BTC500-1/0	A-40
87-700	A-34	89-335	A-26	90-085	C-47	B-4-18-9-M	A-62	BTC500-14	A-40
87-701	A-34	89-336	A-26	90-086	C-47	B4-25	A-36	BTC500-4	A-40
87-702	A-34	89-337	A-26	90-087	C-47	B-48-175-0-L	A-62	BTC750-250	A-40
87-703	A-34	89-338	A-26	90-088	C-47	B-48-175-9-L	A-62	BTCA-2	A-40
87-704	A-34	89-339	A-26	90-089	C-47	B4-B	A-36	C-24	A-39, C-23
87-706	A-34	89-402	A-25	90-090	C-47	B-6-40-0-C	A-62	C-290	F-3, F-5, F-24, F-32
87-736	A-34	89-404	A-25	90-091	C-47	B-6-40-9-C	A-62	C-50	F-25
87-738	A-34	89-406	A-25	90-092	C-47	B-6-40-9-M	A-62	C-700	F-10
87-900	G-23	89-408	A-25	90-124	C-47	B-8-50-0-C	A-62	C-760	F-12
87-925	G-23	89-410	A-25	90-128	C-47	B-8-50-0-M	A-62	C-770	F-13
87-950	G-23	89-412	A-25	90-170	C-47	B-8-50-35-C	A-62	C-795	F-19
87-958	A-33	89-414	A-26	90-171	C-47	B-8-50-9-C	A-62	C-90	F-11, F-26, F-27, F-29, F-32
88-100	A-33	89-417	A-26	90-173	C-47	B-8-50-9-D	A-62	CR-958	F-17
88-843	C-23	89-423	A-26	90-174	C-47	B-8-50-9-M	A-62	F-956	F-17
89-014SM	G-19, G-29	89-424	A-26	90-176	C-47	B-8-50MT-0-C	A-62	FIBERTEKALLB	G-4
89-014SMRCA	G-19	89-430	A-26	92-610	G-19, G-29	B-8-50MT-9-C	A-62	FIBERTEKALLP	G-4
89-017	G-19	89-434	A-26	92-619	G-19	B-ASST-500C	A-62	FIBERTEKMMP	G-4
89-018	G-19	89-435	A-26	92-650	G-19	BCTT-100	A-62	FIBERTEKMMP	G-4
89-026	G-25	89-436	A-26	92-651	G-19, G-28	BCTT-200	A-62, E-2	FIBERTEKSMP	G-4
89-044	G-19, G-28	89-437	A-26	92-654	G-19, G-24, G-29	BGR-1	A-36		



# Catalog Number Index

Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page	Cat.	Page
H-2909	D-3	IT3I-C0	E-4	L-4419M	D-3	LB-1001	D-2, D-3	LB-920	D-5, D-6
H-3324	G-8	IT3S-C	E-2	L-4420	D-2, D-3	LB-1001M	D-3	LB-921	D-5, D-6
H-3412	G-8	IT3S-C0	E-3, E-5	L-4421	D-2, D-3	LB-1002	D-2, D-3	LLB-1195	D-7
H-4868	G-8	IT3S-C0	E-3, E-5	L-4421M	D-3	LB-1002M	D-3	P-2710	B-10
H-632	A-10	IT3S-C35	E-3	L-4422	D-2, D-3	LB-1003	D-2, D-3	PA-830	F-22
HSC-1	A-10	IT3S-C702	E-3	L-4452	D-2	LB-1004	D-2, D-3	TC-340	F-5
IA-3240	H-2	IT3S-D	E-3, E-5	L-4994	D-3	LB-1005	D-2, D-3	TL-100	F-33
IA-3241	H-3, H-4	IT3S-D0	E-3, E-5	L-5210	D-4, D-5	LB-1089	D-7	TL-102	F-10, F-26, F-33
IA-4989	H-5	IT3SMH-C	E-6	L-5211	D-4, D-5	LB-1090	D-7	TL-103	F-11
IT1_5I-C	E-4	IT3SMH-C0	E-6	L-5212	D-7	LB-1091	D-7	TL-104	F-12, F-13, F-33
IT1_5I-C0	E-4	IT4I-C	E-4	L-5215	D-7	LB-1092	D-7	TL-435	F-33
IT1_5I-M	E-4	IT4I-C0	E-4	L-5217	D-7	LB-1151	D-7	TL-436	F-33
IT1_5I-M0	E-4	IT4LH-L	E-5	L-5269	D-7	LB-1152	D-7, G-32	TL-532	F-25
IT1_5IMH-C	E-6	IT4LH-L0	E-5	L-5270	D-7	LB-1153	D-7, G-32	TL-532A	F-22, F-24
IT1_5IMH-C0	E-6	IT4LHMH-C	E-6	L-5361	D-2, D-3	LB-1154	D-7	TL-795	F-19
IT1_5M-C	E-4	IT4LHMH-C0	E-6	L-5361M	D-3	LB-1155	D-7	TL-796	F-18
IT1_5M-C0	E-4	IT4S-C	E-3, E-5	L-5436	D-4, D-5	LB-1156	D-7	TL-80	F-27
IT1000CCL2-C	E-9	IT4S-C0	E-3, E-5	L-5559	D-4, D-5	LB-1184	D-7	TL-806	F-21
IT1000MP-C	E-7	IT4S-D	E-3, E-5	L-5560	D-4, D-5	LB-1185	D-7	TL-82	F-27
IT1000MP-C0	E-7	IT4S-D0	E-3, E-5	L-5561	D-4, D-5	LB-1186	D-7	TL-95	F-28
IT10H-L	E-5	IT4SID-C	E-6	L-5562	D-4, D-5	LB-1187	D-7	TL-956	F-17
IT10H-L0	E-5	IT4SMH-C	E-6	L-5563	D-4, D-5	LB-1188	D-7	TLA1-956	F-17
IT11H-L	E-5	IT500CCL2-C	E-9	L-5564	D-4, D-5	LB-1189	D-7	TLA2-956	F-17
IT11H-L0	E-5	IT5LH-L	E-5	L-5616	D-7	LB-1190	D-7	TLAC-956	F-17
IT125CCL-C	E-9	IT5LH-L0	E-5	L-5617	D-7	LB-1194	D-7	TLBP-956	F-17
IT14H-L	E-5	IT5S-C	E-5	L-5618	D-7	LB-1195	D-2	TLF-252	F-33
IT14H-L0	E-5	IT5S-C0	E-5	L-5619	D-7	LB-1421	D-2, D-3	TLGP-956	F-17
IT14H-L8	E-5	IT625CCL2-C	E-9	L-5620	D-2, D-3, G-32	LB-1747	G-12	TLOP-956	F-17
IT1LPMB-C	E-7	IT6EH-C0	E-5	L-7486	C-7	LB-1748	G-15	TRACETEKMM	G-4
IT1M-C	E-4	IT750CCL2-C	E-9	L-7625	D-4, D-5	LB-197	D-7	TRACETEKSM	G-4
IT1M-C0	E-4	IT750MP-C	E-7	L-8762	D-2	LB-198	D-7	VFF5	G-31
IT1MID-C	E-6	IT750MP-C0	E-7	L-8763	D-2, D-3	LB-2726	G-14	WGR-1	A-38
IT1M-M	E-4	IT7H-L	E-5	L-9038	D-7	LB-2727	G-14	WGR-500JR	A-38
IT1SMB-C	E-7	IT7H-L0	E-5	L-9039	D-7	LB-2728	G-14	WGR-B	A-38
IT1SMB-C0	E-7	IT7LH-L	E-5	L-9300	D-4, D-5	LB-718	D-7	WGR-SK	A-38
IT250CCL-C	E-9	IT7LH-L0	E-5	LA-2358	D-3	LB-719	D-7	WT1-1	A-37
IT250CCL-C0	E-9	IT-BAG	E-2	LA-3953	D-2, G-14, G-25	LB-720	D-7	WT1-B	A-37
IT2I-C	E-4	IT-COMBO	E-2	LA-4102	G-12	LB-721	D-7	WT2-1	A-37
IT2I-C0	E-4	K-2422	A-29	LA-4123	C-21	LB-722	D-7	WT2-B	A-37
IT2I-M	E-4	K-6491	C-5	LA-4124	C-21	LB-727	D-7	WT3-1	A-37
IT2I-M0	E-4	K-6492	C-5	LA-4125	H-19	LB-728	D-7	WT3-B	A-37
IT2LH-C	E-5	K-6493	C-5	LA-4126	H-19	LB-729	D-7	WT4-1	A-37
IT2LH-C0	E-5	K-6494	C-5	LA-4127	H-19	LB-730	D-7	WT41-1	A-38
IT2M-C	E-4	K-6495	C-5	LA-4128	H-19	LB-731	D-7	WT41-500JR	A-38
IT2M-C0	E-4	K-6496	C-5	LA-4157	G-8	LB-740	D-2, G-14	WT41-B	A-38
IT2M-M	E-4	K-6497	C-5	LA-4159	G-8	LB-742	D-2	WT41-SK	A-38
IT2S-C	E-2, E-3, E-5	K-6498	C-5	LA-4173	G-8	LB-743	D-2, G-14	WT4-B	A-37
IT2S-C0	E-3, E-5	K-6499	C-5	LA-4218	B-6	LB-744	D-2	WT51-1	A-38
IT2S-C30	E-5	K-6500	C-5	LA-4233	G-8	LB-825	C-5	WT51-4	A-38
IT2S-C35	E-3	K-6501	C-5	LA-4234	G-8	LB-840	C-5	WT51-500JR	A-38
IT2S-C702	E-3	K-6502	C-5	LA-4235	G-8	LB-882	D-7	WT5152JR	A-38
IT2SID-C	E-6	K-6503	C-5	LANTEK10GBKIT	G-6	LB-883	D-7	WT51-B	A-38
IT2S-M	E-3, E-5	K-6504	C-5	LANTEK6	G-2, G-3	LB-895	D-7	WT51-SK	A-38
IT2S-M0	E-3, E-5	K-6505	C-5	LANTEK6A	G-2, G-3	LB-896	D-7	WT52-1	A-38
IT2SMB-C	E-7	K-7920	G-5	LANTEK6ABAS	G-3	LB-911	D-5, D-6	WT52-500JR	A-38
IT2SMB-C0	E-7	K-8906R	C-22	LANTEK6APREM	G-3	LB-912	D-5, D-6	WT52-B	A-38
IT2SMH-C	E-3, E-6	K-8909	C-22	LANTEK6ATRV	G-3	LB-913	D-5, D-6	WT52-SK	A-38
IT2SMH-C0	E-3, E-6	K-8926	C-22	LANTEK6B	G-3	LB-914	D-5, D-6	WT54-1	A-38
IT2SMH-M	E-3, E-6	K-8947R	C-22	LANTEK7G	G-2, G-3	LB-915	D-5, D-6	WT54-B	A-38
IT375CCL2-C	E-9	K-8985	B-6	LANTEK7GBAS	G-3	LB-916	D-5, D-6	WT6-1	A-37
IT375CCL2-C0	E-9	L-1953	D-2	LANTEK7GPREM	G-3	LB-917	D-5, D-6	WT6-B	A-37
IT3I-C	E-4	L-4419	D-2, D-3	LANTEK7GTRV	G-3	LB-918	D-5, D-6		



# Customer Service/ Technical Support

It has long been a goal at IDEAL to serve our customers and distributors more effectively than anyone in the industry. A promise of helping our customers and distributors in any way we can comes with every product we ship.

- **Customer service and technical support representatives available Monday through Friday, 7 a.m. to 7 p.m. CST**
- **Complete offering of marketing/sales literature within 24 hours of request**



# Merchandising

Point-of-purchase communication is an important aspect of the IDEAL sales strategy. We are committed to helping our distributors move our products off their shelves. To do that, we've developed a variety of exciting, thoughtful ways to increase a store's association with IDEAL and build repeat customers.

# Promotions

There is no substitute for the impact that an effectively managed national promotion can achieve. Our record of exciting and successful promotions is second-to-none in the industry. The annual Collectible Toy Truck promotion, for example, has become a phenomenon of its own and helps sell millions of wire connectors. With a well-designed promotion, everyone wins.

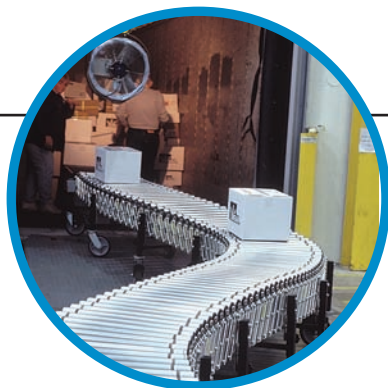


# Distribution Center

Our state-of-the-art facility located at IDEAL headquarters in Sycamore, IL is responsible for making sure our products arrive on time and as ordered to our customers around the world. Our employees manage an inventory of thousands of different products, ensuring they're available when our customers need them. Orders received by 1 p.m. are normally shipped by 5 p.m. of the same day.







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