

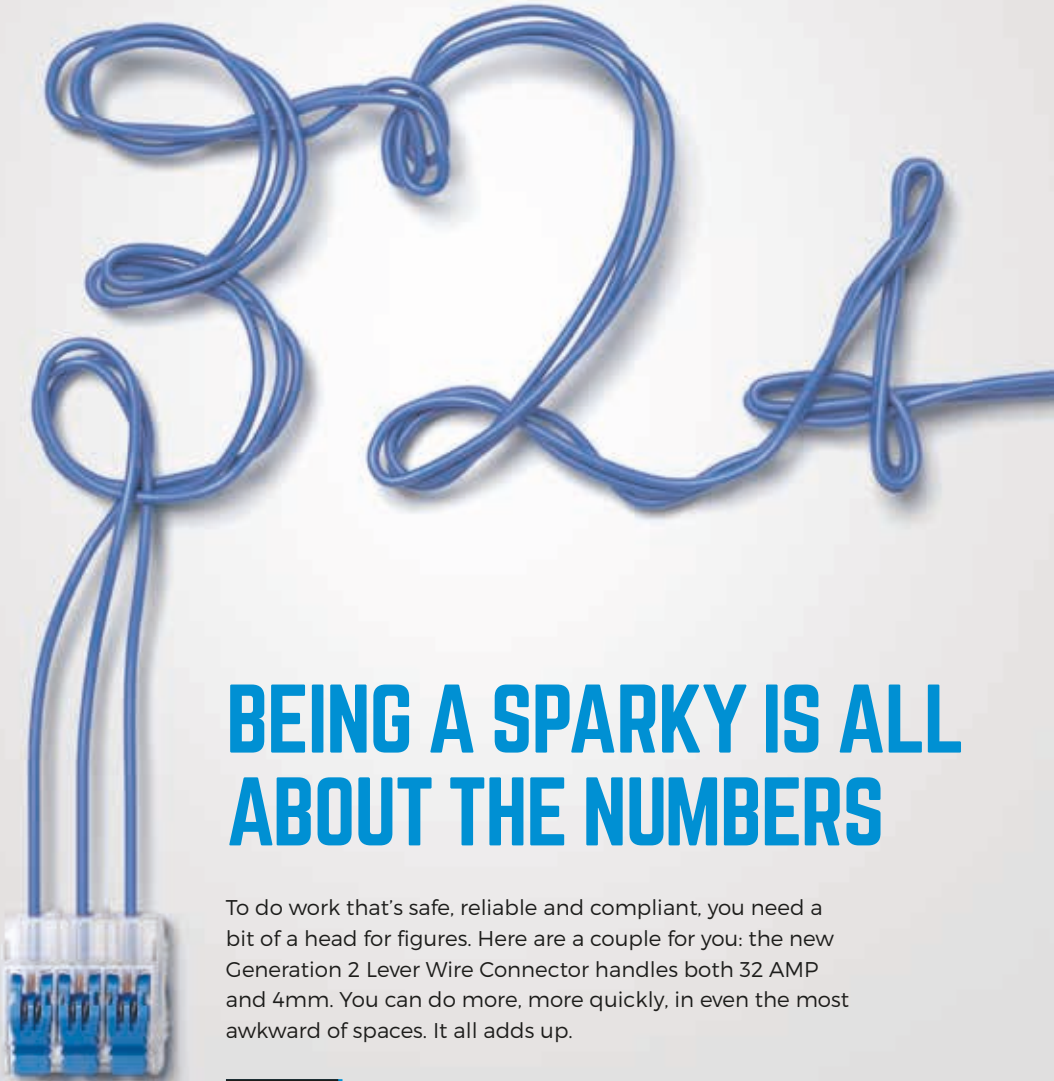


ELECTRICAL &  
DATA PRODUCTS

EUROPE, MIDDLE EAST & AFRICA CATALOGUE



idealind.com



# BEING A SPARKY IS ALL ABOUT THE NUMBERS

To do work that's safe, reliable and compliant, you need a bit of a head for figures. Here are a couple for you: the new Generation 2 Lever Wire Connector handles both 32 AMP and 4mm. You can do more, more quickly, in even the most awkward of spaces. It all adds up.



# INTRODUCTION



Across the world, electricians trust Ideal Industries' products for their quality, innovation and value.

We understand the pressures our customers face on site. Our product development, customer service and distribution networks are focused on helping you complete projects faster, more easily and to the highest standards of integrity and consistency.

We are working with colleges and education providers to support the next generation of electricians, while continuing to serve experienced electrical professionals and data technicians across domestic, commercial and industrial installation environments.

By working with you and drawing on your expertise, we're able to innovate and respond quickly to emerging requirements with solutions that are functional, practical, safe and durable.

You'll find some examples of that innovation in our new catalogue, including our new Gen II Lever Connector.

Our goal is to help you deliver improved installation quality and value for your customers. You can trust us to offer best in class products across a wide selection of electrical consumables, tools and equipment, all of which have been thoroughly tested and proven.

This catalogue is designed to provide you with accurate and useful information that will help you select the right products for your needs.

A handwritten signature in brown ink that reads "Brett Smyth".

**Brett Smyth**  
General Manager  
Europe, Middle East & Africa



## **IDEAL INDUSTRIES EMEA**

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Offices in the UAE and Germany

[www.idealind.com](http://www.idealind.com)

**A** WIRE TERMINATION

**B** WIRE INSTALLATION

**C** WIRE CUTTERS & STRIPPERS

**D** WIRING ACCESORIES

**E** SAFETY

**F** TEST & MEASUREMENT

**G** DATA TOOLS & ACCESORIES



# WIRING CONNECTORS





1 x 3 strands / 3 fil / 3 Drädbel /  
± 7 AWG / ± 7 dröjle led

WIRE LENGTH / Longueur des câblages /  
Kabelabstände / Längd på de led /  
Bundelsträngens diameter

INSULATION / Isolerings / Isolering /  
Isolering

30-1023

**IDEAL** 3-Port / 3 ports / 3-Leiter /  
3 portar / 3-portarna

**IN-SURE**

PUSH-IN WIRE CONNECTORS  
WIRBEL / WIRBELN / WIRBELN  
WIRBELN / WIRBELN / WIRBELN  
WIRBELN / WIRBELN / WIRBELN

Position with connecting

0.75 mm / 0.03 in  
1.5 mm / 0.06 in  
2.5 mm / 0.1 in



# A WIRE TERMINATION

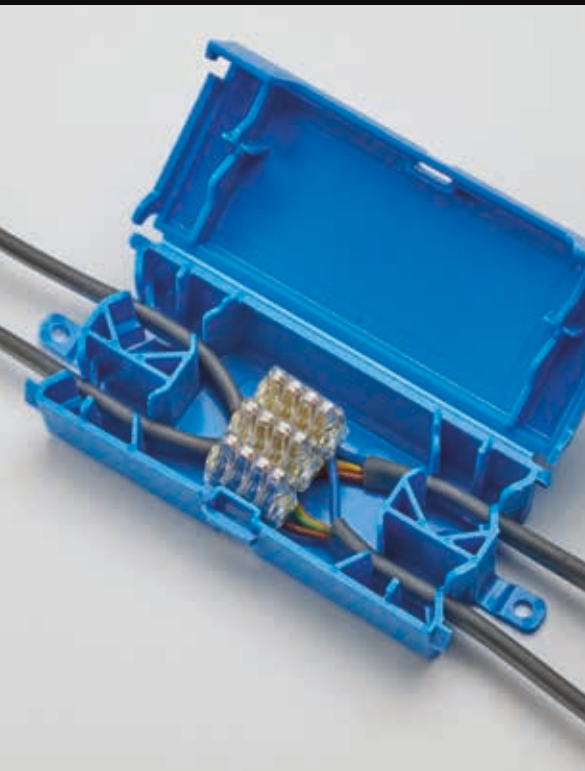
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# OUT WITH THE OLD!

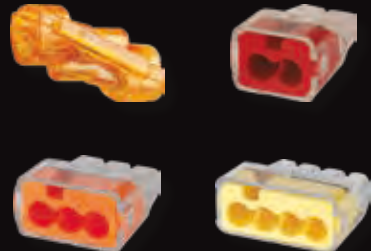
The old adage 'if it ain't broke, don't fix it' is a mantra many electrical contractors live by, continuing to use the tried and tested products and installation methods they've used for years because they do the job.

There's a lot to be said for familiarity; but there are also benefits to embracing new techniques that offer a faster, easier, safer and more consistent installation.

**'IDEAL wire connectors – for a fast, easy and safe installation'**



Electrical cable terminations are traditionally done using a terminal strip. They're not difficult to use, but even the simplest of traditional techniques can be improved upon and, in this case, the use of lever or push-in connectors can save time, make the job easier, and help electricians achieve a more consistent and compliant installation.



# The Key Benefits

Listed below are the many benefits of switching from traditional terminal strip connections to push-in and lever wire connections. These innovative connections from IDEAL are perfect for electricians who are still keen to develop their skills.

## > FASTER INSTALLATIONS

The old adage 'if it ain't broke, don't fix it' is a mantra often quoted by those content to remain permanently within their comfort zone. The problem is, without trying new tools and techniques, we don't find out whether the job can be done faster, better and with a greater level of consistency.

## > IMPROVED QUALITY

Often, keeping to the same routines can mean missing an opportunity to save time and improve quality, both of which can deliver commercial advantages for electrical installers

## > REDUCED CALL BACKS

Even small time savings on a single task can add up to a significant time and cost saving over the length of a full installation. What's more, consistent quality not only reduces the risk of snagging and call backs; it could also enhance the success rate of bids for repeat work

## > AVOID ARCING + LOOSE SCREWS

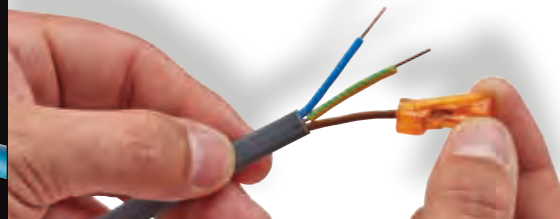
When using traditional terminal strips the screws can loosen over time, causing arcing in the connector.

This presents a potential fire risk and is just one of the reasons why push-in and lever connectors are being more widely used instead of terminal blocks in numerous applications.

## > COMPLIANT INSTALLATIONS

The 18<sup>th</sup> Edition requires that traditional terminal strip connections should be accessible for annual inspections in compliance with BS EN 60670-22 which makes it difficult to select a suitable location for terminal strip connections, leading to non-compliance for many projects.

Lever and push-in connectors are classified as 'maintenance-free' when used in conjunction with an approved enclosure box, so can be part of a compliant installation anywhere within the property.



# OUT WITH THE OLD! CONTINUED

## > CHOOSING THE RIGHT ENCLOSURE

A traditional junction box with screw terminals has always needed to be installed in an accessible location as over time terminals will need to be checked. If an appropriate location could not be found, access panels were needed. Choosing an enclosure which has been tested to and complies with BS 5733 maintenance free accessory standard like the IDEAL In-Sure® Box makes it possible to save money on materials and keep the enclosure installation process as quick and simple as possible.

## > REDUCED LABOUR COSTS

A barrier to change when it comes to switching from terminal strips to lever or push-in connectors is perceptions of cost. While the unit price of connectors may be slightly more than terminal strips, the time savings they offer easily offset the minimal additional costs. Connectors not only help to keep the job within programme, but also reduces labour costs over the length of the project.

## > PEACE OF MIND

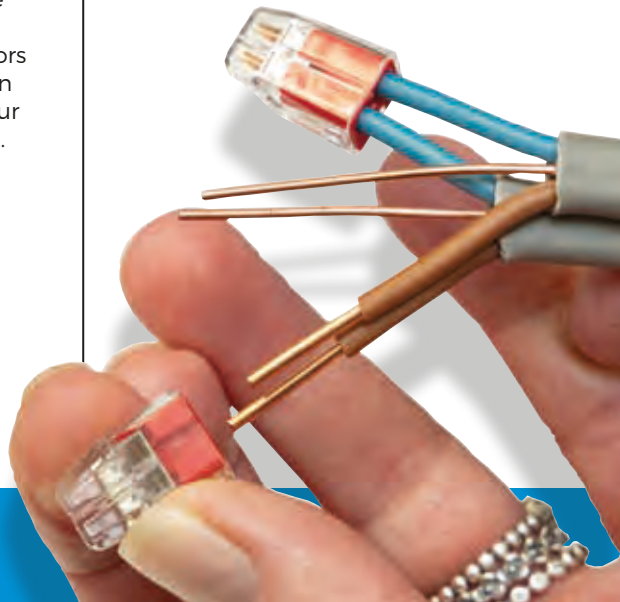
What's more, making the switch provides peace of mind because use of connectors removes any inconsistency associated with the tightening of terminal strip screws, thereby building value into the cost of the connectors by reducing the need for quality assurance checks or call backs.

## > REMOVED MARGIN FOR ERROR

This standardised approach to making the connections ensures lever and push-in connectors deliver a fit-and-forget solution, as well as driving speed of installation. While speed and consistency of terminal strip installations grows with experience, connectors remove any margin for error, even for inexperienced installers who are still training.

## > CONSISTENT CONNECTIONS

Using connectors rather than terminal strips ensures every connection is consistent because there is no variation in the tightening of the fixing screw that fastens the cable in place. Ideal Industries' wire connectors even include a stripping guide on the side to aid consistently accurate stripping of the cable prior to connection, along with a continuity check port for testing.



# Quick Reliable Connections

IDEAL Industries' range of wire connectors provides electrical installers with a time-saving, modern and safe alternative to traditional screw-down terminal strips.

## > LEVER WIRE CONNECTORS

- Perfect solution for joining solid, stranded or flexible conductors
- Modern alternative to traditional strip connectors
- Safe, reliable and re-useable – no need to lift the lever
- Compact design that takes up less room in junction boxes and enclosures
- No screwdriver required
- 0.2 mm<sup>2</sup> to 4.0 mm<sup>2</sup> (solid and rigid stranded) and 0.14 mm<sup>2</sup> to 4.0 mm<sup>2</sup> (flexible)
- 32A/450V

## > SPLICELINE WIRE CONNECTORS

- Excellent for extending and connecting wires
- 3x faster to install than traditional crimped butt splices
- Provides a crimp free, solderless butt splice
- Tool free, push-in straight line connector
- 0.5 mm<sup>2</sup> to 4.0 mm<sup>2</sup> for solid and 1.0 mm<sup>2</sup> to 2.5 mm<sup>2</sup> for stranded
- 32A/450V

## > PUSH-IN WIRE CONNECTORS

- Reduce installation time by up to 50%
- Easy glide-in wire connection
- Perfect replacement for crimped splices
- Low insertion force for fast connections
- 0.75 mm<sup>2</sup> to 4.0 mm<sup>2</sup> for solid and 1.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup> stranded
- 32A/450V



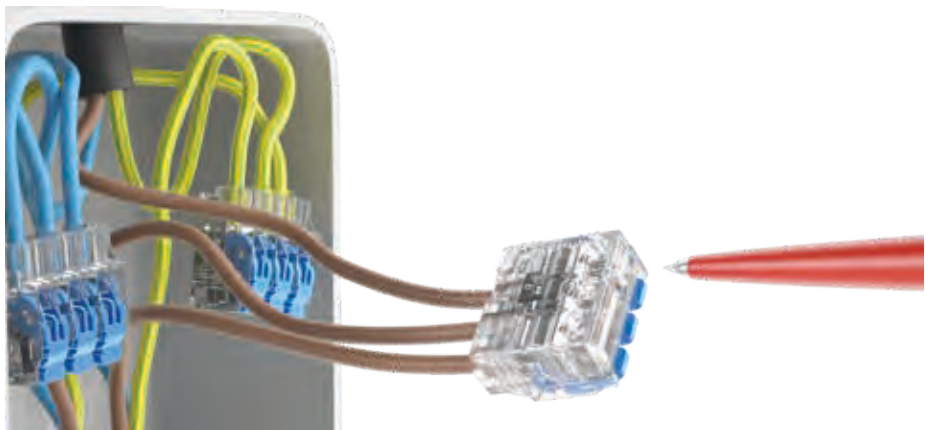
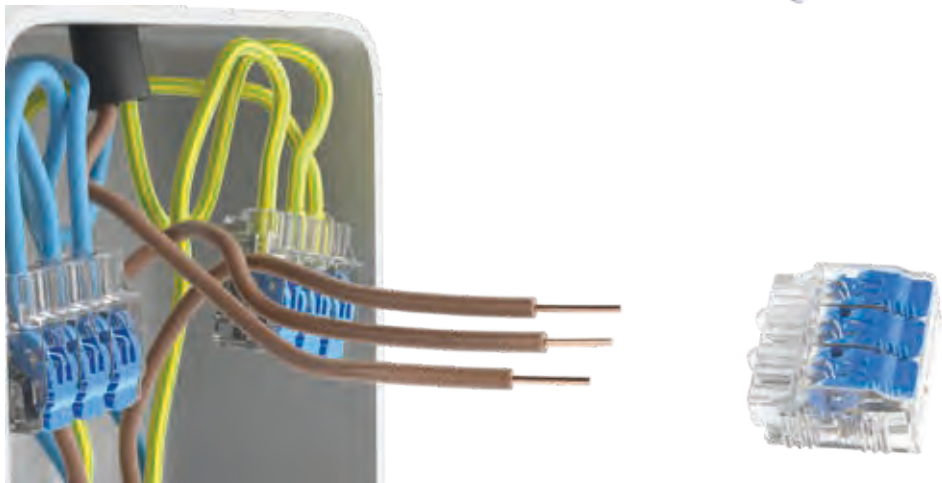
## > ADDITIONALLY, ALL 3 TYPES COME WITH:

- Check port for continuity testing
- Clear shell allowing for visual inspection of connection

Robust and well-designed at an attractive price point, IDEAL wire connectors offer a user-friendly, cost-effective and quality-led alternative to terminal strips.

They are BS 7671:2018 (18<sup>th</sup> Edition), IEC 60998-1 and IEC 60998-2-2 compliant plus CE, UKCA, UL and ENEC approved.







# GEN II LEVER WIRE CONNECTORS

The IDEAL Lever connectors utilise the latest connection technologies and can accommodate multiple wires of different types of sizes.

It offers a fast, simple and cost-effective alternative to termination strip allowing electrical professionals to save time and money on site while achieving easier, more consistent terminations for wires up to 4mm<sup>2</sup> (12AWG) and 32 Amps.



- For use in all applications up to 32A including lighting, access control, radial and final ring circuits
- Releasable connector – for solid, stranded and flexible wires
- Innovative levers – opens in the opposite direction of insertion points
- Compact design – suits tight spaces.
- Easy to use - no need to lift the levers when using on solid wire
- Continuity check port - for testing
- Clear shell - allows for verification of connection
- Secure your cables in seconds – no screwdriver, no crimping, just strip, push, connect
- Wire clamping range - 0.2 mm<sup>2</sup> to 4.0 mm<sup>2</sup> (24 - 12 AWG for solid and rigid stranded wires (7 strands) and 0.14 mm<sup>2</sup> to 4.0 mm<sup>2</sup> (24 - 12 AWG) for flexible wires
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 60998 and UL 486C compliant
- CE, UKCA, UL and ENEC approved



### Specifications

		Model L2 2-Port	Model L3 3-Port	Model L5 5-Port
Rating	IEC 60998	32 Amp / 450V / 85°C (ambient)		
	UL 486C	600V / 105°C (working)		
Depth		18.6 mm		
Width		13.3 mm	18.9 mm	30.4 mm
Height		8.8 mm		
Wire Combination Range	Solid and Rigid Stranded	0.2mm <sup>2</sup> -4.0mm <sup>2</sup> /24-12 AWG		
	Flexible Wires	0.14mm <sup>2</sup> -4.0mm <sup>2</sup> /24-12 AWG		





### Ordering Information

Model	Ports	Quantity	Cat. No.
L2	2	Bag of 10	<b>30-0092-10</b>
		Bag of 30	<b>30-0092-30</b>
		Box of 40	<b>30-0092</b>
L3	3	Bag of 10	<b>30-0093-10</b>
		Bag of 30	<b>30-0093-30</b>
		Box of 40	<b>30-0093</b>
L5	5	Box of 30	<b>30-0095</b>
L2/L3/L5	Mixed Bag	10 x 2-port 10 x 3-port	<b>30-0099-B</b>
	Mixed Box	10 x 5-port	<b>30-0099</b>

For kits, please see page 20



# LEVER WIRE CONNECTORS

The lever wire connectors provide the perfect solution for joining solid, stranded or flexible conductors.

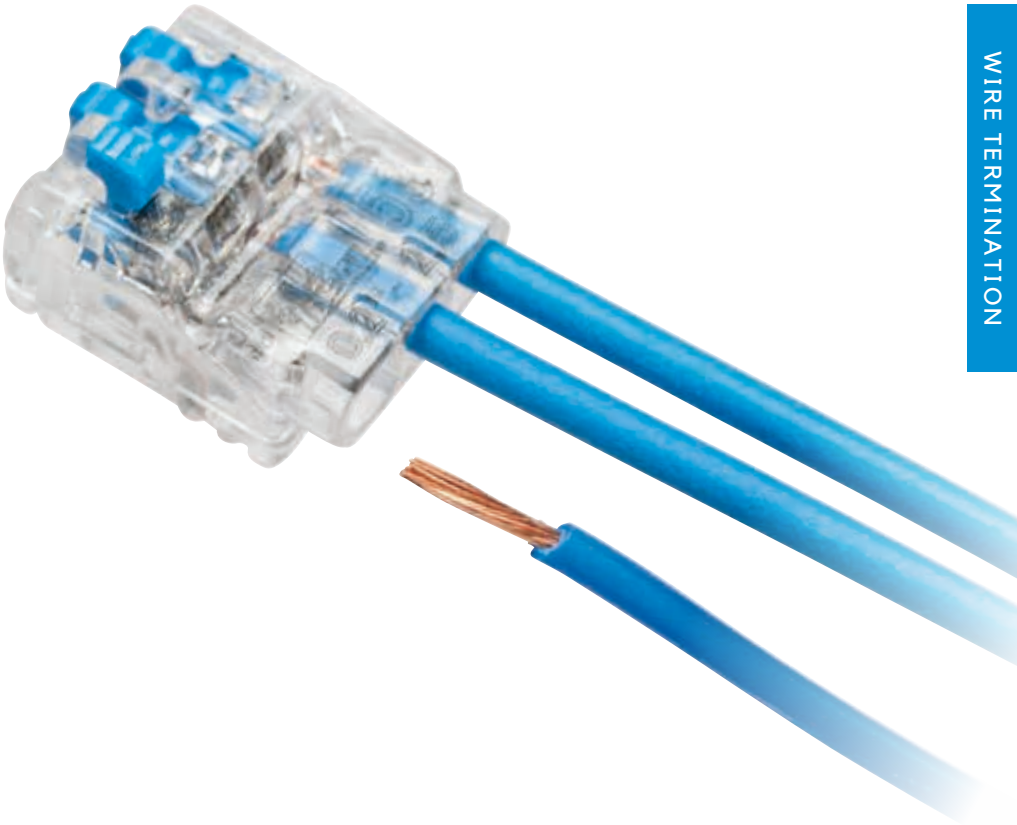
These versatile connectors have a compact design that takes up less room in junction boxes and enclosures.

- Releasable connector for solid, stranded and flexible wires
- Wire clamping range: 0.2mm<sup>2</sup> – 2.5mm<sup>2</sup> (24-18 AWG)
- Modern alternative to traditional strip connectors
- Safe, reliable and re-useable
- Works just like a standard push-in connector with solid and rigid stranded wires
- Clear shell allows verification of connection
- Continuity check port and strip length guide
- Compact design suits tight spaces
- No screwdriver required
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 60998 and UL 486C compliant
- CE, UKCA, UL and ENEC approved

## Specifications

		Model 52 2-Port	Model 53 3-Port	Model 55 5-Port
Rating	IEC 60998	24 Amp / 450V / 85°C ambient		
	UL 486C	300V / 105°C working		
Depth	21 mm			
Width	11.9 mm	16.1 mm	24.5 mm	
Height	11.7 mm			
Wire Combination Range	Solid, Rigid Stranded and Flexible Wires	0.2mm <sup>2</sup> -2.5mm <sup>2</sup> /24-18 AWG		





### Ordering Information

Model	Ports	Quantity	Cat. No.
52	2	Box of 40	<b>30-1052</b>
53	3	Box of 40	<b>30-1053</b>
55	5	Box of 30	<b>30-1055</b>
59	Mixed/ Combo Box	10 x 2-port 10 x 3-port 10 x 5-port	<b>30-1059</b>

For kits, please see page 20



# PUSH-IN WIRE CONNECTORS

The push-in wire connector can reduce installation time by up to 50% compared to more traditional connection methods such as terminal blocks.

Push-In connectors are the perfect replacement for crimped splices. In addition the most popular 2, 3 & 4 port models are rated to 32 Amps.

- Fits any combination of 0.75mm<sup>2</sup> - 4.0mm<sup>2</sup> solid or 1.5mm<sup>2</sup> - 2.5mm<sup>2</sup> stranded ( $\leq 7$  strands) copper conductors or tin bonded flexible wire
- 32 Amp rating on 2, 3 and 4 port models
- High quality, secure connections
- Clear shell allows verification of connection
- Continuity test port
- Colour coded for easy identification
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 998-2-2 and UL 486C/UL 467 grounding compliant
- CE, UKCA and UL approved

## Specifications

		Model 32 Red 2-Port	Model 33 Orange 3-Port	Model 34 Yellow 4-Port	Model 87 Grey 5-Port	Model 88 Blue 6-Port	Model 90 Black 8-Port
Rating	IEN 60998	32A/450V/105°C max			24A/450V/105°C		
	UL94V-2/UL 467*	20A/600V**/105°C					
Depth		19.81 mm			18.52 mm		18.21 mm
Width		13.21 mm	17.53 mm	20.83 mm	23.03 mm	15.32 mm	35.03 mm
Height		9.65 mm			9.02 mm	15.42 mm	9.02 mm
Wire range	Solid	0.75mm <sup>2</sup> to 4.0mm <sup>2</sup> / 20-12 AWG					
	Stranded	1.5mm <sup>2</sup> to 2.5mm <sup>2</sup> * ( $\leq 7$ Strands) 16 - 14 AWG ( $\leq 19$ str.) 18 AWG (7 Strands)					
	Tin Bonded	18 - 14 AWG ( $\leq 19$ str.)					

COPPER TO COPPER ONLY. Do not use on aluminium.\* Only 2, 3 and 4 ports.

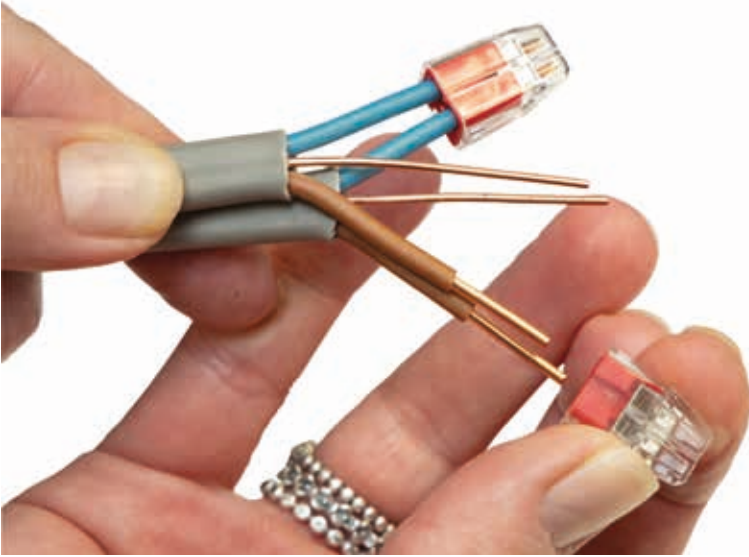
\*\*600V maximum building wire, 1000V maximum signs or lighting fixtures.



Wire Connector  
774A

Cu/Cu  
Only





### Ordering Information

Model	Colour	Ports	Quantity	Cat. No.
32	Red	2	Box of 100	<b>30-1032</b>
			Bag of 10	<b>30-1032-10</b>
			Bag of 40	<b>30-1032-40</b>
33	Orange	3	Box of 100	<b>30-1033</b>
			Bag of 10	<b>30-1033-10</b>
			Bag of 40	<b>30-1033-40</b>
34	Yellow	4	Box of 100	<b>30-1034</b>
			Bag of 10	<b>30-1034-10</b>
			Bag of 40	<b>30-1034-40</b>
87	Grey	5	Box of 50	<b>30-087</b>
88	Blue	6 Stacked	Box of 50	<b>30-088</b>
90	Black	8	Box of 50	<b>30-090</b>



COPPER TO COPPER ONLY. Do not use on aluminium.  
For kits, please see page 20



# SPLICELINE IN-LINE WIRE CONNECTORS

The SpliceLine® in-line wire connector provides a crimp-free, solderless butt splice. The two-port model accepts up to 4.0mm<sup>2</sup> (14AWG) solid wire, allowing one connector to do the job of multiple through-crimps.

Its end-to-end connection is also a great solution for pre-fab operations.

- Tool-free, push-in through crimp
- Easily passes through standard knockouts
- End-to-end connection ideal for pre-fab operations
- Transparent polycarbonate window for visual inspection of connection
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 60998-1, IEC 60998-2-2, UL 486C and UL 467 grounding compliant
- CE, UKCA and UL listed



Description	Qty.	Cat. No.
SpliceLine In-line Wire Connectors	Bag of 10	<b>30-1042-10</b>
	Bag of 40	<b>30-1042-40</b>
	Box of 100	<b>30-1042</b>

For kits, please see page 20

## Specifications

Model 42 / Orange / 2-Port			
Rating	IEC 60998	32A/450V/105°C max	
	UL 467	20A/600V/105°C	
Wire range	Solid	0.5mm <sup>2</sup> - 4.0mm <sup>2</sup>	20-12 AWG
	Stranded	1.0mm <sup>2</sup> - 2.5mm <sup>2</sup> (≤ 7 strands)	16-12 AWG (≤19 strands)
	Tin Bonded	18 - 14 AWG (≤19 str.)	







# IN-SURE BOX

The BS 5733 maintenance free accessory standard stipulates that a maintenance free junction box should be used when installing an electrical junction in an inaccessible location, i.e. behind plasterboard or under a floor etc. This eliminates the need for access panels or expensive re-work of finished surfaces.

The In-Sure® Box complies with the BS 5733 and the 18<sup>th</sup> Edition of BS 7671 wiring regulations and is designed for use with Push-In, Gen II Lever, Lever and SpliceLine® connectors.

- **No tools required** - making installation simple and fast
- **Small** - fits through a 50mm hole for spot light or similar installations
- **Versatile** - one enclosure suits multiple installation requirements.
- **Easy to use** - no loose parts to fit or lose
- **Secure your cables in seconds** - patented In-Sure® cable grip system
- **Maintenance Free** - eliminate the need for access panels



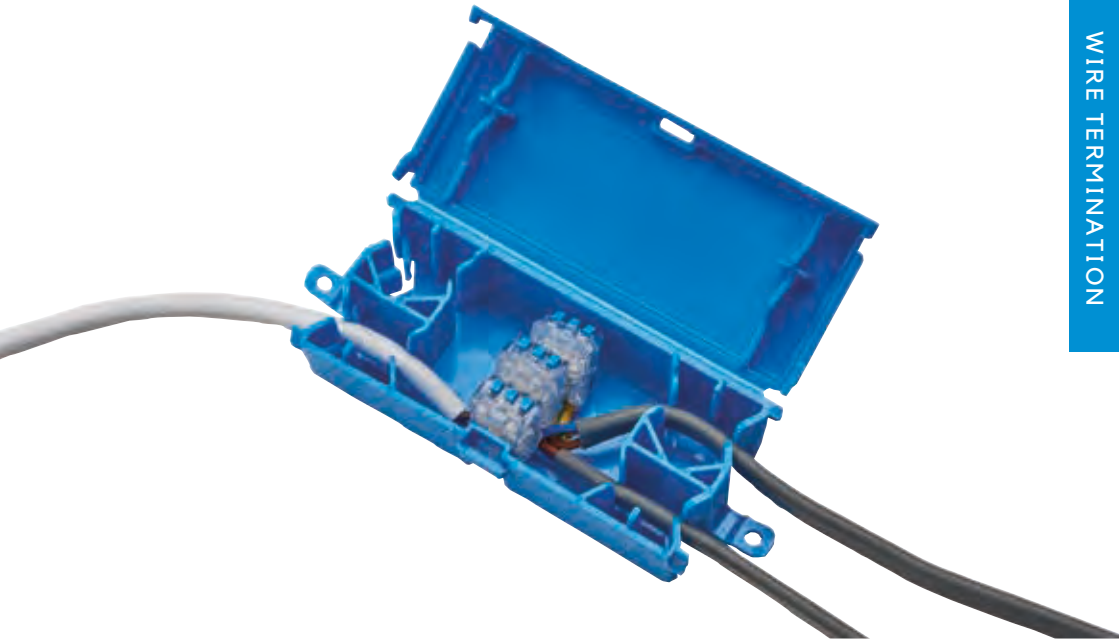
## Cable range supported / maximum cables per size

Cable Type/Size	Flat Twin & Earth	3 Core Flat & Earth	General Purpose Flexible Cable	2 Core Flat Flexible Cable
2.5mm <sup>2</sup>	2	N/A	N/A	N/A
1.5mm <sup>2</sup>	6	4	2	N/A
1.0mm <sup>2</sup>	8	6	4	N/A
0.75mm <sup>2</sup>	N/A	N/A	4	8
0.5mm <sup>2</sup>	N/A	N/A	6	8



Description	Quantity	Cat. No.
In-Sure® Box	1	<b>30-4000-1</b>
	Box of 10	<b>30-4000</b>





### Specifications

MODEL	WIRE CONNECTOR DESCRIPTION	MAX CURRENT / VOLTAGE ~ RATING	MAX CABLE MM <sup>2</sup>	MAX AGGREGATE CURRENT (Max Iag)
32	2-port Push-In	16A/250V	2.5mm <sup>2</sup>	48A
33	3-port Push-In			24A
34	4-port Push-In			24A
L2	2-port Gen II Lever	16A/250V	2.5mm <sup>2</sup>	48A
L3	3-port Gen II Lever	16A/250V	2.5mm <sup>2</sup>	24A
L5	5-port Gen II Lever	16A/250V	2.5mm <sup>2</sup>	24A
52	2-port Lever	16A/250V	2.5mm <sup>2</sup>	48A
53	3-port Lever			24A
55	5-port Lever			24A
42	SpliceLine® in-line	16A/250V	2.5mm <sup>2</sup>	24A

Connectors have been de-rated to be suitable as a BS 5733 maintenance free accessory. The Max Aggregate Current (Iag) is the sum of all the possible currents through the In-Sure® Box in normal use. This limit must not be exceeded.






# WIRE CONNECTOR KITS

IDEAL offers a range of wire connector kits comprising of Push-In, SpliceLine® and Lever wire connectors.



These kits meet the needs of today's modern electricians who demand quality products that satisfy the requirement to make safe and reliable connections of wires in a variety of wiring applications.



## Ordering Information for kits

Model	Description	Qty.	Cat. No.
	32A Push-In Connector Installer Kit	30 x 2-port push-in 30 x 3-port push-in 30 x 4-port push-in 30 x SpliceLine®	<b>30-5011EU</b>
	Push-In Connector Premium Kit	50 x 2-port push-in 50 x 3-port push-in 50 x 4-port push-in 40 x 5-port push-in 20 x 6-port push-in 15 x 8-port push-in 30 x Twister® 341 (FOC)	<b>30-5020EU</b>
	Push-In Connector Starter Kit	30 x 2-port push-in 30 x 3-port push-in 30 x 4-port push-in 20 x 6-port push-in	<b>30-5021EU</b>



Model	Description	Qty.	Cat. No.
	Push-In & Lever Wire Connector Kit (80 pcs.)	10 x 2-port lever connector 10 x 3-port lever connector 5 x 5-port lever connector 10 x 2-port push-in 10 x 3-port push-in 10 x 4-port push-in 10 x 6-port push-in 15 x 2-port SpliceLine®	<b>30-5005EU</b>
	Push-In & Lever Wire Connector Premium Kit (240 pcs.)	30 x 2-port lever connector 40 x 3-port lever connector 20 x 5-port lever connector 30 x 2-port push-in 30 x 3-port push-in 20 x 4-port push-in 15 x 5-port push-in 15 x 6-port push-in 10 x 8-port push-in 30 x 2-port SpliceLine®	<b>30-5006EU</b>

# GEN II LEVER WIRE CONNECTOR KITS

The GEN II lever wire connector kits contain a selection of Gen II lever connectors, push-in connectors and SpliceLine connectors. There is even a kit including our cable stripper for flat cable (Twin & Earth and Data T<sup>®</sup>-Cutter).



For the full specification for each kit, please see the individual product pages or visit our website.

## Ordering Information

Description	Qty.	Cat. No.
Twin & Earth Kit for flat cable	1 x Cable Stripper for flat cable (45-235) 1 x Data T <sup>®</sup> -Cutter (45-074) 20 x SpliceLine 20 x 2-port push-in 20 x 3-port push-in 20 x 2-port Gen II lever 20 x 3-port Gen II lever	<b>30-5002EU</b>
Push-In & Lever Wire Connector Kit (80 pcs.)	10 x 2-port Gen II lever connector 10 x 3-port Gen II lever connector 5 x 5-port Gen II lever connector 10 x 2-port push-in 10 x 3-port push-in 10 x 4-port push-in 10 x 6-port push-in 15 x 2-port SpliceLine <sup>®</sup>	<b>30-5025EU</b>
Push-In & Lever Wire Connector Premium Kit (240 pcs.)	30 x 2-port Gen II lever connector 40 x 3-port Gen II lever connector 20 x 5-port Gen II lever connector 30 x 2-port push-in 30 x 3-port push-in 20 x 4-port push-in 15 x 5-port push-in 15 x 6-port push-in 10 x 8-port push-in 30 x 2-port SpliceLine <sup>®</sup>	<b>30-5026EU</b>



# WIRE CONNECTOR BAGS

The IDEAL range of wire connector bags have been designed for electrical contractors, plumbers, installers and heating engineers that may not require the quantities found in our popular boxes, but still have the occasional requirement for our key range of electrical wire connectors.



## Ordering Information

Description	Qty.	Cat. No.
SpliceLine Wire Connectors	10 pk	<b>30-1042-10</b>
SpliceLine Wire Connectors	40 pk	<b>30-1042-40</b>
2-Port Push-In Wire Connectors	10 pk	<b>30-1032-10</b>
3-Port Push-In Wire Connectors	10 pk	<b>30-1033-10</b>
4-Port Push-In Wire Connectors	10 pk	<b>30-1034-10</b>
2-Port Push-In Wire Connectors	40 pk	<b>30-1032-40</b>
3-Port Push-In Wire Connectors	40 pk	<b>30-1033-40</b>
4-Port Push-In Wire Connectors	40 pk	<b>30-1034-40</b>
2-Port Lever Wire Connectors	10 pk	<b>30-0092-10</b>
3-Port Lever Wire Connectors	10 pk	<b>30-0093-10</b>
2-Port Lever Wire Connectors	30 pk	<b>30-0092-30</b>
3-Port Lever Wire Connectors	30 pk	<b>30-0093-30</b>
2-, 3- & 5-Port Lever Wire Connectors	30 pk	<b>30-0099-B</b>
SpliceLine, 3-port Push-In and 2- & 3-Port Lever Wire Connectors	20 pk	<b>30-0099-MB</b>



# Twister® ProFLEX Wire Connector

Twister® ProFLEX™ combines the most comfortable connector from IDEAL with the added protection of a flexible skirt.

It delivers the widest wire combination range with the highest voltage rating in the industry, every day performance professional electricians can trust.

- Flexible skirt provides improved protection and adapts to tightly fit electrical boxes with limited space
- Swept wing design with SureGrip™ overmould offers greater comfort, leverage, and torque for faster connections
- Expanding square-wire spring and polypropylene shell deliver a secure connection every time
- Widest range in the industry
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- IEC 60998-2, EN 60998-2-4 and UL 486 C compliant



Model	Wire Combination Range (mm)	Wire Combination Range AWC	Quantity	Cat. No.
<b>347</b>	1000V 0.34mm <sup>2</sup> to 10.0mm <sup>2</sup> Min. 2 x 0.75mm <sup>2</sup> Max. 4 x 4.0mm <sup>2</sup> / Max. 3 x 6.0mm <sup>2</sup>	1000V 22-8 AWG Min. 2 #18 - Max 4 #10	Box of 50	<b>30-1047</b>





# Twister® ProFLEX Mini Wire Connector

The Twister® ProFLEX™ Mini combines the most comfortable wire connector from IDEAL Electrical with the added protection of a flexible skirt.

Its space-saving design fits the tightest electrical spaces while accommodating the widest wire range of any orange/blue connector from 2 #22 AWG to 4 #12 solid AWG wire

- Expanding square-wire spring and polypropylene shell deliver a secure connection every time
- Swept wing design with SureGrip™ overmould offers greater comfort, leverage, and torque for faster connections
- Flexible skirt provides improved protection and adapts to tightly fit electrical boxes with limited space
- Widest range in the industry
- Tough, UL 94V-2 flame-retardant shell



Model	Wire Combination Range (mm)	Wire Combination Range AWG	Quantity	Cat. No.
343	600V* 0.34mm <sup>2</sup> to 4.0mm <sup>2</sup> Min. 2 x 0.34mm <sup>2</sup> Max. 4 x 4.0mm <sup>2</sup>	600V 22 to 12 AWG Min. 2 #22 – Max. 4 #12 Solid	Box of 100	<b>30-343</b>
			Jar of 500	<b>30-643J</b>
			Barrell of 35,000	<b>30-843</b>



UL File E5238



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

## Cushion-Grip Swept Wing

WIRE TERMINATION

- SureGrip™ overmoulding provides improved leverage, more torque, and faster connections
- Accepts solid, stranded and flexible wires and are reusable
- Swept wings offer extra leverage and less effort for large wire combinations
- 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
- Cost effective replacement for terminal blocks
- Widest range in the industry
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 60998-1, IEC 60998-2-4 and UL 486 C compliant
- CE, UKCA and UL listed



Model	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
<b>344<sup>®</sup></b>	600V* 22 to 8 AWG  Min. 2 #18 - Max. 4 # 10	32A/600V*/ 105°C (221°F)  0.5mm <sup>2</sup> to 4.0mm <sup>2</sup> Min. 3 x 0.5mm <sup>2</sup> Max. 4 x 4.0mm	Box of 50	<b>30-144</b>
			Jar of 250	<b>30-244J</b>
			Jar of 500	<b>30-644J</b>
			Barrel of 20,000	<b>30-944</b>

\* 1,000V maximum in fixtures and signs



# Twister® Wire Connectors

The No.1 twist-on wire connector. The Twister® easily handles the most common wiring tasks. A patented, expanding square-wire spring always ensures a quick, safe connection.

- Exceptional wire-range capacity – three colour-coded models handle wire combinations from as small as 0.5 mm<sup>2</sup> (22 AWG) to as large as 10.0 mm<sup>2</sup> (8 AWG)
- Accept solid, stranded and flexible wires and are reusable
- Swept wings offer extra leverage and less effort for large wire combinations
- 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
- Cost effective replacement for terminal blocks
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 60998-2, IEC 60998-2-4 and UL 486 C compliant
- CE, UKCA and UL listed



Model	Colour	Wire Combination Range (AWG)	Wire Combination Range (mm)	Qty.	Cat. No.
<b>340®</b>	Orange	600V* 22 to 10 AWG Min. 2 #22 - Max. 3 #12	32A / 450V 0.5mm <sup>2</sup> to 4.0mm <sup>2</sup> Min. 2 x 0.5mm <sup>2</sup> Max. 2 x 4.0mm <sup>2</sup>	Box of 100	<b>30-340</b>
<b>341®</b>	Tan	600V* 22 to 8 AWG Min. 3 #22 - Max. 3 #10	41A / 600V 0.5mm <sup>2</sup> to 6.0mm <sup>2</sup> Min. 3 x 0.5mm <sup>2</sup> Max. 2 x 6.0mm <sup>2</sup>	Box of 100	<b>30-341</b>
<b>342®</b>	Grey	600V* 18 to 6 AWG Min. 3 #14 - Max. 2 #8 w/2 #12	57A / 600V 2.5mm <sup>2</sup> to 10.0mm <sup>2</sup> Min. 3 x 2.5mm <sup>2</sup> Max. 2 x 10.0mm <sup>2</sup>	Box of 50	<b>30-342</b>

\*1,000V maximum in fixtures and signs



Wire Connector  
774A

Cu/Cu  
Only



UK  
CA



# WIRE-NUT® WIRE CONNECTORS

The American classic since 1928.

- Fixed square spring for a secure hold
- Refined range to handle all common applications
- Positive grip shell that is perfect to twist-on with fingers
- Excellent for fine stranded wire applications
- UL Listed to 105°C (221°F)
- IEC 60998-1, IEC 60998-2-4 and UL 486 C compliant
- CE, UKCA and UL listed



Model	Colour	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
<b>71B®</b>	Grey	300V 22 to 16 AWG Min. 2 #22 Str. Max. 2 #16	300V 0.34mm <sup>2</sup> to 1.5mm <sup>2</sup> Min. 2 x 0.34mm <sup>2</sup> Max. 3 x 1.5mm <sup>2</sup>	Box of 100	<b>30-071</b>
				Carton of 1,000	<b>30-171</b>
<b>72B®</b>	Blue	300V 22 to 14 AWG Min. 2 #22 Max. 3 #16	300V 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> Min. 2 x 0.34mm <sup>2</sup> Max. 3 x 1.5mm <sup>2</sup>	Box of 100	<b>30-072</b>
				Carton of 1,000	<b>30-172</b>
				Keg of 10,000	<b>30-272</b>
<b>73B®</b>	Orange	600V* 22 to 14 AWG Min. 1 #18 w/1 #20 Max. 2 #14	600V* 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> Min. 1 x 0.75mm <sup>2</sup> w/1 x 0.5mm <sup>2</sup> Max. 4 x 1.5mm <sup>2</sup> w/1 x 0.50mm <sup>2</sup>	Box of 100	<b>30-073</b>
				Jar of 300	<b>30-073J</b>
<b>74B®</b>	Yellow	600V* 18 to 12 AWG Min. 2 #18 Max. 4 #14 w/1 #18	600V* 0.75mm <sup>2</sup> to 4.0mm <sup>2</sup> Min. 2 x 0.75mm <sup>2</sup> Max. 4 x 2.5mm <sup>2</sup> w/1 x 0.75mm <sup>2</sup>	Carton of 1,000	<b>30-173</b>
				Box of 100	<b>30-074</b>
<b>76B®</b>	Red	600V* 18 to 6 AWG Min. 2 #14 Max. 4 #12	600V* 0.75mm <sup>2</sup> to 16.0mm <sup>2</sup> Min. 2 x 2.5mm <sup>2</sup> Max. 2 x 4.0mm <sup>2</sup>	Jar of 175	<b>30-074J</b>
				Box of 100	<b>30-076</b>
				Jar of 150	<b>30-076J</b>

\*1,000V maximum in fixtures and signs



Wire Connector  
774A

Cu/Cu  
Only



UK  
CA



# HIGH-TEMP WIRE-NUT® WIRE CONNECTORS

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

- Black, thermoplastic shell designed to withstand extreme heat build-up found in high-wattage light fixtures and signs
- UL Listed to 150°C (302°F)
- UL 486 C compliant



Model	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
<b>71B®</b>	300V 22 to 16 AWG Min. 2 #22 Str – Max. 2 #16	300V 0.34mm <sup>2</sup> to 1.5mm <sup>2</sup> Min. 2 x 0.34mm <sup>2</sup> – Max. 2 x 1.5mm <sup>2</sup>	Box of 100	<b>30-3627</b>
			Carton of 1,000	<b>30-151</b>
			Keg of 25,000	<b>30-251</b>
<b>72B®</b>	300V 22 to 14 AWG Min. 2 #22 – Max. 3 #16	300V 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> Min. 2 x 0.34mm <sup>2</sup> – Max. 3 x 1.5mm <sup>2</sup>	Box of 100	<b>30-3628</b>
			Keg of 10,000	<b>30-252</b>
<b>73B®</b>	600V* 22 to 14 AWG Min. 1 #18 w/1 #20 Max. 2 #14	600V* 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> Min. 1 x 0.75mm <sup>2</sup> w/1 x 0.50mm <sup>2</sup> Max. 4 x 1.5mm <sup>2</sup> w/1 x 0.50mm <sup>2</sup>	Box of 100	<b>30-3629</b>
			Keg of 10,000	<b>30-253</b>
			Barrel of 50,000	<b>30-803</b>
<b>59B™</b>	600V* 22 to 12 AWG Min. 2 #20 – Max. 3 #14	600V* 0.34mm <sup>2</sup> to 4.0mm <sup>2</sup> Min. 2 x 0.5mm <sup>2</sup> – Max. 3 x 2.5mm <sup>2</sup>	Box of 100	<b>30-059</b>
			Keg of 5,000	<b>30-259</b>

\*1,000V maximum in fixtures and signs



Wire Connector  
774A

Cu/Cu  
Only





# WING-NUT® WIRE CONNECTORS

## High-Leverage Wing

- Contoured wing profile provides extra leverage for superior torque
- Expanding, live-action spring expands to accommodate a wide range of wire sizes and combinations
- Co-polymer shell expands for smooth, progressive tightening providing dependable connections
- Removable for repeat usage on same size or larger combinations
- Tough, UL94V-2 flame retardant shell rated at 105°C (221°F)
- IEC 60998-1, IEC 60998-2-4 and UL 486 C compliant
- CE, UKCA and UL listed



Model	Colour	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
451®	Yellow	600V* 18 to 10 AWG Min. 2 #18 Max. 3 #12	600V* 0.75mm <sup>2</sup> to 6.0mm <sup>2</sup> Min. 2 x 0.75mm <sup>2</sup> Max. 3 x 4.0mm <sup>2</sup>	Box of 100	<b>30-451</b>
				Jar of 225	<b>30-451J</b>
				Jar of 500	<b>30-651J</b>
				Bag of 500	<b>30-651</b>
452®	Red	600V* 18 to 8 AWG <b>Min. 2 #18</b> <b>Max. 4 #10</b> <b>(Widest range in the Industry!)</b>	600V* 0.75mm <sup>2</sup> to 10.0mm <sup>2</sup> Min. 2 x 0.75mm <sup>2</sup> Max. 4 x 6.0mm <sup>2</sup>	Box of 100	<b>30-452</b>
				Jar of 300	<b>30-452J</b>
				Jar of 500	<b>30-652J</b>
				Bag of 500	<b>30-652</b>
454®	Blue	600V* 14 to 6 AWG Min. 3 #12 Max. 1 #6 w/2 #8	600V* 2.5mm <sup>2</sup> to 16.0mm <sup>2</sup> Min. 3 x 4.0mm <sup>2</sup> Max. 2 x 16.0mm <sup>2</sup>	Box of 25	<b>30-454</b>
				Bag of 100	<b>30-654</b>

\* 1,000 maximum in fixtures and signs



Wire Connector  
774A

Cu/Cu  
Only



UK  
CA



# TWISTER® AL/CU WIRE CONNECTORS

## Al/Cu Connections

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

Model	Colour	Quantity	Part No.
65	Purple	Card of 2	<b>30-065</b>
		Card of 10	<b>30-765</b>
		Card of 25	<b>30-165</b>
		Box of 100	<b>30-265</b>
		Carton of 1,000	<b>30-365</b>

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



### Wire Combination Ranges

1 #10 Al solid w/1 or 2 #10 Cu solid	1 #12 Al w/1 or 2 #14 Cu
1 #10 Al w/1 or 2 #12 Cu	2 #12 Al solid w/1 #14 Cu
2 #10 Al solid w/1 #12 Cu	1 #10 Al w/1 or 2 #18 Cu
1 #10 Al w/1 or 2 #14 Cu	2 #10 Al solid w/1 #18 Cu
2 #10 Al solid w/1 #14 Cu	1 #12 Al w/1 or 2 #16 Cu
2 #12 Al solid w/1 #10 Cu	2 #12 Al solid w/1 #16 Cu
1 #12 Al solid w/1 or 2 #10 Cu	1 #10 Al w/1 or 2 #16 Cu
1 #12 Al stranded w/1 or 2 #10 Cu solid	2 #10 Al solid w/1 #16 Cu
1 #12 Al w/1 or 2 #12 Cu	1 #12 Al w/1 or 2 #18 Cu
2 #12 Al solid w/1 #12 Cu	2 #12 Al solid w/1 #18 Cu



Wire Connector  
also listed as  
grounding  
equipment









# IP RATED WEATHERPROOF WIRE CONNECTORS

Designed specifically for above ground, interior/exterior connections exposed to damp/wet and corrosive environments.

WeatherProof® connectors are pre-filled with a non-hardening, silicone-based sealant that protects against moisture and corrosion.

- Silicone-based sealant protects against moisture and corrosion
- IP55 rated
- Easy to apply, pre-filled twist-on wire connectors
- Accept solid and stranded wire
- Handle wire sizes from 1.5mm<sup>2</sup> to 4.0mm<sup>2</sup> copper conductors
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- BS 7671:2008 (18<sup>th</sup> Edition), IEC 998-2-4 compliant and UL listed to 486 C and G (sealed twist-on wire connector)
- CE, UKCA and UL listed



Model	Colour	Wire Combination Range (AWG)	Wire Combination Range (mm)	Qty.	Cat. No.
61	Black/Orange	600V* 22 to 14 AWG Min. 2 #20 - Max 2 #14	24A/450V 1.5mm <sup>2</sup> to 2.5mm <sup>2</sup> Min. 1 x 1.5mm <sup>2</sup> - Max 2 x 2.5mm <sup>2</sup>	Card of 25	<b>30-1161</b>
62	Black/Red	600V* 18 to 8 AWG Min. 3 #18 - Max 2 #10 w/1 #14	32A/450V 1.5mm <sup>2</sup> to 4.0mm <sup>2</sup> Min 2 x 1.5mm <sup>2</sup> - Max. 4 x 4.0mm <sup>2</sup>	Card of 25	<b>30-1162</b>
63	Black/Dark Blue	600V* 16 to 6 AWG Min. 3 #14 - Max 5 #10	32A/450V 2.5mm <sup>2</sup> to 4.0mm <sup>2</sup> Min 3 x 2.5mm <sup>2</sup> - Max. 6 x 4.0mm <sup>2</sup>	Card of 15	<b>30-1163</b>





# MUDBUG® UTILITY WIRE CONNECTORS



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



Model	Wire Combination Range	Wire Combination Range (mm)	Quantity	Part No.
60®	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 - Max. 1 #10 w/2 #12	600V* 0.5mm <sup>2</sup> to 6.0mm <sup>2</sup> Min. 1 x 0.5mm <sup>2</sup> w/1.75mm <sup>2</sup> - Max. 1 x 6.0mm <sup>2</sup> w/2 - 4.0mm <sup>2</sup>	Carton of 1,000	<b>30-360Y</b>

\*1,000V maximum in fixtures and signs



**Model: Wire Combinations:**
**Twister® ProFLEX** 2 #22 3 #22 2 #20 3 #20 2 #18 2 #16 3 #16 2 #14 3 #14 2 #12 3 #12 4 #14 3 #12 4 #12 5 #12 4 #10 2 #6

	2 #22	3 #22	2 #20	3 #20	2 #18	2 #16	3 #16	2 #14	3 #14	2 #12	3 #12	4 #14	3 #12	4 #12	5 #12	4 #10	2 #6
<b>347 Red/Yellow</b>				<b>WIDEST RANGE IN THE INDUSTRY</b>													
					MIN. 2 #18												MAX. 4 #10
<b>Twister®</b>																	
340® Orange	MIN. 2 #22																
341® Tan		MIN. 3 #22												MAX. 3 #10			
344® Red/Tan					MIN. 2 #18												
																	MAX. 4 #10
342® Grey									MIN. 3 #14								MAX. 2 #8 w/2 #12
<b>Wire-Nut®</b>																	
71B® Grey (300V)	MIN. 2 #22 Str.				MAX. 2 #16												
72B® Blue (300V)		MIN. 2 #22			MAX. 3 #16												
73B® Orange					MIN. 1 #18 w/1 #20												
																	MAX. 2 #14
74B® Yellow																	
																	MAX. 4 #14 w/1 #18
76B® Red																	MIN. 2 #14
																	MAX. 4 #12
<b>Wing-Nut®</b>																	
451® Yellow																	
																	MIN. 2 #18
452® Red																	
																	MAX. 3 #12
454® Blue																	
																	MIN. 2 #18
																	MAX. 4 #10
																	MIN. 3 #12
																	MAX. 1 #6 w/2 #8
<b>WeatherProof</b>																	
61® Grey/Orange																	
																	MIN. 2 #20
																	MAX. 2 #14
62® Grey/Red																	
																	MIN. 3 #18
																	MAX. 2 #10 w/1 #14
63® Grey/Dk Blue																	
																	MIN. 3 #14
																	MAX. 5 #10
<b>MudBug®</b>																	
60® Yellow																	
																	MIN. 1 #20 w/1 #18
																	MAX. 1 #10 w/2 #12



# WIRE CONNECTOR APPLICATION GUIDE

WIRE TERMINATION

		<b>RESIDENTIAL</b>									
		Light Switches	Receptacles	Ceiling Fans	Can Lights	Thermostat Controls	HVAC	Smoke/CO Detectors	Garage Door Openers	Door Bells	
<b>Twister®</b>											
340™ Orange		•	•	•	•	•	•	•	•	•	
341® Tan		•	•				•	•	•		
344® Red/ Yellow		•	•				•		•		
342® Grey											
<b>Wire-Nut®</b>											
71B® Grey						•					
72B® Blue						•	•			•	
73B® Orange				•	•			•		•	
74B® Yellow		•		•	•			•			
76B® Red		•	•				•		•		
<b>Wing-Nut®</b>											
451® Yellow		•	•	•	•			•		•	
452® Red		•	•				•		•		
454® Blue											

		<b>COMMERCIAL</b>									
		Multi-Gang Switch Boxes	Security Systems	Intercoms	Recessed Lighting	Controls	Illuminated Signage	Receptacles	3-Phase Motors	HVAC	
<b>Twister®</b>											
340™ Orange			•	•	•	•					
341® Tan			•		•	•				•	
344® Red/ Yellow		•	•			•	•	•	•	•	
342® Grey		•				•	•		•	•	
<b>Wire-Nut®</b>											
71B® Grey			•	•							
72B® Blue			•	•							
73B® Orange			•	•	•						
74B® Yellow					•	•					
76B® Red		•				•	•	•	•	•	
<b>Wing-Nut®</b>											
451® Yellow					•						
452® Red		•				•	•	•	•	•	
454® Blue		•				•	•		•	•	

# WIRE CONNECTOR APPLICATION GUIDE

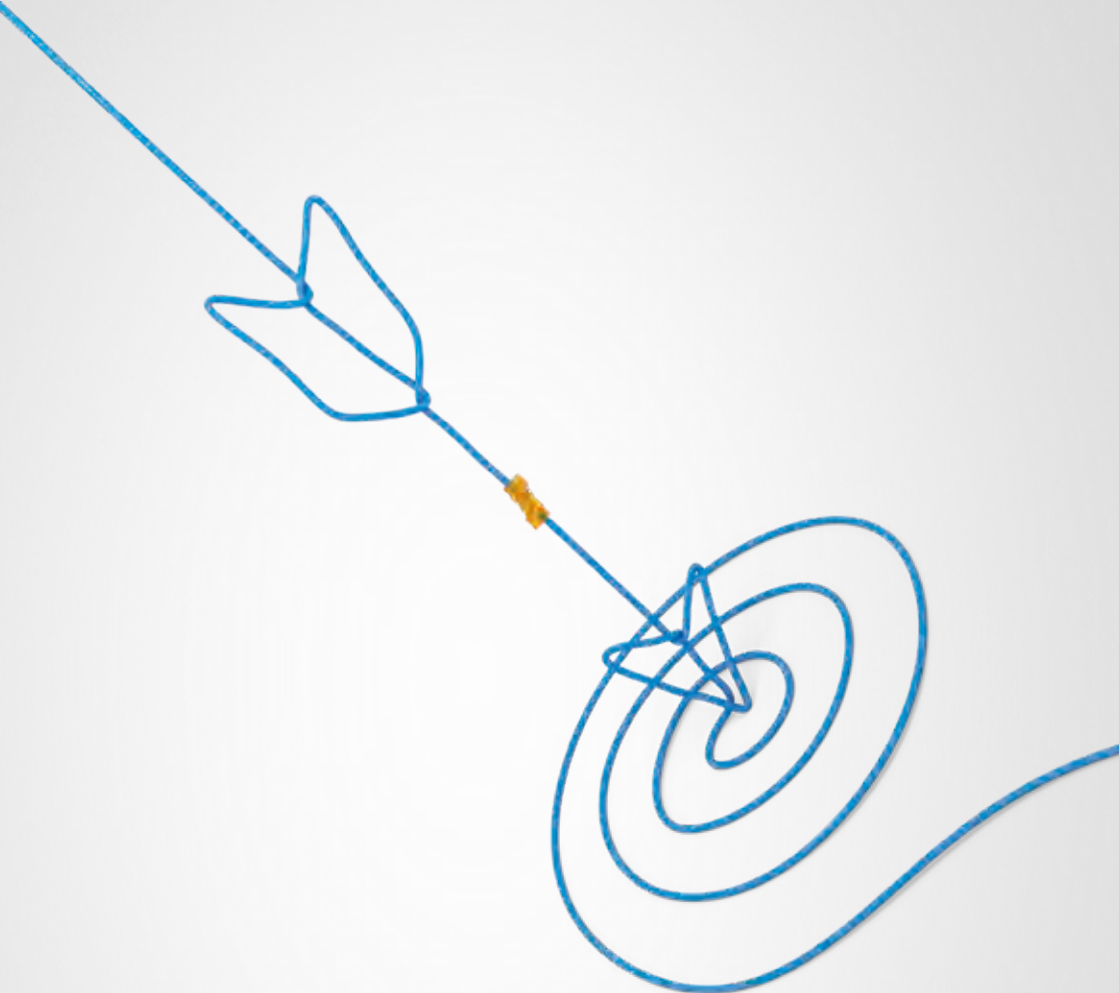
**RESIDENTIAL**

WeatherProof	Receptacles	Ceiling Fans	Can Lights	Thermostat Controls	HVAC	Smoke/CO Detectors	Garage Door Openers	Door Bells
61° Grey/Orange				•	•		•	
62° Grey/Red	•	•	•			•		•
63° Grey/Dk. Blue	•	•	•			•		•

**COMMERCIAL**

WeatherProof	Security Systems	Exterior Lighting	Street/Parking Lot Lighting	Car Washes	Processing Plants	Traffic Signals	HVAC
61° Grey/Orange	•			•	•	•	•
62° Grey/Red		•		•	•		•
63° Grey/Dk. Blue		•	•	•	•		





## FAST, ACCURATE CONNECTIONS FROM IDEAL

Switching to our SpliceLine push in wire connectors can help boost your speed, reduce errors and ensure consistent quality. Look out for our connectors next time you stock up with any electrical retailer.



[idealind.com](http://idealind.com)

**SpliceLine**  
IN-LINE WIRE CONNECTORS

# WIRE INSTALLATION







**IDEAL**®

**Yellow 77**®

**Wire Pulling Lubricant**

**Lubricante para tracción de cable • Lubrifiant de tracción**

- Consistent, smooth pulls
- Clings throughout the pull
- Will not wash off cable
- Proven performance since 1959

- Tiras consistentes y suaves
- Se adhiere al cable a lo largo del tiraje
- No se lavará del cable
- Rendimiento comprobado desde 1959

- Tractions régulières et douces
- Adhère pendant toute l'opération
- Ne se détache pas du câble
- Des performances éprouvées depuis 1959

56

# **B** WIRE INSTALLATION

Lubrication Matters .....	B-4
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ClearGlide® Wire Pulling Lubricant.....	B-12
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# LUBRICATION MATTERS

Like any other sector, the electrical industry evolves to adopt new trends and working practices on a continuous basis.

A wide array of factors influence those trends, including regulatory change, cultural shifts and new products coming onto the market to aid safety, speed of installation and cost reduction

One of the trends that has been very evident in the EMEA market recently is an increased use of conduit in electrical installations.

There has been no ground-breaking innovation in the world of conduit design or fabrication and it isn't new to the EMEA electrical industry; indeed, conduit has been common in industrial settings and exterior installations since we first started to connect plugs to sockets.

What's changed is the amount of conduit used to protect cables in interior commercial and domestic properties.

## > THE MOVE TOWARDS CONDUIT

Increased use of conduit brings EMEA into line with common electrical sector working practices in other regions, such as North America, for example, where conduit is a fairly standard element of any electrical network installation. In EMEA, where we benefit from some of the strictest quality and safety standards across all construction disciplines, the need for conduit

has been avoided due to the straight, linear runs typical of wiring installations, which make it easy to predict the route of electric cables from the location of sockets and light fittings.



Most electricians (and their customers) would be horrified to see the haphazard installation of electrical networks in countries where compliance is less rigorous.

However, as the safety of electrical installations has become an increasingly central element of installation best practice, the added protection provided by conduit has led to more widespread use, particularly in retrofit installations.

According to current wiring regulations, where a cable is concealed in a wall or partition at depth of less than 50mm it must be enclosed in earthed metal capping or conduit (trunking) or installed in zones either horizontally within 150mm of the top of the wall or vertically to the wiring accessory or consumer unit.

For retrofit installations in particular, therefore, use of conduit can enable less invasive installations and greater flexibility for the location of cables.

From both a safety and service life perspective, the increased use of conduit for EMEA electrical installations is good news.

The more challenging element of this evolving trend, however, is the need to protect the electrical cables as they are pulled through the conduit during installation.

Because the EMEA electrical sector has traditionally used less conduit, electricians are also less familiar with electrical lubrication and how to select a lubricant with the right performance and properties for their installation.

## > WHY IS LUBRICANT NECESSARY?

Regardless of the type of cable or conduit used, or whether the installation is in a commercial or domestic, or an interior or exterior setting, cabling is vulnerable to damage as it is pulled through the conduit unless a suitable lubricant is used.

When installing cables in conduit, therefore, lubricant is an essential part of any electrician's toolkit.

And, just like every other tool or component used on an

# LUBRICATION MATTERS CONTINUED

installation, the quality of the lubricant chosen can affect speed and ease of installation, safety and long-term performance.

## > MAIN PURPOSE

The main purpose of an electrical lubricant is to help the cable slide easily through the conduit to avoid friction and snagging.

Often conduit is congested with multiple cables, it may be extended in length and include awkward bends and angles, all of which are potential causes of friction and difficulty in pulling the cable.

Use of a suitable lubricant makes pulling the cable easier for the electrician with a lower risk of damage to the cable during installation.

It's not unusual for electricians to improvise by using products, such as washing-up liquid for example, to provide the slipperiness of a lubricant, which can make it easier to pull the cable through the conduit.

However, generic products like this are not designed to reduce friction and snagging and have not been tested for use with electrical cables, so should not be used because they may not offer the protection and compatibility required.

## >WHAT TO LOOK FOR IN AN ELECTRICAL LUBRICANT

The most fundamental property of any electrical lubricant is that it must be benign when in contact with the jacket material of the cable so that it not only protects the cable from friction or snagging but also prevents any loss of integrity of the jacket that protects the wire.

As a wide range of jacket materials are used in cable manufacture, checking that the chosen lubricant is certified for use on the specific cable being installed is essential.

## > YELLOW 77®

All Ideal Industries lubricants have been independently tested to **IEEE** (Institute for Electrical and Electronic Engineers) & **UL** standards and are clearly labelled to enable electricians to verify compatibility.

They are also **pH neutral, environmentally safe, non-toxic, non-flammable** and **non-corrosive**; all properties that electricians should look for when selecting a lubricant to ensure the installation is safe and avoid any long-term damage to the cable or the conduit from the lubricant.

The **“clingability”** of the lubricant is also essential as this determines how well the lubricant performs throughout the pull.

This is particularly important for longer and more complex runs.

For example, Ideal Industries' Yellow 77 Lubricant, which is most commonly used for industrial and commercial installations, has enhanced clingability to provide improved performance in tougher environments.

Ideal Yellow 77 also has the lowest co-efficient of friction of any lubricant in the Ideal Industries' lubricant range, which is another key indicator of performance.

The lower the co-efficient of friction the more protected the cable will be all the way through the pull, so electricians installing cables in extended conduit networks should select the lowest co-efficient of friction available.



# LUBRICATION MATTERS CONTINUED

Temperature stability is also important because performance of the lubricant could be affected if it is installed outside the recommended temperature range.

## > THE IMPORTANCE OF TEMPERATURE

For Yellow 77, which is often used for industrial and power sector installations, the temperature range is 0°C – 54°C, providing sufficient variability for most installations.

For Aqua-Gel lubricant, a polymer-based lubricant alternative to wax for exterior installations, the temperature range is even greater at 0°C – 82°C.

The temperature range for ClearGlide lubricant, which is usually recommended for residential, office, data comms and retrofit installations, is 0°C – 82°C.

For these environments, ease of application and clean-up are also important considerations to prevent damage to interior finishes.

The ClearGlide bottle is designed to allow the lubricant to be

dispensed straight into the conduit to prevent spills and the product has been formulated with added perfume to prevent chemical odours in interior spaces.





## > QUALITY COUNTS

As with all electrical consumables, when it comes to selecting a lubricant, quality counts, so lubricants should never be seen as a generic, commodity item.

Selecting the right lubricant from a trusted manufacturer with an **established range** and **quality assured in-house production** is the only way to ensure the product offers the performance, safety and protection needed for the specific installation challenges and environment.





- Yellow 77 is easy to apply
- Yellow 77 has the lowest co-efficient of friction of any lubricant in the Ideal Industries' range - the lower the co-efficient of friction the more protected the cable will be
- Also comes in a 1-quarter squeeze bottle, 1-gal bucket and 5-gal buckets



- Can be applied by hand
- pH neutral
- Environmentally-safe
- Non-toxic
- Non-flammable
- Non-corrosive



- The "clingability" of the lubricant determines how well it performs throughout the pull.
- Particularly important for longer and more complex runs.
- Yellow 77 Lubricant is most commonly used for industrial and commercial installations, has enhanced clingability to provide improved performance in tougher environments.

# WIRE LUBRICANTS & ACCESSORIES

## Yellow 77® Wire Pulling Lubricant

- The no. 1 brand of wire pulling lubricant since 1959 – the perfect general purpose lubricant
- 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
- Will not break down or separate after repeated exposure to freezing temperatures
- Dries to a thin, non-conductive film
- Creamy texture applies easily and uniformly by hand or brush
- Homogeneous blend requires no mixing
- Will not dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive



Description	Part No.
1-qt. Squeeze Bottle	<b>31-358</b>
1-gal. Bucket	<b>31-351</b>
5-gal. Bucket	<b>31-355</b>





## ClearGlide® Wire Pulling Lubricant

- Clear and colourless 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 datacom applications - safe to use with all cable types
- Controlled evaporation rate is ideal for shorter runs
- Remains stable over wide temperature ranges – usable from 32°F to 180°F (0°C to 82°C)
- Dries to a semi-fluid film that will not clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive

Description	Part No.
1-qt. Squeeze Bottle	<b>31-388</b>
1-gal. Bucket	<b>31-381</b>
5-gal. Bucket	<b>31-385</b>



## Aqua-Gel® II Cable Pulling Lubricant

- Polymer-based formula provides maximum tension reduction in high-stress electrical and communication cable-pulling operations
- Compatible with most cable types except composite rubber
- Cleans up easily with soap and water and clings to cable throughout long pulls
- Remains stable over wide temperature range – usable from 32°F to 180°F (0°C to 82°C)
- Dries to a semi-fluid film that will not clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe - non-toxic, non-flammable and non-corrosive
- For outdoor use only

Description	Part No.
1-qt. Squeeze Bottle	<b>31-378</b>
1-gal. Bucket	<b>31-371</b>
5-gal. Bucket	<b>31-375</b>



## Product Selection

	ClearGlide®	Yellow 77®	Aqua-Gel® II
Colour	Clear	Yellow	Blue
Base	Polymer	Wax	Polymer
Average Coefficient of Friction*	.23	.17	.19
Stability Range	32°F - 180°F (0°C - 82°C)	32°F - 130°F (0°C - 54°C)	32°F - 180°F (0°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)
<b>Compatibility (Cable Types):</b>			
Rubber	●	●	●
Neoprene	●	●	●
Nylon	●	●	●
PVC	●	●	●
High-density or cross-linked polyethylene	●	●	●
Low-density polyethylene	●		●
Semi-conducting jacket	●		●
Hypalon	●	●	●

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



## Duct Seal

- Seals around junction boxes, flashings and service entrances
- Permanently soft, non-toxic compound can be painted immediately after application
- Will not adversely affect other plastic materials or corrode metals
- No adverse effect to human skin.
- Can be shaped by hand to any form and reused if necessary.
- Countless other applications in the refrigeration, heating and cooling, plumbing, and metal fabrication fields as well as being an excellent general purpose sealant around the home.

Properties	Test Method	Value
Base	-	Non-drying synthetic polymers and oils
Fillers	-	Saturated mineral fillers and other inert ingredients
Specific Gravity	ASTM D71-72	1.65 to 1.7
Cone penetration	ASTM D217-52T	Load of 300 gm..5 sec. @ 25°F; 100-115 mm/10
Temperature usage range	25°F to + 120°F	Recommended
Temperature tolerance range	-30°F to + 175°F	Will not slump at +275°F

Description	Quantity	Part No.
1 lb. Block	Carton of 10	<b>31-601</b>
5 lb. Block	Carton of 10	<b>31-605</b>



## Noalox® Anti-Oxidant

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


**30-024**

Description	Part 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>



Compatible with aluminium to aluminium and aluminium to copper connections.


**30-026**

**30-030**

**30-031**

**30-032**





# CONDUIT BENDERS

## Bender Heads

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

## Handles

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



## Ductile Iron Benders

- Withstands a lifetime of heavy use
- Strong iron material



Conduit Type and Size	Part No. (head only)	Part No. (handle only)	Part No. (head and handle)
1/2 in. EMT	<b>74-001</b>	<b>74-019</b>	<b>74-026</b>
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	<b>74-002</b>	<b>74-019</b>	<b>74-027</b>
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	<b>74-003</b>	<b>74-020</b>	<b>74-028</b>
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	<b>74-006</b>	<b>74-021</b>	<b>74-034</b>
BenderBoot™	<b>H-4076</b>		





# Tuff-Grip™ Pro...

## Industry's Leading Fish Tape!



Length marked! Now laser etched in 12" increments to provide instant conduit length.

### Fish Tape Materials

#### Blued Steel™



- Laser etched in 12" increments to provide instant conduit length
- Unique finish is non-oily and resists rust
- Multiple options in width, length and eyelet for ease of use
- Stiffer for long runs
- Highest grade carbon steel
- Tensile strength 725 kg (1,600 lbs.)

#### Zoom™



- 19 strands of stainless steel
- Ultra hard nylon jacket adds slipperiness, protects cables and user's hands
- Excellent for corrugated plastic conduit
- Excellent for multiple bends or wet/corrosive work environment

#### Volt-Guard



- Non-conductive to 1000V
- Designed for use around live circuits

#### S-Class®



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

## BLUED-STEEL™



Length (m/ft.)	Width & Thickness mm / in	Case Diameter	Tuff-Grip™ Pro	Replacement Tape
15 / 50	3.2 x 1.5 / 1/8 x .060	22 cm / 9 in.	<b>31-033</b>	31-004
18 / 60	3.2 x 1.5 / 1/8 x .060	30 cm / 12 in.	<b>31-055</b>	31-035
36 / 120	3.2 x 1.5 / 1/8 x .060	30 cm / 12 in.	<b>31-056</b>	31-036
73 / 240	3.2 x 1.5 / 1/8 x .060	30 cm / 12 in.	<b>31-057</b>	31-038

## ZOOM™



Length (m/ft.)	Width & Thickness mm / in.	Case Diameter	End Type	Tuff-Grip™ Pro
15 / 50	4.8 / 3/16 diameter	30 cm / 12 in.	Eyelet	<b>31-090</b>
30 / 100	4.8 / 3/16 diameter	30 cm / 12 in.	Eyelet	<b>31-092</b>

## VOLT-GUARD



Length (m/ft.)	Width & Thickness mm / in.	Case Diameter	End Type	Tuff-Grip™ Pro
18 / 60	4.8 x 2.4 / .1875 x .094	30 cm / 12 in.	Eyelet	<b>31-542</b>
36 / 120	4.8 x 2.4 / .1875 x .094	30 cm / 12 in.	Eyelet	<b>31-544</b>

## S-CLASS®



Length (m/ft.)	Width & Thickness mm / in. diameter	Case Diameter	End Type	Tuff-Grip™ Pro	Replacement Tapes
15 / 50	4.8 / 3/16	30 cm / 12 in.	Metal Eyelet	<b>31-062</b>	31-160
30 / 100	4.8 / 3/16	30 cm / 12 in.	Leader	<b>31-061</b>	31-152
60 / 200	4.8 / 3/16	40 cm / 16 in.	Metal Eyelet	<b>31-065</b>	31-165

# YELLOW 77<sup>®</sup>



# WIRE PULLING LUBRICANT



**MESS FREE &  
EASY TO APPLY**

**LOWEST  
CO-EFFICIENT  
OF FRICTION**

# WIRE CUTTERS & STRIPPERS



# WIRE STRIPPERS





# **C** WIRE CUTTERS & STRIPPERS

T <sup>®</sup> -Cutter .....	C-4
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## T<sup>®</sup>-Cutter Wire Cutter

- Hardened steel, shear-type blades
- Spring-loaded automatic opening
- Plier nose for gripping
- Corrosion-resistant
- Tough steel construction



Description	Cat. No.
T <sup>®</sup> -Cutter Wire Cutter	45-123

## Data T<sup>®</sup>-Cutter Wire Cutter

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



Description	Part No.
Data T <sup>®</sup> -Cutter	45-074

## Electrician's Scissors

- Designed for use in telephone and electrical service applications
- Cut up to 16 AWG solid and 12 AWG stranded wire
- Serrated surface on back blade edge cleans wire and straightens twisted pair conductors
- Stripping notches strip 19 and 23 AWG wire
- Chrome over nickel plating



Description	Part No.
Electrician's Scissors w/stripping notches	35-088

# WIRE STRIPPERS

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

## **Kinetic<sup>®</sup> Reflex<sup>™</sup> T<sup>®</sup>-Stripper Wire Stripper**

- Thumb Valley<sup>™</sup> Protection
- Pocket Locket Locking Hasp
- Shear Cut Bolt Cutters
- Textured Thermoplastic Grips
- Ergonomic Textured Handles



## **Kinetic<sup>®</sup> Super Wire Stripper**

- Thumb Valley<sup>™</sup> Protection
- Pocket Locket Locking Hasp
- Shear Cut Bolt Cutters
- Textured Thermoplastic Grips
- Ergonomic Curved Handles



## **Reflex<sup>™</sup> Super T<sup>®</sup>-Stripper Wire Stripper**

- Locking Pawl
- Bolt Cutting
- Extended Textured Comfort
- Ergonomic Handles



## **Reflex<sup>™</sup> Premium T<sup>®</sup>-Stripper Wire Stripper**

- Thumb Valley<sup>™</sup> Protection
- Textured Thermoplastic Grips
- Ergonomic Textured Handles



## **T<sup>®</sup>-Stripper Wire Stripper**

- Compact, lightweight
- Precision-ground, knife-type blades
- Built-in looping holes, wire cutters and plier nose
- Straight Handles





## T<sup>®</sup>-Stripper Wire Strippers

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



Description	Solid	Stranded	Part No.
T <sup>®</sup> -5 T <sup>®</sup> -Stripper Wire Stripper	10-18 AWG	12-20 AWG	<b>45-119</b>
T <sup>®</sup> -5 T <sup>®</sup> -Stripper Wire Stripper			<b>45-120</b>
T <sup>®</sup> -6 T <sup>®</sup> -Stripper Wire Stripper	14-24 AWG	16-26 AWG	<b>45-121</b>
T <sup>®</sup> -7 T <sup>®</sup> -Stripper Wire Stripper	22-30 AWG	24-32 AWG	<b>45-125</b>
T <sup>®</sup> -8 T <sup>®</sup> -Stripper Wire Stripper	6-14 AWG	8-16 AWG	<b>45-124</b>
T <sup>®</sup> -Stripper Wire Stripper – Metric	0,75-6mm <sup>2</sup>		<b>45-120-341</b>

## T<sup>®</sup>-Stripper Wire Strippers (Stainless Steel)

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



Description	Solid	Stranded	Part No.
T <sup>®</sup> -Stripper Wire Stripper	10-20 AWG	12-22 AWG	<b>45-220</b>
Reflex Super T <sup>®</sup> Stripper Wire Stripper	10-18 AWG	16-26 AWG	<b>45-221</b>
Reflex Super T <sup>®</sup> Stripper Dual NM Wire Stripper	12/2 & 14/2	—	<b>45-222</b>

## Reflex™ Premium T®-Stripper Wire Strippers

- Ergonomic design
- Curved handles help reduce wrist fatigue
- Textured sleeves with extra cushioning



45-415

Description	Solid	Stranded	Part No.
Reflex™ Premium T®-Stripper Wire Stripper	10-18 AWG	12-20 AWG	<b>45-415</b>
	14-24 AWG	16-26 AWG	<b>45-416</b>
	22-30 AWG	24-32 AWG	<b>45-417</b>
	6-14 AWG	8-16 AWG	<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™ Super T®-Stripper Wire Strippers

- Ergonomic design
- Curved handles help reduce wrist fatigue
- Textured sleeves with extra cushioning



45-615

Description	Solid	Stranded	Part No.
Reflex™ Super T®-Stripper Wire Stripper	8-16 AWG	10-18 AWG	<b>45-615</b>
	8-14 AWG	8-16 AWG	<b>45-618</b>
			<b>45-619</b>
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	12-2 and 14-2 AWG	–	<b>45-621</b>

## Kinetic® Super Wire Strippers

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



45-715

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

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

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



45-915

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





## Twin & Earth Cable Stripper for flat cable

- Self-adjusting stripping blades automatically select proper position
- Strips Twin and Earth cable
- Open-throat construction allows unlimited strip length
- Neatly removes outer cable sheath and inner wire sheathing to desired lengths
- Lightweight, ergonomic design helps reduce user fatigue



Description	Part No.
Twin & Earth Cable Stripper for flat cable	45-235

### For flat cables between 0.75 and 2.5 mm<sup>2</sup> and up to 12 mm wide

- Simply insert the required length of cable into the tool and squeeze the handles together
- The open-throat design allows an unlimited strip length for both the outer sheath and the inner wire sheathing
- The tool's specially hardened and tempered steel blades ensure an accurate cut and an extended service life, making it an excellent investment







## Stripmaster® Wire Stripper

- 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



### Knife-Type Blades for Metric Wire

Wire Size mm <sup>2</sup>						Cat. No.
0.75	1.0	1.5	2.5	4.0	6.0	<b>45-292-341</b>

## V-Notch Stripper

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



Description	Part No.
V-Notch Stripper	<b>45-101</b>

## Forged Heavy-Duty Wire Strippers

- 6-32/8-32 screw cutting hole
- Precision stripping holes with heavy duty plier nose and recessed holes for low profile bolt cutting
- Wide nose to twist multiple wires simultaneously
- Unique plier head design to ream conduit
- Crimper
- Ergonomic Smart Grip textured handles for improved grips



**45-110**

Description	Solid	Stranded	Part No.
Forged Heavy-Duty Wire Stripper	8-16 AWG	10-18 AWG	<b>45-110</b>
Forged Heavy-Duty Dual NM Wire Stripper	12/2 & 14/2	—	<b>45-112</b>

## 7-in-1 Stripper

- Versatile, seven-function tool features precision-ground stripping blades, cushioned grips and plier nose
- Strips 1.5mm<sup>2</sup>-6.0mm<sup>2</sup> solid and 0.5mm<sup>2</sup> - 4.0 mm<sup>2</sup> stranded wire (AWG equivalents)
- Crimps bare and insulated terminals from 0.5mm<sup>2</sup> - 5.0mm<sup>2</sup>, RG-59 coax connectors and 7 to 8mm auto ignition connectors
- Cuts unhardened wire, bolts and screws and reforms threads
- Reams and de-burrs conduit. Gauges and loops wire



Description	Solid	Stranded	Part No.
7-in-1 Stripper	8 - 16 AWG	10 - 18 AWG	<b>45-777</b>

## Lil' Ripper Stripper™

- Rips Twin & Earth outer jacket cleanly and quickly
- Clips outer sheathing to remove excess wire jacket
- Strips inner conductor wires
- Looping holes loop wire for screw-on connections
- Twist-Assist™ tightens most popular sizes of winged twist-on connectors
- Strip length measuring scale allows for quick and easy measurements
- Conveniently fits in your pocket



Description	Part No.
Lil' Ripper Stripper™	<b>45-025</b>

## BigFoot™ Ratcheting Cable Cutter

- Designed to cut 380 mm<sup>m</sup> (750 MCM) and smaller hard-drawn copper and aluminium cables
- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimises cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage
- Moulded-in foot provides stability and leverage when making multiple cuts
- Not for use on steel armoured cable



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

\*Max. Jaw Opening - 2 in./5 cm

## PowerBlade™ 750 Cable Cutter

- Fits most standard power drills
- Jaw opening of 1-1/2 in. (38mm)
- Cuts copper cable up to 380 mm<sup>2</sup> (750 MCM) and aluminium cable up to 506 mm<sup>2</sup> (1000 MCM)
- Specially hardened, rounded blades minimise cable distortion for professional quality
- Not for use on steel armoured cable



(Drill not included)

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

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

## Cable Cutter

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



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

## 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 aluminium only.
- Not designed for steel or ACSR.



Description	Length	Replacement Head	Part No.
250 MCM Long-Arm Cable Cutter	14 in./355 mm	35-031B	35-031
500 MCM Long-Arm Cable Cutter	22 in./558 mm	35-032B	35-032
1000 MCM Long-Arm Cable Cutter	32 in./810 mm	35-033B	35-033

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

## Linesman Pliers

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



Description (Smart-Grip™ Handles)	Part No.
9-1/2 in. Linesman Pliers w/New England nose, crimping die and fish tape puller	<b>30-3430</b>

## Long-Nose Pliers

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



Description (Smart-Grip™ Handles)	Part No.
8-1/2 in. Long-Nose Pliers w/Cutter	<b>35-3038</b>

## Diagonal-Cutting Pliers

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



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

## Tongue & Groove Plier

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



Description (Smart-Grip™ Handles)	Jaw Opening	Part No.
9-1/2 in. Tongue & Groove Pliers	2 in.	<b>35-3420</b>

## Cable Cutter

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



Description (Smart-Crip™ Handles)	Part No.
9-1/2 in. Cable Cutter	<b>35-3052</b>

## Multi-Crimp Tool

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



Description (Smart-Grip™ Handles)	Part No.
9-3/4 in. Multi-Crimp Tool	<b>30-3429</b>



# IDEAL T<sup>®</sup>-STRIPPER



# WIRING ACCESSORIES







# **D** WIRING ACCESSORIES

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# IDEAL PRO SERIES

## BAGS AND CARRIERS



## Hand Tool Carriers

Introducing the IDEAL® Pro Series line of tool backpacks, totes, pouches and bags. These rugged, versatile carriers are perfect for storing, organising and transporting your vital tools and supplies. Protect and organise the things you need for the job with these durable, full featured carriers.

### Tape Measure Clip



**Removable Tool Pouch**  
and drill bit holder



**Moulded Plastic Bottom**  
for durability



**Phone / Sunglasses Case**



**Tablet/Laptop Pocket**



**Tape Chain**



**Fish Tape Holder**



**Drill Holster**



**Water Bottle Holder**



The range includes **Dual Compartment Tool Backpacks** with a dedicated space for a laptop and/or tablet plus phone/glasses case and removable tool pouch and bit holder for extra versatility and storage.

The **Large Mouth Bags** open completely for ease of access to tool and equipment, while the **Premium Tool Carriers** are sturdy and lightweight with multiple internal and external pockets keeping your space clean and visible.

The **Premium Tool Pouches** have several functional pockets and handling Straps and premium features to keep tools visible and organised for both storage and on the job use.





## Backpacks

The IDEAL® Pro Series Dual Compartment Tool Backpack provides a storage and transport solution for any tradesperson.

The versatile design includes two compartments that can open to a lay-flat position for flexible use on the floor, bench or hoist.

The backpack has an abundance of interior and exterior organisational pockets, an integrated drill holster as well as dedicated space for a laptop and/or tablet.

The protective phone/glasses case safeguards your most vulnerable items while on the job and the removable tool pouch and bit holder allow for extra versatility and storage.

Exterior pockets include a large double slotted front pocket that easily accommodates fish tapes, a water bottle carrier and a nickel-plated tape measure clip.

The interior includes a wide variety of tiered pockets to hold screwdrivers, meters, bit holders, power drills, etc.

The rugged moulded bottom is designed to hold up in harsh environments.



**37-000**

(Products not included)

### Features:

- 18 pockets
- Moulded plastic bottom for durability
- Fish tape holder
- Hard protective phone/sunglasses case
- Padded straps for added comfort
- Includes tape chain and tape measure clip
- Drill holster, removable tool pouch and dedicated laptop/tablet pocket available on 37-000 model only
- Dimensions  
37-000: 16 in. x 19 in. x 10-1/2 in.  
37-001: 14-1/2 in. x 18-1/2 in. x 9 in.

**37-001**

(Products not included)



The IDEAL® Pro Series Single Compartment Tool Backpack has a compact, lightweight design providing a solution for any tradesperson.

It contains multiple tiered pockets designed to easily access and organise the tools and equipment you need most and is equipped with a protective phone/sunglasses case, durable moulded bottom, a fish tape pocket, tape chain and tape measure clip.

Description	Part No.
IDEAL® Pro Series Dual Compartment Backpack	<b>37-000</b>
IDEAL® Pro Series Single Compartment Backpack	<b>37-001</b>

## Large Mouth Bags

The IDEAL® Pro Series Large Mouth Bags feature a sturdy design that opens completely for ease of access to tools and equipment.

Multiple interior and exterior pockets including a protective phone/sunglasses case allow you to store and carry what you need for every job.


**37-012**

(Products not included)

### Features:

- Total pockets:
  - 37-012      26 pockets
  - 37-011      26 pockets
  - 37-010      20 pockets
- Top opens completely for easy access to large tools
- Reinforced to hold itself open
- Hard protective phone/sunglasses case
- Models 37-011 & 37-012 feature side pull straps for ease of transport
- Includes shoulder strap
- Includes tape chain and tape measure clip
- Dimensions
  - 37-012: 18 in. x 11-1/2 in. x 11-1/2 in.
  - 37-011: 16 in. x 11 in. x 9 in.
  - 37-010: 13 in. x 9 in. x 9-1/2 in.

### 37-011

(Products not included)


**37-010**

(Products not included)

Description	Part No.
IDEAL® Pro Series Large Mouth Bag, 18 in.	<b>37-012</b>
IDEAL® Pro Series Large Mouth Bag, 16 in.	<b>37-011</b>
IDEAL® Pro Series Large Mouth Bag, 13 in.	<b>37-010</b>



## Premium Tool Carriers

The IDEAL® Pro Series Premium Tool Carriers feature a sturdy and lightweight design for organizing and transporting tools.

Multiple internal and external pockets allow you flexibility in storing what you need for every job while premium features keep your space clean and visible.

### Features:

- Total pockets:  
37-031: 34 pockets  
37-030: 32 pockets
- Model 37-030 features a protective phone/sunglasses case
- Shoulder strap
- Moulded carrying handle
- Removable drill bit pouch for versatility
- Includes tape chain and tape measure clip
- Easy access supply tool pocket
- Dimensions  
37-031 11 in. x 12 in. x 16 in.  
37-030 12 in. x 12 in. x 15 in.



**37-031**

(Products not included)



**37-030**

(Products not included)

Description	Part No.
IDEAL® Pro Series Premium Tool Carrier	<b>37-031</b>
IDEAL® Pro Series Moulded Bottom Premium Tool Carrier	<b>37-030</b>

## Premium Tool Pouch

The IDEAL® Pro Series Premium Tool Pouch features a lightweight and durable design perfect for any tradesperson.

With multiple functional pockets, handling straps, and premium features these pouches will keep tools visible and organised for both storage and on the job use.

### Features:

- 2 deep pockets to hold a variety of tools
- Designed to comfortably fit on hip
- Carry as a hand pouch, shoulder pouch or tool belt
- Includes both adjustable web belt with metal buckle and removable shoulder strap
- Includes tape chain and tape measure clip
- Dimensions: 10 in. x 6-1/2 in. x 11 in.


**37-020**

(Products not included)

Description	Part No.
IDEAL® Pro Series Premium Tool Pouch	<b>37-020</b>

**Moulded Carrying Handle**

**Tape Measure Clip**
**Adjustable Web Belt & Shoulder Strap**

**Tape Chain**

## Electrical Supply Pouch

- Hook and loop divider allows for 1 or 2 compartments
- Easy carry of essential electrical supplies
- Wide open pockets for easy access of accessories
- Dimensions: 7 in. x 9-1/2 in. x 3 in.



(Products not included)

Description	Part No.
IDEAL® Pro Series Electrical Supply Pouch	<b>37-024</b>



## Wire Armour™ Vinyl Electrical Tape

### When is the last time you looked at your tape?

With so many options available, making the right choice for your application can be difficult. Use the below selection guide to quickly compare and contrast our offering and determine which option is best suited to your needs.

#### Electrical Vinyl Type Premium Professional

- Primary insulation up to 600V and 105°C
- Cold and weather resistant
- Great elasticity
- Flame retardant
- Great resistance to sun, water, oil, acids, alkalis and corrosive chemicals
- Multiple colours available for marking and identification of phases
- Highly UV resistant



#### General Purpose

- Primary insulation up to 600V and 80°C
- Good elasticity
- Flame retardant
- Affordable solution
- Available in multiple colours for wire marking and identification



## Product Offering

	Cat. No.	Case Quantity	Colour	Thickness	Low Temperature rating	High Temperature rating	Adhesion Strength	Elongation in %	Tensile Strength	Dielectric Strength	
Premium Professional	46-33	10	Black	7 mil	0°F -18°C	221°F 105°C	20 oz/in.	260	17 lb/in.	9,000V	
	46-88			8.5 mil				300	20 lb/in.	10,000V	
	46-35-WHT		White	7 mil	14°F -10°C			17 oz/in.	220	17 lb/in.	7,500V
	46-35-BLU		Blue								
	46-35-RED		Red								
	46-35-GRN		Green								
	46-35-YLW		Yellow								
	46-35-ORN		Orange								
	46-35-BRN		Brown								
	46-35-GRY		Grey								
46-35-VIO	Violet										
Contractor PRO	46-PRO	10	Black	7 mil			17 oz/in.	220			
General Purpose	46-1700	10	Black	7 mil	32°F 0°C	176°F 80°C	16 oz/in.	200	16 lb/in.	7,000V	
	46-1700-WHT		White								
	46-1700-BLU		Blue								
	46-1700-RED		Red								
	46-1700-GRN		Green								
	46-1700-YLW		Yellow								
	46-1700-ORN		Orange								
	46-1700-BRN		Brown								
	46-1700-GRY		Grey								
	46-1700-VIO		Violet								



## Linerless Rubber Tape

- Primary insulation up to 69kV
- Linerless ethylene rubber
- Excellently conforms to complex shapes
- Moisture, corrosion, and chemical resistant
- High thermal conductivity allowing heat to dissipate from joint
- Overload temperature: 266°F
- Elongation: 890%



Dimensions	Part No.
3/4" x 0.03" x 30'	<b>46-130C-3/4x30</b>
1" x 0.03" x 30'	<b>46-130C-1x30</b>
1-1/2" x 0.03" x 30'	<b>46-130C-1.5x30</b>
2" x 0.03" x 30'	<b>46-130C-2x30</b>

## Mastic Pads

- Primary insulation up to 1kV
- Superior adhesion and dielectric strength
- Sealing and insulating for buried, submerged or overhead electrical connections
- Resistant to UV rays and impermeable to ozone, water, soil, dirt and corrosive chemicals
- Overload temperature: 266°F
- Package of 10



Dimensions	Part No.
6-1/2" x 0.13" x 4"	<b>46-2200-6.5x4</b>

## Rubber Mastic Tape

- Primary insulation up to 2kV
- Insulating and moisture sealing splices and terminations
- Moisture, corrosion and chemical resistant
- Suitable for direct burial and overhead applications
- Overload Temperature: 266°F
- Elongation: 890%



Dimensions	Part No.
1" x 0.065" x 10'	46-2228-1x10

## Corrosion Tape

- Protects pipe, joints, conduit and couplings in overhead or direct burial applications
- Highly resistant to sun, water, oil, acids, alkalis, and corrosive chemicals
- Bacteria and fungus resistant
- Pressure sensitive
- Thickness: 10mil



Dimensions	Part No.
2" x 0.01" x 100'	46-50-UNPRINT-2





# Armourband™ Insulating Wrap

The **ArmourBand™ Insulating Wrap** insulates and protects devices while providing a quick, clean, reusable solution to the traditional tape application. It fits most receptacles while offering a repositionable wrap with a non-slip finish, allowing for excellent grip that leaves no residue behind.

## Reusable

- Clean, reusable solution to traditional electrical tape application.

## Quick

- 2X faster installation than electrical tape.
- Thickness is equivalent to 6 wraps of premium electrical tape.
- 33% wider than standard electrical tape.
- Non-slip finish and exceptional elongation for easy installation.

## Durable

- Improved performance for extreme temperatures.
- Decreases risk of stray strands causing electrical shock.
- Exceeds flame retardant properties of electrical tape.
- Superior silicone construction for improved coverage.



Description	Temperature rating	Voltage	Inside Diameter	Qty.	Part No.
ArmourBand™ Insulating Wrap	-30°C to 150°C	600V	1.45" / 36.83 mm	Bag of 10	<b>47-100</b>
				Jar of 100	<b>47-110J</b>
				Bulk Pack of 1,000	<b>47-120</b>





## TKO™ Carbide-Tipper Hole Cutters

IDEAL Electrical's line of TKO™ Carbide-Tipped Hole Cutters offer the most efficient and clean cutter replacement for traditional knockouts, by making smooth holes in a fraction of the time at a fraction of the cost.

Specifically designed to cut sheet metal, IDEAL TKO™ cutters will even cut stainless steel with their precision engineered ground carbide tips.

The innovative one-piece design includes the exclusive SmoothStart™ replaceable pilot drill, which guides the cutter to the surface, avoiding cutter damage and providing smooth accurate holes.

With an integral over-drill flange the IDEAL TKO™ 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.

### Carbide-Tipped Hole Cutters

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





## Quick Snap Snap-In Connector

The IDEAL® Quick Snap connector provides exceptional performance and incredible value.

Quick Snap can be installed quickly and easily, without the use of tools, securing cable in place and providing superior protection from damage that can be caused by rough knock-out edges.

Simply push in - no tools required.

- Protects and secures cable
- Snap connector into 1/2" knockout
- Insert from the outside
- Push non-metallic sheathed cable through connector

Securely holds cable while protecting from rough edges of knockouts.



Description	Qty.	Part No.
Quick Snap Snap-In Connector	Jar of 50	<b>46-050</b>
	Jar of 125	<b>46-125</b>



## Cable Stacker

- Used to route, fasten, and support CATV, telephone, security and instrumentation cables
- Organise lengthy cable runs, eliminating tangled wires and excessive heating that can occur when too many cables are fastened tightly together
- Angled nail allows it to be installed from any direction, regardless of the spacing or positioning of the studs



Description	Quantity	Part No.
Cable Stacker	25/Bag	<b>BPSTCKR-25</b>
Cable Stacker	100/Bag	<b>BPSTCKR-100</b>
Cable Stacker	300/Bucket	<b>BPSTCKR-300</b>



E201201  
NO LOAD  
CABLE HARDWARE

LISTED

# SAFETY





# **E** SAFETY

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# IMPORTANCE OF SAFE ISOLATION

Unintentional energisation of circuits, machinery and equipment is a leading cause of death and injury among electrical contractors.

To minimise this type of accident regulations such as the Provision and Use of Work Equipment 1998, Section 19 Energy” and the “Electricity at Work Regulations 1989, Regulation 13” require companies to have effective isolation policies in place.

Most accidents can be avoided by installing simple lockout/tagout devices prior to any electrical work being carried out.

## BASIC PRACTICE FOR SAFE ISOLATION

When working on electrical equipment/energised circuits, it is important that certain basic steps are followed:

- The correct point of isolation is identified
- An appropriate means of isolation is used
- Suitable caution notices should be placed where visible at the point of isolation
- All conductors must be proved to be dead at the point where work is intended to be carried out
- The electrical supply can not be reinstated while work is

being carried out on any equipment/part of the circuit

- Isolation of equipment/circuits should be under the control of the person responsible for carrying out work on the isolated conductors
- Multi-lock hasps / devices should be used in the event of more than one person working on isolated equipment / circuits



## COMPLIANCE WITH CURRENT REGULATIONS

IDEAL offers a range of lockout/tagout products to provide a cost-effective and safe solution in the management of electrical safety and circuit isolation in the workplace.

IDEAL lockout/tagout devices help to achieve compliance with current regulations.

For more comprehensive information on electrical safety and safe isolation, refer to the best practice guide available from the **Electrical Safety Council** entitled **‘Guidance on the management of electrical safety and safe isolation procedures for low voltage installations’**.

The latest version is available on the Electrical Safety Council website ([www.esc.org.uk](http://www.esc.org.uk)).



# SAVING LIVES AND PREVENTING INJURY WITH SAFE ISOLATIONS

**According to the latest statistics from Electrical Safety First, there are 379 injuries or fatalities per year in England from electrical distribution.**

It's an alarming statistic, particularly when we consider that many of these incidents are entirely preventable by using simple equipment and maintaining good safety behaviours on site.

In the electrical sector, as in all aspects of the construction sector, health and safety is already a priority.

However, those who work with known hazards all the time can become complacent about the real dangers and overlook the need for basic safety measures to protect themselves and others.

In the electrical sector, one step that is often overlooked is safe isolation of the electrical network.

More alarming still, is a parallel statistic: only one in five electricians carries a safe isolation lockout/tagout kit to ensure that the isolated distribution network



is not accidentally switched to live while they are still working.

As a result, professionals who routinely work with mains voltage and know how potentially fatal it can be are failing to protect themselves and their colleagues from accidents that could cause serious injury or death.





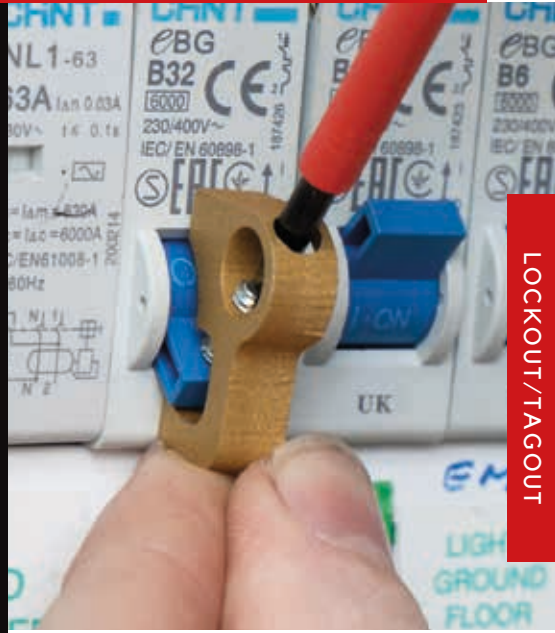
## WHERE DOES THE RESPONSIBILITY LIE?

Fundamentally, the issue of electric shocks caused by unsafe isolations results from poor safety behaviours on site. Electricians know that they need to make an isolation safe by locking it out and marking it clearly, yet they are not only failing to do so, but do not even carry the required equipment in their kit.

Part of this is due to workplace cultures.

Young electricians entering the profession have been trained in safe isolations and anticipate using best practice on site but, in a busy commercial environment, under time pressure, experienced colleagues don't always prioritise locking out and tagging isolations to ensure they're safe.

As a result, poor safety behaviours are being perpetuated and electricians continue to put themselves, their colleagues, and others on site at risk.



LOCKOUT/TAGOUT





# SAVING LIVES AND PREVENTING INJURY WITH SAFE ISOLATIONS CONTINUED

There is another element to the problem, however.

While it's the employer's responsibility to ensure that each operative remains safe on site and enforce good safety behaviours, few contractors supply safe isolation kits in the same way they would expect to provide PPE.

Nor do they make carrying a safe isolation kit a mandatory requirement across their team.

As a result, the practice of locking out and tagging isolations on site is often not monitored by those in senior site-based roles and the message about the importance of safe isolations is not, therefore, endorsed.

## GETTING KITTED UP

The need for increased vigilance and improved safety behaviours when it comes to safe isolations has prompted to call for improved regulation and compliance on safe isolation of live electrical services

to drive safety best practice and save lives.



There is HSE guidance in place to encourage safe isolation best practice, but this needs to be reinforced by a mandatory requirement to prevent accidents by locking out every isolation.

Accidental contact with part of the network that has inadvertently been switched back to live is, after all, an easily avoidable hazard.



# WIDE RANGE OF KITS AVAILABLE

We have a wide range of safe isolation products that enable electricians to lock out isolations, including padlocks, hasps and lockout devices, along with re-useable tags.

We recommend that all electricians carry a full safe isolation lockout / tagout kit on every job and have a range of safe isolation kits for both commercial and domestic installation environments.

For additional protection against accidental contact with mains voltage, we also suggest that electrical contractors use IDEAL's range of insulated tools.

Ultimately, IDEAL has a range of electrical testing equipment which should also be used as part of a safe isolation process to verify isolation of the required area and check that there is no potential danger from mains voltage.

## LET'S TAKE ACTION

Hopefully, at some point, use of lockout and tagout kits will become mandatory.

Until then, let's save lives and prevent injury by using the equipment available to make isolations safer.

LOCKOUT/TAGOUT



## Contractor Lockout/Tagout Kit

- Aimed at contractors working on industrial, commercial and domestic installations
- Contains a range of devices allowing you to lock off most breakers on the market
- Supplied in a handy zipped pouch to help keep the kit close to hand and easily accessible



## Contractor PRO Lockout/Tagout Kit

- Aimed at contractors working on industrial, commercial and domestic installations
- Contains a broad range of devices allowing installers to provide safe isolation by locking off virtually all breakers on the market today
- Includes full range of MCB lockout devices including pins-in, pins-out, pins-out wide, tie-bar and various universal MCB lockout devices
- Supplied in a handy zipped pouch to help keep the kit close to hand and easily accessible



Description	Part No.
Contractor Lockout/Tagout Kit	<b>44-985UK</b>
Contractor PRO Lockout/Tagout Kit	<b>44-995</b>

## Domestic Installer Lockout/Tagout Kit

- Primarily aimed at the domestic installer
- Contains devices for use on typical breakers found in domestic installations
- Supplied in a handy zipped pouch



## Personal Lockout/Tagout Kit

- A low-cost lockout kit containing two popular lockout devices plus a safety padlock and Do Not Operate tag
- Suitable for individuals or companies wishing to kit out their entire workforce with a low-cost versatile lockout kit



Description	Part No.
Domestic Installer Lockout/Tagout Kit	<b>44-924</b>
Personal Lockout/Tagout Kit	<b>44-925</b>



**Do not  
operate**



**Danger**  
Equipment  
Locked out



**DANGER**

**LOCKED  
OUT  
DO NOT REMOVE**

## Apprentice Kit

Poor safety behaviour around isolation is a real problem in the electrical industry, with only one in five electricians carrying a safe isolation kit in their tool bag. IDEAL is helping to address this issue by working with training providers to achieve a cultural shift and embed safety best practice in the next generation of electricians as well as trainee heating engineers and plumbers.

The Apprentice Safe Isolation Kit has been designed to contain everything an apprentice needs

- The lockout kit includes a Vol-Con® Digital Voltage Tester:
  - tests for both AC and DV voltage
  - provides a visual and audible alert for continuity and non-contact voltage
  - features low impedance to eliminate ghost voltages
- Supplied in a handy zipped pouch



Description	Part No.
Apprentice Kit	44-986

## Kit Selection Chart

Part no.	Description:	44-925	44-924	44-985UK	44-986	44-995
K-8334	Safety Padlock	✓	✓	✓	✓	
K-40611	Non-Conductive Safety Padlock					✓
KB-0224	Steel Lockout Hasp		✓	✓		
44-428EU	Non-Conductive Lockout Hasp					✓
KB-0375	Circuit Breaker Lockout			✓	✓	✓
IA-2280	"No-Hole" Lockout Device			✓		✓
441.001	MCB Pins-Out Device (Std)	✓	✓	✓		✓
441.002	MCB Pins-In Device					✓
441.003	MCB Pins-Out Device (Wide)					✓
441.004	Tie-Bar Lockout Device					✓
KB-0234	Universal MCB Lockout Device (Metal)	✓	✓	✓	✓	✓
44-2393	Universal MCB Lockout Device (Plastic)					✓
44-2394	Universal MCB Lockout Device (Plastic)					✓
44-5833EU*	Lockout Tags	✓(1)	✓(2)	✓(5)	✓(5)	✓(5)
K-7566	Marking Pen		✓	✓	✓	✓
IA-3240	Lockout Pouch		✓	✓	✓	✓
61-090EU	Vol-Con® Elite Digital Voltage Tester with GS38 compliant test leads				✓	

\* Can only be ordered in packs of 5 (44-5833EU)



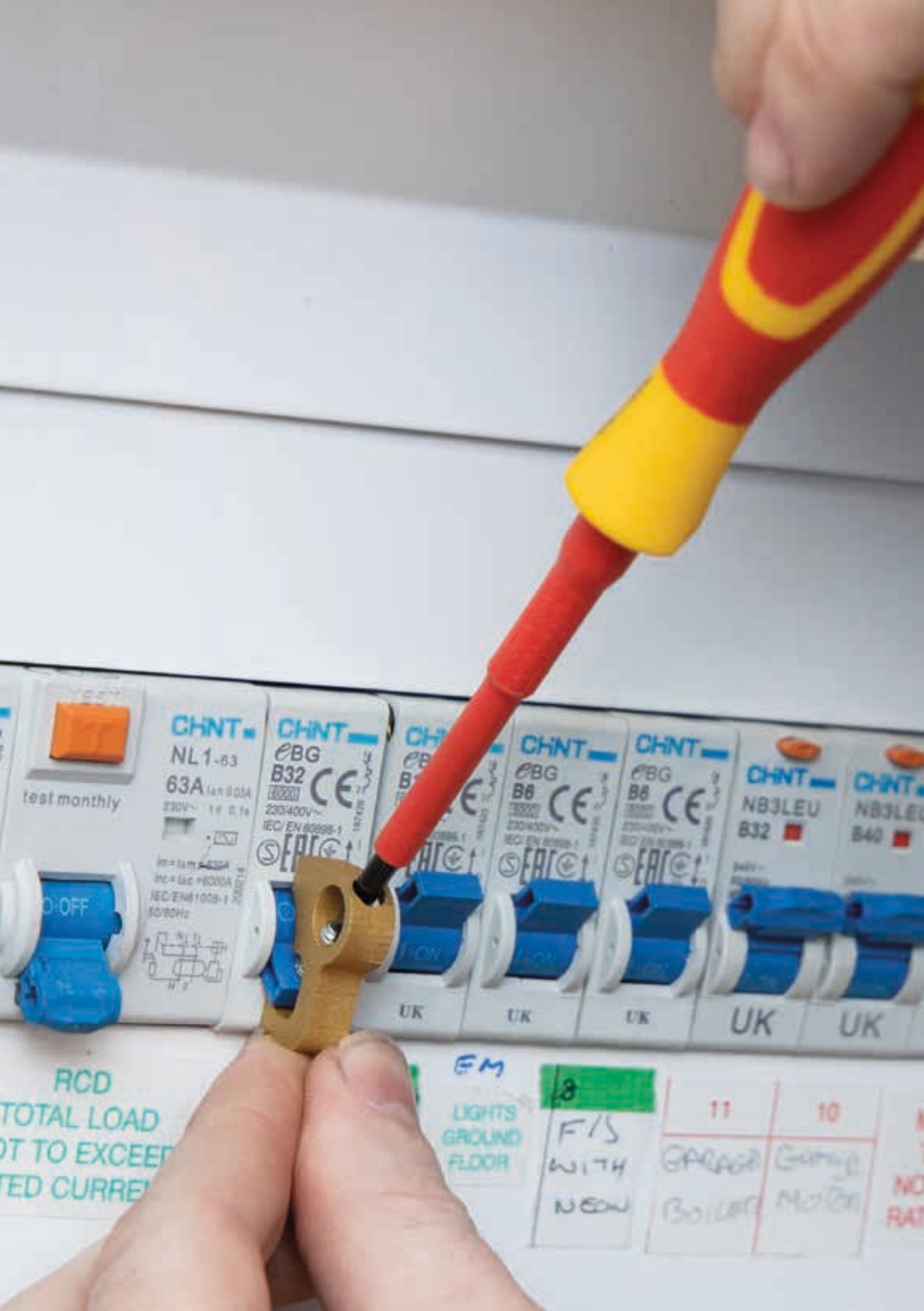


**DANGER**  
**LOCKED  
OUT**  
DO NOT REMOVE

**Charging**

**WARNING**  
DO NOT TOUCH





CHNT

NL1-63

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

test monthly

OFF

ON

ON

ON

ON

ON

ON

ON

ON

ON

ON

ON

ON

ON

CHNT

EBG

B32

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

CHNT

EBG

B6

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

CHNT

EBG

B6

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

CHNT

EBG

B6

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

CHNT

NB3LEU

B32

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

CHNT

NB3LEU

B40

63A I<sub>an</sub> 0.03A

230V~ 1.6 0.16

230/400V~

IEC/EN 60898-1

SEAC

UK

RCD  
TOTAL LOAD  
NOT TO EXCEED  
TESTED CURRENT

EM  
LIGHTS  
GROUND  
FLOOR

EM	11	10
F/S WITH NEW	GARAGE BOILER	Garage Motor

## MCB Lockout Devices

- A safe and effective method for locking out European Circuit Breakers
- The lockout easily installs with the aid of a Push Button
- Use in combination with a padlock with a shackle diameter up to 6 mm for added safety
- Requires no tools to install



441.001



441.002



441.003

Description	Cat. No.
MCB Lockout Device - Pins Out	441.001*
MCB Lockout Device - Pins In	441.002
MCB Lockout Device - Pins Out Wide	441.003

\* Available as blister packaging for retail display - add "-D" to the end of the part number

## Universal MCB Lockout Devices

- Universal MCB lockout devices useful for isolating MCB's without pin holes on the MCB switches
- Simple and easy to use



KB-0234



44-2393



44-2394

Description	Cat. No.
Universal MCB Lockout Device - metal	KB-0234*
Universal MCB Lockout Device - plastic, yellow (small)	44-2393*
Universal MCB Lockout Device - plastic, blue (large)	44-2394

\* Available as blister packaging for retail display - add "-D" to the end of the part number

## Safety Padlocks

- Dedicated safety lockout device reduces confusion with other locks
- Durable non-conductive, Xenoy lightweight body
- 6 mm triple-coated hardened-steel shackle
- Key retention ensures keys do not get lost while padlock not in use
- Available in various colours for easy identification



Description	Cat. No.
Safety Padlock 38 mm steel shackle - red	<b>K-8334*</b>
Safety Padlock 38 mm steel shackle - blue	<b>K-8330</b>
Safety Padlock 38 mm steel shackle - yellow	<b>K-8336</b>
Safety Padlock 76 mm long steel shackle - red	<b>K-41021</b>

\* Available as blister packaging for retail display - add "-D" to the end of the part number

## Non-Conductive Safety Padlocks

- Dedicated safety lockout device reduces confusion with other locks
- Non-conductive, Xenoy lightweight body
- 6 mm non-conductive nylon shackle
- Dielectric protection - anti-sparking
- Key retention ensures keys do not get lost while padlock not in use
- Available in red or yellow body



Description	Cat. No.
Non-Conductive Safety Padlock 38 mm nylon shackle - red	<b>K-40611</b>
Non-Conductive Safety Padlock 38 mm nylon shackle - yellow	<b>K-40612</b>

## Universal Hasp (Double Ended)

- Combines small and large hasp
- Allows up to six workers to lock out a single energy source
- Attach hasp to energy disconnect switch
- Control cannot be turned on until last worker's padlock is removed from hasp
- Hasp length 137 mm

Description	Cat. No.
Universal Hasp (Double Ended)	<b>KB-0231</b>



## Steel Lockout Hasps

- Steel jaw with vinyl coated handle
- Allows up to six workers to lock out a single energy source
- Attach hasp to energy disconnect switch
- Control cannot be turned on until last worker's padlock is removed from hasp
- 25 mm and 38 mm dia. shackles available

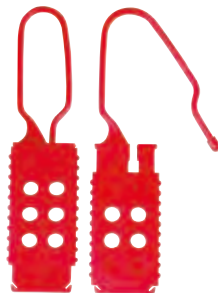
Description	Cat. No.
Steel Lockout Hasp - 38 mm shackle	<b>KB-0224*</b>
Steel Lockout Hasp - 25 mm shackle	<b>IA-5502</b>



\* Available as blister packaging for retail display - add "-D" to the end of the part number

## Non-Conductive Logout Hasp

- Non-conductive, dielectric protection, anti-sparking
- Allows up to six workers to lock out a single energy source
- Attach hasp to energy disconnect switch
- Control cannot be turned on until last worker's padlock is removed from hasp
- Inside jaw 25 x 63 mm



Description	Cat. No.
Non-Conductive Lockout Hasp	<b>44-428EU</b>

## Mini-MCB Lockout Device

- Universal device that fits virtually all miniature circuit breakers in the market
- Cover easily pivots open and closed so the dial is inaccessible in the locked position to prevent removal
- Can be applied horizontally or vertically to lock out more than one breaker simultaneously



Description	Cat. No.
Mini-MCB Lockout Device	<b>KB-1234</b>

## "No-Hole" Lockout Devices

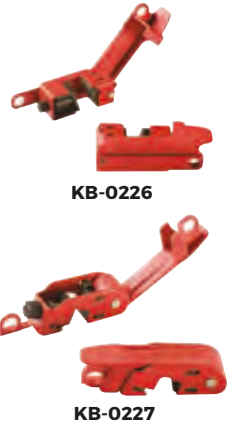
- Lockout device that is ideal for breakers without built-in locking facilities often found in older domestic and commercial installations
- Extremely versatile - works on wide range of single pole and internal-trip multi-pole breakers
- Thumbscrews to clamp lockout securely onto switch tongue, and cover for thumbscrew to lock in place to prevent clamp from being loosened



Description	Cat. No.
"No-Hole" Lockout Device (max. switch 15 mm)	<b>IA-2280</b>
"No-Hole" Lockout Device (max. switch 38 mm)	<b>LA-2182</b>

## Circuit Breaker Lockouts

- Attaches securely to breaker with simple thumb turn and clamping handle
- KB-0226 is designed for breakers with wide or tall toggles
- KB-0227 fits standard height and tie-bar toggles
- The narrow profile permits side-by-side breaker lockout
- Durable powder coated steel and reinforced polymer for use in harsh environments



**KB-0226**

**KB-0227**

Description	Cat. No.
Circuit Breaker Lockout Kit including one for wide & tall toggles and one for standard single & double toggles	<b>KB-0375*</b>
Circuit Breaker Lockout Kit for wide & tall toggles	<b>KB-0226</b>
Circuit Breaker Lockout Kit for standard single & double toggles	<b>KB-0227</b>

\* Available as blister packaging for retail display - add "-D" to the end of the part number

## Tie-Bar Lockout Device

- A safe and effective method for locking out non-standard breakers where pins-in / pins-out devices can not be used
- Convenient thumb wheel for quick application
- Use in combination with a padlock with a shackle diameter up to 6 mm for added safety
- Requires no tools to install



Description	Cat. No.
Tie-Bar Lockout Device	<b>441.004</b>

## Adjustable Cable Lockout

- Adjustable safety hasp and cable
- Ideal for locking out multiple breakers or side-by-side gate valves
- Device can be locked using four padlocks
- Can be adjusted once the cable is locked
- Durable, flexible multi-stranded 1.8 m long vinyl coated steel cable
- Tough, lightweight, dielectric Xenoy thermoplastic body withstands chemicals and performs effectively in extreme conditions



Description	Cat. No.
Adjustable Cable Lockout	<b>44-808</b>

## Lock Stations

- Integrated, one-piece moulded construction
- Resilient polycarbonate material provides heat resistance and high impact strength
- Lockable cover prevents loss of contents
- Secure with a combination lock for simple access control



Description	Cat. No.
5-10 Locks Lockout Station (Station Only)	<b>44-778-SO</b>
10-20 Locks Lockout Station (Station Only)	<b>44-806-SO</b>



## Electrical Plug Lockouts

- Surrounds electrical plugs and prevents accidental reconnection
- Designed to enable installation in confined spaces
- Large plug lockout accepts various electrical plugs up to 500V and accommodates wide range of cable diameters
- Small plug lockout is perfect for safe isolation of appliances with a standard mains plug
- Locked out using safety padlock



44-0487



44-0488

LOCKOUT/TAGOUT

Description	Cat. No.
Electrical Plug Cover (Small) 120V - 240V	44-0487
Electrical Plug Cover (Large) 220V - 500V	44-0488

## DO NOT OPERATE Lockout Tags

- Heavy duty vinyl tag with metal grommet for extra strength
- Designed to withstand use in harsh environments
- High visibility lettering



Description	Cat. No.
DO NOT OPERATE Lockout Tags - Pack of 5	44-5833EU

## Marking Pen

- Fast-drying, permanent ink will not smear
- For use on lockout tags, write-on marker cards and write-on cable-tie marker plates

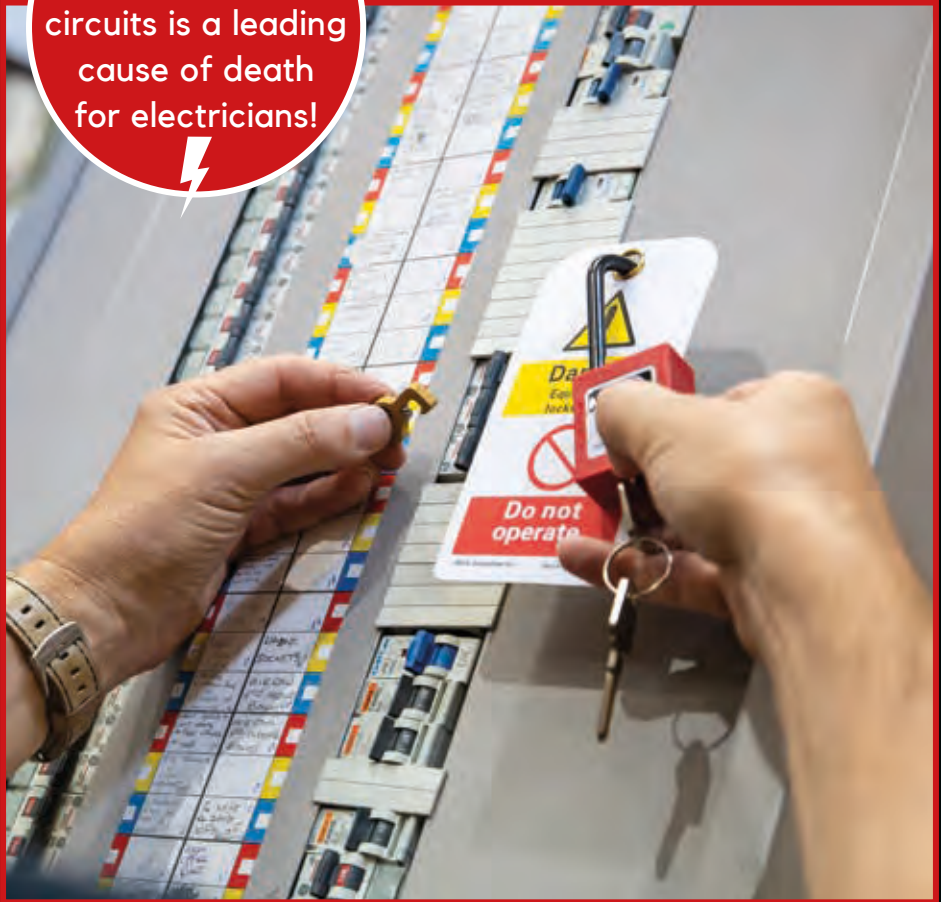


Description	Cat. No.
Marking Pen w/black ink	K-7566

# BE SAFE !



Unintentional energisation of circuits is a leading cause of death for electricians!



## SAFE ISOLATION BY IDEAL

[idealind.com](http://idealind.com)

[eur.sales@idealindustries.com](mailto:eur.sales@idealindustries.com)

[@idealindustries\\_emea](https://www.instagram.com/idealindustries_emea)

# TEST & MEASUREMENT





NCV

PPE  
VAC

12.3

600 Count Display

GFCI

V  
LoZ

Power button icon

NCV

Light and backlight icons

# **F** TEST & MEASUREMENT

SureTrace™ Circuit Tracers .....	F-4
Clamp Meters .....	F-12
Digital Multimeters .....	F-18
Voltage Testers .....	F-22
Non-Contact Voltage Tester .....	F-24
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Finding Breakers using Sure-Trace™ .....	F-34

# SURETRACE CIRCUIT TRACER

## > GREAT PERFORMANCE AND FUNCTIONALITY

Like all Ideal Industries products, the SureTrace Circuit Tracer has been designed for ease of use, performance and functionality, but most users are still surprised by the number of functions provided by a single device

## > ROBUST AND CONVENIENT

Supplied in a robust carry case that protects the unit and makes it easier to carry around site, the SureTrace Circuit Tracer is fabricated from tough, moulded rubber casings and good quality plastic.

The device comes complete with a battery unit, which features a convenient carry strap, ensuring SureTrace can be deployed wherever and whenever required.

Consequently, while offering a sleek, ergonomic test and measurement device, the SureTrace provides a hardwearing piece of equipment that can withstand site conditions and remain fully-operational for long-term use, backed by a two-year warranty.

## > TRANSMITTER & RECEIVER

The transmitter unit is substantial

and simple to use, with on/off, battery warning and voltage warning lights.

The Receiver offers automatic screen rotation, regardless of orientation, which is ideal for taking accurate readings when working in a confined space.

With four sensitivity levels, it works on both energised and un-energised circuits (0-600V AC/DC), providing a 0-99 signal strength



reading with a visual display alongside an audible indicator, which intensifies in tone as the signal strength increases.

#### > BREAKER FIND FUNCTION

The 'Breaker Find' function provides a reliable and fool proof indication for any circuit, ensuring circuit breakers and fuses can be identified every time with accurate CertainCircuit™ detection. This is especially useful for electricians carrying out electrical installation condition reports (EICRs) because it provides fast and accurate identification of circuits.

The device also indicates which distribution board contains the breaker, with a simple scan of the distribution board panel's face. Providing unbeatable accuracy, the unit can differentiate between two ring circuits, even if they are wired almost in parallel.

#### > CABLE TRACING FUNCTION

The 'Cable Tracing' function also offers both accuracy and consistency. Even when used

on cables installed in deep trunking, it is simple to identify where the cable sits.

The cable tracing function can even identify cable located within steel conduit, and dead circuits can be traced by picking up an earth path with a crocodile clip and fly lead.

#### > CABLE ID FUNCTION

The 'Cable ID' function allows cables to be identified quickly and easily, making it ideal for retrofit and upgrade projects along with maintenance work.

By connecting the cable ends to the SureTrace transmitter and a local earthed point for a return path, the operator can identify the cable thanks to a clear indicator on the unit.

#### > OPEN CIRCUIT FUNCTION

The multi-functional SureTrace tool also includes an 'Open



# SURETRACE CIRCUIT TRACER CONTINUED

Circuit' function. This handy function allows the user to pick out a disconnection with a single sweep, delivering pinpoint accuracy.

This enables electricians to quickly and easily identify any errors on the network.

## > INDUCTIVE CLAMP

The top model of the SureTrace Circuit Tracer range (part number 61-959) is supplied with an inductive clamp, which induces a signal into a circuit and allows the tracing of live circuits, even if the circuit is located within metal conduit.

This useful feature allows the device to be used even if the customer has requested that the equipment is not switched off during testing.

The clamp is also ideal for testing sockets that have not been marked up or accurately labelled as the clamp introduces a clearly discernible signal,

allowing the socket faces to be quickly identified across two circuits.

## > CONDUIT TRACER FUNCTION

The device also provides conduit tracer functionality, with a comparable level of sensitivity and accuracy.

As a result, the path of conduit can be identified even through





an obstacle such as a thick layer of timber.

### > INTUITIVE OPERATION

While the SureTrace Circuit Tracer provides multiple functions and is packed with features, it is simple and intuitive to operate and the instruction manual enables users to navigate its functionality and leverage its full benefits.

### > SENSITIVITY LEVELS

The user can set the sensitivity level to suit their own working environment and the additional sensitivity capacity can be deployed for more challenging requirements.

From domestic projects to commercial contracts, and for all EICR requirements, the Ideal Industries SureTrace Circuit Tracer offers the multi-functional performance and convenience to make it a go-to test and measurement device for any electrician.

### > 3 MODELS AVAILABLE

The Circuit Tracer comes in 3 models. For kit content, please go to page 9.












# SURETRACE™

## CIRCUIT TRACER



# Circuit Tracer Kit Options and Parts

KIT OPTIONS	 Receiver with Super-Bright OLED Rotating Display (90° increments), inductive clamp & battery pack	 Receiver with Super-Bright OLED Rotating Display (90° increments)	 Receiver with Rotating Red LED Display (180° increments)
KIT OPTIONS	61-959	61-957	61-955
<b>RC-959</b> Receiver with Super-Bright OLED Display 	✓	✓	—
<b>RC-955</b> Receiver with Red LED Display 	—	—	✓
<b>TR-955</b> Transmitter Rated for Use on Circuits from 0 to 600V AC/DC 	✓	✓	✓
<b>IC-958   BP-958</b> Inductive Clamp & Battery Pack 0 to 120V circuits carrying <5 Amps. 	✓	—	—
<b>TL-958UK   TL-958EU</b> Test Lead Set (UK or EU plug) 	✓	✓	✓
<b>CR-959</b> Cradle for RC-959 and RC-955 Receivers 	Sold Separately	Sold Separately	Sold Separately

TEST & MEASUREMENT

# Circuit Tracer Receiver Features

TEST & MEASUREMENT



**RC-959**



**Super Bright  
OLED Display**



**Red LED  
Display**



**Exclusive Rotating Display**  
90° Increments (RC-959)  
180° Increments (RC-955)



**Four Levels of Sensitivity**



**Audible Indication**



**Low Battery Indicator**



**RC-955**



**Finds Opens**



**Finds Conductors in  
Walls, Ceilings and Floors**



**Finds Dead Shorts**

# Circuit Tracer Transmitter Features



**CertainCircuit™**  
(TR-955)



**Energised**



**De-energised**



**TR-955**

## CertainCircuit™

After the correct breaker has been identified and tripped, the transmitter senses the loss of power and sends a different signal back to the receiver at the panel to give the user confidence that the right circuit has been de-energised.

**Inductive Clamp for when direct contact with alligator clips is not possible**

**Traces de-energised circuits**



**Inductive Clamp & Battery Pack**

(For use on circuits carrying up to 120V AC w/less than 5 Amps)

**IC-958 | BP-958**



**Cradle**

(For use on RC-955 & RC-959 Receivers)

**CR-959**



**Tracer Test Lead Set**  
**TL-958UK | TL-958EU**

1. 3 Ft. Lead Adapter for Transmitter (set of 2)
2. 25 ft. Lead Adapter for Transmitter
3. Alligator Clips (set of 2)
4. Blade Prongs
5. Outlet Plug Adapter for Transmitter (EU or UK plug)



# CLAMP METERS



# Clamp Meter Features



TEST & MEASUREMENT

61-757 | 61-747



## Backlit Displays

### Patented TightSight™ Backlit Display

eliminates need to bend or twist conductors or place your head near or in the panel and allows you to easily read the bottom display when taking all measurements.





# Fork Meter Features

TEST & MEASUREMENT



**Non-Contact Voltage Indication**  
Built in Clamp Tip



**0.75 in. (19mm) Jaw Opening**



**Torch Function/Backlight**



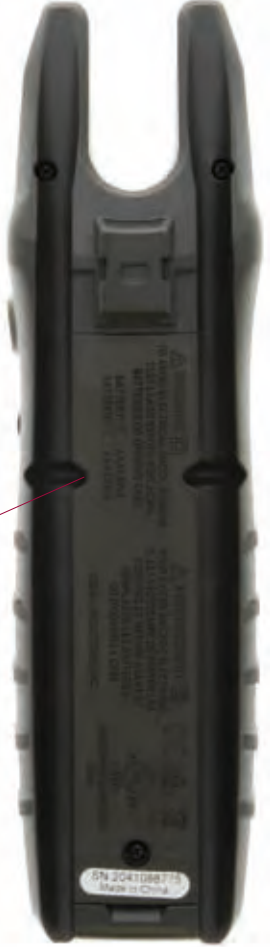
**Probe Storage & Lead Holders**



**Delta**



**Max.**



**Patented TightSight™ Backlit Display** eliminates need to bend or twist conductors or place your head near or in the panel and allows you to easily read the bottom display when taking measurements





## TightSight® Clamp Meters



**61-775**  
1000A AC/DC  
Clamp Meter  
TightSight™  
w/Backlight  
CAT IV 600V  
CAT III 1000V



**61-765**  
660A AC  
Clamp Meter  
TightSight™  
w/Backlight  
CAT IV 600V  
CAT III 1000V



**61-757**  
600A AC/DC  
Clamp Meter  
TightSight™  
w/Backlight  
& Torch Function  
CAT IV 600V  
CAT III 1000V



**61-747**  
400A AC/DC  
Clamp Meter  
TightSight™  
w/Backlight  
& Torch Function  
CAT III 600V



**61-415**  
200A AC/DC  
Split Jaw Meter  
TightSight™  
w/Backlight  
& Torch Function  
CAT IV 600V  
CAT III 1000V

## Conventional Clamp Meters/Accessories



**61-737**  
400A AC Clamp  
Meter 4000 Count  
w/Backlight  
CAT III 600V



**61-744**  
400A AC Clamp  
Meter 4000 Count  
& Torch Function  
CAT III 600V



**61-405**  
200A AC Split  
Jaw Meter  
w/Backlight &  
Torch Function  
CAT III 600V



**TL-757**  
Test Leads  
w/Alligator Clips



**UMHS-757**  
Universal Magnetic  
Hanging Strap



FEATURES	61-775	61-765	61-757	61-747
CAT Rating (Safety)	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V
Listing	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM
Drop Protection			6.6 ft. (2m)	6.6 ft. (2 m)
Clamp/Jaw Opening	2.0 in. (50.8mm)	1.5 in. (38mm)	1.4 in. (35.5mm)	1.4 in. (35.5mm)
AC Voltage (Volts)	750V	750V	1000V	600V
DC Voltage (Volts)	750V	750V	1000V	600V
AC Current (Amps)	1000A	660A	600A	400A
DC Current (Amps)	1000A	660A	600A	400A
Ohms (Resistance)	999.9Ω	999.9Ω	60MΩ	40MΩ
AC Millivolts	—	—	6000	4000
DC Millivolts	—	—	6000	4000
True RMS	✓	✓	✓	✓
High Voltage Alarm	✓	✓	ACV/DCV>30V	ACV/DCV>30V
Audible Continuity	✓	✓	✓	✓
Visual Continuity	✓	✓	✓	✓
Backlight	✓	✓	✓	✓
Temperature	—	—	-40°F ~ 1832°F -40°C ~ 1000°C	-40°F ~ 1832°F -40°C ~ 1000°C
Low Impedance (LoZ)	—	—	✓	—
NCV	NA	NA	40-600V	40-600V
Auto Ranging	✓	✓	✓	✓
Range Hold	NA	NA	✓	✓
Data Hold	✓	✓	✓	✓
Relative	✓	✓	✓	✓
Diode Test	NA	NA	✓	✓
Capacitance Test	✓	✓	6.000mF	4.000mF
Frequency / Duty Cycle	✓	✓	10Hz-9.999KHz	10Hz-9.999KHz
Max / Min	✓	✓	✓	✓
Magnetic Strap Mount	NA	NA	✓	✓
Test Probe Holder	NA	NA	✓	✓
Torch Function	NA	NA	✓	✓
Auto-Power Off (APO)	✓	✓	✓	✓
APO Disable	✓	✓	✓	✓
Low Battery Indication	✓	✓	✓	✓
Battery Type	1 x 9 Volt	1 x 9 Volt	3 x 1.5V AAA	3 x 1.5V AAA
Bottom LCD Display	✓	✓	✓	✓
LCD Display Count	9999	9999	6000	4000
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
Leads & Alligator Clips	TL-757	TL-757	TL-757	TL-757

\* Go to [idealind.com](http://idealind.com) for complete warranty information. Specifications are subject to change without notice.

TEST & MEASUREMENT

FEATURES	61-737	61-744	61-415	61-405
CAT Rating (Safety)	CAT III 600V	CAT III 600V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
Listing	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM
Drop Protection	3.3 ft. (1m)		6.6 ft. (2m)	6.6 ft. (2m)
Clamp/Jaw Opening	1.4 in. (35.5mm)	1.45 in. (36.5mm)	0.75 in. (19mm)	0.75 in. (19mm)
AC Voltage (Volts)	600V	600V	1000V	1000V
DC Voltage (Volts)	600V	600V	1000V	1000V
AC Current (Amps)	400A	600A	200A	200A
DC Current (Amps)	—	—	200A	—
Ohms (Resistance)	40MΩ	40MΩ	60MΩ	60MΩ
AC Millivolts	4000	NA	✓	✓
DC Millivolts	4000	NA	✓	✓
True RMS	✓	No	✓	✓
High Voltage Alarm	ACV/DCV >30V	NA	ACV/DCV >30V	ACV/DCV >30V
Audible Continuity	✓	✓	✓	✓
Visual Continuity	✓	NA	✓	✓
Backlight	✓	NA	✓	✓
Temperature	-40°F ~ 1832°F -40°C ~ 1000°C	NA	—	—
Low Impedance (LoZ)	—	NA	—	—
NCV	40-600V	70-600V	40-600V	40-600V
Auto Ranging	✓	✓	✓	✓
Range Hold	✓	✓	✓	✓
Data Hold	✓	✓	✓	✓
Relative	✓	NA	✓	✓
Diode Test	✓	NA	✓	✓
Capacitance Test	400.0μF	NA	6.000mF	6.000mF
Frequency / Duty Cycle	10Hz~9.999KHz	NA	—	—
Max / Min	✓	NA	✓	✓
Magnetic Strap Mount	✓	NA	✓	✓
Test Probe Holder	✓	NA	✓	✓
Torch Function	—	NA	✓	✓
Auto-Power Off (APO)	✓	✓	✓	✓
APO Disable	—	NA	✓	✓
Low Battery Indication	✓	✓	✓	✓
Battery Type	3 x 1.5V AAA	2 x 1.5V AAA	2 x 1.5V AAA	2 x 1.5V AAA
Bottom LCD Display	—	NA	✓	—
LCD Display Count	4000	4000	6000	6000
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
Thermocouple	TC-757	-	-	-
Lead & Alligator Clips	Included	Leads only	Included	Included

\* Go to [idealind.com](http://idealind.com) for complete warranty information. Specifications are subject to change without notice.

# DIGITAL MULTIMETERS



# Digital Multimeter Features



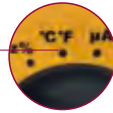
**Non-Contact Voltage Tester**  
Built in



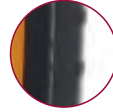
**Non-Contact Voltage, High Voltage, Visual Indications, Augment Audible Indication**  
(61-357, 61-347, 61-337)



**Backlit Display**  
(all models)



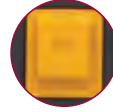
**Temperature**  
(61-357, 61-347, 61-337)



**Removable Boot**  
All Models



**Probe Holder Storage**  
All Models



**Universal Magnetic Strap Clip**  
All Models

TEST & MEASUREMENT



**FUSE Notification**  
(61-357, 61-347, 61-337)



**LEAD Notification**  
(61-357, 61-347, 61-337)



**Bar Graph Image**  
(61-357 only)

# Digital Multimeters



**61-357**  
1000V AC DC  
Digital Multimeter  
CAT IV 600V | CAT III  
1000V



**61-347**  
1000V AC DC  
Digital Multimeter  
CAT IV 600V



**61-337**  
600V AC DC  
Digital Multimeter  
CAT III 600V



**61-327**  
600V AC DC  
Digital Multimeter  
CAT III 600V



**TL-757**  
Test Leads  
w/Alligator Clips



**UMHS-757**  
Universal Magnetic  
Hanging Strap



**F-347-357P**  
11A (1000V) & 600mA (1000V)  
Fuses for 61-357 & 61-347



**F-337P**  
10A (600V) & 400mA (600V)  
Fuses for 61-337



FEATURES	61-357	61-347	61-337	61-327
CAT Rating (Safety)	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT III 600V	CAT III 600V
Listing	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM
Drop Protection	6.6 ft. (2m)	6.6 ft. (2m)	3.3 ft. (1m)	3.3 ft. (1m)
Ingress Protection	IP52	IP52	—	—
AC Voltage (Volts)	1000V	1000V	600V	600V
DC Voltage (Volts)	1000V	1000V	600V	600V
AC Current (Amps)	10A	10A	10A	—
DC Current (Amps)	10A	10A	10A	—
Ohms (Resistance)	60M $\Omega$	60M $\Omega$	40M $\Omega$	4M $\Omega$
AC Millivolts	6000	6000	4000	—
DC Millivolts	6000	6000	4000	4000
AC Milliamps	6000	6000	4000	—
DC Milliamps	6000	6000	4000	—
AC Microamps	6000	6000	4000	—
DC Microamps	6000	6000	4000	—
True RMS	✓	✓	—	—
High Voltage Alarm	ACV/DCV   >30V	ACV/DCV   >30V	ACV/DCV   >30V	ACV/DCV   >30V
Audible Continuity	✓	✓	✓	✓
Visual Continuity	✓	✓	✓	✓
Backlight	✓	✓	✓	✓
Temperature	-40 - 1832°F -40 - 1000°C	-40 - 1832°F -40 - 1000°C	-40 - 1832°F -40 - 1000°C	—
Low Impedance (LoZ)	✓	—	—	—
NCV	✓	✓	✓	✓
Auto Ranging	✓	✓	✓	—
Range Hold	✓	✓	✓	—
Data Hold	✓	✓	✓	✓
Diode Test	✓	✓	✓	✓
Capacitance Test	6000 $\mu$ F	6000 $\mu$ F	4000 $\mu$ F	—
Frequency / Duty Cycle	10Hz - 9.99 KHz	10Hz - 9.99 KHz	10Hz - 9.99 KHz	10Hz - 9.99 KHz
Max / Min	✓	✓	✓	—
Magnetic Strap Mount	✓	✓	✓	✓
Test Probe Holder	✓	✓	✓	✓
Auto-Power Off	✓	✓	✓	✓
APO Disable	✓	✓	✓	✓
Low Battery Indication	✓	✓	✓	✓
Battery Type (Included)	3 x 1.5V AAA	3 x 1.5V AAA	3 x 1.5V AAA	3 x 1.5V AAA
LCD Display Count	6000	6000	4000	4000
Lead Warning	✓	✓	✓	—
Fuse Notification	✓	✓	✓	—
Bar Graph	✓	—	—	—
Battery Test	—	—	—	✓
Warranty	2-Year*	2-Year*	2-Year*	2-Year*
<b>Accessories</b>				
Thermocouple (included)	TC-757	TC-757	TC-757	-
Leads, Case & Temp. Sensor	Included	Included	Included	Leads only

\* Go to [idealind.com](http://idealind.com) for complete warranty information. Specifications are subject to change without notice.





# VOLTAGE TESTERS



ACV	DCV
600	600
480	380
277	220
240	110
208	48
120	36
48	24
24	12

AC DC

AC/DC  
VOLTAGE  
INDICATOR



61-547

IP42



CAT III 600V

COM  $\perp$  +

# Voltage Tester Features



**Non-Contact Voltage**



**Audible Indication**  
for NCV, Continuity & High Voltage



**Backlit Display**



**LoZ**  
Eliminates Ghost Voltage



**GFCI Test**



**Universal Magnetic Strap Clip**



**Probe Holder for Storage**



TEST & MEASUREMENT



## VOLTAGE TESTER SELECTION GUIDE



Voltage & Continuity  
Tester w/LCD, GFCI,  
Torch Function & NCVT  
CAT IV 600V



8 Level AC/DC  
Voltage Indicator  
w/ Polarity Indicator  
CAT III 600V

FEATURES	61-557	61-547
CAT Rating (Safety)	CAT IV 600V	CAT III 600V
Listing Preferred	cULs, CE	cULs, CE
Drop Protection	6.6 ft. (2m)	6.6 ft. (2m)
Ingress Protection	IP42	IP42
AC Voltage (Volts)	6 ~ 600	24 ~ 600
DC Voltage (Volts)	6 ~ 600	24 ~ 600
High Voltage Alarm	ACV >36 or DCV >50V	ACV/DCV ≥ 36V
Audible Continuity	✓	—
Visual Continuity	✓	—
Backlight	✓	—
Low Impedance (LoZ)	✓	—
NCV	90-600V	—
Auto Ranging	✓	—
Magnetic Strap Mount	✓	✓
Test Probe Holder	✓	✓
Torch Function	✓	—
Auto-Power Off (APO)	✓	—
Low Battery Indicator	✓	—
Battery Type	3 x 1.5V AAA	—
LCD Display Count	600	—
Backlight	✓	—
DC Polarity Indication	✓	—
Leads	Removable	Fixed
GFCI Test	✓	—
Display	LCD	Neon Lamps
Warranty	2-Year*	2-Year*
Test Leads	TL-757	
Magnetic Hanging Strap	UMHS-757	

\* Go to [idealind.com](http://idealind.com) for complete warranty information. Specifications are subject to change without notice.

# Vol-Con® Elite Digital Voltage Tester

- Tests for AC Voltage from 24-600VAC
- Tests for DC Voltage from 6-220VDC
- Visual and audible warning
- Audible continuity
- Non-contact voltage indication (40-600VAC)
- Low impedance to eliminate ghost voltages
- Low battery indicator
- Replaceable GS38 compliant test leads
- Integral lead storage
- 2-year warranty



TEST & MEASUREMENT

Description	Cat. No.
Vol-Con® Elite Digital Voltage Tester	61-090EU



UK  
CA



N12966



## Accessories

Includes	
GS38 Compliant Test Leads	TL-102EU

# NON-CONTACT VOLTAGE TESTERS





# Non-Contact Voltage Testers



Dual Range on 61-657 only.



**Standard Voltage Range**  
Indicated by a Red LED



**Power On**  
Indicated by a Green LED



**Low Voltage Range**  
Indicated by a Blue LED



**Presence of Voltage**  
Indicated by a Flashing Red LED & Audible Tone



### 61-657

Dual Range  
12 to 1000V AC  
NCVT w/Torch  
Function  
CAT IV 1000V

### 61-647

Single Range  
50 to 1000V AC  
NCVT w/Torch  
Function  
CAT IV 1000

### 61-637

Single Range  
24 to 600V AC  
NCVT w/Torch  
Function  
CAT IV 600

### 61-627

Single Range  
24 to 600V AC  
NCVT  
CAT IV 600V



FEATURES	61-657	61-647	61-637	61-627
CAT Rating (Safety)	CAT IV 1000V	CAT IV 1000V	CAT IV 600V	CAT IV 600V
Listing	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM	cULs, CE, RCM
Voltage Sensing Range	12 ~ 1000V AC	50 ~ 1000V AC	24 ~ 600V AC	50 ~ 600V AC
Dual Range	✓	—	—	—
Torch Function	✓	✓	✓	—
Drop Protection	6.6 ft. (2m)	6.6 ft. (2m)	3.3 ft. (1m)	3.3 ft. (1m)
Ingress Protection	IP67	IP67	—	—
Dual Range Sensitivity	✓	—	—	—
Audible Indication	✓	✓	✓	✓
Audible Defeat	✓	✓	✓	—
Visual Indication	Green On, Flashing Red	Green On, Flashing Red	Green On, Flashing Red	Green On, Flashing Red
Visual Range Indicator	Blue Low, Red High	—	—	—
Lanyard Compatible	✓	✓	✓	✓
Auto-Power Off (APO)	✓	✓	✓	✓
Low Battery Indication	✓	✓	✓	✓
Battery Type	2 x 1.5V AAA	2 x 1.5V AAA	2 x 1.5V AAA	2 x 1.5V AAA
Warranty	2-Year*	2-Year*	2-Year*	2-Year*

\* Go to [idealind.com](http://idealind.com) for complete warranty information. Specifications are subject to change without notice.



# INFRARED THERMOMETERS





## Infrared Thermometers

The IDEAL 61-847 Dual Laser Targeting Infrared Thermometer (IRT) is a non-contact temperature sensing meter. Its dual lasers define the outside edges of the area whose temperature will be measured.

The IRT displays the actual measurement as well as 4 selectable additional measurements. HI and LO alarms and emissivity are all user programmable.

The IRT measures temperatures from  $-26^{\circ}$  to  $932^{\circ}\text{F}$  ( $-32^{\circ}$  to  $500^{\circ}\text{C}$ ). The LCD backlit display can be illuminated when working in poor or zero lighting conditions and the laser targeting system can be turned on and off at the user's discretion.

The unit uses two red lasers located above and below the IR sensor to accurately outline the area being measured. An industrial grade overmolding and lanyard tie off point enhance grip and drop protection.

TEST & MEASUREMENT



Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3 as described in Laser Notice No. 56 dated May 8, 2019.



**61-847**

Dual Laser Targeting  
12:1 Infrared Thermometer



**61-827**

Single Laser Targeting  
10:1 Infrared Thermometer



FEATURES	61-847	61-827
Certification	CLASS 2, IEC 60825-1:2014	CLASS 2, IEC 60825-1:2014
Wavelength	630nm-670nm	630nm-670nm
Output	< 1mW	< 1mW
Listing	cULs, CE	cULs, CE
Drop Protection	6.6 ft. (2m)	3.3 ft. (1m)
Optical Resolution (distance-to-spot)	12 : 1	10 : 1
Measurement Range	-26° to 932°F (-32° to 500°C)	-4° to 752°F (-20° to 400°C)
Laser Targeting	Dual	Single
Auto Scan	✓	—
Max/Min/Avg/Diff	✓	—
High/Low Alarm	✓	—
Data Hold	✓	✓
Lock-on (for continuous measurements)	✓	—
Emissivity	0.10 - 1.00 Adjustable	0.95 Fixed
Backlit Display	✓	✓
Display	LCD	LCD
Auto Power-Off	✓	✓
Selectable Celsius / Fahrenheit	✓	✓
Battery Type	2 x 1.5V AAA	2 x 1.5V AAA
Low Battery Indicator	✓	✓
Response Time	250 ms	500 ms
Spectral Response	8 to 14µm	8 to 14µm
Warranty	2-Year*	2-Year*

\* Go to [idealind.com](http://idealind.com) for complete warranty information. Specifications are subject to change without notice.

## Digital Light Meter

- Auto or manual ranging
- Measures in four ranges up to 20,000 FC or 200,000 Lux
- +/- 3% basic accuracy
- Data hold mode
- Max. reading mode
- Auto zero adjustment
- Low battery indication
- Auto power off
- Remote sensor with 59 in. (1.5m) cable
- Includes carrying case



Description	Cat. No.
Digital Light Meter	61-686



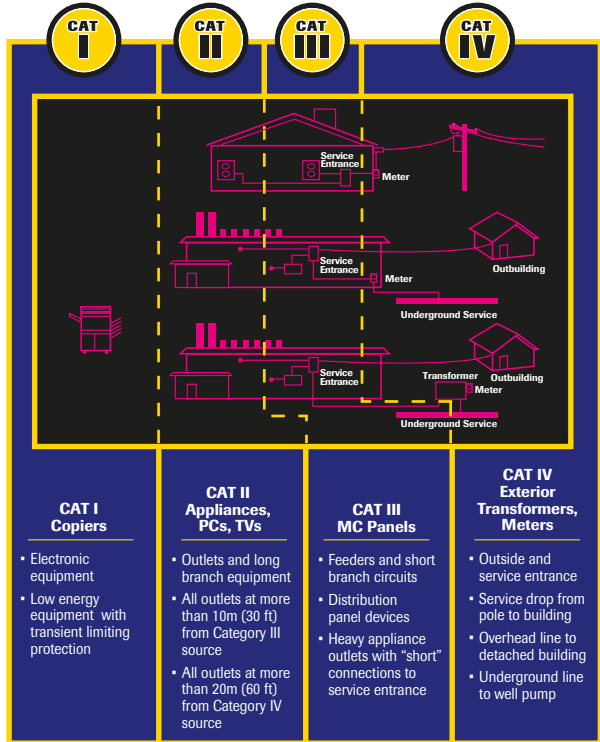
N12966

# 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.



TEST & MEASUREMENT

**Category II** – The local level for fixed and non-fixed powered devices including appliances, lighting and portable equipment. Outlets located more than 30 feet from CAT III sources and 60 feet from CAT IV sources. Peak impulse transient range is from 600–6,000 volts with a 12 ohm source.

**Category III** – The distribution level for fixed primary feeders or branch circuits. Circuits that are separated from CAT IV sources by at least one level of transformer isolation. Peak impulse transient range is 600–8,000 volts with a 2 ohm source.

**Category IV** – The primary supply level for the highest levels of transient 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.

## Finding Breakers using the IDEAL Circuit Tracer

### Step 1: Verify Power and Signal on Circuit

- Plug transmitter into an outlet and power on.
- Hold the receiver near the transmitter to verify connection, confirmed by the lightning bolt symbol.



### Step 2: Scan each Panel for Highest Reading

- Set receiver to the highest sensitivity mode (receiver defaults to this)
- Place receiver flat on the front near the top of each panel until the highest reading is reached. This is the correct panel.



### Step 3: Scan each Breaker for Highest Reading

- Set receiver to the lowest sensitivity mode (also known as Breaker mode).
- Scan each breaker and look for the highest reading. This is the correct breaker.



# DATA TOOLS & ACCESSORIES





**IDEAL.**



# **G** DATA TOOLS & ACCESSORIES

Consistent Data Terminations .....	G-4
FT-45™ Modular Plug Crimp Tool .....	G-8
Cat 6/5e Modular Plugs.....	G-10
Modular Plugs & Boots .....	G-11
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Data T® -Cutter .....	G-14
Electrician's Scissors .....	G-14
PrepPRO™ Coax/UTP Cable Stripper .....	G-14
Coax Strippers .....	G-15
Kinetic Wire Stripper and IDC Connectors .....	G-16
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Punch Down Tools .....	G-19
OmniSeal™ Pro Compression Tool .....	G-20
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# CONSISTENT DATA TERMINATIONS FOR SMART BUILDINGS

Introducing smart technology tailored to meet a building's occupancy patterns and the tenant's commercial requirements is a proven strategy for reducing energy consumption and avoiding energy waste.

We have come a long way since the days of basic timers and PIR sensor lighting control systems, with smart building networks that are both flexible and programmable to ensure they can be adapted to changing needs.

## INCREASED DATA TERMINATIONS

With increasingly sophisticated smart building systems comes a requirement for increasingly complex data networks, and installing those networks requires a large number of terminations.

Each termination requires attention to detail to ensure a robust and compliant connection.

In a multi-storey office block, any smart building installation or retrofit project is likely to involve multiple operatives carrying out the terminations and consistency can be compromised by individuals working with varying standards of quality.

Time pressures can also jeopardise quality and consistency, with tight programmes causing terminations to be rushed, reducing consistency as a consequence.

When consistency and compliance are compromised, identifying the terminations on the system that need to be rectified can be an onerous and time-consuming task.

The answer, therefore, is to ensure terminations are carried out in a way that guarantees best practice and consistency, regardless of the number of operatives and time pressures on site.



# INSTALLATION ISSUES

Data networks require field-termination of CAT5e, CAT6 or CAT6A cables using RJ-45 modular plugs.

The more complex the network, the greater the number RJ-45 assemblies and terminations required.

Conventional installation methods require conductors to be trimmed to an exact length before the plug is placed onto the cable.

If the conductors are too short, circuits will remain open, but this will not be evident until the system is tested. Finding the issues on the network at this point can be a needle-in-a-hay-stack exercise.

If the conductors are too long, meanwhile, there is a risk that the pairs could be left exposed outside of the plug body or cable jacket.

This not only looks sloppy, but could also hinder performance on the network.

In this scenario, the conductors can also move out of place; an issue that is likely to remain unnoticed until the cables are tested.

To overcome both of these potential data network termination issues, contractors need to adopt a technique that will offer complete consistency for every termination, regardless of the number of installation operatives involved, without increasing the time needed to complete the work.

It was these requirements that led to the development of IDEAL Industries' FT-45 Feed-Thru modular plugs and crimp tool.





# CONSISTENT DATA TERMINATIONS FOR SMART BUILDINGS CONTINUED

## SPEED, SIMPLICITY AND CONSISTENCY

Designed to completely re-think the traditional RJ-45 assembly and crimping process, IDEAL Industries' FT-45 solution allows installers of smart networks to speed up and simplify the termination of RJ-45 plugs by eliminating the need to trim conductors to a precise length before inserting the cable into the plug.

## FEED-THRU™ MODULAR PLUGS

The Feed-Thru Modular Plugs are single-piece connectors, so there is no need for installers to assemble a three-piece connector, even when working with CAT6 cable.

This makes terminations faster, simpler and more consistent, whether using CAT5e, CAT6 or CAT6A cables.

Conductor wires do not need to be accurately trimmed to a specific length; instead, installers simply need to remove an appropriate section of jacket, remove the centre spline (if present), untwist the pairs into the right order, and trim the ends flat.

The cable can then be slid into the connector until seated.

The unit has been designed with

open ends that allow conductors to be completely fed through the connector before crimping.

The cable can be pushed into the connector to ensure the twisted pairs are as close to the pin contacts as possible, and that the jacket is seated beyond the primary strain relief for a secure connection.

Thanks to the clear connector design, the installer can then visually inspect and verify the correct wiring order, ensuring greater accuracy and fewer errors during the installation process.

Once the wires have been fed through, the installer can pull the

## PROGRESSIVE APPROACH

cable into the plug, allowing the twists to be pulled to the front of the connector.

This provides better radio-frequency performance and minimal untwisting.

The versatile FT-45™ Crimp Tool designed to be used with the IDEAL Industries FT-45 Modular Plugs further enhances the right-first-time consistency of this approach.

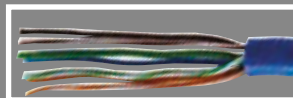
With a single crimp cavity for RJ-45/8-position connectors, it is capable of crimping **Ideal Feed-Thru standard, shielded, and unshielded** connectors for **CAT5e, CAT6 and CAT6A** cables.

The installer simply squeezes the handle to the closed position to cleanly shear the excess conductor wires and leave a smooth, flat finish – crimping and cutting the cable in a single action.

To make it easier for installers to switch from conventional RJ-45 connections to the improved consistency and simplicity of the FT-45 system, IDEAL Industries has introduced two new FT-45 kits.

The kits include the FT-45 modular crimp tool, the IDEAL PrepPro cable stripper and the IDEAL Data T-cutter, along with a choice of either 50 unshielded connectors or 25 unshielded and 25 shielded connectors.

The speed, simplicity and consistency the system offers makes FT-45 a popular choice for installers, linking a progressive approach to installation with the progressive smart technology that is helping to reduce energy consumption in our built environment.







## FT-45™ Modular Plug Crimp Tool

The FT-45™ is a simple, compact and highly effective crimp tool for installers and technicians that terminate RJ-45 connectors regularly.

Enables conductors to be cut flush with the end face of the connector when used with the FT-45™ tool.

- **Speed** - The simplified process of RJ-45 data terminations increases productivity
- **Accuracy** - Cleanly shears the excess conductors and leaves a smooth, flat finish
- **Reliability** - Clear connector design for visual inspection of wiring order reducing errors
- **Compact** - Easily fits in your pocket and lightens the tool bag load
- **Versatile** - Suitable with Feed-Thru, standard, or shielded connectors (CAT5e, CAT6 or CAT6A)
- **Heavy duty** - Cutting blade that will last for over 2,000 cuts
- **Ergonomic** - Reduced hand force compared to traditional crimp tools
- **Wiring scheme** - 568A & 568B marked on the tool
- **Easily maintained** - Replaceable cutting blades available

Description	Cat. No.
FT-45™ Feed-Thru Modular Plug Crimp Tool	<b>30-495</b>
FT-45™ Replacement Blade	<b>30-4951</b>

## CAT5e/6/6A Feed-Thru RJ-45 Modular Plugs

Open end Feed-Thru connectors offer several advantages over standard closed end connectors.

- Reduces errors - Wires can be easily verified before trimming.
- Easy to use - Conductors do not need to be pre-trimmed to a specific length
- Improved wire stability - 3 prong contacts into every wire for more conductive contact points

**Large Diameter  
CAT6A/6/5e**



**CAT6 Feed-Thru**



**CAT6 Standard  
3-Piece\***



**CAT5e Shielded  
Feed-Thru**



**CAT5e Feed-Thru**



**CAT5e Standard  
Shielded**



**CAT5e Standard\*\***



Description	Qty.	Cat. No.
CAT6A <sup>***</sup> /6/5e Shielded Feed-Thru RJ-45 Modular Plugs	10	<b>85-363</b>
CAT6A <sup>***</sup> /6/5e Shielded Feed-Thru RJ-45 Modular Plugs	25	<b>85-368</b>
CAT6A <sup>***</sup> /6/5e Shielded Feed-Thru RJ-45 Modular Plugs	50	<b>85-369</b>
CAT6A <sup>***</sup> /6 Unshielded Feed-Thru	50	<b>85-385</b>
CAT5e Shielded Feed-Thru RJ-45 Modular Plugs	25	<b>85-365</b>
CAT5e Shielded RJ-45 Modular Plugs	25	<b>85-361</b>
CAT5e Feed-Thru RJ-45 Unshielded Modular Plugs	25	<b>85-370</b>
CAT5e Feed-Thru RJ-45 Unshielded Modular Plugs	10	<b>85-370-10</b>
CAT5e Feed-Thru RJ-45 Unshielded Modular Plugs	50	<b>85-371</b>
CAT5e Feed-Thru RJ-45 Unshielded Modular Plugs	100	<b>85-372</b>
CAT6 Feed-Thru RJ-45 Unshielded Modular Plugs	25	<b>85-375</b>
CAT6 Feed-Thru RJ-45 Unshielded Modular Plugs	10	<b>85-375-10</b>
CAT6 Feed-Thru RJ-45 Unshielded Modular Plugs	50	<b>85-376</b>
CAT6 Feed-Thru RJ-45 Unshielded Modular Plugs	100	<b>85-377</b>

\*see page 11 (85-366) / \*\*see page 11 (85-346)

\*\*\*only applies to a cable diameter of max. 8.1 mm with inner cores between 1.02-1.22 mm in diameter

## Modular Plugs

- Plugs are capable of supporting the latest EIA/TIA cable system performance categories when installed in compliance with appropriate EIA/TIA standards and methods
- All plugs work with 24 AWG solid or stranded conductors and round or flat cables.



**85-344  
RJ-11**



**85-346  
RJ-45**

Description	Qty.	Cat. No.
8-Position 8-Contact, RJ-45 Shielded	25	<b>85-361</b>
8-Position 8-Contact, RJ-45	25	<b>85-346</b>
6-Position 6-Contact, RJ-11	25	<b>85-345</b>
6-Position 4-Contact, RJ-11	25	<b>85-344</b>

## CAT6 RJ-45 Modular Plugs

- 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 – 22 – 23 AWG



Description	Qty.	Cat. No.
CAT6 RJ-45 Modular Plugs	25	<b>85-366</b>

## Strain Relief Boots for Modular Plugs

- Prevents broken connector tabs and snagging while extending connector life
- Minimises cable bends that can reduce data speed and result in data loss
- Dampens cable movement and vibrations that can result in premature connector failure



Description	Qty.	Cat. No.
Strain Relief Boots for Modular Plugs*	25	<b>85-380</b>

\* max cable diameter 55 mm (0.22")



# FT-45™ KITS

## SPEED, ACCURACY AND RELIABILITY

With increasingly sophisticated smart building systems comes a requirement for increasingly complex data networks which includes a large number of terminations.

Designed to completely re-think the traditional RJ-45 assembly and crimping process, IDEAL Industries' FT-45 solution allows installers of smart networks to speed up and simplify the termination of RJ-45 plugs by eliminating the need to trim conductors to a precise length before inserting the cable into the plug.

IDEAL kits meet the demands of today's network installers and come in a variety of options with or without the modular plugs, but all including a selection of quality tools required for installing data terminations faster, easier and more consistent.



30-5014EU



30-5015EU

DATA



**33-507**



**33-508**

Kit Includes:	33-507	33-508	30-5014EU	30-5015EU	30-5016EU
Unshielded Kit			✓		
Premium Kit				✓	
Smart Home Kit					✓
Feed-Thru RJ-45 Installation Kit	✓				
Twisted Pair Termination Kit		✓			
FT-45™ Modular Crimp Tool	✓	✓	✓	✓	✓
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	✓	✓	✓	✓	✓
Data T®-Cutter			✓	✓	
Electrician's Scissors	✓	✓			
Punch Down Tool		✓			
Pouch	✓	✓			
CAT6A*/6/5e Feed-Thru Shielded RJ-45 Modular Plugs				✓ (25)	
CAT5e Feed-Thru Shielded RJ-45 Modular Plugs				✓ (25)	
CAT5e Feed-Thru Unshielded RJ-45 Modular Plugs			✓ (50)	✓ (25)	✓ (10)
CAT6 Feed-Thru Unshielded RJ-45 Modular Plugs			✓ (50)	✓ (25)	

\*only applies to a cable diameter of max. 8.1 mm with inner cores between 1.02-1.22 mm in diameter

## Data T<sup>®</sup>-Cutter

- Cuts round communication cable and maintains cable geometry for better cable performance
- Cuts multi-pair cable up to .500 in. (12.7mm) and coaxial cable up to RG-9/U
- Suitable for copper and aluminium (not steel reinforced)
- Steel reinforced centre conductors can be trimmed with bolt cutting holes
- Locking latch keeps tool closed in pouch



Description	Cat. No.
Data T <sup>®</sup> -Cutter	45-074

## Electrician's Scissors

- Designed for use in telephone and electrical service applications
- Cut up to 16 AWG solid and 12 AWG stranded wire
- Serrated surface on back blade edge cleans wire and straightens twisted pair conductors
- Stripping notches strip 19 and 23 AWG wire
- Chrome over nickel plating



Description	Part No.
Electrician's Scissors w/stripping notches	35-088

## PrepPRO<sup>™</sup> Coax/UTP Cable Stripper

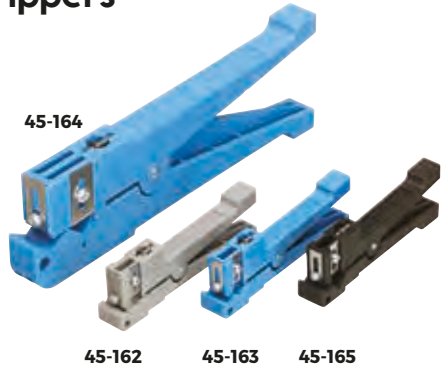
- Auto adjusting blade depth for 6/6Quad/59 coax cable
- 1/4" x 1/4" (6.4 x 6.4 mm) coax preparation
- Replaceable blade cartridges
- Spring loaded for consistent cutting force
- CAT5e/6 jacket stripping



Description	Cat. No.
PrepPRO <sup>™</sup> Coax/UTP Cable Stripper	45-605

# UTP/STP/Coaxial Cable Strippers

- Four models cover cable diameters up to 9/16 inch (14.3 mm).
- All models include two adjustable depth blades and one adjustable round slitting blade
- Common uses are for fibre jackets, mini-coax prep, twisted pair cables and other speciality copper cables where standard stripping products are not available
- Replacement blades available for all models



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> (Grey)
Coaxial Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D.	Mini Coax RG-58,CB	<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-59/6, UTP Cable	<b>45-165</b> (Black)
Replacement Blade Set* for 45-162, 45-163, 5-165	---	<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.

## Coax Stripper

- Specific adjustments needed for each cable size
- For crimp BNC and TNC connectors
- Strips braid 0.240 in. or 6mm and dielectric 0.240 in. or 6mm



Description	Cat. No.
Coax Stripper - 3 Step	<b>45-520</b>



## Kinetic Super™ IDC Wire Stripper/Crimper Kit

- Cuts and strips 22 to 24 AWG
- Crimps IDC Connectors



Description	Cat. No.
Kinetic Super™ Wire Stripper/Crimper Kit – includes 25 IDC's (UR, 3-Wire Butt Splice)	<b>33-719</b>

## IDC Insulation Displacement Connectors



**UR**



**UY**



**UR2**



**UY2**

Model	Colour	Ports	Conductor Range	Max. Insulation Diameter	Quantity	Part No.
<b>UR</b>	Red	3	19-26 AWG	0.066"	25	<b>85-925</b>
					100	<b>86-925</b>
<b>UY</b>	Yellow	2	22-26 AWG	0.060"	25	<b>85-950</b>
					100	<b>86-950</b>
<b>UR2</b>	Red	3	19-26 AWG	0.082"	100	<b>86-930</b>
<b>UY2</b>	Yellow	2	19-26 AWG	0.082"	100	<b>86-955</b>



## Ratchet Telemaster™ RJ-11/RJ-45 Crimp Tool

- Pro quality ratcheting Telemaster™ Tool for RJ-45 and RJ-11 crimping modular plugs
- Gives repeatable crimp action for consistent, high quality connections
- For paired conductors
- Heavy-duty steel frame



Description	Cat. No.
Ratchet Telemaster™ RJ-11/RJ-45 Crimp Tool	<b>30-696</b>
Replacement Cut & Strip Blade Set for 30-696	<b>LA-4102</b>

## Telemaster™ RJ-11/RJ-45 Crimp Tool

- Multi-function tool cuts, strips and crimps for easy one-tool application
- For paired conductors
- Steel frame for long-term durability. (Crimps primary modular plug strain relief only)



Description	Cat. No.
Tool for RJ-11 (1, 2, 3 pair) and RJ-45 (4 pair) Plugs	<b>30-496-001</b>
Replacement Cut and Strip Blade Set for Telemaster™	<b>LB-1747</b>

## BT Connector Tool

A high quality crimp tool for use with standard 4 and 6 way BT telephone plugs. The tool is manufactured from strong, stainless steel with bright, yellow plastic handles and a spring action mechanism, ensuring comfortable, trouble-free use

- Multi-function ratchet action tool that cuts, strips and crimps
- Robust construction offering long-term durability
- Crimps 6-position RJ-12 and RJ-11 modular plugs
- Crimps 6-position BT plugs
- Cuts and strips flat cable

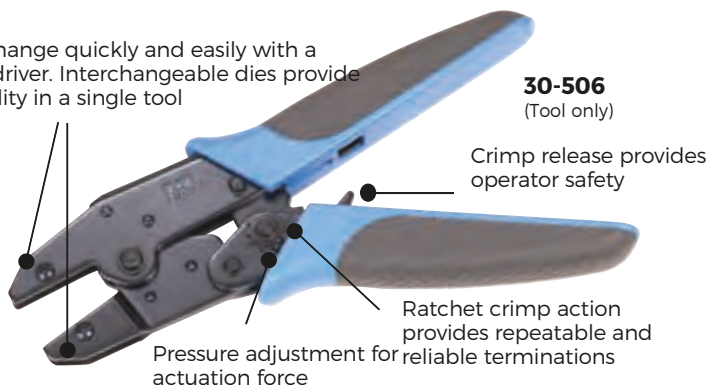


Description	Cat. No.
BT Connector Tool	<b>30-527</b>

# 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.

Dies change quickly and easily with a screwdriver. Interchangeable dies provide versatility in a single tool



## 30-559

RJ-45 Eight-position crimp die set for keyed or non-keyed modular plugs



## 30-579

Die set for insulated terminals/colour coded nests 22-10 AWG (.3mm<sup>2</sup> - 5.3mm<sup>2</sup>)



## 30-580

Die set for non-insulated terminals 22-8 AWG (0.3mm<sup>2</sup>-8.0mm<sup>2</sup>)



## 30-581

Die set for RG-58, RG-59/62, BNC/TNC Coax Connectors (Hex, 0.255 (6.5mm), 0.213 (5.4mm), 0.068 (1.7mm))



## 30-582

Die set for F-type CATV RG-59, RG-6 Connectors (Hex, 0.350 (8.9mm), 0.320 (8.1mm), 0.255 (6.5mm))



Description	Cat. No.
Crimpmaster™ Crimp Frame Tool	<b>30-506</b>
Die set for RJ-45 eight-position keyed or non-keyed modular plugs	<b>30-559</b>
Die set for insulated terminals/colour coded nests	<b>30-579</b>
Die set for non-insulated terminals	<b>30-580</b>
Die set for RG-58, RG-59/62, BNC/TNC Coax Connectors	<b>30-581</b>
Die set for F-type CATV RG-59, RG-6 Connectors	<b>30-582</b>

## Punch Down Tool

- Insertion tool for Krone/LSA blocks
- For seating telecom and data cables into terminals



Description	Cat. No.
Punch Down Tool (Insertion tool for Krone blocks)	<b>35-482</b>

Krone® is a registered trademark of Krone, Inc.

## PunchMaster™ Punch Down Tool

- Inserts and cuts cable terminations effortlessly
- Professional quality tool
- For seating telecom and data cables into terminals effortlessly
- Adjustable high/low actuation setting accommodates termination requirements
- Turn-Lock™ Style blade holding design
- Impact-absorbing cushioned grip reduces operator stress for high volume installers



Description	Cat. No.
Punchmaster™ II Punch Down Tool w/110 & 66 blades	<b>35-485</b>
Removable Krone® Blade for 35-485	<b>35-478</b>



## OmniSeal™ PRO Compression Tool

The IDEAL OmniSeal™ PRO Compression Tool offers additional features and increased connector compatibility in a smaller, more compact tool designed to meet the demands of the professional installer.

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



Description	Cat. No.
OmniSeal™ PRO XL Compression Tool	<b>30-793</b>

## Connector & Tool Compatibility Chart

Type	IDEAL Connector	OmniSeal™ Pro XL 30-793	LinearX®3 33-632
F	F 6 RTQ™	✓	✓
	F 6Q RTQ™	✓	✓
	F 6 RTQ™ 90°	✓	✓
	F 59 RTQ™	✓	✓
	F 6 NJX™	✓	✓
	F 6Q NJX™	✓	✓
BNC	BNC 59	✓	✓
	BNC 59 90°	✓	✓
	BNC 6 RTQ™	✓	✓
RCA	RCA 6	✓	✓

- ✓ No tool adjustment needed.
- ✓ Tool adjustment needed.

DATA

## LinearX® Compression Tool Features

- Adjustable post for different length/style connectors
- Compresses F/BNC/RCA connectors

A hinged hasp keeps the tool in a compact closed position when not in use

Handle has double dipped textured cushion grip for comfort and all-day use

One handed operation is possible with all compatible connectors.



Durable and rugged zinc die-cast body with a protective powder coated paint finish

Description	Cat. No.
LinearX®3 F/BNC/RCA Compression Tool (Adjustable) with four RTQ™ F-Connectors	<b>33-632</b>

## LinearX®3 Hip Kit - 33-622

- Cut, strip and terminate F connectors in one handy starter tool kit

Description	Part No.	
LinearX®3 Hip Kit	<b>33-622</b>	
Kit Includes:	Qty.	Part No.
LinearX®3 Compression Tool	1	<b>33-632</b>
PrepPRO® Coax (59/6/6Q)/UTP Cable Stripper	1	<b>45-605</b>
Data T®-Cutter	1	<b>45-074</b>
Pouch with Belt Clip	1	—



## Compression Connectors

### RTQ™ XR™ Reg/Tri/Quad & Plenum F-Connectors

- Fits 60% regular, tri-shield and quad shield cables
- Nickel-plated, brass-construction for superior corrosion resistance
- Designed for use in satellite and cable TV installations
- Weatherproof for indoor and outdoor use
- Use 30-793 or LinearX® Compression Tool

### RG-11 RTQ™ InSITE® F-Connectors

- Fits 60% regular and quad shield RG-11 cables
- Plenum cable version also available
- Use 30-793 Compression Tool for termination
- Standard 1/4" x 1/4" cable prep. Use 45-526 Coax Stripper

### InSITE® BNC Connectors

- Clear 360° window for confident cable insertions
- Nickel-plated, brass-construction for superior corrosion resistance
- Moisture-inhibiting design
- Use 30-793 or 33-632 Compression Tool
- 75 Ohm nominal impedance
- Gold-plated pin contact area
- Available in straight, 90° and plenum versions

### OmniCONN™ F-Connectors

- Non corrosive nickel plated brass body and polycarbonate bushing
- Nylon adapter sleeve and o-ring provide double protection for a watertight seal
- Free spinning hex nut for ease of installation onto all 7/16 ports
- 75 ohm nominal impedance
- Two-piece pre-assembled connectors

### NJX™ Connectors

- 75 ohm nominal impedance
- Bandwidth up to 3 GHz
- Compatible with all IDEAL Compression Tools
- Designed for indoor use
- RG-6 and RG-6 Quad versions














### TLC™ Connectors

- No compression tool required
- 75 ohm nominal impedance
- Bandwidth up to 3 GHz
- Designed for indoor use
- RG-6 and RG-6 Quad versions










# Compression Connectors

Type	Image	Series/Model #	Cable Type	Quantity	Part No.	
F		RTQ™ XR™ Model #6FRTQXR	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	Card of 10	<b>92-651</b>	
				Jar of 50	<b>92-650</b>	
				Jar of 100	<b>92-656</b>	
				Bulk 1,000	<b>92-659</b>	
	RG-6		InSITE® RTQ™ 90° Model #6FRAIS- RTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	Card of 5	<b>92-691</b>
			NJX™ Model #6FNJX	RG-6	Card of 10	<b>89-040</b>
			NJX™ Model #6QFNJX	RG-6 Quad	Card of 10	<b>89-041</b>
			TLC™ Model #6FTLC	RG-6	Card of 10	<b>85-068</b>
					Card of 4	<b>85-069</b>
					Card of 50	<b>85-168</b>
		TLC™ Model #6QFTLC	RG-6 Quad	Card of 4	<b>85-079</b>	
				Card of 50	<b>85-178</b>	
	OmniConn™ Model #6FOC	RG-6	Jar of 50	<b>89-044</b>		
			Bulk 1,000	<b>89-1544</b>		
	OmniConn™ Model #6QFOC	RG-6 Quad	Jar of 50	<b>89-045</b>		
			Bulk 1,000	<b>89-1545</b>		
RG-59		RTQ™ Model #59FRTQ	RG-59/59Q RTQ™	Card of 10	<b>92-611</b>	
				Jar of 50	<b>92-610</b>	
RG-11		RTQ™ Model #11FISRTQ	RG-11 RTQ™ RG-11 Quad	Card of 10	<b>89-211</b>	
		Cable Specific Model #11PLFIS	RG-11/11Q Plenum	Card of 10	<b>92-212</b>	
RCA		RTQ™ Model #59RCARTQ	RG-59/59Q RTQ™	Jar of 35	<b>89-570</b>	
					RTQ™ Model #6RCARTQ	RG-6/6Q RTQ™

DATA

## Compression Connectors

Type	Image	Series/Model #	Cable Type	Quantity	Part No.
BNC		InSITE® Model #59BNCIS	RG-59	Card of 4	<b>92-704</b>
				Card of 15	<b>89-047</b>
				Jar of 35	<b>89-5047</b>
				Bulk 1,000	<b>89-1047</b>
		InSITE® 90° Model #59BN- CRAIS	RG-59	Card of 5	<b>92-693</b>
					InSITE® Model #59PLB- NCIS
	InSITE® RTQ™ Model #6BNCIS- RTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	Card of 4	<b>92-705</b>	
			Card of 15	<b>89-048</b>	
			Jar of 35	<b>89-5048</b>	
	InSITE® 90° Model #6BN- CRAISRTQ	RG-6/6Q RTQ™ & Plenum 6/6Q RTQ™	Card of 5	<b>92-695</b>	

## Compression Cable Preparation Instructions

All IDEAL compression connectors require a standard 6.5 mm x 6.5 mm (1/4" X 1/4") cable preparation.

This preparation leaves 6.5 mm (1/4") of the centre conductor exposed and an additional 6.5 mm (1/4") of the shielding exposed.

Preparation tools are available in single, two or three blade models. Two blade models are the most commonly used type of stripping tool for coax compression as they remove both 6.5 mm (1/4") sections at one time during the preparation.

Single blade models require two separate stripping actions for compression preparation.

IDEAL has several models of cable preparation tools that are compatible with compression connectors, each having various feature choices such as user adjustable blade depths, replaceable blades, number of active blades, product size and hand motion required to prepare the cable.

## Serrated Kevlar® Cutter

- Superior quality high-carbon stainless steel with molybdenum and vanadium provides hard, razor-sharp edges
- Breaker notch cuts jacket and breaks fibreglass in one step
- Textured cushioned-grip handles
- Designed to cut up to 3mm fibre cables



Description	Part No.
Serrated Cutter w/Breaker Notch (Patent pending)	<b>45-344</b>

Note: Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company.

## MiniLite-Strip™ Optical Fibre Stripper

- Small strip notch engineered and precision-ground to strip 900 micron or 250 micron buffer coatings from 125 or 140 micron fibre
- Larger round strip notch machined to remove the 3mm outer jacket
- Strip notches pre-set and locked, no field adjustment necessary



Description	Part No.
MiniLite-Strip™ Optical Fibre Stripper	<b>45-352</b>

## DualScribe™ Double-Ended Fibre Optic Scribes

- Three professional quality blade styles to choose from to meet your specific needs – Ruby, Sapphire, Carbide
- 30° single bevel – DualScribe™ reversible blade doubles tool life
- Soft non-slip grip provides precise control during scribing
- Clear safety cap protects the blades from damage when not in use



Description	Part No.
Ruby Blade Fibre Optic Scribe (Red Handle)	<b>45-357</b>
Sapphire Blade Fibre Optic Scribe (Blue Handle)	<b>45-358</b>
Carbide Blade Fibre Optic Scribe (Black Handle)	<b>45-359</b>

# 1 GHz Cable TV/General Purpose Splitters

- Splits 1 input signal into 2 output signals
- Designed for use in Digital Cable TV and standard coax splitting applications
- 5 MHz to 1 GHz bandwidth
- Internal printed circuit board for improved electrical performance
- Nickel plated zinc construction
- EMI/RFI shielding effectiveness: >-120dB
- Insertion loss: 3.5dB to 4.0dB over rated frequency range
- For 75Ω coaxial cable systems



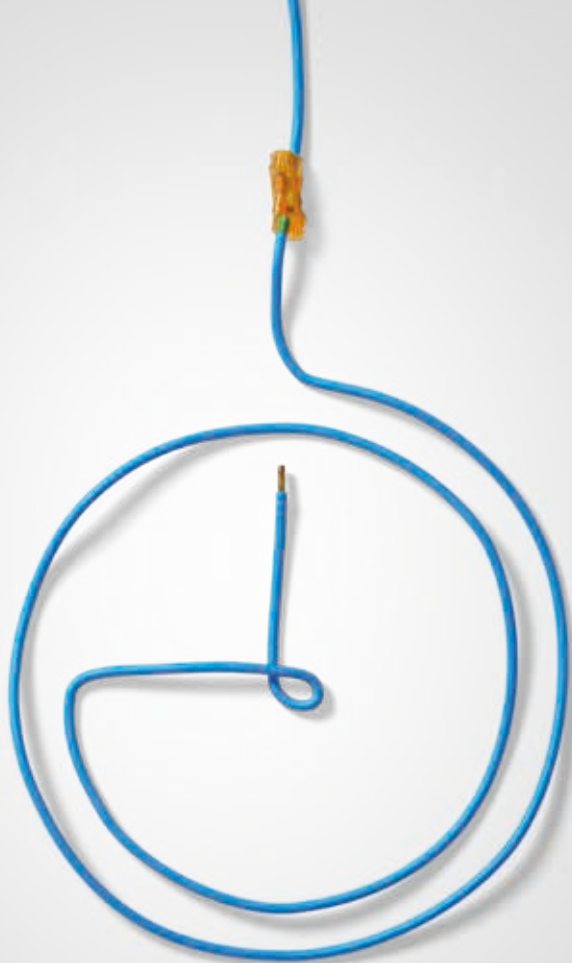
Description	Part No.
High Performance Cable Splitter, 5MHz-1GHz, 2-Way	<b>85-132</b>
High Performance Cable Splitter, 5MHz-1GHz, 3-Way	<b>85-133</b>
High Performance Cable Splitter, 5MHz-1GHz, 4-Way	<b>85-134</b>

## 2.4 GHz Satellite & Digital TV Splitters

- Splits 1 input signal into 2 balanced output signals
- Designed for use in High Definition applications - Satellite/ Digital Cable TV
- 5 MHz to 2.4 GHz bandwidth
- All ports are power-pass: 0.5 Amp DC; 60 Volt DC Max.; 12-18 Volt DC typical operation for LNB power.
- Internal printed circuit board for improved electrical performance
- Nickel plated zinc construction
- EMI/RFI shielding effectiveness: >-80dB
- Insertion loss: 4.4dB to 6.4dB over rated frequency range
- For 75Ω coaxial cable systems



Description	Part No.
2-Way, 5MHz - 2.4GHz	<b>85-332</b>
3-Way, 5MHz - 2.4GHz	<b>85-333</b>
4-Way, 5MHz - 2.4GHz	<b>85-334</b>



# FOR THE SPARKS WITH NO TIME TO WASTE

Switching from traditional connectors to our SpliceLine push in wire connectors could save you time, money and hassle on all your installations. Look out for these fast fitting, high quality and maintenance free connectors next time you stock up with any electrical retailer.



**SpliceLine**  
IN-LINE WIRE CONNECTORS



# ...AND YOU'RE ON TO THE NEXT JOB

The new Generation 2 Lever Wire Connector is compatible with 4mm squared wires, and it'll take 32 AMP, too. So you're free to do more, more quickly, in even the most awkward of spaces. Let's keep things moving forwards.

