

Klein Tools New Zealand Catalogue

www.kleintoolsnz.com





Wattmaster



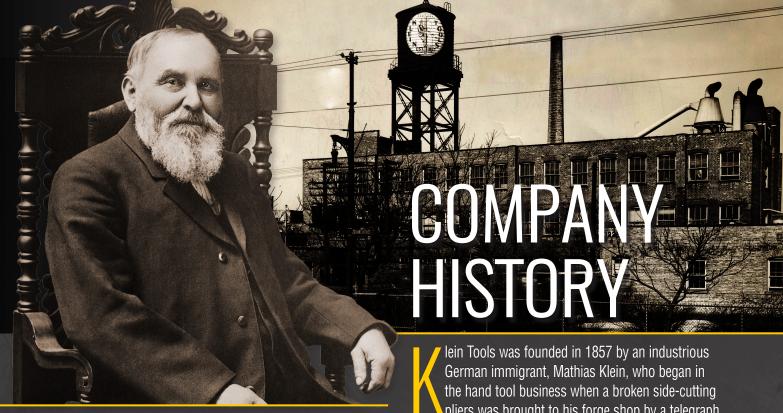






TABLE OF CONTENTS

	INDUSTRIAL PLIERS & TOOLS	3-1 4
	INSULATED TOOLS	15-21
	SCREWDRIVERS & SOCKETS	<mark>22-26</mark>
	KNIVES & CUTTING TOOLS	<u>27-32</u>
	UTILITY	33-42
7.0	HVAC & CONSTRUCTION	43-50
KLEIN TOOLS	PPE & SAFETY PRODUCTS	51-54
33	LEVELS & MEASURING TOOLS	55-58
	ILLUMINATION	
	STORAGE	
	TEST & MEASUREMENT	
	VOICE/DATA/VIDEO	88-99
	KLEIN GEAR	
	CABLE GLANDS & ACCESSORIES	105-107
dlco	CONDUIT & ACCESSORIES	
	ENCLOSURES	111-112
	BATTERY & HYDRAULIC CRIMPERS	113-116
T	TERMINALS	117-129
	LUGS & LINKS	130-137
	FIXINGS & FASTENINGS	138-143
	FIXINGS & FASTENINGSCABLE JOINTING	144-150
_		
0	HAND TOOLS	151-168
#	HOLEMAKING	
/attmaster	CABLE PULLING	172-174
Ë	ELECTRICAL & SPECIALTY TAPE	
+-	EVERYDAY ELECTRICAL NEEDS	178-181
	WORKPLACE SAFETY	1 <mark>82-1</mark> 83
	DOLLACACE CTODACE	



pliers was brought to his forge shop by a telegraph

lineman. Mathias repaired the pliers by forging and finishing a new half for the tool and riveting it to the old half. Soon the lineman returned because the other original half of the pliers had broken and needed replacement. Mathias forged and finished the second half of the pliers and riveted it to the other replacement half – creating the first complete Klein pliers.

To this day, Klein Tools is proudly owned and managed by the Klein family. Over 160 years of hard work and dedication has earned Klein the reputation of supplying only the finest quality products for users of professional hand tools, Test and Measurement and occupational protective equipment.

> Klein Tools continues to expand domestically and internationally to provide quality products to professionals all over the world.



Industrial Pliers and Tools

Klein specializes in the making of the world's finest pliers... Pliers that professionals have trusted for more than 160 years. Klein pliers feel right and work right. They are job-matched for every kind of work you do; designed and built with exceptional quality standards in a tradition that dates back to 1857.



For Professionals... Since 1857™



Introduction - Pliers

Klein Quality

Klein pliers are made of the finest U.S. steel alloy. Forged, precision machined, hardened, and carefully tempered for maximum strength, Klein pliers provide exceptional performance and durability.

All pliers mating surfaces and dimensions are precision machined and hot riveted for uniformly smooth opening and closing action. Cutting knives are manufactured for long-lasting edges and are designed to perfectly align and meet according to the way each is used

Side-cutting and long-nose pliers with side cutters have knives that meet at the hinge first and then meet at least one-half of the knife length. Diagonal-cutting pliers meet at the tip first and then meet at least one-half of the knife length.

These precise knife-closing designs increase knife life and facilitate resharpening.

Klein pliers are individually adjusted to meet performance standards far exceeding application requirements – ensuring that nothing less than outstanding quality ever carries the Klein name.

Using Pliers

A professional knows all the rules about using pliers, but a review of the following points may help you recall any you may have forgotten.

- 1. Never use pliers to do another tool's job. Pliers should not be used as a hammer or pry tool or a wrench. Using pliers instead of the proper tools risks damaging the work, damaging yourself, and losing time.
- 2. Never push pliers beyond their capacity. Bending stiff wire with light pliers or the tip of needle-nose pliers can spring or break them. Use a stronger, blunt-nose pliers. When you need greater leverage, use pliers with greater leverage. Don't extend the length of the pliers handles. Bolts should be cut with a bolt cutter, and large cable with a cable cutter.
- 3. Never expose pliers to excessive heat. Direct flame on metal can ruin the tool. Cutting pliers are especially vulnerable to high, direct heat.
- **4. Never cut hardened wire with ordinary pliers.** Pliers should not be used for cutting hardened wire unless they are specifically recommended for this use.
- 5. Never rock pliers from side to side when cutting wire...and never bend the wire back and forth against the cutting knives. Either practice can dull or nick the cutting

edges. Cut wire at a right angle only. If it won't cut readily, the knives may need sharpening, or you may need pliers with greater leverage.

- **6.** Never cut any wire or metal unless your eyes are protected. Goggles or other protective devices are an absolute must. Don't take shortcuts. Operate safely...The professional way.
- 7. Never cut any wire or metal unless your fellow workers' eyes are also protected. The wire that doesn't get you may get someone else. Think about the "other guy" as well as yourself.
- 8. Never depend on plastic-dipped handles to insulate you from electricity.

 Plastic-dipped and Journeyman™ handles are intended for comfort and a firmer grip only. They are not intended for protection against electric shock. Never use any pliers or cutting tools on live electrical circuits. Only use insulated tools that are marked with the official international 1000-volt rating symbol if there is any chance that the tool will make contact with an energized source.

Pliers Catalog Number Prefixes/Suffixes

"D" (Prefix) – Indicates the pliers have plastic-dipped handles for comfort, NOT for protection against electrical shock.

"HD" (Prefix) – Indicates the pliers have heavy-duty plastic-dipped handles to provide an extra level of user comfort, NOT for protection against electrical shock.

- "J" (Prefix) Indicates the pliers have State-of-the-art dual material molded Journeyman™ handles for a softer, more comfortable grip on the outer surface and a harder, more durable grip on the inner surface and handle ends, NOT for protection against electrical shock.
- "C" (Suffix) Indicates the pliers have a coil spring in the handles for self-opening action.

Pliers Cutting Edges

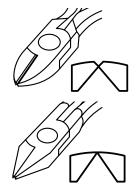
Knife-edge descriptions refer to the angle of the outside cutting edges of the knives when fully closed.

Standard Cutting Edges

Cuts hard wire. Found on all Klein side-cutters, long-nose, and on most diagonal-cutting pliers.

Full-Flush Cutting Edges

Close, flat cutting of soft wire only. Found on select diagonal-cutting pliers.



Semi-Flush Cutting Edges

Closely cuts medium wire. Found on select diagonal-cutting pliers.







www.kleintoolsnz.com



Introduction - Pliers

Pliers Dimensions

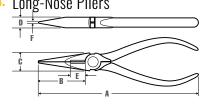
All Klein pliers are listed with necessary dimensions in both inches and millimeters. The following drawings of six basic types of pliers are keyed by letter to the dimensions given for each pliers listed. All dimensions are subject to commercial tolerances.

1. Side-Cutting Pliers

2. Diagonal-Cutting Pliers

3. End Cutting Pliers

Long-Nose Pliers



A – Overall Length

B – Jaw Length

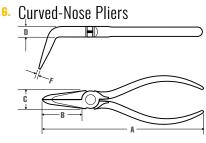
C – Jaw Width

D – Jaw Thickness

E – Knife Length

F – Point Thickness

5. Flat-Nose and Duck-Bill Pliers



Pliers dimensions shown are accurate within accepted commercial tolerances, which allow slight variations that normally result from forging and grinding operations.







High-Leverage Side-Cutting Pliers

Includes core side-cutting features plus:

- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other pliers designs
- Combination polished and black-oxide finish



CAT. NO: D213-9NE

Refer to the insulated section for insulated pliers.

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Color	Handle Finish	Weight			
D213-9NE	238 mm	41 mm	32 mm	16 mm	20 mm	Dark Blue	Plastic Dipped	0.5 kg			
Pliers with hea	Pliers with heavy-duty cutting knives designed to cut ACSR, screws, nails and most hardened wire										
D2000-9NE	238 mm	41 mm	32 mm	16 mm	20 mm	Light Blue	Plastic-Dipped	0.5 kg			

High-Leverage Side-Cutting Pliers - Connector Crimping

Includes core side-cutting features plus:

- Crimping die behind hinge for superior leverage crimping non-insulated connectors, lugs and terminals
- Cleanly strips 10 and 12 solid AWG wire and 12 and 14 AWG stranded wire (Cat. No. J213-9NECRN)
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other pliers designs



CAT. NO: D213-9NE-CR



WIRE STRIPPING HEAD J213-9NECRN



Plastic-Dipped



JOURNEYMAN™ Dual-Material

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Color	Handle Finish	Weight
D213-9NE-CR	238 mm	41 mm	32 mm	16 mm	20 mm	Yellow	Plastic-Dipped	0.5 kg
J213-9NECR	241 mm	41 mm	32 mm	16 mm	20 mm	Yellow/Black	Journeyman™	0.5 kg
J213-9NECRN	241 mm	41 mm	32 mm	16 mm	20 mm	Yellow/Black	Journeyman™	0.5 kg
Pliers with heav	y-duty cutting knives	designed to cut A	CSR, screws, nai	ls and most harden	ed wire			
D2000-9NECR	238 mm	41 mm	32 mm	16 mm	20 mm	Light Blue	Plastic-Dipped	0.5 kg
J2000-9NECR	241 mm	41 mm	32 mm	16 mm	20 mm	Light Blue/Black	Journeyman™	0.5 kg





5



Side-Cutting Pliers

High-Leverage Side-Cutting Pliers -Lineman's Bolt-Thread Holding

Includes core side-cutting features plus:

- Hinge opening holds and cleans 16 mm pole line and hardware bolts or threaded rods
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other pliers designs



CAT. NO: D2000-9NETH NZ REF: KL1405

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Color	Handle Finish	Weight				
Pliers with heav	Pliers with heavy-duty cutting knives designed to cut ACSR, screws, nails and most hardened wire											
D2000-9NETH	238 mm	41 mm	32 mm	16 mm	20 mm	Light Blue	Plastic-Dipped	0.5 kg				

High-Leverage Universal Combination Pliers

Includes core side-cutting features plus:

- Crimping die behind hinge for superior leverage crimping non-insulated connectors, lugs and terminals
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other pliers designs
- Toothed pipe-grip for greater gripping power









Plastic-Dipped

Dual-Material

neiei to the msulateu se	ction for insulated pilers.							
Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Color	Handle Finish	Weight
12098	219 mm	45 mm	26 mm	14 mm	19 mm	Dark Blue	Plastic-Dipped	0.33 kg
J12098 (KL4665)	222 mm	45 mm	26 mm	14 mm	19 mm	Dark Blue/Black	Journeyman™	0.37 kg

Hybrid Pliers

- Multi-purpose tool saves time and lessens the tool count
- Strips 10-14 AWG solid and 12-16 stranded wire
- · High-leverage design for more cutting power
- Wide knurled head easily grabs and twists wires
- 6-32 and 8-32 bolt shearing
- · Crimps non-insulated connectors, lugs and terminals
- Full length, induction hardened cutting knives for hard wire



CAT. NO: J215-8CR NZ REF: KL4668



Cat. No.	Strips and Cuts	Crimps	Shears	Overall Length	Knife Length	Handle Color	Handle Finish	Weight
J215-8CR	10 - 14 AWG Solid, 12 - 16 AWG Stranded	10 - 22 AWG	6-32 and 8-32	222.3 mm	19 mm	Dark Blue/Black	Journeyman™	0.37 kg



Diagonal-Cutting Pliers

Plastic-dipped handles for comfort and ease of identification

Hot-riveted joint ensures smooth action and no handle wobble

> Induction-hardened cutting knives for long life

> > hort jaws and beveled cutting edges permit close cutting of wire



from Klein's US-made, proprietary blend

High-Leverage Diagonal-Cutting Pliers

Includes core diagonal-cutting features plus:

• High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other pliers design



CAT. NO: D2000-28





Plastic-Dipped

JOURNEYMAN™ Dual-Material

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
D228-8 (KL1510)	205 mm	21 mm	30 mm	21 mm	Standard	Red	Plastic Dipped	0.27 kg
J228-8	206 mm	21 mm	30 mm	21 mm	Standard	Red/Black	Journeyman™	0.30 kg
Pliers with heavy-o	duty cutting knives (designed to cut AC	SR, screws, nails	and most hardened	d wire			
D2000-28 (KL1520)	205 mm	21 mm	30 mm	21 mm	Standard	Light Blue	Plastic Dipped	0.27 kg
J2000-28	206 mm	21 mm	30 mm	21 mm	Standard	Light Blue/Black	Journeyman™	0.30 kg

High-Leverage Diagonal-Cutting Pliers - Angled Head

Includes core diagonal-cutting features plus:

- Angled head design for easy work in confined spaces
- · High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting and gripping power than other plier designs











Plastic-Dipped

JOURNEYMAN™ Dual-Material

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
D248-8 (KL1690)	205 mm	21 mm	30 mm	21 mm	Standard	Red	Plastic-Dipped	0.27 kg
Pliers with heavy-di	uty cutting knives d	esigned to cut AC	SR, screws, nails	and most hardene	d wire			
D2000-49	229 mm	21 mm	30 mm	21 mm	Standard	Yellow	Plastic Dipped	0.29 kg
D2000-48 (KL1700)	203 mm	21 mm	30 mm	21 mm	Standard	Blue	Plastic Dipped	0.27 kg
J2000-48 (KL1705)	206 mm	21 mm	30 mm	21 mm	Standard	Light Blue/Black	Journeyman™	0.28 kg



Diagonal-Cutting Pliers

High-Leverage Heavy-Duty Diagonal-Cutting Pliers

Includes core diagonal-cutting features plus:

- Extra long cutting blades provide greater cutting ability
- Beefier, more reinforced head lasts longer than standard diagonal-cutters
- 2000 series heavy-duty cutting knives cut ACSR, screws, nails and most hardened wire
- Angled blade design for easier access to cut screws and bolts
- High-leverage design has 46% more cutting power
- Dual-material handles provide better grip and added comfort



Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
J2000-59	229 mm	32 mm	31 mm	16 mm	Standard	Blue/Black	Journeyman™	0.5 kg

Heavy-Duty Diagonal-Cutting Pliers - Tapered Nose

Includes core diagonal-cutting features plus:

- Heavier design for all-purpose use
- Tapered nose for easy working in confined areas



NZ REF: KL1720 Weight

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
D252-6	156 mm	21 mm	20 mm	21 mm	Standard	Red	Plastic-Dipped	0.17 kg

Standard Diagonal-Cutting Pliers

Includes core diagonal-cutting features plus:

- Tapered nose for easy working in confined areas and close tip cutting
- Trims plastic or printed circuit boards (Cat. D210-6C)



Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
D245-5	129 mm	18 mm	14 mm	18 mm	Standard	Red	Plastic-Dipped	0.09 kg
D210-6C	156 mm	20 mm	18 mm	21 mm	Semi-Flush	Red	Plastic-Dipped	0.13 kg

Diagonal-Cutting Electronics Pliers

Midget Diagonal-Cutting Pliers

Includes core diagonal-cutting features plus:

- Sharp pointed nose for precise tip cutting
- Tapered nose for easy working in confined areas and close tip cutting (Cat No. D295-4C, & D257-4C)
- Spring-loaded for self-opening action (Not available on Cat. No. D257-4C)
- Narrow jaw and hinge for delicate work in tight areas (Cat. No. D259-4C)



CAT. NO: D257-4C







D257-4C

D259-40

D209-5C

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
D209-5C	129 mm	18 mm	14 mm	18 mm	Semi-Flush	Light Blue	Plastic-Dipped	0.09 kg
D259-4C (KL1810)	108 mm	13 mm	10 mm	13 mm	Flush	Light Blue	Plastic-Dipped	0.05 kg
D257-4C (KL1780)	108 mm	13 mm	11 mm	13 mm	Semi-Flush	Light Blue	Plastic-Dipped	0.05 kg



Diagonal-Cutting Electronics Pliers

Precision Flush Cutter

- Shears wire up to 16 AWG producing a flat, flush cut
- · Shear cutting greatly reduces cutting effort and minimizes fly-off
- Molded flared grips for greater tool control
- Steel return spring for increased comfort during repetitive cutting
- Ultra slim profile increases access in confined areas
- Heat treated for increased durability



VAI. NO: D2/5-5 NZ REF: KL1840

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight
D275-5	127 mm	11 mm	7 mm	2 mm	Flush	Red	Plastic	0.05 kg



Standard Long-Nose Pliers - Side-Cutting

Includes core long-nose features plus:

- Induction-hardened, long-lasting cutting knives
- Knurled jaws for sure wrapping and looping
- Curved handles provide greater tool control



CAT. NO: D203-6

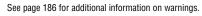




Plastic-Dipped

JOURNEYMAN™ Dual-Material

Refer to the insulated sec	tion for insulated pliers.							Dι	ual-Material
Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Diameter	Knife Length	Handle Color	Handle Finish	Weight
D203-6 (KL1240)	169 mm	48 mm	18 mm	10 mm	2 mm	13 mm	Yellow	Plastic-Dipped	0.12 kg
D203-7 (KL1270)	183 mm	62 mm	18 mm	10 mm	2 mm	13 mm	Yellow	Plastic-Dipped	0.13 kg
J203-6	172 mm	48 mm	18 mm	10 mm	2 mm	13 mm	Yellow/Black	Journeyman™	0.14 kg









Long-Nose Pliers

Heavy-Duty Long-Nose Pliers - Side-Cutting

Includes core long-nose features plus:

- Induction-hardened cutting knives for long life
- · Heavier design for greater cutting power
- Extended handles provide added reach and greater leverage



NZ REF: KL1300







Plastic-Dipped

JOURNEYMAN™ **Dual-Material**

Refer to the insulated section for insulated pliers.								Dual-Material	
Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Diameter	Knife Length	Handle Color	Handle Finish	Weight
D203-8	214 mm	59 mm	25 mm	13 mm	3 mm	16 mm	Yellow	Plastic-Dipped	0.27 kg
D203-8N	214 mm	59 mm	25 mm	13 mm	3 mm	16 mm	Yellow	Plastic-Dipped	0.27 kg

All-Purpose Pliers

- Strips 8-16 AWG solid and 10-18 AWG stranded wire
- Induction-hardened cutting knives for increased wire cutting performance, including hard wire
- Long nose for grabbing and looping wire
- 6-32 and 8-32 screw shearing



CAT. NO: J206-8C NZ REF: KL1305

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Diameter	Knife Length	Handle Color	Handle Finish	Weight
J206-8C	219 mm	56 mm	25 mm	13 mm	3 mm	13 mm	Yellow/Black	Journeyman™	0.27 kg

Curved Long-Nose Pliers

Includes core long-nose features plus:

- 70° bent nose for maximum work visibility in confined areas
- Knurled jaws for sure wrapping and looping
- Curved handles provide greater tool control



CAT. NO: D302-6

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Diameter	Handle Color	Handle Finish	Weight
D302-6	162 mm	38 mm	18 mm	10 mm	2 mm	Yellow	Plastic Dipped	0.14 kg

Crimping Tools

Crimping/Cutting Tools

- Marked for insulated and non-insulated solderless terminals and connectors
- Tapered nose design for working in confined areas
- Specially hardened wire cutter in nose
- Hot-riveted joint for smooth action and no handle wobble



CAT. NO: J1005

Cat. No.	Handle Finish	Crimps	Overall Length	Handle Color	Weight
J1005	Journeyman™	10 - 22 AWG	248 mm	Red/Black	0.84 lb (0.38 kg)





Pump Pliers

Klaw™ Pump Pliers

- Compact, narrow design for easy work in small or hard to reach spaces
- Gripping surfaces with specially hardened teeth for reduced wear and positive gripping
- Extended grips for added comfort



CAT. NO: D504-7

Cat. No.	Overall Length	Jaw Capacity	Handle Color	Handle Finish	Weight
D504-7	187 mm	35 mm	Yellow	Plastic-Dipped	0.15 kg
D504-12	305 mm	70 mm	Yellow	Plastic-Dipped	0.6 kg

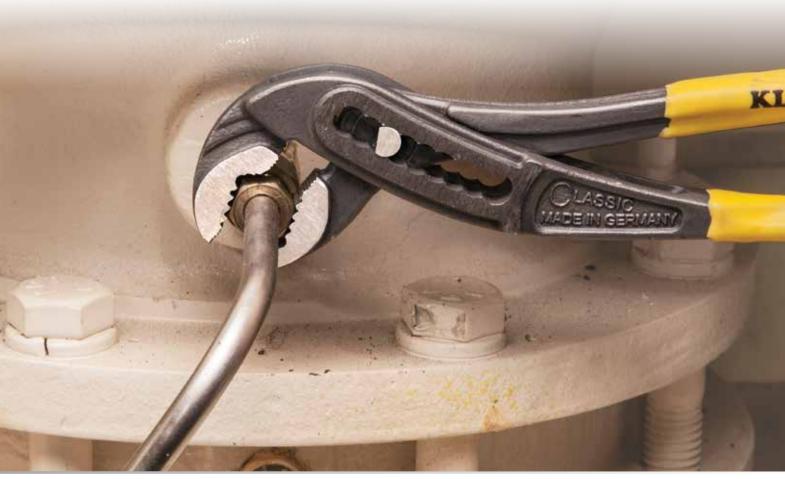
Pump Pliers

- Secure tongue and groove design for non-slip grip even with heavy pressure
- Wide range of versatile jaw positions
- Quick adjust rivet allows one handed, fast and easy adjustment of plier jaws



CAT. NO: D502-10 NZ REF: KL2230

Cat. No.	Overall Length	Jaw Capacity	Handle Color	Handle Finish	Weight
D502-10	254 mm	45 mm	Yellow	Plastic-Dipped	0.44 kg













The durability of a plier with the sharpness and precision of a wire stripper.



KLEIN-KURVE_{TM}
comfort grip handles
for reduced hand fatigue

Induction hardened cutting knives for longer cut life

6-32 and 8-32 screw shearing holes





Klein-Kurve® Wire Stripper / Cutter / Crimper Multi Tool

- Wire Stripper with six stripping holes for 8-18 AWG solid and 10-20 AWG stranded wire
- Multi Tool's side cut design features longer knives for more cutting
- · Crimps non-insulated connectors, lugs and terminals for 10-20 AWG stranded wire
- Knurled jaw for twisting, grabbing and looping wire
- Twists up to three wires at a time
- High leverage design for improved performance
- Klein-Kurve® comfort grip handles for reduced hand fatigue
- Induction hardened cutting knives for long life
- Hot-riveted joint ensures smooth action and no handle wobble



CAT. NO: K12065CR

Cat. No.	Strips and Cuts	Screw Shearing	Crimping Capacity	Overall Length	Handle Color	Weight
K12065CR	8-18 AWG Solid, 10-20 AWG Stranded	6-32 and 8-32	10-20 AWG Stranded	211 mm	Blue/White	0.29 kg

Long-Nose Wire Stripper/Crimper

- Crimps insulated and non-insulated connectors
- Tip designed to grab, pull and bend the smallest of wires
- · Reinforced head (patent pending design) reduces flex
- Optimized for ideal leverage when stripping and crimping
- Precision shear-type cutting blades for easier cutting
- Do no use to cut steel wire patent-pending
- Patent US D827,403



CAT. NO: 1009

Cat. No.	Strips and Cuts	Bolt Size	Crimping Capacity	Overall Length	Handle Color	Weight
1009	10 - 20 AWG Solid; 12 - 22 AWG Stranded	6 - 32 and 8 - 32	10 - 22 AWG	197 mm	Gray/Yellow	0.15 kg
1019	10 - 26 AWG Solid; 12 - 28 AWG Stranded	6 - 32 and 8 - 32	10 - 22 AWG insulated and non-insulated terminals, B connectors, Scotchlok® IDC connectors	197 mm	Gray/Red	0.15 kg



Wire Strippers/Cutters

Wire Strippers/Cutters

- Strips six standard wire sizes without nicking wire
- Scissors action of 13 mm wide cutter makes clean cuts with little effort
- · Serrated nose jaws to bend, shape or pull wire; holes for looping wire ends
- Spring-loaded for self-opening action
- Comfortable, plastic-covered handles
- Wide blades of 13 mm make clean cuts with little effort



CAT. NO: 1011M

Cat. No.	Strips and Cuts	Overall Length	Handle Color	Weight
1011M	0.15 to 4.0 mm ² Stranded Wire	156 mm	Blue	0.10 kg

Self-Adjusting Wire Stripper/Cutter

- Wire Stripper with stripping head that adjusts to strip: 10-20 AWG solid, 12-22 AWG stranded, and 12/2 and 14/2 Romex® cable (all sizes) and other nonmetallic (type NM) sheathed cable
- Adjustable stopper to control the length of the core strip
- Tensioning thumb wheel allows for precise stripping of smaller gauge wire
- Convenient wire cutter in handle
- Grooved grips are designed for added comfort
- Perfect for HVAC applications because it allows you to strip the outer jacket of thermostat wire and then all the associated individual wires



CAT. NO: 11061 NZ REF: KL11061

Cat. No.	Strips and Cuts	Hold-Open Spring	Overall Length	Handle Color	Weight
11061	10 - 20 AWG Solid, 12 - 22 AWG Stranded, 12/2 and 14/2 Romex® Wire	No	210 mm	Blue/Black	0.36 kg

Romex® is a registered trademark of Southwire Company.

Katapult Wire Stripper/Cutter

- Cuts and strips 22 AWG wire with ease
- Compound action wire stripping: grip and strip via single action squeezing motion
- · Precision machined stripping holes easily remove jacket insulation without damaging the wire
- Removes up to 24 mm in length of the insulation layer (jacket layer) in a single step
- Tension loaded wire-grip gently holds the cable in place while retaining the cable geometry
- Additional cutting blades and spare parts available



CAT. NO: 11063W NZ REF: KL11063

Cat. No.	Strips and Cuts	Hold-Open Spring	Overall Length	Handle Color	Weight
11063W	8 - 20 AWG Solid, 10 - 22 AWG Stranded	Yes	168 mm	Blue/Black	0.34 kg

Ratcheting Crimper

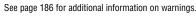
Ratcheting Crimper - Insulated Terminals

- Crimps insulated terminals onto 10-22 AWG stranded copper wire
- Adjustable compound action design puts more crimping power into each squeeze
- Three crimping cavities in one tool
- Built-in ratchet ensures full-cycle crimping for a uniform crimp every time
- Unique cavity design provides consistent crimp from either side of the tool
- Dial adjusts the amount of force applied to the crimp
- Dual-material molded grips provide added comfort



CAT NO: 3005CB NZ REF: KL3005CR

Cat. No.	Front Cavity	Mid Cavity	Rear Cavity	Handle Finish	Handle Color	Overall Length
3005CR	RED 22-16 AWG Insulated Terminals	BLUE 16-14 AWG Insulated Terminals	YELLOW 12-10 AWG Insulated Terminals	Dual-Material	Red/Black	229 mm











High Leverage Cable Cutters

Riveted joint ensures smooth action and no handle wobble

Precision hardened and sharpened shear cutters for clean, round cuts

Forged Tool steel for durability

Two blade profiles maximize the efficiency of cutting and stripping

Cat. No.	Cutting Capacity	Handle Color	Handle Finish	Overall Length	Weight
63213	Up to 9mm Aluminium and Copper	Red	Plastic-Dipped	160 mm	170 g
63217	Up to 11mm Aluminium and Copper	Red	Plastic-Dipped	210 mm	300 g
William with the					

High-Leverage Cable Cutters

Includes core cable cutter features plus:

- High-leverage design for exceptional cutting capability
- · Precision, one-hand shearing action
- Cable-gripping shear-type jaws
- Perfect for working in confined spaces
- Fits in most tool pouches/belts



CAT. NO: 63050 NZ REF: KL6341

Cat. No.	Cutting Capacity	Handle Color	Handle Finish	Overall Length	Weight
63050	4/0 Aluminum, 2/0 Soft Copper, 100-Pair 24 AWG Communications Cable	Red	Plastic-Dipped	239 mm	0.41 kg

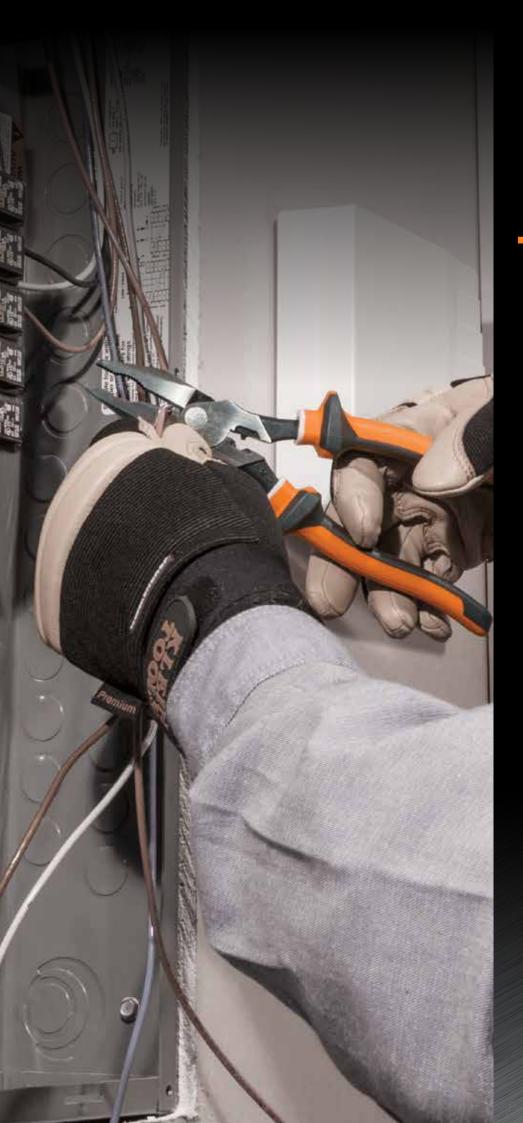
Multi-Cable Cutter

- Hardened steel precision-ground cutting blades for long life
- Copper curved cutter cleanly cuts round copper cable without compression or frayed ends
- Double-dipped grips for comfort
- · Coil spring provides fast self-opening action
- Holes for looping and bending wire
- Convenient lock for storage also prevents accidental locking and loosening over time



CAT. NO: 63020

Cat. No.	Cutting Capacity	Screw Shearing	Handle Color	Overall Length	Weight
63020	Up to 12 AWG Solid and Stranded Copper Wire, Up to 0.032" (.081 mm) Diameter Stainless Steel, Up to 1/2" (12.7 mm) Multi-conductor Cable, Coaxial Cable RG-6 Quad, RG-59 and RG-62	6-32 & 8-32	Red	178 mm	0.20 kg



Insulated Tools

Klein insulated tools combine excellent functionality along with reduced of risk of injury where a tool might make contact with an energized source with voltage up to 1000 volts.





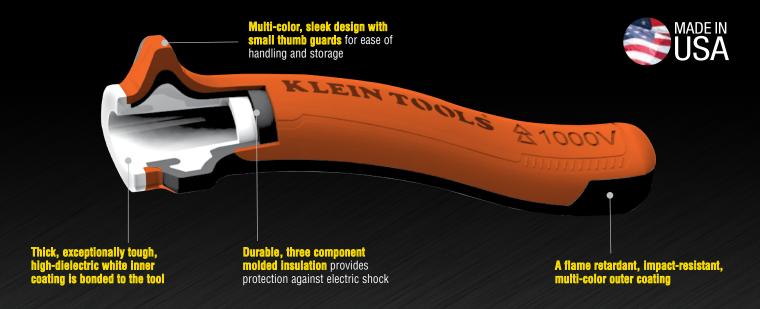
For Professionals... Since 1857™



Electrician's Insulated Tools (EINS)







All Klein insulated tools comply with ASTM F-1505 and IEC 60900 standards for insulated tools and are clearly marked with the official international 1000-volt rating symbol. Not all tools with plastic coatings or plastic handles provide protection against electrical shock. Only use those tools that are marked with the official international 1000-volt rating symbol, as shown, if there is any chance that the tool will make contact with an energized source.

The Electrician's line of insulated tools (EINS) have passed VDE third party testing certification to the IEC 60900 standard.

AWARNING: Only use tools that are marked with the official international 1000-volt rating symbol shown below, if there is any chance that the tools will make contact with an energized source.

AWARNING: Wear approved eye protection. Always inspect your tools before use. Do not use if orange coating cracks, breaks or becomes damaged. Destroy tool if white layer shows through orange layer.

AWARNING: Do NOT touch uninsulated portion of the tool or any conductive object when either might contact an energized source.

AWARNING: Whenever possible, always de-energize lines and equipment prior to working on or around them. Klein insulated tools are designed only to reduce the chance of injury where the tool may make contact with an energized source.

AWARNING: Because moisture, films, or other surface contaminants are conductive, Klein insulated tools must be kept clean, dry, and free of any surface contaminants.

Insulated High-Leverage Side-Cutting Pliers

Includes core insulated features plus:

- High-leverage design provides 46% greater cutting and gripping power than other plier designs
- Streamlined design with sure-gripping, cross-hatched knurled jaws



CAT. NO: 213-9NE-EINS

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Color	Handle Finish	Weight	
213-8NE-EINS	224 mm	37 mm	28 mm	37 mm	19 mm	Orange/Gray	3-Layer	0.5 kg	
213-9NE-EINS	245 mm	41 mm	33 mm	41 mm	20 mm	Orange/Gray	3-Layer	0.6 kg	
Pliers with heavy-duty cutting knives design to cut ACSR, screws, nails and most hardened wire									
2000-9NE-EINS	245 mm	41 mm	33 mm	41 mm	20 mm	Orange/Gray	3-Layer	0.6 kg	



Insulated Pliers

Insulated High-Leverage Diagonal-Cutting Pliers

Includes core insulated features plus:

- High-leverage design. Rivet is closer to the cutting edge for 36% greater cutting power than other pliers designs
- 13° angled head for easier work in confined spaces (Cat. No. 2000-48-EINS)



CAT. NO: 220-6-EINS

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Cutting Knives	Handle Color	Handle Finish	Weight			
220-6-EINS	160 mm	20 mm	23 mm	11 mm	Standard	Orange/Gray	3-Layer	0.19 kg			
Pliers with heavy-duty cutting knives design to cut ACSR, screws, nails and most hardened wire											
2000-28-EINS	210 mm	21 mm	30 mm	21 mm	Standard	Orange/Gray	3-Layer	0.32 kg			
2000-48-EINS (KL9005)	210 mm	21 mm	30 mm	21 mm	Standard	Orange/Gray	3-Layer	0.32 kg			

Insulated Long-Nose Pliers — Side-Cutting

Includes core insulated features plus:

- Knurled jaws for sure wrapping and looping
- Curved handles to provide greater tool control (Cat. Nos. 203-6-EINS, and 203-7-EINS)
- Heavier design for easier, more comfortable cutting and an extended handle for added reach and leverage (Cat. No. 203-8-EINS)



CAT. NO: 203-8-EINS **NZ REF:** KL9011

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Diameter	Knife Length	Handle Color	Handle Finish	Weight
203-6-EINS	175 mm	49 mm	18 mm	10 mm	2 mm	13 mm	Orange/Gray	3-Layer	0.14 kg
203-7-EINS (KL9010)	187 mm	62 mm	18 mm	10 mm	2 mm	13 mm	Orange/Gray	3-Layer	0.14 kg
203-8-EINS (KL9011)	225 mm	59 mm	25 mm	13 mm	3 mm	16 mm	Orange/Gray	3-Layer	0.32 kg

Insulated Combination Pliers

Includes core insulated features plus:

- Crimping die behind hinge for superior leverage crimping non-insulated connectors, lugs and terminals
- Toothed pipe-grip for greater power



CAT. NO: 12098-EINS NZ REF: KL9000

Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Knife Length	Handle Color	Handle Finish	Weight
12098-EINS	225 mm	45 mm	26 mm	45 mm	19 mm	Orange/Gray	3-Layer	0.5 kg

Handle Color

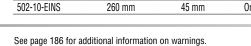
Orange/Gray

Insulated Pump Pliers

Includes core insulated features plus:

Secure tongue and groove design for non-slip grip - even with heavy pressure





Overall Length

Jaw Capacity

45 mm



Cat. No.

502-10-EINS



Insulated Cutting/Stripping Tools

Insulated High-Leverage Cable Cutter

Includes core insulated features plus:

- · High-leverage design for exceptional cutting capability
- Cable-gripping shear-type jaws
- Precision, one-hand shearing action
- Perfect for working in confined spaces
- Do NOT use to cut steel or ACSR



Cat. No.	Cutting Capacity	Overall Length	Handle Color	Weight
63050-EINS	4/0 Aluminum, 2/0 Soft Copper, 100-Pair 24 AWG Communications Cable	245 mm	Orange/Black	0.5 kg

Insulated Wire Stripper/Cutters

Includes core insulated features plus:

- Cuts, strips, loops and gauges wire
- Spring-loaded for self-opening
- Compact, lightweight wire-stripping and cutting tool
- Narrow serrated nose fits into tight places for easy bending, shaping and pulling of wire
- Cleanly shear 6-32 and 8-32 screws
- Do not use for cutting steel wire or bolts
- Hardened spring steel with precision-ground stripping holes for easy removal of insulation



CAT. NO: 11054-EINS

Cat. No.	Strips and Cuts	Screw Shearing	Overall Length	Handle Color	Weight
11054-EINS	8 - 16 AWG Solid, 10 - 18 AWG Stranded	6-32 and 8-32	203 mm	Orange/Gray	0.23 kg

Insulated Lineman's Skinning Knife

- Large molded, comfort grip handle with measuring marks to help measure stripping length of wire
- Tough, tempered steel blade provides maximum sharpness and durability to withstand frequent cable scoring
- Notch on back of blade for scraping or removing insulation



Cat. No.	Special Features	Blade Length	Overall Length	Blade Material	Handle Color	Weight
1571-INS	Measuring Marks on Handle	60 mm	222 mm	1095 Steel	Orange	0.16 kg

8-in-1 Insulated Interchangeable Screwdriver Set

- Interchangeable Insulated Screwdriver Set with an insulated handle, 5 interchangeable insulated blades, and a carrying pouch
- Screwdriver Set includes tip sizes: two #2 Phillips, two 1/4-Inch Slotted, one #1 Phillips, one #1 Square, one #2 Square, and one 3/16-Inch Slotted
- Securely and easily release the blade with a quick twist of the lock collar
- Interchangeable blades with a slim-tip to fit tight terminal blocks
- Handle and blade have a 1000-Volt insulation rating and meets or exceeds ASTM F1505 standard for insulation
- A layer of orange impact and flame resistant insulation protects from electric shock
- Cushion-Grip handles for greater torque and comfort
- Double-ended blades have a 3.5-Inch shaft length, single-ended blades have 5.75-Inch shaft length
- Durable, carrying roll pouch keeps the set organized and protected

Cat. No.	Phillips Bits	Slotted Bits	Square Bits	Shaft Length	Handle Color	Overall Length	Weight
32288	#1, #2	1/4", 3/16"	#2	89 - 146 mm	Black/Orange	210 mm	0.42 kg







Anti-roll design prevents tool loss

VDE Insulated Tools (INS)

№ 1000 V

IEC 60900 and ASTM F1505 standards, for insulated tools, and are clearly marked with the official 1000-volt rating symbol

Durable, molded insulation to meet or exceed all VDE standards for insulated tools

> Ergonomic handle grip for greater torque and comfort

Slimmer tips* for easier access to circuit breakers and other tight spaces.

▲WARNING: Only use tools that are marked with the official international 1000-volt rating symbol shown below, if there is any chance that the tools will make contact with an energized source.

AWARNING: Wear approved eye protection. Always inspect your tools before use. Do not use if orange coating cracks, breaks or becomes damaged. Destroy tool if white layer shows through orange layer.









AWARNING: Do NOT touch uninsulated portion of the tool or any conductive object when either might contact an energized source.

AWARNING: Whenever possible, always de-energize lines and equipment prior to working on or around them. Klein insulated tools are designed only to reduce the chance of injury where the tool may make contact with an energized source.

AWARNING: Because moisture, films, or other surface contaminants are conductive, Klein insulated tools must be kept clean, dry, and free of any surface contaminants.

VDE Insulated Screwdrivers





Cat. No.	Tip Type	Shank Type	Shank Length	Overall Length
32228INS (KLA32228INS)	2.5 mm Cabinet Tip	Round	75 mm	180 mm
32229INS (KLA32229INS)	3.0 mm Cabinet Tip	Round	100 mm	180 mm
32230INS (KLA32230INS)	3.5 mm Cabinet Tip	Round	100 mm	190 mm
32243INS (KLA32243INS)	4.0 mm Cabinet Tip	Round	100 mm	190 mm
32244INS (KLA32244INS)	5.5 mm Cabinet Tip	Round	125 mm	225 mm
32245INS (KLA32245INS)	6.5 mm Cabinet Tip	Round	150 mm	260 mm
32246INS (KLA32246INS)	#1 Pozidriv®	Round	80 mm	180 mm
32247INS (KLA32247INS)	#2 Pozidriv®	Round	100 mm	210 mm
32258INS (KLA32258INS)	#1 Phillips Tip	Round	80 mm	180 mm
32259INS (KLA32259INS)	#2 Phillips Tip	Round	100 mm	210 mm
32318-INS	#1 Square Drive	Round	80 mm	180 mm
32319-INS	#2 Square Drive	Round	100 mm	210 mm



32690-INS	4pc Insulate	d Screwdriver Set
	Cat. No.	Tip Type
	32229INS	3.0 mm Cabinet Tip Screwdriver
•	32243INS	4.0 mm Cabinet Tip Screwdriver
•	32258INS	#1 Phillips Tip Screwdriver,
	32259INS	#2 Phillips Tip Screwdriver



32316INS

2316-INS	6pc Insulated	d Screwdriver Set
	Cat. No.	Tip Type
	32229INS	3.0 mm Cabinet Tip Screwdriver
3	32243INS	4.0 mm Cabinet Tip Screwdriver
	32244INS	5.5 mm Cabinet Tip Screwdriver
•	32259INS	#2 Phillips Tip Screwdriver
•	32247INS	#2 Pozidriv® Tip Screwdriver
,	32319INS	#2 Square Drive Screwdriver



323	1	7	ı	N	18

-INS	6pc Insulat	ed Screwdriver Set
	Cat. No.	Tip Type
	32229INS	3.0 mm Cabinet Tip Screwdriver
	32243INS	4.0 mm Cabinet Tip Screwdriver
	32244INS	5.5 mm Cabinet Tip Screwdriver
	32245INS	6.5 mm Cabinet Tip Screwdriver
	32258INS	#1 Phillips Tip Screwdriver
	32259INS	#2 Phillips Tip Screwdriver

See page 186 for additional information on warnings.









www.kleintoolsnz.com



Nut Driver Set, 1000V Insulated, 9-piece

- Tool set includes 3/16-Inch, 1/4-Inch, 5/16-Inch, 11/32-Inch, 3/8-Inch, 7/16-Inch, 1/2-Inch, 9/16-Inch and 5/8-Inch nut drivers
- Nut Drivers with Full hollow shafts facilitate work on long bolt applications
- Durable, two-layer, molded insulation protects against electric shock
- Tip-Ident® quickly identifies nut driver and size
- Highly durable, black, nylon case features custom-fitted tool pockets
- Replacement case available (Cat. No. 33534)
- Meets or exceeds IEC 60900: 2012, ASTM F1505-10 standards for insulated tools



Cat. No.	Nut Drivers	Shaft Length	Handle Color	Overall Length	Weight
33524	3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2", 9/16" and 5/8"	152 mm	Black/Orange	248 - 289 mm	2.72 kg

Screwdriver Set, 1000V Insulated Slotted and Phillips, 9-Piece

- Screwdriver Set features three sizes of cabinet, keystone and Phillips tips. (See individual tool listings for more details)
- Insulated screwdrivers have two layers of insulation to provide protection against electric shock
- Meets or exceeds IEC 60900: 2012, ASTM F1505-10 standards for insulated tools
- Highly durable, black nylon case features zipper closure, custom-fitted pockets and an extra pocket for additional storage
- Replacement case available (Cat. No. 33538)



CAT. NO: 33528

Cat. No.	Screwdrivers	Handle Color	Overall Length	Weight
33528	3/16", 1/8", 1/4", 5/16", 3/8", #1, #2, #3	Black/Orange	279 mm	2.5 kg

Screwdriver Set, 1000V Insulated Slotted and Phillips, 2-Piece

- Screwdriver Set includes one 1/4-Inch Cabinet-Tip (Cat. No. 602-4-INS) and one #2 Phillips-Tip (Cat. No. 603-4-INS)
- Insulated screwdrivers reduce risk with work up to 1000 volts
- Durable, two-laver, molded insulation
- Orange outer coating is flame and impact resistant
- White high-dielectric inner coating is bonded to the steel
- Cushion-Grip handles for greater torque and comfort
- Meets or exceeds IEC 60900 and ASTM F1505 standards for insulation
- Made in the USA
- Includes non-magnetic tips



CAT. NO: 33532-INS

Cat. No.	Screwdrivers	Shank Length	Handle Color	Overall Length	Weight
33532-INS	1/4" Cabinet Tip, #2 Phillips Tip	102 mm	Black	180 mm	0.27 kg

Slim-Tip Insulated Screwdrivers, Cushion Grip

- Slim-Tip Insulated Screwdriver Set includes: 4-Inch round shank in a #2 Phillips and 1/4-Inch Cabinet tips; 6-Inch round shank in a #2 Square and 3/16-Inch Cabinet tips
- 1000-Volt rated insulated screwdrivers with slim-tips that allow for greater access into tight spaces
- Insulated blade is flush with the tip to help reduce nicking the insulation
- Layer of orange impact and flame-resistant insulation protects from energized sources
- Cushion-grip handles for greater torque and comfort
- Meets or exceeds ASTM F-1505-16 and IEC 60900:2018
- Made in the USA

Cat. No.	Screwdrivers	Set	Blade Length	Overall Length	Weight
33734-INS	1/4" Cabinet Tip, #2 Phillips Tip, 3/16" Cabinet Tip, #2 Square Tip	4 Piece	Black	211 - 262 mm	0.3 kg







Insulated Screwdriver, #1 Phillips Tip, 4-Inch

- 1000V Rated for safety
- Durable, two-layer, molded insulation to meet or exceed all ASTM and IEC standards for insulated tools
- Cushion-Grip handles for greater torque and comfort
- Custom US-made tool steel
- Made in the USA



CAT. NO: 6334INS

Insulated #2 Phillips Screwdriver, 7-Inch

- 1000V Rated for safety
- Durable, two-layer, molded insulation to meet or exceed all ASTM and IEC standards for insulated tools
- · Cushion-Grip handle for greater torque and comfort
- Custom US-made tool steel
- Made in the USA



Insulated Screwdriver, #3 Phillips, 7-Inch Shank

- 1000V Rated for safety
- Durable, two-layer, molded insulation to meet or exceed all ASTM and IEC standards for insulated tools
- · Cushion-Grip handles for greater torque and comfort
- Custom US-made tool steel
- Made in the USA



Insulated Screwdriver, 3/16-Inch Cabinet, 4-Inch

- 1000V Rated for safety
- Durable, flame-retardant, molded dual-layer insulation
- Custom US-made tool steel
- Made in the USA



CAT. NO: 601-4-INS

Insulated Screwdriver, 3/16-Inch Cabinet, 7-Inch

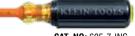
- 1000V Rated for safety
- Durable, two-layer, molded insulation to meet or exceed all ASTM and IEC standards for insulated tools
- Custom US-made tool steel
- Cushion-Grip handle for superior torque and comfort
- Made in the USA



CAT. NO: 601-7-INS

Insulated 1/4-Inch Cabinet Tip Screwdriver, 7-Inch

- 1000V Rated for safety
- Durable, two-layer, molded insulation to meet or exceed all ASTM and IEC standards for insulated tools
- Custom US-made tool steel
- Cushion-Grip handle for superior torque and comfort
- Made in the USA



CAT. NO: 605-7-INS

See page 186 for additional information on warnings.



Screwdrivers and Sockets

Offering a variety of tip types, hex sizes, shaft lengths, and handle designs, Klein has the screwdrivers and nut drivers professionals demand to get the job done with comfort and ease.



For Professionals... Since 1857™

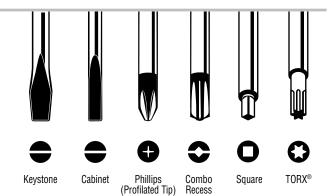


Introduction

Extra-quality features have made the Klein name famous for hand tools - features that assure greater convenience, comfort and efficiency in use, plus exceptional strength and durability.

All Klein drivers are made of the highest quality tempered steel and carefully heat-treated for maximum strength. Shafts have integral flanges that provide an extrastrong, torque-proof anchor in the handle. Strong, durable black tips are forged and precision ground with square edges to fit screw openings securely. They resist slippage and provide positive turning action.

Cushion-Grip screwdrivers feature super-comfortable, sure-grip handles on top-quality blades for the professional. All Klein screwdrivers meet or exceed applicable ANSI and MIL specifications.



Using Screwdrivers and Nut Drivers

The size of the screw or nut and the type of opening it has determines which driver to use. Here are a few tips on how to use a driver that can be of benefit, because screwdrivers are the most often misused and abused hand tools of all.

- 1. Never use a driver to do another tool's job.
 - Using a driver as a pry bar, scraper, or a chisel can ruin the tool, spoil the work and cause injury.
- 2. Never push a driver beyond its capacity.

Make a pilot hole for the screw for easier driving. Use square-shank drivers for heavy work.

3. Never expose a driver to excessive heat.

Direct flame can draw the temper from the metal, weakening and possibly warping it, making it unsafe and inefficient to use.

Never use a driver at an angle to the screw.

Always keep the shank perpendicular to the screw head. Driving at an angle or using a point that is too small can spoil the screw or slip and damage the work.

- 5. Never depend on a driver's handle or covered blade to insulate you from electricity. Plastic and Cushion-Grip handles are intended only to provide a firm, comfortable grip. Insulated blades are intended only as a protective measure against shorting out components. Only use insulated tools that are marked with the official international 1000-volt rating symbol if there is any chance that the tool will make contact with an energized source.
- 6. Discard damaged or worn drivers.

TORX® is a registered trademark of Acument Intellectual Properties, LLC

Multi-Bit Cushion-Grip Screwdrivers/Nut Drivers

15-in-1 Screwdriver/Nut Drivers

- Includes 14 different screwdriver tips plus a 1/4" nut driver
- Internal storage for screwdriver bits



in handle



CAT. NO: 32290













Cat. No.	Description	Nut Driver Sizes	Phillips Bits	Slotted Bits	Square Bits	Hex Bits	Combo Bits	Torx® Bits	Other Bits	Shank Length	Handle Color	Overall Length	Weight
32290	Multi-Bit Screwdriver with Storage 15-Piece	1/4"	#0, #1, #2, #3	4 mm, 6 mm	#1, #2	_	#1, #2	#10, #15, #20, #25	_	102 mm	Black	216 mm	0.23 kg
32291	Tamper-proof Multi-Bit Screwdriver Set 15-Piece	1/4"	_	_	_	Pins: 1/8", 9/64", 5/32", 3/16"	_	Pins: #10, #15, #20, #25, #27, #30	Spanners: #6, #8, #10, #12	102 mm	Black	216 mm	0.23 kg

Multi-Bit Screwdriver/Nut Drivers

Integrated screwdriver/nut driver shaft holds popular tips and converts nut driver sizes



CAT. NO: 32500









Cat. No.	Nut Driver Sizes	Phillips Bits	Slotted Bits	Square Bits	TORX® Bits	Shank Length	Handle Color	Overall Length	Weight
32500	3/8", 5/16", 1/4"	#1, #2	6.4 mm, 4.8 mm	#1, #2	T10, T15	76.2 mm	Yellow/Black	184 mm	0.23 kg

TORX® is a registered trademark of Acument Intellectual Properties, LLC











CAT. NO: 32305

CAT. NO: 32596



Multi-Bit Cushion-Grip Screwdrivers/Nut Drivers

15-in-1 Multi-Bit Ratcheting Screwdriver

- Multi-Bit screwdriver features a durable ratcheting mechanism for faster and easier all-day driving
- On-board storage of 14 different double-sided screwdriver bits and a 1/4-Inch nut driver
- Industrial-strength bits that are conveniently housed in the handle
- Collar sets ratchet direction at forward, fixed and reverse
- Cushion-Grip handle for great torque and maximum comfort
- Spin cap for optimum and precise control
- Includes Phillips (#0, #1, #2, #3), Slotted (3/16-Inch, 1/4-Inch), Square (#1, #2), Torx® (T10, T15, T20, T25), and Combo (#1, #2) bits
- TORX® is a registered trademark of Acument Intellectual Properties, LLC

Cat. No.	Nut Driver Sizes	Phillips Bits	Slotted Bits	Square Bits	TORX® Bits	Combo Bits	Handle Color	Shank Length	Overall Length
32305	1/4"	#0, #1, #2, #3	3/16", 1/4"	#1, #2	T10, T15, T20, T25	#1, #2	Black/Yellow	89 mm	221 mm

HVAC Slide Drive™ Multi-Bit Screwdriver / Nut Driver, 8-in-1

- 8-in-1 Screwdriver / Nut Driver with unique, patented head that slides back and forth to switch from 1/4-Inch to 5/16-Inch magnetic hex-head screwdriver
- Thumb nut locks tip setting
- Features a specialty bit for installation/removal of common TR-4 Schrader® valves
- Includes 1/4-Inch and 3/8-Inch hollow nut drivers, as well as #2 Phillips, 1/8-Inch (3 mm) and 1/4-Inch (6 mm) slotted screwdriver tips
- Cushion-Grip handle for greater torque and comfort
- Great for HVAC applications including thermostat installation and control work



U.S. patent 7,654,175 B2

All-in-1 Precision Screwdriver Set with Case

- Precision screwdriver set includes 39 bits for various applications including repair of most Apple® products
- Powerful magnets inside barrel to better retain bits, as well as pick-up and hold fasteners
- Reversible barrel has standard and extended-reach ends
- Compact carrying case features a stay-shut latch and extra-long bits for easier access
- Spin cap offers optimum and precise control
- Industrial-strength heat treated bits
- Cushion-Grip handles for maximum comfort
- Apple® is registered trademarks of Apple Inc; TORX® is a registered trademark of Acument Intellectual Properties, LLC; Tri-Wing® is a registered trademark of Phillips Screw Company









CAT. NO: 32717





Multi-Bit Cushion-Grip Screwdrivers/Nut Drivers

Non-Ratcheting Magnetic Screwdriver with 32-Piece Tamper-proof Bit Set

- Sturdy bit and screw holding magnet allows for screws to fit securely in place for easy use
- Durable PVC black block allows for easy storage of standard 1/4" bits
- Includes complete tamper-proof bit set in block



Cat. No.	Nut Driver Sizes	Hex Bits	TORX® Bits	Other Bits	Shank Length	Handle Color	Overall Length	Weight
32510	1/4"	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm	T7, T8, T10, T15, T20, T25, T27, T30, T40	Spanner: 4, 6, 8, 10; Tri-Wing®: 1, 2; TORQ-SET®: 6 , 8, 10	89 mm	Yellow/Black	203 mm	0.32 kg

TORX® is a registered trademark of Acument Intellectual Properties, LLC. TORQ-SET® and Tri-Wing® are registered trademarks of Phillips Screw Co.

Stubby Multi-Bit Screwdriver/Nut Driver

• Compact design features standard 32 mm shaft allowing easy access to tight work spaces

Slotted Bits

3.2 mm, 2.4 mm

Shaft holds four universal tips and converts to two nut driver sizes



CAT. NO: 32561





Cat. No.	Nut Driver Sizes	Phillips Bits	Slotted Bits	Shank Length	Handle Color	Overall Length	Weight
32561	1/4", 5/16"	#1, #2	4.8 mm, 6.4 mm	32 mm	Yellow/Black	87 mm	0.07 kg

Shank Length

71 mm

TORX® Bits

4-in-1 Electronics Precision Screwdrivers

Four different tips in one tool

Cat. No.

32581

Rotating cap for optimum and precise control

Phillips Bits

#0, #00



Handle Color

Yellow/Black

CAT. NO: 32581





erall Length	Weight
165 mm	31 g

6-in-1 Ratcheting Stubby Screwdrivers

• Ratcheting mechanism allows user to work faster with more efficiency









Slotted Bits Shank Length **Overall Length** 1/4", 5/16" #1, #2 4.8 mm, 6.4 mm 33 mm Yellow/Black 89 mm 0.05 kg













Multi-Bit Cushion-Grip Screwdrivers/Nut Drivers

Torque Screwdriver Set

- Compact, easy to use set includes the Torque Screwdriver, a 6-piece bit set and a rugged case with foam inserts for a tight, organized fit
- Increased usability and readability plus a wider torque range (0.56-4.52 Nm)
- Tri-lobular design with a textured finish for better grip
- Lightweight, aluminum frame
- N.I.S.T. traceable calibration certificate
- Set includes six 89 mm power drivers and a 1/4" nut driver





Cat. No.	Included	Weight
57032	Phillips: #1 and #2; Slotted: 4.8 mm and 6.4 mm; Square: #1 and #2; and 1/4" Nut Driver	0.5 kg

Metric 7-in-1 Nut Driver

- Seven sizes in one tool allow for easy, one-handed driving
- Strong, rare earth magnets (7, 8, 9, 10 and 12 mm) securely hold nuts and bolts
- Spring coil (11 and 13 mm) holds nuts and bolts in place without the use of magnets
- Hollow shafts (7, 8, 10, 11 and 13 mm) for driving nuts deep onto bolts or threaded rod
- Heavy-duty handle and shaft exceed the torque performance of regular nut drivers
- Wrench-assist on handle for added torque on tough jobs
- Color-coded bands for easy identification







CAT. NO: 57032

Cat. No.	Nut Driver Sizes	Overall Length	Weight
32807MAGM	7, 8, 9, 10, 11, 12 and 13 mm	242 mm	0.51 kg

Screw-Holding Screwdrivers

Slotted Plastic-Handle Screw-Holding Screwdrivers

- Positive gripping action holds, starts, and drives slotted screws in awkward, hard-to-reach places
- Split-blade screw-holding driver wedges into screw slot
- Not designed for torquing or tightening

Cat. No.	Tip Type	Shank Type	Overall Length	Weight
K23 (KL8105)	4.8 mm Slotted	Round	133 mm	0.02 kg
K28 (KL8110)	4.8 mm Slotted	Round	260 mm	0.05 kg
K34 (KL8115)	6.4 mm Slotted	Round	197 mm	0.05 kg
K36 (KL8120)	6.4 mm Slotted	Round	248 mm	0.07 kg
K38 (KL8125)	6.4 mm Slotted	Round	299 mm	0.09 kg
K44	7.9 mm Slotted	Round	210 mm	0.11 kg
K46 (KL8126)	7.9 mm Slotted	Round	260 mm	0.11 kg
K48 (KL8128)	7.9 mm Slotted	Round	311 mm	0.14 kg

Precision blade for use with small precision screws. Blade thickness of 0.7 mm expanding to 1.1 mm. ‡ Blade thickness of 1.1 mm expanding to 2.1 mm. K21 and K23 have pocket clips.



CAT. NO: K36

Cat. No.	Set Contain	ns	Weight
SK234	Slotted Hold	ing Screwdriver Set, 3-Piece	0.18 kg
	Cat. No.	Description	
	K23	4.8 mm Slotted Screw Holding Screwdriver	
	K34	6.4 mm Slotted Screw Holding Screwdriver	_
	K46	7.9 mm Slotted Holding Screwdriver	_

Phillips-Tip Screw-Holding Screwdrivers

- Positive gripping action holds and starts Phillips screws in awkward, hard-to-reach places
- Blade separates to hold the fastener
- Not designed for torquing or tightening



Cat. No.	Tip Type	Shank Type	Overall Length	Weight
K19	Phillips	Round	229 mm	22.7 g

See page 186 for additional information on warnings.



Knives and Cutting Tools

Klein provides a wide range of knives and other cutting tools for professional applications across all trades.



For Professionals... Since 1857™



Utility Knives

Auto-Loading Folding Retractable Utility Knife

- Auto-loading blade for faster and safer blade changes
- Internal blade storage holds and includes 3 blades
- Rubber grips on handle for improved control and comfort
- High quality triple ground blades stay sharp longer
- Lock release to close knife
- Equipped with belt clip

Cat. No.	Overall Length	Length Closed	Weight
44130	181 mm	105 mm	210 g

- Push button to easily open and close
- Rugged, heavy-duty and durable construction
- Contains a wire stripping notch

Folding Utility Knife

- · High quality triple ground blades stay sharp longer
- · Rubber grips on handle for improved control and comfort
- The bright orange handle color makes this knife easy to find in a tool bag or pouch

Cat. No.	Overall Length	Length Closed	Weight
44131	159 mm	102 mm	120 g

Klein Kurve™ Retractable Utility Knife

- Rugged, heavy-duty and durable construction
- Contains a wire-stripping notch
- Internal blade storage includes and holds 6 blades
- High quality triple ground blades stay sharp longer
- · Rubber grips on handle for improved control and comfort
- Designed for improved cutting ability

Cat. No.	Overall Length	Length Closed	Weight
44133	178 mm	165 mm	210 g

CAT. NO: 44130 NZ REF: KL44130



CAT. NO: 44131 NZ REF: KL44131



CAT. NO: 44133 NZ REF: KL44133

Camouflage Assisted-Open Folding Utility Knife

- Realtree Xtra® Camo design handle with rubber grip and TPR overmold for a secure grip
- Rugged, heavy-duty and durable construction
- Spring-assisted opening with dual thumb stud for right- or left-handed use
- Blade locks when in closed position
- Low carry pocket clip
- Lanyard hole

Cat. No.	Overall Length	Length Closed	Weight
44135	178 mm	159 mm	210 g



CAT. NO: 44135 NZ REF: KL44135



Realtree AP-XTRA Camouflage Design

© 2012 of Jordan Outdoor Enterprises, Ltd., all rights reserved.







Utility Knives

Auto-Retracting Utility Knife

- Rugged, heavy-duty and durable construction
- Knife incorporates a wire-stripping notch
- Safety yellow handle for greater visibility
- Blade removal/insertion without disassembly
- Blade retracts fully into housing when cut is complete





CAT. NO: 44136 NZ REF: KL44136

Blade retracts fully into housing when cut is complete.



Cat. No.	Overall Length	Length Closed	Weight
44136	146 mm	144 mm	200 g

Pocket Knives

Compact Pocket Knife

- Lockback secures blade in open position
- Corrosion resistant black aluminum handle
- Reversible thumb stud for easy one-hand opening
- Lanyard hole allows knife to be tethered
- Low-carry pocket clip



CAT. NO: 44142 NZ REF: KL44142

Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
44142	Drop Point	73 mm	440A Stainless Steel	Aluminum	97 mm	172 mm	400 g

Stainless Steel Pocket Knife 3-Inch Steel Blade

- Compact and lightweight knife
- Stainless steel handle and blade for long life
- Hardwood handle inserts on both sides
- Modified spearpoint blade locks open



CAT. NO: 44034

Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
44034	Drop Point	76 mm	Stainless Steel	Stainless Steel	102 mm	178 mm	113 g

Electrician's Pocket Knives

- Liner lock secures blade in open position
- Stripping notches on the back of the blade
- Low-carry pocket clip



NZ REF: KL44201

Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
44201	Drop Point	86 mm	440A Stainless Steel	Anodized Aluminum	108 mm	202 mm	136 g





Pocket Knives

Rugged Pocket Knives

- Liner lock secures blade in open position
- Rugged handle with rubber finger grip
- Lanyard hole allows knife to be tethered
- Low-carry pocket clip

Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
44220	Drop Point	89 mm	440A Stainless Steel	Anodized Aluminum	120 mm	208 mm	140 g
44222	Tanto	89 mm	440A Stainless Steel	Nylon/Rubber	120 mm	208 mm	110 g



CAT. NO: 44220 NZ REF: KL44220



CAT. NO: 44222 NZ REF: KL44222



Realtree AP-XTRA Camouflage Design © 2012 of Jordan Outdoor Enterprises, Ltd., All rights reserved.

Slitting Pocket Knife

- Liner lock secures blade in open position
- Durable plastic handle
- Shackle allows knife to be tethered



CAT. NO: 1550-24 NZ REF: KL4480

Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
1550-24	Hawkbill	70 mm	Stainless Steel	Plastic	114 mm	172 mm	70 g

Carbon Steel Hawkbill Slitting Blade Pocket Knife

- Extra-large curved hawkbill slitting-blade 2-5/8-Inch (67 mm) long
- Ideal for heavy-duty line work
- Woodgrain plastic handle
- Blade locks open



Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
1550-4	Hawkbill	67 mm	Carbon Steel	Plastic	105 mm	156 mm	70 g
'							

Sportsman Knife with Drop Point Blade

- Curved handle with big bolster
- Brass bolster and ebony wood handle
- Stainless steel blade and brass lining ensure long life
- 3-3/8-Inch (86 mm) blade length
- Blade locks open
- Comes with leather snap case with belt loop





CAT. NO: 44037

Cat. No.	Blade Type	Blade Length	Blade Material	Handle Material	Length Closed	Overall Length	Weight
44037	Clip Point	86 mm	Stainless Steel	Ebony Wood	127 mm	222 mm	187 g





Pocket Knives

Cable Skinning Utility Knife with Replaceable Blade

- Heavy-duty sheepsfoot blade is replaceable to eliminate the need for sharpening
- Blade locks securely by a captive lock screw, making it as a solid as a fixed-blade knife
- Thumb stud for easy opening
- Handle has rubber exterior for increased grip
- A lock-back design securely locks the blade in the open position
- Pocket clip for easy storage and convenient access



Cat. No.	Special Features	Blade Length	Overall Length	Blade Material	Handle Color	Weight
44218	Replaceable Blade	64 mm	198 mm	440A Stainless Steel	Orange/Black	160 g

Cable/Lineman's Skinning Knives

- Features 76 mm steel blade that withstand frequent scoring and slitting of cable jacket
- Notch on blade back for scraping or removing wire insulation
- Comfortable textured handle with finger grooves and guard
- No contact between stainless steel ring and hardened steel blade
- Rectangle-shaped handle design for attachment to some utility hot stick equipment



Cat. No.	Special Features	Blade Length	Overall Length	Blade Material	Handle Color	Weight
1570-3	Hook Blade, Notch, and Ring	76 mm	203 mm	Steel	Black	140 g

Cable Splicer's Knife, 6-1/2-Inch

- Special-purpose short blade with comfortable, full-sized, heavy-duty handle
- Coping-type blade made of the finest cutlery steel, tough and carefully tempered to hold its edge
- Handle is textured for comfort and firm grip
- · Hang hole for easy storage and portability



GAI. NU: 44200

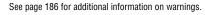
Cat. No.	Special Features	Blade Length	Overall Length	Blade Material	Handle Color	Weight
44200	Hook Blade, Notch, and Ring	45 mm	159 mm	1095 Steel	Black	68 g

Cable Splicer's Kit

- Includes cable splicer's knife, electricians scissors, and 2-pocket leather pouch
- Cuts cable, telephone wire, and strips insulation
- Dimensions: 2-1/8-Inch (54 mm) x 7-1/2-Inch (191 mm)
- Knife's textured handle provides comfortable grip
- Pouch is riveted and stitched for added durability
- Electrician's Scissors feature wire stripping notches

Cat. No.	Kit Contain:	\$	Weight
44037	Cable Splicer's Kit		0.23 kg
	Cat. No.	Description	
	44200	Cable Splicer's Knife, 6/12"	
	2100-7	Electrician's Scissors, Nickel Plated	
	5187	Scissors & Cable Splicer's Knife Holder	







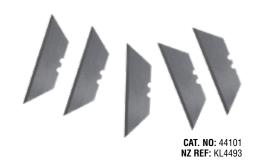


Replacement Blades

Utility Knife Blades, 5 Pack

- Heavy-duty razor-edged blades
- Universal size fits Klein and most other makes of utility knives
- Blades are reversible for extra life
- Includes: five utility knife replacement blades

Cat. No.	Blade Length	Blade Thickness	Pack Quantity
44101	61.9 mm (2.438")	0.6 mm (0.025")	5



Utility Blade Dispenser with 50 Blades

- 50 blades included
- High quality, triple ground blades stay sharp longer
- Gauge on dispenser indicates blades remaining
- Convenient interim storage for used blades
- Blades are compatible with all standard utility knives

Cat. No.	Overall Width	Dimensions	Pack Quantity
44103	32.9 mm	109.9 x 71.0 x 32.9 mm	50



CAT. NO: 44103

Replacement Hawkbill Blade for 44218 3-Pack

- 3-pack replacement blades for Cable Skinning Folding Utility Knife Cat. No. 44218
- Induction-hardened 440A stainless steel
- Heavy-duty hawkbill blade
- Note: to replace blade, loosen captive screw, pull old blade straight from the handle, replace with new blade and tighten the lock screw
- Patent US D808,749

Cat. No.	Blade Length	Blade Type	Pack Quantity
44219	63.5 mm (2.5")	Hawkbill	3



Sharpening Tools

Combination Knife and Scissors Sharpener

- High-grade, tungsten-carbide inserts sharpen both sides of the blade at the same time
- · Restores knife edge in three or four strokes
- Built-in finger guard helps to protect your hand
- Lightweight, compact size for easy carrying and storage
- Sharpens electrician's scissors, pocket knives, retractable-blade utility knives, razor blade knives and serrated knives

Cat. No.	Overall Length	Overall Width	Weight
48036	102 mm	57 mm	0.05 kg



⚠WARNING: Improper use of knife and scissors sharpener and/or failure to follow instructions can result in injuries. Keep your fingers behind the curved guard and your thumb securely on the multi-grooved thumb-rest indentation, never in front of it.







Utility

Klein Tools has established a reputation for manufacturing high quality safety, cutting and wire pulling tools to help linemen do their jobs. The company remains dedicated to making the best hand tools in the industry, and supporting linemen with quality and reliability they can count on every day.

For Professionals... Since 1857™



Safety Products

Lockouts with Interlocking Tabs

- Specifically designed for locking out power sources such as disconnects, switches, and panel boxes
- Double interlocking hasp of tempered steel with patented interlocking tabs for extra security
- Hasps are bright zinc-plated
- Riveted construction
- Six-hole locking bodies coated with red vinyl plastic
- Holes will accept up to 8 mm diameter shackles

Cat. No.	Closed Hasp I.D.	Weight
45201	38 mm	113 g



CAT. NO: 45201 NZ REF: KL9090

AWARNING: Use only in accordance with OSHA requirements.

Cable Cutters

Utility Cable and Rope Cutters

- Forged steel with black-oxide finish for long life
- Shear-type hook jaws grab and hold cable while shear-cutting action makes clean cuts
- Beveled tips for positive mating
- Hinge bolt with pin-set nut for proper blade tension



CAT NO: 63035

⚠WARNING: Do NOT cut steel or ACSR.

Cat. No.	Cutting Capacity	Handle Color	Overall Length	Weight
63035	MCM Cable 350 Copper, 350 Aluminum	Red	413 mm	0.8 kg

Stoffel® is a registered trademark of Stoffel Seals Corporation.

Ratcheting Cable Cutters

- Reduced hand force for easier cutting
- Patented two-step ratchet mechanism requires fewer strokes per cut
- Quick release lever opens blades easily in every cutting position to allow removal of the cable before completion of cut
- Hardened steel cutting blades for lasting strength and sharpness
- Locking lever keeps handles closed for easy transport; fits in a toolbox or bag

⚠WARNING: Do NOT cut steel or ACSR.



NZ REF: KL6355

Replacement parts available

(blades, handles, springs, pawl sets and release plates). Go to www.kleintools.com for a full listing of replacement parts.

Cat. No.	MCM Maximum Cable Capacity (Aluminum)	MCM Maximum Cable Capacity (Copper)	MCM Maximum Cable Capacity (Communication Cable)	Overall Length	Handle Color	Weight
63060	750 MCM	600 MCM	29 mm	260 mm	Red	0.6 kg

See page 186 for additional information on warnings





Cable Cutters

ACSR Ratcheting Cable Cutter

- High-leverage ratcheting mechanism for easier cutting
- Quick-release lever opens blades easily in every cutting position.
 (Allows removal of the cable before completion of cut)
- Hardened steel cutting blades for long lasting strength and sharpness
- Tools can be locked when not in use
- Cutting inserts with screws (Cat. No. 63800ACSR)



Replacement parts available

(blades, handles, springs, pawl sets and release plates) Go to www.kleintools.com for a full listing of replacement parts.

Cat. No.	MCM Maximum Cable Capacity (ACSR)	MCM Maximum Cable Capacity (Aluminum)	MCM Maximum Cable Capacity (Copper)	MCM Maximum Cable Capacity (Guy Strand)	Handle Color	Overall Length	Weight
63607	336 MCM	600 MCM	400 MCM	_	Yellow	260 mm	0.7 kg
63800ACSR	477 MCM	32 mm	25 mm	13 mm	Red	349 mm	1.5 kg

Ratcheting ACSR Cable Cutter - Heavy-Duty



- Ratchet-action design provides maximum leverage with minimum effort for heavy-duty use
- Forged, heat-treated, shear-type blades, plus 610 mm long fiberglass handles with heavy duty grips for comfort and slip resistance
- Blade-advance knob for fast rotation of the blade to engage the cable or other material being cut
- Quick-release mechanism allows for removal of the cable or rod before completion of the cut, if desired
- Not designed for cutting EHS guy strand or reinforcement rod
- Cuts steel and ACSR

CAT. NO: 63700

Cat. No.	Soft Cable Maximum Capacity	Steel Cable Maximum Capacity	Handle Color	Overall Length	Weight
63700	57 mm Diameter, 750 MCM Diameter, Copper or Aluminum	32 mm Diameter ACSR, ACAR, 11 mm Diameter Common Guy Strand, 16 mm Diameter Steel Wire Rope, 13 mm Diameter Steel Rod (C.R.S. SOFT)	Yellow	711 mm	6.4 kg



Types of Wire Pulling Grips

Klein Chicago[™], Parallel Jaw and Haven's[™] Grips are widely used in the power, communications, and general construction fields to pull wire and cable. The grips maintain temporary tension until the wire or cable can be permanently terminated.

Klein Chicago™ Grips

Designed for use on aluminum, copper, weatherproof coated wire, PVC covered conductors and messenger and guy strand

- Locking loop handles allow the jaws to be held in an open position for easy placement on wire or cable
- Available in Round, Double V, Single V and Aggressive jaw contours



Parallel Jaw Grips

Lightweight compact grips pull an exceptionally wide range of cable types and sizes

- Latch helps maintain cable position
- Large-diameter eye accommodates large hooks on hoists, winches and tackle blocks
- Available in Round and Double V jaw contours



Haven's™ Grips

Designed for use when a light, compact grip is desired where conductor deformation is not a factor

- Knurled eccentric jaw applies gripping pressure to 1/4" of cable area
- Some models include a swing latch that holds cable securely in jaw
- Recommended for messenger and guy strand and wire rope
- 1625 Series can be used for wire rope



Hot-line Latch

Designed for placing a grip on cable with a hot-line stick.

- The three notches in the hot-line latch adjust the balance of the grip to better match the direction of the cable sag
- When stick is removed, latch closes automatically to guard against grip accidentally disengaging from wire
- Standard hot-line grips are not supplied with springs or lock-open features
- Some grips are available with a positionable latch

Wire Pulling Grips Warnings

WARNING: Grips are to be used for temporary installation, not for permanent anchorage.

AWARNING: When used on/or near energized lines, ground, insulate, or isolate grip before pulling.

♠WARNING: Do not exceed rated capacity.

MARNING: Always match proper size and type of grip to application.

⚠WARNING: Before each use, clean jaw area and inspect grip for proper operation to avoid slippage.



Types of Jaw Contours

	l	
Single V	Steel Strand Cat. No.	
 Simple three-point contact jaws. Designed for use on small diameter bare wire and cable (solid and stranded). 	1613-30	
Double V	Steel Strand Cat. No.	Wide Range of Cables Cat. No.
 Four-point contact provides greater gripping pressure and assures proper alignment of wire and cable within the jaws. Designed for high strength messenger and guy strand and extra high-strength cables and conductors. 	1613-40, 1684-5, 1684-5H, 1692-5, 1684-74, and 1684-5F	1671-10
Round	ACSR and AAC Cat. No.	Wide Range of Cables Cat. No.
 Round jaws provide maximum contact and gripping power to minimize conductor deformation. (Smooth and knurled styles). Recommended for use on bare aluminum, and copper conductors. 	1628-30 SERIES 1656-20 1656-30 1656-40 1656-50 1656-60	1685-20 1685-31
Aggressive	Steel Strand Cat. No.	
Recommended for use when conductor deformation is not an issue or when a more aggressive bite is needed.	1604-20L 1625-20 (For Wire Rope) 1625-20 7/8 (For Wire Rope)	

Selecting the Proper Grip

Grip Recommendation

Klein Tools offers a service of recommending the proper grip for a particular application based on a sample of cable. This service is free of charge. All that we require is a minimum 6-9 foot (2-3 m) length of cable.

If there is ever a question about the safe condition of any grip, please contact Klein Tools New Zealand at 0800 553 466 or sales@kleintoolsnz.com

Three basic factors are needed in order to determine the proper grip for each specific application:

- 1. Type of wire or cable (ACSR, ACSS, AAC, Copper, Steel Strand).
- 2. AWG or MCM (diameter) of wire or cable.
- 3. Maximum safe load required.

See page 186 for additional information on warnings.







Recommended Care and Maintenance

Grip Cleaning, Lubricating and Inspecting

The following guidelines have been established to keep all grips in good working condition.

Cleaning





◀ Step 1. Use the Klein Grip Cleaning Wire Brush Set (Cat. No. 25450) or emery cloth to clean the surfaces of grip jaws



Step 2.
Spray degreaser on the grip jaws, all joints and moving parts



◀ Step 3. Use the Klein Grip Cleaning Wire Brush to remove dirt and debris from the grip jaws

Step 4. Wipe grips dry with soft cloth. Repeat all cleaning steps as necessary until grip is completely clean



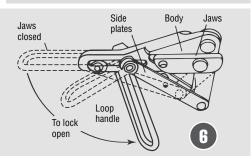
Lubricating







Step 6. Carefully inspect jaw condition, proper alignment of jaws and all parts, and possible distortion caused by exceeding safe-load specifications. Grips should operate smoothly. Spring-loaded grips should lock open with loop handle in "Down" position and should close automatically with loop handle "Up." The Klein Parallel Jaw Grip may be tested by opening and closing the jaws by hand, exercising proper caution. All parts and rivets should be checked for distortion



Note: Conductors may have a die-grease coating which can deposit on grip jaws. New conductors should be wiped clean before grip application. Grip jaws should be wiped clean of all grease before use.

Never repair any grip. Grips that are bent, misaligned, or otherwise distorted should be discarded and replaced.

If there is ever a question about the safe condition of any grip, please contact Klein Tools New Zealand Customer Service directly at 0800 553 466 or email: sales@kleintoolsnz.com

See page 186 for additional information on warnings



Chicago™ Grips

1656 Series

- Round, smooth inside jaw contour on this series of grips is ideal for bare ACSR
- Smooth jawed grips with maximum contact are less likely to cause cable deformation



2,041 kg Maximum Safe Load

Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
1656-20 (KE250)	5.08 to 10.16 mm	No	No	No	102 mm	1.2 kg
1656-30 (KE260)	7.87 to 13.46 mm	No	No	No	121 mm	1.5 kg

3,629 kg Maximum Safe Load

Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
1656-40	13.46 to 18.80 mm	No	No	No	140 mm	3.4 kg
1656-50	18.80 to 21.84 mm	No	No	No	140 mm	3.4 kg
1656-60	21.84 to 24.38 mm	No	No	No	140 mm	3.5 kg

1628 Series

- Round jaws are shaped to provide maximum contact with the cable, virtually eliminating cable deformation
- These grips are special order only; please allow 30 days for delivery; special order grips are not returnable

9,072 kg Maximum Safe Load

Cat. No.	Cable Diameter Range	Jaw Length	Weight
162830N	21.06 to 22.61 mm	273 mm	12.3 kg
1628300	22.63 to 24.21 mm	273 mm	12.3 kg
162830P	24.23 to 25.78 mm	273 mm	12.3 kg
162830R	25.81 to 27.38 mm	273 mm	12.3 kg
162830S	27.41 to 28.96 mm	273 mm	12.3 kg
162830T	28.95 to 30.55 mm	273 mm	12.3 kg
162830U	30.7 to 32 mm	273 mm	12.3 kg



Bare Wire-1613 Series

- Designed for working with solid and stranded bare wire from 2 mm to 5 mm
- Lightweight, cost-effective grip
- Single "V" groove jaw





680 kg Maximum Safe Load

Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
1613-30	2.03 mm to 5.08 mm	No	Yes	Yes	76 mm	0.7 kg

See Wire Pulling Grip Warnings on page 36





39



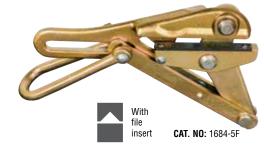
Chicago™ Grips

Aircraft Cable, EHS (Extra-High-Strength), Messenger and Guy Strand-1613, and 1684 Series

- Designed for cable sizes from 3 mm to 25 mm
- Double V grooves provide four-point contact, reducing chance of slipping and providing proper alignment of wire and cable.
 Cat. No. 1684-5F is a Single V with file insert.
- Sawtooth jaw profile provides extra gripping power







Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
2,041 kg Maximum Sa	fe Load					
1613-40 (KE170)	30.05 to 9.40 mm	Yes	No	Yes	106 mm	1.2 kg
1613-40H	30.05 to 9.40 mm	Yes	No	Yes	106 mm	1.43 kg
S1613-40H	30.05 to 9.40 mm	Yes	Yes	Yes	106 mm	1.4 kg
3,629 kg Maximum Sa	fe Load					
1684-5F	4.06 to 13.97 mm	No	Yes	Yes	127 mm	2.9 kg
1684-5	5.54 to 13.97 mm	No	Yes	Yes	127 mm	2.6 kg
1684-5H	5.54 to 13.97 mm	Yes	No	Yes	127 mm	2.9 kg
1692-5	5.54 to 13.97 mm	No	Yes	Yes	127 mm	2.5 kg
3,629 kg Maximum Sa	fe Load – EHS Specific					
1684-74	5.54 to 13.97 mm	No	Yes	Yes	127 mm	2.6 kg



À ₩



Steel Strand - Haven's™ Grips

Messenger and Guy Strand — 1604 Series

- Designed for use when light, compact grip is desired and where cable deformation is not a factor
- Gripping pressure of the knurled jaw is applied to 6.35 mm cable area
- Latch helps hold cable in the jaw

2,268 kg Maximum Safe Load









Wire Rope — 1625 Series

- Designed for use when light, compact grip is desired and where cable deformation is not a factor
- Gripping pressure of the knurled jaw is applied to 6.35 mm cable area
- All 1625 series have a swing latch to help hold cable in the jaw







3,629 kg Maximum Safe Load

Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Weight
1625-20	7.11 to 19.05 mm	No	No	No	1.6 kg
162520-7/8	9.65 to 22.35 mm	No	No	No	1.5 kg

Parallel Jaw Grips

Parallel Jaw Grip — HDPE Coated Cable

- Securely pulls HDPE-coated cable commonly known as "tree wire"
- Innovative high-traction surface grips the cable without damaging the outer jacket
- Tough carbide grit technology withstands even the harshest jobsite conditions









Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
1,814 kg Maximum Safe Load						
1716-70	15.9 to 34.6 mm	Yes	Yes	No	114 mm	2.3 kg
5,443 kg Maximum Safe Load						
1716-60	17.78 to 33.02 mm	No	Yes	No	130 mm	3.7 kg



41



Parallel Jaw Grips

KT4800 Series

- Features a round serrated jaw
- Hot latch closes automatically to guard against grip accidentally disengaging from wire
- Large opening in the handle to accommodate a wide variety of hooks on hoists, winches and tackle blocks



5,443 kg Maximum Safe Load

Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
KT4802	17.78 to 31.75 mm	Yes	No	No	130 mm	4.1 ka

Parallel Jaw Grips — 1685

- Lightweight, compact grips pull an exceptionally wide range of cable types and sizes
- Round inside-jaw contour for maximum contact to minimize cable deformation
- Lower jaw is serrated to firmly grip insulated cables and conductors
- Includes a latch that prevents the grip from falling in case of jaw disengagement from the cable
- Large-diameter eye accommodates large hooks on hoists, winches and tackle blocks



Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
2,041 kg Maximur	n Safe Load					
1685-20	3.98 to 22.22 mm	No	Yes	No	64 mm	1.2 kg
3,400 kg Maximur	n Safe Load					
1685-31	15.87 to 31.75 mm	Yes	Yes	No	144 mm	2.2 kg

Parallel Jaw Grips — 1671-10

- Longer jaws achieve a firm hold, reducing potential deformation to cable
- Designed with a Double V jaw contour, a latch, plus a large-diameter eye that accommodates large hooks on hoists, winches, and tackle blocks
- When latch is closed, it helps maintain cable position in grip jaws



4,536 kg Maximum Safe Load

Cat. No.	Cable Diameter	Hot Latch	Spring	Locking Handle	Jaw Length	Weight
1671-10	9.40 to 19.05 mm	No	No	No	111 mm	2.0 kg

HVAC and Construction

These job-matched tools are proven to stand the test of time with superior results.



For Professionals... Since 1857™



Cutting, Crimping & Notching Tools

Snap Lock Punch

- Drop-forged steel jaw easily punches 10 mm wide impressions on metal edges to easily join pieces of sheet metal, duct or pipe
- Compound-leverage mechanism for greater control and easy operation
- Comfortable, contoured grips cover hardened steel handles
- All-steel construction and nickel-chrome plated hardware provides long life and durability
- Convenient self-opening latch for one handed operation
- For use on sheet metal and vinyl and aluminum siding
- Quality tool for HVAC professionals provides superior results



CAT	ИU·	86528

Cat. No.	Overall Length	Handle Color	Weight
86528	213 mm	Blue/Gray	0.5 kg

Hand Notcher

- Cuts 30-degree V shapes in sheet metal quickly and easily to make corners
- Drop-forged, high impact steel jaw with 21 mm maximum throat depth
- Jaw's hook design allows easy notching of corners and take-off tabs without slippage
- For up to 24 gauge steel and 26 gauge stainless steel
- Comfortable, contoured grips cover hardened steel handles
- All-steel construction and nickel-chrome plated hardware provides long life and durability
- Convenient self-opening latch for one handed operation
- Designed for HVAC professionals who want superior results



Cat. No.	Overall Length	Handle Color	Weight
86526	232 mm	Blue/Gray	0.5 kg

5-Blade Crimper

- Produces factory-precision indentations in stove pipe and round duct with just a squeeze
- Compound-leverage mechanism makes precise indentations
- Crimps 24 gauge steel and 28 gauge stainless steel
- All steel construction with nickel-plating provides long life and durability
- Comfortable, contoured grips cover hardened steel handles
- Convenient self-opening latch for one-handed operation
- Quality tool for HVAC professionals provides superior results



Cat. No.	Crimps	Overall Length	Handle Color	Weight
86520	24 Gauge CRSM and 28 Gauge SSSM	260 mm	Blue/Gray	0.5 kg





Cutting, Crimping & Notching Tools

Duct Cutter with Wire Cutter

- All-steel double edge blade easily cuts fiber board, fiberglass lined, and flexible ducts
- Built-in wire cutter for convenience
- Compound leverage mechanism for easy wire cutting
- Comfortable, contoured grips cover hardened steel handles
- All-steel construction and nickel-chrome plated hardware provides long life and durability
- Convenient self-opening latch for one handed operation
- Designed for HVAC professionals who want superior results



CAT. NO: 89554

Cat. No.	Blade Length	Overall Length	Handle Color	Weight
89554	118 mm	319 mm	Blue/Gray	0.5 kg

Seaming & Folding Tools

Seamers - Straight and Offset

- Compound-leverage mechanism easily and accurately bends, seams, and flattens sheet metal and non-ferrous metals
- Jaw marked in 6 mm increments for precise bending measurements
- All-steel construction and nickel-chrome plated hardware provide long life and durability
- Vinyl grips with handle stops for added comfort and easy operation
- Straight-handle model is used for most general applications
- Offset-handle model is for use in overhead or confined areas
- Broader jaw model for forming wider folds
- Folds 22 gauge and 24 gauge stainless steel

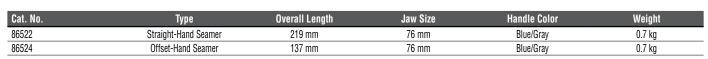








CAT. NO: 86524









Jab Saw

- Triple ground teeth cut drywall, wallboard, plywood and plastic
- Blade cuts in both directions (push and pull)
- Hardened, beveled blade point for scoring and plunge cuts
- Comfort cushion grip with thumb groove
- Flat-end grip for palming or punching through drywall



CAT. NO: 725 NZ REF: KL5164

Cat. No.	Blade Length	Overall Length	Weight
725	152 mm	305 mm	0.14 kg

High-Tension Hacksaw

- Adjustable blade tension up to 30,000 PSI for fast, precise cuts
- Soft-touch grips
- Alternative 45° mounting for flush cutting
- Front mount for reciprocating saw blades
- Blade storage in handle
- Includes 305 mm x 24 TPI bi-metal hack saw blade and 153 mm x 24 TPI bi-metal reciprocating saw blade

Cat. No.	Blade Length	Overall Length	Weight
702-12	305 mm	413 mm	0.7 kg

Adjustable Hole Saw

- Quickly and smoothly cuts cleaner holes in drywall and ceiling tiles
- Blades adjust to cut holes from 51 to 178 mm in diameter
- Fits most 10 mm and 13 mm drill chucks
- No binding while cutting
- No additional tools needed to adjust the hole saw
- Dust shield catches ceiling debris (2 included)
- Hex key included

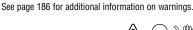
Cat. No.	Range	Weight
53731	51 mm to 178 mm	149.6 g



CAT. NO: 702-12









Flexible Drill Bits

Flex Bit Kit

- 3-piece kit includes folding placement tool, 13 mm - 14 mm O.D. pulling grip and 14 mm x 1.4 m flexible drill bit
- Everything you need to pull up to 14 mm O.D. wire
- Complete kit used for drilling and pulling wire and cable
- Use placement tool to guide bit through walls
- Flexible drill bit makes 14 mm holes in wood
- Pulling grip attaches to the flexible drill bit after the hole has been made and pulls 13 mm - 14 mm wire and cable

Cat. No.	Kit Contains		Weight
53721			0.9 kg
	Cat. No.	Description	
	53715SEN	Flex Bit Placement Tool	
	53718	Flex Bit Auger 14 mm x 1.4	
	KPS050SEN	Wire Pulling Grip 13 mm to 14 mm	



CAT. NO: 53721

CAT. NO: 53722

Flex Bit Extension

- Onnects to the end of a flex bit and extends the length
- For use with flex bits 3/4-Inch (19 mm) and larger
- Connection diameter is 5/8-Inch (16 mm)
- Ideal in applications where additional drill bit length is required, such as drilling between walls or several rafters

Cat. No.	Connection Diameter	Overall Length	Weight
53722	16 mm	137 cm	0.5 kg

PVC Cutters

Ratcheting PVC-Cutters

- Provide straight cuts I.D. 13 mm 32 mm, O.D. 16 mm 41 mm of white and gray schedule 40 and 80 PVC
- Quick, one-handed blade release
- Ratchet action allows easy, one-hand cutting
- No tools required for instant blade change
- Replacement blade and pin available



Cat. No.	PVC Cutting Capacity	Overall Length	Weight
50031	I.D. 13 mm to 32 mm; O.D. 16 mm to 41 mm	229 mm	0.5 kg

⚠WARNING: Do NOT cut cold PVC

 $\triangle \textbf{WARNING:}$ Do NOT use to cut metallic pipes, cable or wire.







CAT. NO: 50031



Construction Tools

Broad Head Podger Pins

- Forged, heat-treated bull pin increases efficiency by providing a larger striking surface
- Angled head and smooth blending of radii increase strength and reduce the danger of chipping
- Below the head, squared-off shoulders have been forged to provide a surface for applying wrench to loosen wedged bull pins
- Added resistance to "mushrooming" permits much longer use than conventional designs and the even taper reduces binding and hang-up



Cat. No.	Overall Length	Diameter	Point Diameter	Weight
3255	349 mm	32 mm	8 mm	1.3 kg
3256 (KE3256)	254 mm	27 mm	6 mm	0.7 kg

Tie-Wire Reel

- Klein's redesigned tie-wire reel allows loading pre-coiled tie wire onto the reel without having to remove the cover
- Rugged, lightweight reel is smooth aluminum alloy with wear parts made of steel
- Designed for left or right hand use
- Large, comfortable rewind knob

Cat. No.	Overall Width	Dimensions	Weight
27400	71 mm	159 mm Diameter x 71 mm Width	1.1 kg



Tie-Wire Reel Pad

- Worn on the belt under the Klein® tie-wire reel (Cat. No. 27400)
- Made of 5 mm thick rigging leather
- Underside has a sponge-rubber pad to minimize hip fatigue

Cat. No.	Belt Connection	Belt Width	Overall Length	Overall Width	Overall Height	Weight
27450	Slotted	51 mm	178 mm	178 mm	19 mm	0.14 kg

Tie-wire reel and ironworker's heavy-duty tie-wire belts also available.



CAT. NO: 27450

CAT. NO: 64306

Grizzly™ Bar



- A heavy, strong, multi-purpose tool that saves time and effort on the job
- The 76 mm width protects concrete when stripping forms
- Efficient blade angle and 1.4 m total length provide high leverage as a crow bar, as well as a nail and spike puller
- Blade is forged and hardened alloy with keyhole nail-pulling slot in center and "V" notch in tapered edge
- Can be used to help align walls during tilt-up construction, to roll and align large pipe, to remove shingles and flooring, and for many other stripping and prying tasks

Cat. No. Ov	erall Length	Body Diameter	End	Weight
64306	1.4 m	38 mm	60°	5.4 kg

NARNING: Always wear approved personal protective equipment.







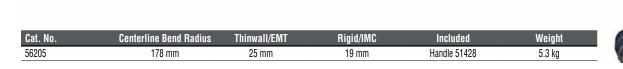


Iron Conduit Benders

marks help save time on the job

Includes core conduit bender features plus:

Bright orange color handle is easy to spot on the jobsite



Tube Benders & Cutters

Professional 4-in-1 Tube Bender

- Bends four popular tube sizes
- Calibrated markings for accurate left-hand, right-hand, and offset bends up to 90°
- For soft copper, aluminum, and steel tubing
- Bends 5 mm, 6 mm, 8 mm, and 10 mm 0.D. tubing

Cat. No.	Overall Length	Weight
89030	354 mm	0.5 kg

CAT. NO: 89030

CAT. NO: 56205

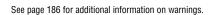
Professional Tube Cutter

- Accurate 4 roller tracking system no spiraling
- Professional reaming tool for stainless steel tubing
- Extra cutting wheel included in handle

Cat. No.	Cutting Capacity	Overall Length	Weight
88904	3 mm to 35 mm Steel and Copper Tubing	153 mm	0.6 kg



CAT. NO: 88904











Fiberglass Fish Tapes

- Strong S-Glass fiberglass fish tape material provides better pushing power and long life while maintaining its low-friction exterior and maneuverability
- Case design decreases payout effort and friction by optimizing the tape payout angle
- Slip-resistant housing geometry improves winding power and reduces binding
- Multi-position handle gives you a firm, steady grip as you pull or rewind the tape
- Durable 7-Inch spiral steel leader helps push through crowded conduit
- Descending laser etched markings in 1-Foot (0.3 m) increments allow you to more accurately measure conduit runs and the amount of tape left to pay out
- Polypropylene case and handle offer high impact resistance

Cat. No.	Tape Material	Tape Length	End/Leader	Overall Dimensions	Weight
56350	Fiberglass	15 m (50 ft)	Spiral Steel Leader	4.7 x 31.4 x 41.2 cm	1.3 kg



Multi-Groove Fiberglass Fish Tapes

Includes core fish tape features plus:

- Rigidity for long distance
- Less surface contact when pushing through crowded conduit for smoother tape feeding
- Durable 178 mm leader helps push through crowded conduit
- Available resin eyelet for total non-conductivity

Cat. No.	Tape Material	Tape Length	End/Leader	Overall Dimensions	Weight
56382	Multi-Groove Fiberglass	15 m (50 ft)	Nylon Eyelet	4.7 x 31.4 x 41.2 cm	1.2 kg

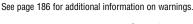


CAT. NO: 56325

Fish & Glow Rod Set

- Extra durable, lightweight and available in a variety of lengths and flexibilities
- Five 1/4-Inch (6 mm) diameter fish rods and one 3/16-Inch (5 mm) diameter glow rod assemble to a full 25-feet (7.62 m)
- Five rods with durable 5/16-Inch diameter stainless steel connectors and one rod with 1/4-Inch diameter stainless steel connectors

6.4 - 4.8 mm (1/4" - 3/16") (5) 4' (1.2m) Lo-Flex Fish Rods, (1) 5' (1.3m) Mid-Flex Glow Rod with Bullet Nose and Hook Attachments







PPE & Safety Products

As important as tools are, personal protective equipment and safety gear are the foundation at any job. Klein Tools is committed to building the best safety gear to keep you safe from head to toe and be sure that you can keep working every day.



For Professionals... Since 1857™





Klein Cooling Towel

- Advanced PVA cooling technology
- Feels cooler than ambient air temperature
- Activates quickly; under a minute!
- Stays cool for hours
- Multi-use; reactivate several times
- 13-Inch x 29.5-Inch (330 mm x 749 mm)
- To activate or re-use, wet the towel and gently wring out the excess water
- Machine or hand wash with mild detergent; air dry only
- Store damp in storage tube with cap off for daily use





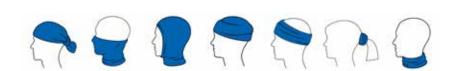
Cat. No.	Colour	Material	Overall Width	Overall Length
60090	Blue	PVA	33 cm (13")	74.9 cm (29.5")
60093	Gray	FVA	33 (111 (13)	74.9 (111 (29.0)

Neck and Face Cooling Band

- This cooling band is designed using super evaporative performance knit fabric
- Secure fit and won't unravel with sewn elastic ends
- Anti-odor treatment for long lasting freshness
- Seamless, moisture-wicking fabric can be worn wet or dry
- When wet, cooling is instant and can last for hours
- UPF 50+ sun protection from harmful UV rays
- Versatile cooling band can be worn many ways
- Can be worn by itself or under a hard hat
- One Size Fits Most
- Reflective accents
- Machine washable
- Also available in High-Visibility Yellow (Cat. No. 60465)



Cat. No.	Colour	Material	Overall Width	Overall Length	
60439	Blue	000/ Daluartan 00/ Carandan	05.4 (40")	FO 0 (00")	
60465	High-Visibility Yellow	92% Polyester, 8% Spandex	25.4 cm (10")	50.8 cm (20")	





Neck and Face Warming Half-Band, Black

- Top portion of warming band covers the face and has two layers of protection
- Moisture wicking knit fabric on top portion has anti-odor treatment for freshness
- 270-Gram fleece on bottom portion for warmth in cold conditions
- Secure fit and won't unravel with sewn elastic edge
- One size fits most
- Reflective accents
- Machine washable

Cat. No.	Description	Color	Material	Overall Length
60455	Neck and Face Warming Band	Black	Exterior: 92% Polyester, 8% Spandex; Interior: 90% Polyester, 10% Spandex	20" (50.8 cm)
60466	Neck and Face Warming Half-Band	DIAUK	Top Portion: 92% Polyester, 8% Spandex; Bottom Portion: 90% Polyester, 10% Spandex	12" (30.5 cm)









Lightweight Gel Knee Pads

- Lightweight knee pads have slip resistant rubber caps to grip kneeling surface for enhanced stability and balance
- Pressure dispersed with gel and EVA foam that cushions the knee
- Fatigue reduced by gel design that also provides lightweight comfort and protection
- Bottom strap is webbed
- Top strap is elastic
- · Cinch-tight straps provide comfortable, snug fit
- Clips hold tight and keep straps secure



Cat. No.	Material	Closure Type	Overall Length	Overall Height	Overall Width
60184	TPE 40%, Neoprene 20%, EVA Foam 20%, Polyester 15%, Nylon 5%	Clip	152 mm (6")	305 mm (12")	152 mm (6")

Tradesman Pro™ Knee Pads

- Five layers of impact resistant material for protection and comfort
- For comfort: an inner fabric layer of neoprene, an over-sized impact-absorbing gel layer, a molded polyurethane foam layer
- For protection: a super-tough 600d outer fabric layer, a protective outer shell with stabilizing non-slip surface
- Single strap doesn't bunch behind your leg
- Quick-fasten buckle

Cat. No.	Material	Overall Length	Overall Height	Overall Width
55629	Neoprene/Polyurethane	88.9 mm (3.5")	241.3 mm (9.5")	190.5 mm (7.5")



CAT. NO: 55629

Tradesman Pro™ Kneeling Pad

- 1" (25.4 mm) thick, resilient NBR foam protects your knees
- Kneeling pad won't stay compressed, it bounces back to original form
- Chamfered safety edge with orange stripes provides visual and tactile
- awareness of edge (Cat. No. 60136)
- Large size allows you to move without moving the pad each time
- Built-in handle allows convenient transport or hanging
- Closed-cell foam is resistant to petroleum and is silicone-free
- Use kneeling or standing; great for anti-fatigue
- Water repellent
- Indoor or outdoor use; hand washable



Cat. No.	Description	Material	Colour	Overall Length	Overall Width	Overall Height
60135	Tradesman Pro™ Standard Kneeling Pad	NBR Foam	Black	533 mm (21")	25.4 mm (1")	355 mm (14")
60136	Tradesman Pro™ Large Kneeling Pad	NBR Foam	Black	711 mm (28")	25.4 mm (1")	406 mm (16")





Tradesman Pro™ Shoe Covers, Large

- High quality, durable nylon construction
- Water resistant
- High traction, slip resistant soles (exceeds 0.5 COF per ASTM D1894)
- Reusable; 6-9 month average lifespan with daily use
- Easy on and off
- Machine wash cold, air dry
- 1 black pair per package
- Proudly Made in the USA with Global Components

Cat. No.	Colour	Size	Package Quantity
55488	Black	Extra Large: Fits Men's Boot 13.5-17	1 Pair
55489	Black	Large: Men's Boot 10.5-13 or Women's Boot 11 and Up	1 Pair



CAT. NO: 55488

Klein Kleaners® Hand Cleaning Towels

- Simple and convenient pre-moistened towels
- Powerful, yet gentle pumice-like cleaning action
- Quickly loosens, dissolves, and absorbs dirt and grease
- Features a natural citrus solvent that's gentler than petroleum-based hand cleaners
- For additional information, read the Material Safety Data Sheet for this product

Cat. No.	Towel Size	Package Quantity
51425	228.6 mm x 304.8 mm(9" x 12")	72



CAT. NO: 51425 NZ REF: KL5142

Tool Tethers

Tool Tether, 10-Pound Maximum Load

- Keep your tools close at hand when working at height
- Maximum working capacity of 10-pounds (4.5 kg)
- Relaxed length of 32-Inches (812.8 mm)
- Stretched length of 60-Inches (1524 mm)

Otheten	ca icrigin or oo in	51163 (102 4 111111)				GAI. NO. III
Cat. No.	Hook Material	Hook Type	Cable Material	Maximum Load Capacity	Relaxed Length	Stretched Length
TT1	Steel	Carabiner	Polypropylene	4.5 kg (10lb)	81.3 cm (32")	152.4 cm (60")





Triple-Locking Tool Tether, 15-Pound Max

- Keep your tools close at hand when working at height
- Maximum working capacity of 15-pounds (7 kg.)
- Triple-locking carabiner for additional security
- Relaxed length: 32-Inches (813 mm)
- Stretched length: 51-Inches (1295 mm)

Cat. No.	Hook Material	Hook Type	Cable Material	Maximum Load Capacity	Relaxed Length	Stretched Length
TT2	Aluminium Alloy	Triple-Locking Carabiner	Nylon Webbing	6.8 kg (15lb)	81.3 cm (32")	129.5 cm (51")





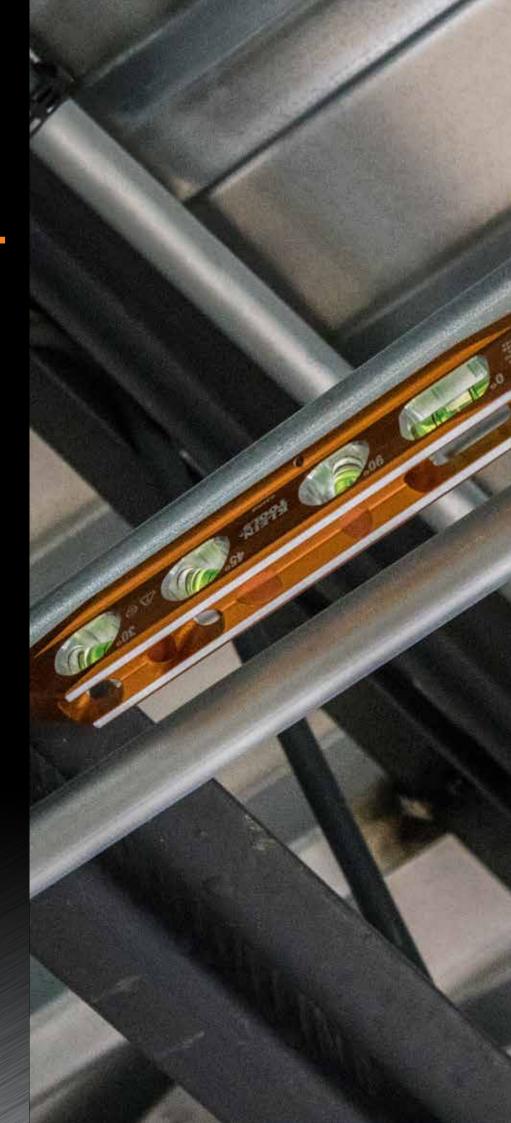
See page 186 for additional information on warnings.





Levels and Measuring Tools

Quick, easy and accurate measurements can mean the difference between a job well done and one that misses the mark. Klein offers a variety of levels and other measuring devices that will help you measure up any task.



For Professionals... Since 1857™



Levels

Aluminum Torpedo Levels

- Aluminum frame with orange body for added visibility and durability
- Locking track prevents powerful rare-earth magnets from falling out
- Top V-groove fits contour of pipe
- Large high-visibility vials are easy to read



CAT. NO: 935R

Cat. No.	Number of Vials	Type of Vials	Overall Length	Weight
935R	3	0°, 90°, 45°	9" (228.6 mm)	0.53 lb (0.24 kg)

Torpedo Level

- Strip magnet bottom holds securely to conduit and metal surfaces
- High-visibility orange level won't get lost on conduit
- Large high-visibility vials are easy to read
- Top V-groove fits contour of pipe



CAT. NO: 935

Cat. No.	Number of Vials	Type of Vials	Overall Length	Weight
935	3	0°, 90°, 45°	229 mm	0.12 kg

Torpedo Billet Level, Rare Earth Magnet

- Level's patented magnet track prevents powerful rare earth magnets from falling out
- Large, easy-to-read high-visibility vials at 4 angles: level, 90, 45, and 30 degrees
- Large, top-view vial window enables easy readability from multiple angles
- V-Groove fits contour of conduit and pipe
- Tapered nose easily pushes into pockets
- US Patent 9,964,407



High-visibility orange body is easy to see on conduit and at the jobsite

CAT. NO: 935RB

Cat. No.	Number of Vials	Type of Vials	Overall Length	Weight
935RB	4	0°, 90°, 45°, 30°	203 mm	0.21 kg

Bubble Level

- Level's adjustable vial allows angle transfer between multiple surfaces
- Patented magnet track keeps powerful rare earth magnets in place
- Top V-Groove fits contour of conduit and pipe
- High visibility vials with reinforced housing
- Durable rubberized end caps increase drop protection at 9.9-Foot (3 m)
- Vial accuracy is +/- 0.029°
- Protrusions on rubber end caps help prevent movement while on walls
- US Patent 9,964,407





Cat. No.	Number of Vials	Type of Vials	Overall Length	Weight
935L	3	0°, 90°, Adjustable	610 mm	0.87 kg



CAT. NO: 935L



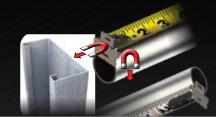




UNCLUTTERED,

FOR IMPROVED

Magnetic end hooks with dual angle polarity attaches to conduit and steel studs to easily read from above or below





Cat. No.	Tape Length	Measurement Scale	Hook	Magnetic	Tape Print
86000	9 m	Metric	Double	Yes	Double-sided
9375	7.5 m	Metric & Imperial	Double	Yes	Double-sided

neizi 1101

Retraction Speed Brake controls blade speed and

protects fingers from having to touch blade





- Protect hands when cleaning magnetic tip end. Use gloves or cloth.
- · Avoid magnetic contact with sensitive electronic or computer equipment.
- To avoid personal injury and damage to this tool, do not allow the tape blade to retract into case.
 Do NOT open case. Spring motor is under tension, and opening case may cause injury.

Blade-printed conduit multiplier bending table helps calculate offsets and saddles

COMPUTER TO THE REST OF THE PARTY OF THE PAR

Digital Angle Gauge and Level

- This Digital Angle Gauge and Level can measure or set angles, check relative angles, or can be used as a digital level
- High visibility reverse contrast display improves visibility in dimly lit work environments
- Strong magnetic base to attaches to conduit, pipes, saw blades, vents, ducts, and other ferromagnetic surfaces
- V-groove edges enable optimal alignment on conduits and pipes for bending and alignment
- 0 to 90-Degree and 0 to 180-Degree measurement ranges facilitate multiple and diverse applications
- 0 to 180-Degree range is useful when accounting for kickback in pipe bending applications when bending to 90-Degree or more
- Display auto-rotates when upside-down for easy viewing
- Water and dust resistant with rating of IP42
- Soft carrying case and two AAA batteries included

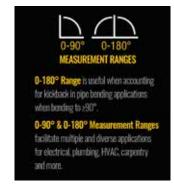
Cat. No.	Accuracy	Overall Length	Overall Height	Overall Width
935DAG	±0.1° from 0° to 1°, 89° to 91°, 179° to 180°; ±0.2° at All Other Angles	60 mm (2.36")	56 mm (2.2")	30 mm (1.2")

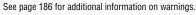




















Laser Line Levels

- Self-leveling laser level is easy-to-read with horizontal and vertical laser lines and red plumb spot lasers
- Projects horizontal and vertical lines independently or together to address various alignment tasks
- Integrated magnetic 360-Degree mounting bracket with 1/4-Inch and 5/8-Inch tripod mounting threads
- Magnetic bracket facilitates attachment to ferromagnetic objects such as steel studs, doors, beams or electrical panels
- · Additional mounting clamp attachment for use on ceiling grid applications
- Low battery indicator and easily accessible battery compartment
- Water and dust resistant (IP54)
- Hard plastic carrying case included









Cat. No.	Laser Colour	Plumb Laser	Accuracy	Overall Length	Overall Height	Overall Width	Weight
93LCLS (KL93LCLS)	Red	Yes	±2 mm per 10 m	67 mm	127 mm	133 mm	0.7 kg without Batteries
93LCLG (KL93LCLG)	Green	Yes	±2 mm per 10 m	64 mm	127 mm	135 mm	0.7 kg without Batteries

Laser Measuring

Laser Distance Measurer

- Meter provides measurements up to 30 m in distance, at an accuracy of + or 1.6 mm
- Quickly calculates length, area, volume, and indirect measurements with large, easy-to-read buttons
- Offers the option of one-touch, single-distance measurement and continuous measurement
- Depth gauge stick flips out to measure from inside corners or channels
- Highly visible backlit display
- Provides both fractional (imperial) and metric readings
- Memory stores last 20 measurements
- Includes handy carrying pouch to keep until safe when not in use

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
93LDM65	2 x AAA	35 mm	114 mm	51 mm	0.15 kg



CAT. NO: 93LDM65 NZ REF: KL93LDM65







Illumination

The Klein Tools Illumination range provides you the tools to make your life easier and more efficient on and off the jobsite. From hands-free lighting solutions such as headlamps and worklights to handheld flashlights and penlights, you can find the right tool to light your way.

For Professionals... Since 1857™



Work Light

- Swivel hook and magnet for hands free use
- Three AAA batteries included



Cat. No.	Lumens	Batteries	Battery Life	Drop Protection	Weight
55437	50	3 x AAA	5 hrs.	1.8 m	0.09 kg





CAT. NO: 55437 NZ REF: KL55437

Headlamp

- Anti-slip silicone strap keeps headlamp securely fastened to hard hat
- Strap comes pre-adjusted for quick fit to hard hat
- 45-degree tilt for varied beam direction to point light where it is needed most
- Two modes: High (spotlight) and Low (floodlight)
- 3 x AAA batteries included





Cat. No.	Lumens	Batteries	Battery Life	Drop Protection	Weight
56220	Spotlight - 150, Floodlight - 50	3 x AAA	Spotlight - 6 hrs., Floodlight - 10 hrs.	1.8 m	0.14 kg

CAT. NO: 56220 NZ REF: KL56220

Rechargeable Headlamp with Strap, 400 Lumen All-Day Runtime, Auto-Off

- Rechargeable 400 lumen Auto-Off LED Headlamp has 3 modes: All-on/Boost at 400 lumens for 4 hours, Spotlight at 200 lumens for 12 hours, and 22 hour runtime Floodlight at 100 lumens
- Headlamp automatically turns off after 3 minutes in bright light via auto-sensing technology, extending battery life (feature can be disabled by holding the power button for 10 seconds)
- Battery gauge indicates level of battery life with colored LED lights
- Smartly designed headlamp bracket also attaches directly to Klein® Hard Hats (those equipped with bracket system)
- Slim profile with pivoting mount to allow up to a 64-Degree lighting angle
- Adjustable woven fabric strap with silicone grip secures to headlamp onto head, hard hat, or cap
- Light can be easily removed from bracket for recharging
- Rechargeable via micro-USB port (cable included)
- Durable headlamp: drop-test rating of 6-Foot, dust and water resistant

Cat. No.	Lumens	Battery Life	Batteries	Drop Protection	Weight
56048	Boost: 400; High: 200 Low: 100	Boost: 4 hrs High: 12 hrs Low: 22 hrs	Lithium-Ion	1.8 m	91 g













LED Flashlight with Worklight

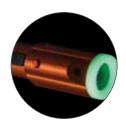
- Bright, focused flashlight and broadcasting work light in one tool
- LED light features a strong magnet for secure, hands-free illumination
- Glow ring tip charges while the light is on and allows for easy retrieval in the dark and in your tool bag
- Waterproof (IP67) and dustproof
- Flashlight: 235 lumens for 6 hours; Worklight: 100 lumens for 12 hours
- Pocket clip for easy, convenient access
- Aluminum body with cushion-grip handle
- 3 x AAA batteries included

Cat. No.	Lumens	Batteries	Battery Life	Drop Protection	Weight
56028	Flashlight: 235 Worklight: 100	3 x AAA	Flashlight: 6 Hours Worklight: 12 Hours	3m	0.15 kg

Inspection Penlight with Laser

- LED penlight for up-close lighting in dim areas
- Laser pointer aids in pinpointing objects in out-of-reach locations
- Glow ring tip charges while the light is on and allows for easy retrieval in the dark
- Pocket clip for easy, convenient access
- Aluminum body with cushion-grip handle









CAT. NO: 56028

Rechargeable Personal Work Light

- · Versatile Rechargeable Personal Work Light stands, hooks, hangs, and mounts magnetically
- LED Light modes are High: 460 Lumens for 9 hours, and Low: 175 Lumens for 16 hours
- Able to charge smartphones and other small devices via USB-A
- Infinite light direction; head rotates 360 degrees while the kickstand rotates 270 degrees
- Kickstand features strong magnets for mounting, three nail notches, and a built-in carabiner for easy hanging
- Gauge
- Rechar
- Easy to
- Durabl

Batteries

3 x AAA

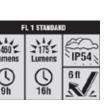
L B.II	Larren	Datta Life	Duan Dualastian	Maink	.a.	
	_					
le light has a 6-Foot drop test rati	ing and is IP54	water and dust re	sistant	9h	16h	
o find glow locator recharges whe	en lit			(0)	16h	bit
irgeable via Micro-USB cord (inclu	ngeg)			<u> </u>		
•				Lumens	Lumens	IP54
e indicates battery life in 25-Percei	nt increments			460	175	α

Cat. No.	Lumens	Battery	Battery Life	Drop Protection	Weight
56403	High: 460, Low: 175	Lithium-Ion 18650	High: 9 hrs, Low: 16 hrs	1.8 m	0.22 kg

Battery Life

High: 6 hrs.

Low: 10 hrs





NZ REF: KL56403

Clip Light

56221

- Rugged, durable rubber overmold for safe and comfortable grip
- Hands-free options: magnetized clip for mounting to magnetic surface or clip for shirt or pocket

High: 150

- Two modes: High/Low
- Impact and water resistant





3 m





CAT. NO: 56221 NZ REF: KL55621

Storage

Tool bags from Klein come in a wide variety of shapes and sizes to match the diverse tools and accessories professionals use every day.



For Professionals... Since 1857™





Electrician's Backpacks

Includes core Tradesman Pro™ features plus:

- Wide opening fits power drills, meters, flashlights, etc.
- Large front pocket easily fits cables and tools
- Polyester upper pocket (Cat. No. 55597) and hard molded pocket to protect safety glasses, meters, etc. (Cat. No. 55421BP-14)
- Shoulder strap with extra padding
- Longer pockets for screwdrivers
- Reflective shoulder and front strips (Cat. No. 55597)



CAT NO: 55421BP-14 NZ REF: KL55421BP



CAT NO: 55421BP-14CAMO NZ REF: KL55421BP14CAMO



Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55421BP-14	368 mm	508 mm	184 mm	39	2.7 kg
55421BP-14CAMO	368 mm	508 mm	184 mm	39	2.7 kg
55597	365 mm	508 mm	178 mm	39	2.5 kg

^{*} DOES NOT conform to ANSI/SEA 107-2015 high visibility safety apparel and accessories standard.



Backpacks

TRADESMAN PRO™

Tradesman Pro™ Tool Gear Backpack

- Tall interior pockets for long screwdrivers
- Upper pocket holds cell phones, keys, etc.
- Zipper pocket has space for pencils and small items
- Bottom is constructed of a coated tough diamond-textured material
- Orange interior to find tools faster
- 1680D ballistic weave for durability



	7	-17	
(A)			
		6	

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55475	187 mm	445 mm	368 mm	35	2.0 kg

Overall Width

178 mm

343 mm

Tradesman Pro™ Tech Backpack

Includes core Tradesman Pro™ features plus:

- Storage for adapters and cables
- Organizer pocket for pens, phone, cables, and more
- Hard, molded front pocket protects safety glasses

Overall Length

356 mm

55456BPL



Separate compartment keeps laptop protected from other tools.

Number of Pockets

25





CAT. NO: 55456BPL NZ REF: KL55456BPL

CAT. NO: 55475

Tradesman Pro™ Tool Master Backpack

470 mm

- Backpack with 48 total pockets to easily keep everything organized
- Removable tool caddy with carrying handles and a D-ring for hanging
- Aircraft cable heavily reinforces the handle as well as a heavy-duty zipper with lockable pulls (lock not included)
- Made of durable 1680d ballistic weave material and a molded bottom to help protect from the elements
- Hang the bag from the heavy-duty metal hook for easy access into the bag
- Well-padded shoulder straps have a buckled chest strap along with lower straps that adjust for a perfect fit

279 mm

- Tool caddy has a zipper pocket and closed pouches for small tools and parts as well as open pockets and straps ideal for long drivers
- Adjustable front pouch for quick tool retrieval, a mid-sized front zipper pocket fits tablets in protective covers, and a front zipper pocket for smaller items
- Molded front pocket helps protect items like phones and safety glasses
- Orange interior helps find tools easily and a large interior space for larger hand tools

495 mm





th	Number of Pockets	Weight
	48	6.0 kg



55485



TRADESMAN PRO™ Tool Bags

Tradesman Pro™ Tool Station Tool Bag Backpack with Worklight

- Backpack with 21 pockets and large interior for maximum tool storage
- Includes removable Flashlight with Worklight; A bright magnetic flashlight and broadcasting work light in one tool
- Elastic loop holds Worklight for hands-free illumination of backpack interior when working in low light areas
- Front of backpack unzips halfway for quick tool access or fully extends for workstation access
- Made of water resistant 1680d ballistic weave material for durability
- Orange interior for easy tool visibility
- Extra padding on the shoulder straps and back for carrying comfort
- · Adjustable chest and lower straps for a customized fit
- Front zipper pocket for small items
- Exterior organization includes side elastic pouch for water bottle, tape measure clip, and tape thong

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55655	368.3 mm (14.5")	508 mm (20")	184.2 mm (7.25")	21	3.6 ka



Tradesman Pro™ Tech Backpack

- Backpack fits laptops up to 3-Inch thick
- Separate compartment keeps laptop protected from tools
- Hard, molded front pocket protects safety glasses
- Tough, durable molded bottom protects from the elements
- Orange interior for easy tool visibility
- Organizer pocket for pens, phone, cables and more
- Water resistant 1680d ballistic weave for durability

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55439BPTB	355.6 mm	469.9 mm	177.8 mm	25	2.5 kg



CAT. NO: 55439BPTB

Tradesman Pro™ Wide-Open Tool Bag

- This tool bag has a stay-open top for unobstructed tool access
- Tool organizer's orange interior and wider opening makes it easier to find the right tool
- Large interior zipper pocket
- Inside is equipped with various sized pockets for tools and gear
- Multiple exterior front and back pockets for quick access
- Outside has side mesh pockets and a metal tape measure holder
- 1680d ballistic weave for durability
- Shoulder strap with extra padding and handles
- Fully-molded bottom protects from the elements

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55569	445 mm	406 mm	254 mm	42	3.2 kg

^{*}DOES NOT conform to ANSI/SEA 107-2015 high visibility safety apparel and accessories standard.





Backpacks

TRADESMAN PRO

Rolling Tool Bag

Includes core Tradesman Pro™ features plus:

- Rugged 152mm wheels easily handle rough terrain
- Load tested up to 91kg
- Top has reinforced metal frame that stays open for easy loading/unloading
- Heavy-duty telescoping handle
- Withstands cold conditions





Molded kick plate to protect from the elements.

Wide open interior to accommodate large tools.

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55452RTB	483 mm	356 mm	318 mm	24	8.6 ka



NZ REF: KL55452RTB

Tradesman Pro™ Tool Master Rolling Tool Bag, 19 Pockets, 22-Inch

- Rolling Tool Bag's rugged 8-Inch (203.2 mm) wheels provide high clearance to easily roll over rough terrain
- Tool bag has a hard top that allows for stacking materials on top
- Load tested up to 250-Pounds (113 kg)
- Twist-lock Klein LED Light (55437) or Wireless Speaker (AEPJS1) on front mount (items sold separately)
- · Heavy-duty telescoping handle for easy maneuvering on the jobsite
- Exterior webbing and D-rings allow for bungee cord attachment and other add-ons
- Metal latches keep lid closed
- Double lock hasp on hard top fits padlock so nothing goes missing (padlock not included)
- Constructed with durable Water Resistant 1680d Ballistic Weave material
- Total of 19 interior and exterior pockets for maximum tool storage
- Wide open interior accommodates large tools
- Orange interior for easy tool visibility
- Hard top is contoured to hold cell phone, beverages and small parts

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55473RTB	554 mm	572 mm	391 mm	19	13.2 kg





Hard Cases

- Hard shell protects tools, meters, small parts and tech devices
- Soft interior lining
- Durable zipper closure

Cat. No.	Number of Pockets	Overall Length	Overall Height	Overall Width	Weight
5184	1	222 mm	57 mm	165 mm	0.29 kg
5189	1	260 mm	57 mm	140 mm	0.29 kg







Tool Totes

TRADESMAN PRO™

Tool Totes

- Double stitched seams for extra durability
- Resized pockets to better fit tools
- Large zipper pockets for tools and small parts
- Shoulder strap with extra padding
- Longer pockets for screwdrivers









Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
5541610-14	254 mm	311 mm	260 mm	40	2.7 kg
554158-14	222 mm	432 mm	222 mm	20	2.3 kg









Tool Pouch

- Tool Pouch with heavy duty reinforced bottoms
- Small Tool Bag features multiple pockets of various sizes, plus a tape thong
- Great for carrying a mix of tools and job site consumables
- Includes a padded shoulder strap for easy carrying, to use without a belt
- Tunnel loop fits 2-Inch (51mm) belts

Cat. No.	Overall Length	Overall Height	Overall Width	Pockets	Weight
5240 (KL5240)	260 mm	260 mm	140 mm	9	0.2 kg
5241 (KL5241)	260 mm	260 mm	172 mm	9	0.4 kg
5242 (KL5242)	241 mm	241 mm	191 mm	9	0.5 kg
5243 (KL5243)	292 mm	254 mm	114 mm	15	0.8 kg

14-Pocket Shoulder Pouch

- Tool Bag with 14 pockets for better tool storage
- Tool organizer has large pockets for easy access to small parts and tools
- Fully molded bottom for stability and protects from the elements
- Orange interior for better tool visibility
- 1680d ballistic weave for durability
- Shoulder strap with extra padding and handle for easy carrying

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
55419SP-14	203 mm	254 mm	127 mm	14	1.4 kg



CAT. NO: 55419SP-14 NZ REF: KL55419SP



Tool Pouches

Leather Tool Pouch with Knife Snap

- Stitched and riveted leather construction for long life
- Has a large utility pocket, two pliers pockets and two screwdriver pockets
- Includes a knife snap
- Slotted to fit belts up to 2-Inches (51 mm) wide

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
5126	152 mm	51 mm	222 mm	5	0.34 ka



CAT. NO: 5126

6-Pocket Tool Pouch with Tunnel Loop

- Features a large utility pocket, three pliers pockets and two screwdriver pockets
- Stitched and riveted leather construction for long life
- Includes a knife snap
- Tunnel loop fits belts up to 2-1/2-Inch (64 mm) wide
- · Assembled in USA of U.S. and imported components

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
5127T	178 mm	254 mm	64 mm	6	0.4 kg



CAT. NO: 5127T

8-Pocket Tool Pouch

- Soft, pliable, black leather is durable and moisture-resistant
- Roomy pouch for electricians, service techs, and maintenance workers
- Five large utility pockets and three pockets for screwdrivers and pliers.
- Tape rule holder on the front
- Fits most belts up to 2.5-Inch (6.4 cm) wide
- · Riveted and stitched for extra durability
- · Heavy-duty chain tape thong securely fastened with a rivet
- Made in the USA

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
5178	279 mm	254 mm	51 mm	8	0.5 kg



PowerLine™ Series Electrician Tool Pouch, 18-Pocket

- Tool Pouch with 18 pockets to carry a variety of tools, includes a large utility pocket with a divider
- Pouch includes convenient chain tape thong
- Constructed of double layered, washable 1000 denier Cordura® fabric
- · Double stitched and rivet reinforced for strength and durability
- No break-in period, forms and hugs the body for easy, daily wear
- Exceptional resistance to abrasion, punctures and tearing
- Cordura® is a registered trademark of INVISTA for durable fabrics

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
5719	279 mm	305 mm	95 mm	18	0.4 kg



CAT. NO: 5719



Zipper Bags

4pk Canvas Zipper Tool Pouch

- Tool Bag Set includes 4 assorted colors: red, gray, black and brown
- Heavy-duty water resistant No. 10 canvas makes these tool pouches strong with brass zipper to keep items secure
- Convenient storage for pliers, wrenches, screwdrivers, nut drivers, other tools and spare parts
- Bank deposit bag for cash
- Made in the USA

Cat. No.	Colour	Overall Length	Overall Height	Overall Width	Weight
5141	Brown, Black, Gray, Red	318 mm	178 mm	18 mm	426 g



10-Inch Canvas Tool Pouch

- Brass grommet on tool pouch easily attaches to tool belt or clip
- Zipper bag provides convenient storage for wire nuts, connectors and other consumables
- 10-Inch (254 mm) long x 8-Inch (203 mm) high x 3-1/2-Inch (89 mm) wide bottom
- Constructed with tough No. 8 canvas for added durability
- Heavy-duty zipper keeps canvas bag securely closed
- Natural canvas coloring makes identification easier



Cat. No.	Colour	Overall Length	Overall Height	Overall Width	Material	Weight
5539NAT	Natural					
5539YEL	Yellow	— 254 mm	203 mm	89 mm	No. 8 Canvas	109 g
5539BLU	Blue	234 111111	203 111111	03 111111	INO. O GATIVAS	109 y
5539RED	Red	_				

Stand-Up Zipper Bags

- Reinforced bottom of 2520d ballistic material prevents tools and parts from poking through
- Stand-up bottom allows items to be found more easily
- Colored interior to see items better
- Bags are different sizes and colors to help with organization
- Body of the bags are of tough 1680d ballistic material
- Connect bags with a carabiner (not for human support)
- Two-pack includes a 165 mm orange bag and a 191 mm gray bag



Cat. No.	Overall Length	Overall Height	Overall Width	Material	Color	Weight
55470	Orange Bag: 216 mm; Gray Bag: 229 mm	Orange Bag: 165 mm; Gray Bag: 191 mm	29 mm	1680d Ballistic Nylon, 2520d Ballistic Nylon Bottom	Orange/Black; Gray/Black	186 g



Zipper Bags

Canvas Zipper Bag

- Tool Bag made of No. 10 canvas, with strong zipper
- No. 10 canvas used to give this tool pouch added durability
- 12.5-Inch x 7-Inch x 4.25-Inch (318 x 178 x 108 mm)
- Heavy-duty zipper keeps canvas bag securely closed

Cat. No.	Colour	Overall Length	Overall Height	Overall Width	Weight
5139	Natural	318 mm	178 mm	18 mm	86 g



Cordura Nylon Zipper Bag

- This Tool Pouch is constructed of Cordura® fabric, a high-performance material resistant to abrasions, tears and scuffs
- Tool Bag's heavy-duty nylon zipper keeps items secure
- Convenient storage for pliers, wrenches, screwdrivers, nut drivers, other tools and spare parts
- Cordura® is a registered trademark of INVISTA for durable fabrics

Cat. No.	Colour	Overall Length	Overall Height	Overall Width	Weight
5139B	Black	318 mm	178 mm	13 mm	109 g



Leather Zipper Bag

- Brushed cowhide leather construction on this tool pouch provides needed durability
- Onvenient zipper bag for pliers, wrenches, and other tool storage
- Premium-quality stitching increases reliability
- Heavy-duty zipper keeps canvas bag securely closed

Cat. No.	Colour	Overall Length	Overall Height	Overall Width	Weight
5139L	Brown	318 mm	178 mm	18 mm	104 g



4pk Canvas Zipper Tool Pouch

- These Tool Pouches are proudly Made in the USA
- Tool Bag Set includes four assorted colors: olive, orange, royal blue, and yellow
- Made of heavy-duty No. 10 canvas with brass zipper
- Convenient storage for pliers, wrenches, screwdrivers, nut drivers and other tools and spare parts

Cat. No.	Colour	Overall Length	Overall Height	Overall Width	Weight
5140	Olive, Orange, Blue, Yellow	318 mm	178 mm	18 mm	426 g





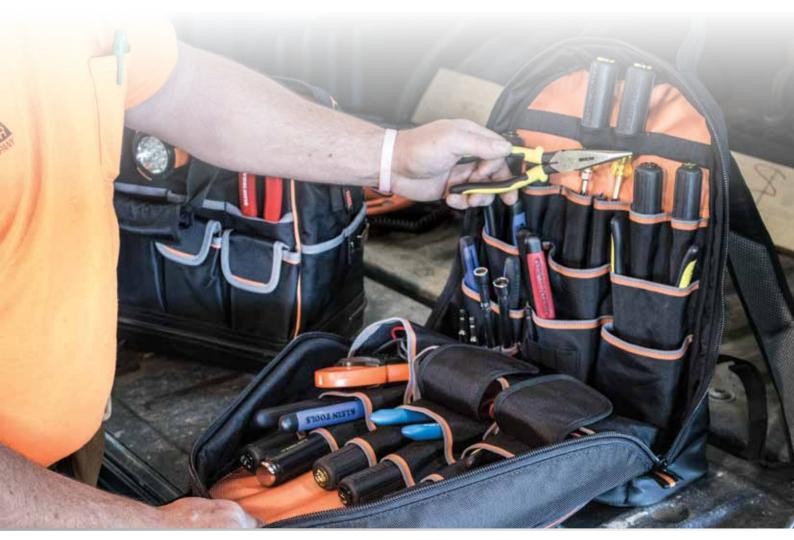
Tool Storage

Mid-Size 20-Compartment Storage Box

- Each box has a carrying handle, positive pull-down locking catch
- Boxes have a heavy, metallic-gray baked-enamel finish
- Box compartments feature high-impact styrene construction
- Scoop-bottom design for easy parts removal and cleaning



Cat. No.	Overall Length	Overall Height	Overall Width	Number of Compartments	Compartment Sizes	Weight
54439	248 mm	51 mm	338 mm	20	67 mm x 59 mm	2.0 kg





Load Rated Canvas Buckets

Durable, straight-wall and tapered-wall buckets are made of heavy-duty canvas

▲WARNINGS:

Inspect for damage before each use. Remove from service if bucket shows signs of wear. Never exceed the working load limit.

Flame-Resistant **Canvas Buckets**

NFPA-701

Meets the performance requirement of NFPA -701

Load Rated Canvas Buckets

- Durable straight wall buckets made of heavy-duty canvas to withstand the harshest job site conditions
- Reinforced bottoms extend up the sides for added durability
- Web straps extend down the sides for additional strength
- The "No." refers to the canvas weight with No. 1 being the thickest and No. 6 being the thinnest

• Cat. Nos. 5104CLR17 and 5104CLR22 hold a 5 gallon bucket (not included)



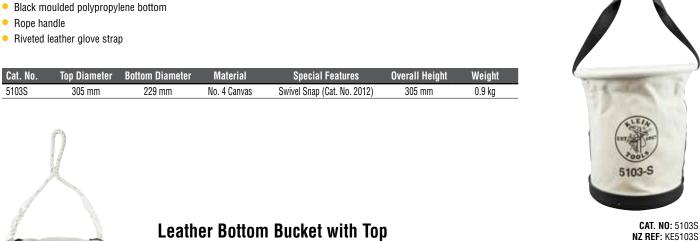
Cat. No.	Load Rating	Diameter	Material	Special Features	Overall Height	Weight
5104	45 kg	305 mm	No. 4 Canvas	Interior Pocket	432 mm	1.2 kg
5104FR	45 kg	305 mm	No. 4 Flame-Resistant Canvas	Interior Pocket	432 mm	1.4 kg
5104S	45 kg	305 mm	No. 4 Canvas	Swivel Snap (Cat. No. 2012)	432 mm	1.3 kg)
5109	34 kg	305 mm	No. 6 Canvas	_	381 mm	0.9 kg
5109PS (KE5109PS)	34 kg	305 mm	No. 6 Canvas	203 mm Square Inside Pocket, Swivel Snap (Cat. No. 2012)	381 mm	1.1 kg
5109S (KE5109S)	34 kg	305 mm	No. 6 Canvas	Swivel Snap (Cat. No. 2012)	381 mm	0.9 kg
5109SLR	68 kg	305 mm	No. 4 Canvas	Swivel Snap (Cat. No. 2012)	381 mm	2.7 kg
5104CLR17 (KE5104CLR17)	68 kg	356 mm	No. 1 Canvas	Stitched and Riveted with a Double Reinforced Bottom	431 mm	3.0 kg
5104CLR22	68 kg	356 mm	No. 1 Canvas	Heavy Duty D Ring	559 mm	3.2 kg
5104CLRFR	68 kg	305 mm	No. 4 Flame-Resistant Canvas	Double Action Carabiner, Zipper Closed Top, Leather Covered Handle	431 mm	1.93 kg



Canvas Buckets

Tapered-Wall Bucket

Cat. No.	Top Diameter	Bottom Diameter	Material	Special Features	Overall Height	Weight
5103S	305 mm	229 mm	No. 4 Canvas	Swivel Snap (Cat. No. 2012)	305 mm	0.9 kg



Leather Bottom Bucket with Top

- Top with Velcro® brand fasteners and multiple attachment loops for easy access and tool storage
- Durable canvas body with leather reinforced bottom
- High-density polyethylene rim

Cat. No.	Diameter	Material	Special Features	Overall Height	Weight
5104VT	305 mm	No. 1 Canvas	VELCRO® Closure	432 mm	1.4 kg

VELCRO® is a registered trademark of Velcro Industries B.V.

Canvas Pouches

Podger Pin and Bolt Bags

CAT. NO: 5104VT

- Bolt bag with podger pin loop on each side
- Neoprene top to help retain 13 mm and 25 mm bolts and nuts inside pouch while working at height (Cat. No. 5416TBR)
- Drain holes to release any water build-up (Cat. No. 5416TSR)



Cat. No.	Number of Pockets	Material	Belt Connection	Belt Width	Overall Length	Overall Width	Overall Height	Weight
5416	3	No. 4 Canvas	Loops	Up to 76 mm	127 mm	254 mm	229 mm	0.39 kg
5416T	3	No. 4 Canvas	Tunnel	Up to 76 mm	127 mm	254 mm	229 mm	0.41 kg
5416TBR	1	No. 4 Canvas	Tunnel	Up to 76 mm	127 mm	254 mm	229 mm	0.45 kg
5416TC	2	No. 4 Canvas	Tunnel	Up to 76 mm	127 mm	254 mm	229 mm	0.39 kg
5416TSR	1	No. 4 Canvas	Tunnel	Up to 76 mm	127 mm	254 mm	229 mm	0.41 kg



Canvas Tool Bags

Canvas Tool Bags — Multiple Pockets, Leather Bottom

- Steel-frame mouth with hinge for rugged use
- Internal pockets in a variety of sizes
- External pocket for additional carrying needs
- Constructed of strong No. 8 natural canvas
- Reinforced bottom supports heavy tools, blocks moisture, and provides durability at wear points
- Wide opening provides easy access to large tools
- Bottom is protected from the elements by 6 studs
- Includes: Shoulder strap mounts, external pocket, leather bottom and 76 mm of sides covered with black leather, 51 mm wide web handles, leather handle wrap, and external tool loop handle in the webbing



CAT. NO: 5003-18

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
5003-18	457 mm	356 mm	152 mm	11	1.8 kg
5003-20	508 mm	381 mm	152 mm	15	1.8 kg

Black Canvas Deluxe Tool Bag

- Tool bag is constructed with heavy-duty No. 8 black canvas
- Tool tote's 13 interior pockets are perfect for tool organization
- Detachable shoulder strap can be adjusted for a perfect fit
- · Stitched and riveted leather handles for extra comfort and strength
- Moisture-resistant vinyl bottom
- Steel frame mouth with hinge for rugged use
- Rivet-reinforced for durability

Cat. No.	Overall Length	Overall Height	Overall Width	Number of Pockets	Weight
510216SPBLK	406.4 mm	355.6 mm	152.4 mm	13	1.7 kg













Electrical Test and Measurement

Crafted for optimum durability, reliability and functionality, our line of test and measurement equipment is engineered with the user in mind. Designed for, and by electricians, our electrical testers provide the latest in innovative, time-saving features that professionals require.

For Professionals... Since 1857™



Voltage Testers

Continuity Tester

- Quickly reveals shorts or broken circuits in all types of electrical devices and controls
- · Tests for continuity of circuit with power off
- Bulb in handle glows when circuit is complete (bulb included)
- Pointed 95 mm probe gets right to the problem
- Deluxe 102 mm long handle with removable nylon cap holds replaceable bulb and battery
- 915 mm test lead with alligator clip
- Uses one AAA battery (not included)

Cat. No.	Overall Length	Weight
69133	111 mm	6.0 g

CAT. NO: 69133

Electronic AC/DC Voltage Testers

- Troubleshoots common residential electrical wiring and devices such as outlets, light fixtures, doorbells, batteries, etc.
- Water and dust resistant, built to withstand a 3m drop

ET40

- Tests AC voltages from 12V to 240V AC at four useful levels aligned with commonly used residential voltages
- Tests DC voltages from 1.5V to 24V at four useful levels aligned with commonly used DC voltages
- Identifies and distinguishes between AC or DC voltage
- Indicates polarity when measuring DC voltages

ET60

- Tests AC/DC voltage from 12-600V at nine useful levels aligned with commonly used voltages
- Uses standard replaceable multimeter test leads for versatility
- CAT IV 600V modern solid-state design for safety
- Easy to use bright LED display clearly reports the voltage present in the circuit being tested
- Integrated test-lead holders lead storage
- Inherent low input impedance reduces the possibility of falsely reading ghost or stray voltages on non-energized circuits
- Batteries not required, as tester is powered by the applied voltage in the circuit being tested

- Automatically selects voltage or continuity; automatically powers on when measurement is attempted
- Backlit LCD Display
- CAT IV 600V (CAT III 690V)
- Uses standard replaceable multimeter test leads
- Features built-in test lead holders on back of meter
- Integrated flashlight













Cat. No.	Batteries	Voltage	Standard	Overall Length	Overall Width	Weight
ET40	2 x AAA	12 to 240 VAC, 1.5 - 2.4 V DC	CAT IV 250V	133 mm	39 mm	90 g with batteries
ET60	Not Required	12 to 600 V AC/DC	CAT IV 600V	144 mm	60 mm	92 g
ET260	3 x AAA	2 to 690V AC/DC	CAT IV 600V; CAT III 690V	154 mm	58 mm	170 g





Voltage Testers

- Detects voltage with simultaneous visual and audible voltage indicators
- Lightweight, compact tool with pocket clip provides convenient storage and quick access
- Auto power-off feature conserves and extends battery life
- Screw-thread battery cap with O-ring
- CAT IV 1000V rating provides expanded operation and protection
- NCVT-1P provide non-contact detection of standard voltage 50 to 1000V AC in cables, cords, circuit breakers, lighting fixtures, switches, outlets and wires.
- NCVT-2P is a non-contact voltage tester that detects 12 to 1000V AC and indicates the presence of voltage. Includes both visual and audible signals.
- NCVT-3P is a non-contact voltage tester with an integrated flashlight. The voltage sensor detects 12 to 1000 VAC and indicates the presence of voltage. Includes both visual and audible signals. The NCVT-3P is rugged enough for any job site.
- NCVT-4IR is designed for HVAC applications and hot spots in panels, includes an infrared thermometer with selectable °F/°C from -30 to 250°C, LCD backlit display, and convenient laser pointer to help target 4:1 distance to spot ratio for temperature
- NCVT-6 is a non-contact voltage tester with an integrated laser distance meter. It can detect voltage over the full-range from 12 to 1000 VAC and can measure distances from 2-Inch (51 mm) up to 66-Feet (20 m). The laser distance meter functions independently from the NCVT with a simple-to-use intuitive interface. Easy, single-button changes between voltage detection and laser distance measurements.





CAT. NO: NCVT-1P





CAT. NO: NCVT-2P









CAT. NO: NCVT-4IR | NZ REF: KL4IR





	Product
CAT. NO: NCVT-6	Plugge

	Features	NCVT-1P	NCVT-2P	NCVT-3P	NCVT-4IR	NCVT-6
	Description	Voltage Tester	Dual Range	Dual Range with Flashlight	Voltage Tester with Infrared Thermometer	Voltage Tester with Laser Distance Meter
	Drop Protection	3 m	2 m	2 m	2 m	2 m
= / \	Ingress Protection	IP40	IP54	IP67	IP54	IP40
A	Safety	CAT IV 1000V	CAT IV 1000V, CE	CAT IV 1000V, CE	CAT IV 1000V AC	CAT IV 1000V, CE
ĩ	Voltage	50-1000V AC	Mode 1: 12-1000V AC Mode 2: 70-1000V AC	Mode 1: 12-1000V AC Mode 2: 70-1000V AC	12-1000V AC	12-1000 VAC
Hz%	Frequency Range	50-500Hz	50-500Hz	50-500Hz	50-500Hz	50 - 500 Hz
	Audible and Visual Alarms	•	•	•	•	•
AP0	Auto-Power Off	•	•	•	•	•
۴°C	Temperature	-	-	-	-30° – 250°C	-
*	Laser	-	-	-	Class 2	Class 2 Distance Meter
-	Flashlight	-	-	•	-	-
	Backlight	-	-	-	-	•
8888	LCD Display	-	-	-	•	 Reverse Contrast
$oxed{B}$	Batteries	2 x AAA	2 x AAA	2 x AAA	2 x AAA	2 x AAA
	Overall Length	140 mm	148 mm	148 mm	159 mm	164 mm
	Weight	23 g	48 g	51 g	57 g	72 g









Clamp Meters



















		Section 2	The same of the sa						
Featu	ires	CL900	CL800	CL700	CL600	CL390	CL320	CL220	CL120
	Drop Protection	2m (6.6ft)	2m (6.6ft)	2m (6.6ft)	2m (6.6ft)	2m (6.6ft)	2m (6.6ft)	2m (6.6ft)	2m (6.6ft)
	Ingress Protection	IP40	IP40	IP40	IP40	-	-	-	-
\triangle	Safety	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V
v	AC Voltage (Volts)	1000V	1000V	1000V	1000V	600V	600V	600V	600V
V	DC Voltage (Volts)	1000V	1000V	1000V	1000V	600V	600V	600V	600V
v+v	AC + DC Voltage	-	-	-	_	-	-	-	-
Ã	AC Current (Amps)	2000A	600A	600A	600A	400A	400A	400A	400A
Ā	DC Current (Amps)	2000A	600A	-	-	400A	-	-	-
Ω	Ohms (Resistance)	60MΩ	60MΩ	60MΩ	60ΜΩ	40ΜΩ	40ΜΩ	20ΜΩ	20ΜΩ
mV	AC Millivolts	-	-	-	-	•	-	•	•
mV	DC Millivolts	•	•	•	•	•	•	•	•
μĀ	DC Microamps	-	-	-	-	•	•	-	-
TRMS	True RMS	•	•	•	•	•	•	•	-
•1))	Audible Continuity	•	•	•	•	•	•	•	•
	Backlight	•	•	•	•	Reverse Contrast Display	•	•	•
°F°C	Temperature	-	-26° – 538°C	-26° – 538°C	-	-40° – 1000°C	-40° – 1000°C	-40° – 1000°C	-
F°C	Differential Temperature	_	-	_	_	_	_		_
T-CRL	Digital Temperature Calibration	-	-	-	-	-	-	-	-

See page 186 for additional information on warnings.





Clamp Meters



Featu	ures	CL900	CL800	CL700	CL600	CL390	CL320	CL220	CL120
LOW Z	Low Impedance	•	•	•	-	_	-	-	-
LPF	Low-Pass Filter	-	-	-	-	-	-	-	-
Ã	Inrush Current	2000A	-	-	-	-	-	-	-
NCV	Non-Contact Voltage Testing	•	•	•	•	•	•	•	•
AUT0	Auto Ranging	•	•	•	•	•	•	•	•
RANGE	Range Hold	•	•	•	•	•	•	•	•
HOLD	Data Hold	•	•	•	•	•	•	•	•
> +	Diode Test	•	•	•	•	•	•	-	-
46	Capacitance Test	6000 μF	6000 μF	6000 μF	-	4000 μF	4000 μF	-	-
Hz %	Frequency / Duty Cycle	1Hz – 500 kHz	1Hz – 500 kHz	1Hz – 500 kHz	-	10Hz – 60kHz	10Hz – 60kHz	-	-
MAX/ MIN	Max / Min	•	•	•	•	•	•	MAX only	MAX only
\triangle	Relative Mode	-	-	-	-	•	-	-	-
G.	Magnet	Available As Accessory							
	Worklight	-	•	-	-	-	-	-	-
AP0	Auto-Power Off	•	•	•	•	•	•	•	•
8888 (£0	LCD Display Count	6000	6000	6000	6000	4000	4000	2000	2000









AWARNINGS: To ensure safe operation and service of the tester, follow these instructions. Failure to observe these warnings can result in severe injury or death.

- Before each use, verify meter operation by measuring a known voltage or current.
- Never use the meter on a circuit with voltages that exceed the category based rating of this meter.
- Do not use the meter during electrical storms or in wet weather.
- $\bullet\,$ Do not use the meter or test leads if they appear to be damaged.
- Ensure meter leads are fully seated, and keep fingers away from the metal probe contacts when making measurements.
- Do not open the meter to replace batteries while the probes are connected.
- Use caution when working with voltages above 60V DC, or 25V AC RMS. Such voltages pose a shock hazard.
- To avoid false readings that can lead to electrical shock, replace batteries if a low battery indicator appears.

 It leads to expect the state of the state
- $\bullet \quad \text{Unless measuring voltage or current, shut off and lock out power before measuring resistance or capacitance.}\\$
- Always adhere to local and national safety codes. Use individual protective equipment to prevent shock and arc blast injury where hazardous live conductors are exposed.











Specialty Clamp Meters

Open Jaw Fork Meter



		CL360
		AC/DC voltageResistanceContinuityNon-Contact Voltage Tester
Include	es	Carrying case, Instruction manual, Straight Input Test leads with CAT III/CAT IV safety caps, 2 x AAA Batteries
Standa	ırd	CE Certified
Jaw Siz	ze	15 mm Opening
Overal	l Length	213 mm
Overal	l Width	54 mm
Overal	l Depth	35 mm
Weight	t	180 g
FEAT	URES	
	Drop Protection	3 m
= 	Ingress Protection	IP40
\triangle	Safety	Jaw & Housing: CAT IV 600V, CAT III 1000V Electrical & Protection Circuit: CAT III 600V,CAT II 1000V
v	AC Voltage (Volts)	600V
V	DC Voltage (Volts)	1000V
Ã	AC Current (Amps)	200A
Ω	Ohms (Resistance)	60ΜΩ
TRMS	True RMS	•
•)))	Audible Continuity	•
	Backlight	•
NCV	Non-Contact Voltage Tes	eting
AUTO	Auto Ranging	•
HOLD	Data Hold	•
APO	Auto-Power Off	•
8888	LCD Display Count	6000

Flexible AC Current Clamp Meter



	ranging root mean square (TRMS)	• 3000A • AC current
Include	es	Carrying case, Instruction manual, 2 x AAA Batteries
Standa	rd	CE Certified
Jaw Siz	ze	457 mm Flexible Clamp
Overal	l Length	266 mm
Overal	l Width	104 mm
Overal	l Depth	27 mm
Weight		425 g
FEAT	URES	
	Drop Protection	2 m
= E / b	Ingress Protection	-
\triangle	Safety	CAT III 1000V CAT IV 600V
Ã	AC Current (Amps)	3000A
TRMS	True RMS	•
	Backlight	•
AUTO	Auto Ranging	•
HOLD	Data Hold	•
MAX/ MIN	Max / Min	•
APO	Auto-Power Off	•
8888 100	LCD Display Count	3000











Digital Multimeters





MM600

MM700



MM400



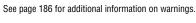
MM300

 Auto-ranging True root mean square (TRMS) 10A AC/DC current AC/DC voltage Resistance Continuity Frequency Duty cycle Capacitance 	 Auto-ranging 10A AC/DC current AC/DC voltage Resistance Continuity Frequency Duty cycle Capacitance Tests diodes Thermocouple 	 Auto-ranging 10A AC/DC current AC/DC voltage Resistance Continuity Frequency Duty cycle Capacitance Tests diodes Thermocouple 	 Manual-ranging 600A DC current AC/DC voltage Resistance Continuity Tests diodes Battery Test mode
 Tests diodes Thermocouple probe to test temperature 	probe to test temperature	probe to test temperature	
	Incl	udes	
Carrying case, Instruction manual, Test leads with CAT III/CAT IV safety caps, Alligator clips, Thermocouple with adapter, 2 x AAA Batteries	Carrying case, Instruction manual, Test leads with CAT III/CAT IV safety caps, Alligator clips, Thermocouple with adapter, 2 x AAA Batteries	Instruction manual, Test leads with CAT III/CAT IV safety caps, Thermocouple with adapter, 2 x AAA Batteries	Instruction manual, Test leads with CAT III/CAT IV safety caps, 2 x AAA Batteries
	Stan	dard	
CATIV 600V, CATIII 1000V CE Certified	CATIV 600V, CATIII 1000V CE Certified	CAT III 600V; CE Certified	CAT III 600V; CE Certified
	Overall	Length	
178 mm	178 mm	152 mm	152 mm
	Overal	Width	
90 mm	90 mm	80 mm	80 mm
	Overal	Depth	
53 mm	53 mm	45 mm	45 mm
	Wei	ght	
410 g	410 g	230 g	230 g

FEA	TURES	MM700	MM600	MM400	MM300
	Drop Protection	2 m	2 m	1 m	1 m
= = 	Ingress Protection	IP42	IP42	-	-
\triangle	Safety	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V	CAT III 600V	CAT III 600V
ĩ	AC Voltage (Volts)	1000V	1000V	600V	600V
V	DC Voltage (Volts)	1000V	1000V	600V	600V
Ã	AC Current (Amps)	10A	10A	10A	-
Ā	DC Current (Amps)	10A	10A	10A	10A
Ω	Ohms (Resistance)	40ΜΩ	40ΜΩ	40ΜΩ	20ΜΩ
mV	DC Millivolts	•	•	•	•
mÃ	AC Milliamps	•	•	•	_
mĀ	DC Milliamps	•	•	•	•
mÃ	AC Microamps	•	•	•	-
μĀ	DC Microamps	•	•	•	•
TRMS	True RMS	•	-	-	-
•)))	Audible Continuity	•	•	•	•
¥-	Backlight	•	•	•	-
°F°C	Temperature	-18° – 816°C	-18° – 538°C	-18° – 538°C	_
LOW	Low Impedance	•	_	-	-
AUTO	Auto Ranging	•	•	•	_
RANGE	Range Hold	•	•	•	-
HOLD	Data Hold	•	•	•	•
+	Diode Test	•	•	•	•
46	Capacitance Test	4000 μF	1000 μF	200 μF	_
Hz %	Frequency / Duty Cycle	1Hz – 500 KHz	1Hz – 500 KHz	1Hz – 500 KHz	-
MAX/ MIN	Max / Min	•	•	•	-
LEAd	Lead Warning	•	•	-	-
liiil	Bar Graph	•	-	-	-
Ğ	Magnetic Mount	Available As Accessory	Available As Accessory	Available As Accessory	Available As Accessory
AP0	Auto-Power Off	•	•	•	
- +	Battery Test	-	_	-	•
8888 LCD	LCD Display Count	4000	4000	4000	2000











Meter Accessories

Replacement Test Lead Sets

- Safety Rating: Category IV 600V and CAT III 1000V
- Screw-on alligator clips attach to wires and other conductors
- Intended for use as replacement test leads for meters that have standard, banana-type input jacks
- Leads are 1 m long
- Perform accurately with Klein Tools' meters and other manufacturer's meters



Cat. No.	For Use With	Weight
69410	All Clamp or Digital Multimeters	90 g

Heavy-Duty Alligator Clip Test Leads

- Standard banana-type inputs compatible with most multimeters and clamp meters
- Heavy-duty alligator clips attach to wires and other conductors
- Perfect for insulation resistance testing
- Alligator clip jaw: 15 mm opening with protective PVC cap
- Includes 1 pair of Universal Test Leads with banana plug to heavy-duty alligator clip
- Safety Rating: Category III 1000V and Category IV 600V
- Leads are 40-Inch (102 cm) long 18 AWG double insulated wire



Cat. No.	For Use With	Weight
69420	All Clamp or Digital Multimeters	87 g

Magnetic Hangers

- Durable nylon weave resists wear and tear
- Constructed with powerful rare earth magnets
- Has a secure loop & hook
- Hanger allows the user to safely work hands-free



CAT. NO: 69445 CAT. NO: 69417 NZ REF: KL69417

Cat. No.	For Use With	Weight
69445	CL220, CL120, CL320, CL390, CL450, Cl600, CL700, CL800, CL900, and Select Multimeters	37 g
69417	MM300, MM400, MM600, and MM700 multimeters, and CL120, CL220, CL320, CL390, CL450, CL600, CL700, CL800, CL900 clamp meters	31 g

Carrying Case

- Constructed of black 600 Denier Nylon for exceptional resistance to abrasions, punctures and tears
- Has a heavy-duty PVC zipper and zinc alloy zipper tag
- Easily fits the following Klein Tools test and measurement meters: MM300, MM400, MM600, MM700, CL110, CL312, CL600, CL700, CL800 and CL900
- Convenient storage for other test and measurement products



CAT. NO: 69401 NZ REF: KL69401

Cat. No.	Number of Pockets	Overall Length	Overall Width	Weight
69401	1	235 mm	102 mm	90 g

Cases

TRADESMAN PRO™

Tradesman Pro™ Carrying Case

- · Recommended for meters, testers, infrared guns, and small tools
- Two layers of padding protect even delicate instruments
- Heavy-duty zipper and rugged PVC coated polyester for durability
- Pockets for quick access and organization
- Loop with snap closure to attach to belts, bags and backpacks



CAT. NO: 69406

Cat. No.	Number of Pockets	Overall Length	Overall Height	Overall Width	Weight
69406	1	235 mm	57 mm	114 mm	0.17 kg





Borescope and Accessories

WiFi Borescope

- WiFi Borescope transmits and displays video and images directly to your smartphone up to 30 Feet (9 m) away
- Waterproof 9 mm camera has 6 on-board, adjustable LED lights and outputs high-quality 640 x 480 images
- Tough, armored 6-Foot (1.8 m) long waterproof camera goose-neck maneuvers around obstacles while maintaining rigidity
- Battery status indicator tracks the charge level of the lithium-ion battery
- Increase and decrease camera LED output either on the Borescope or in the App
- The App not only acts as a display, but stores and shares images and videos via text or email
- Includes convenient pocket clip, USB charging cable, hook attachment, carrying case, and instructions
- The Klein Borescope App is available free at the App Store® for iPhone® users and Google Play® for Android® users



Multiple Applications!

- Electrical
- HVAC
- Plumbing
- Automotive
- Aircraft
- Use to view inaccessible areas:
 - Inside a wall
 - Down the drain - In furnace or vent





Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
ET20	185 mm	58 mm	90 mm	Rechargeable Lithium-ion	0.23 kg



Thermometers

Digital Pocket Thermometer

- User selectable Fahrenheit and Celsius temperature measurements
- Backlit display for easy viewing in low light
- Max/Min, Hold and Average functions
- Auto-power off after 15 minutes conserves battery life
- FDA GRAS compliant for food usage
- Lightweight, compact tool with pocket clip provides easy storage and quick access
- Temperature range of -40 to 250° C

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET05	2 x LR44	165 mm	24 mm	27 mm	39 g



CAT. NO: ET05 NZ REF: KLET05









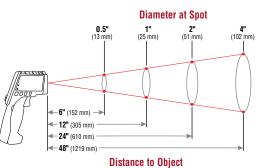


Infrared Thermometers

IR5 Dual Laser Infrared Thermometer

- Optical Resolution (Distance-to-spot) is 12:1
- Features include dual-laser targeting, auto-scan, max/min/avg/diff, high/low alarm, backlit display, auto power-off
- Measurement Range: -30° to 400°C
- For ambient temperatures above freezing, the accuracy is +/- 16° C or +/- 2%; Accuracy below freezing is +/- 16° C plus 0.2 degrees per degree below 0° C
- Uses one 9-volt battery, with battery life expectancy at 10 hours of continuous use with laser and backlight on
- Certified to IEC EN 61326-1:2006, EN608251:1994+A2:2001+A1:2002
- Adjustable emissivity
- Includes custom pouch and batteries











Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
IR5	173 mm	115 mm	47 mm	1 x 9V	0.28 kg

IR10 Dual Laser Infrared Thermometer

- Incorporates surface temperature measurement capability using IR emission and can also measure bulk temperatures of air, gas, or liquids using a standard K-Type probe
- Dual targeting lasers offer more accurate determination of the area being tested
- Optical Resolution (Distance-to-Spot) is 20:1
- Measurement range for both IR and K-Type probe -40 to 1200-Degree Fahrenheit (-40 to 650-Degree Celsius)
- Adjustable emissivity from 0.1-1.0 delivers flexibility to address multiple applications
- Bright backlit display for working in low ambient lighting conditions
- Statistical parameters for measurement event max/min/avg/diff
- User definable high/low limits with audible and visual alarms when limits are breached
- Uses one 9-volt alkaline battery, with battery life expectancy at 8 hours of continuous use with laser and backlight on
- Includes custom pouch, K-Type probe and battery
- Soft-touch, over-mold housing; built to withstand a 9.9-Foot (3 m) drop
- IP54 ingress protections for dust and water resistance











Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Weight
IR10	178 mm	114 mm	52 mm	1 x 9V	0.25 kg



See page 186 for additional information on warnings.



Rechargeable Thermal Imager

- Thermal Imager has over 10,000 pixels to troubleshoot hot and cold spots
- Adjustable emissivity from 0.10 to 0.99
- Store and share images with optional microSD® Card (sold separately)
- User selectable high and low temperature alarms from -4 to 752-Degree Fahrenheit (-20 to 400-Degree Celsius)
- Select color palettes to best capture the event
- Rechargeable lithium-ion battery
- Includes thermal imager, micro-USB charging cable, carrying case, and instructions

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
TI250	Lithium-lon	80 mm	80 mm	25 mm	0.24 kg







CAT. NO: T1250 NZ REF: KLTI250



Insulation Resistance Tester

- Voltage Tester tests insulation resistance up to 4000MΩ at 125V, 250V, 500V, and 1000V DC
- Megohmmeter with test and lock buttons for simple insulation testing
- Warning alarm and high voltage icon for detection of voltage
- Measures up to 1000V AC/DC, resistance, and continuity
- Automatic ranging True Root Mean Square (TRMS) technology for increased accuracy
- Backlit display with bar graph, Auto-power off, High Voltage, Max/Min, and Hold icons
- Low battery indicator with easily replaceable battery and fuse
- Built-in stand and optional magnetic hanger for hands free operation
- Test verification of conformity to EN61557-1,-2,-4
- CAT IV 600V and CAT III 1000V safety rating
- Includes Right Angle Test Leads and Heavy-Duty Alligator Clip Test Leads

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET600	6 x AA	202 mm	59 mm	91 mm	0.6 kg



CAT. NO: ET600

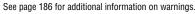
Pinless Moisture Meter

- Pinless Moisture Meter with electromagnetic field (EMF) technology allows for nondestructive detection of moisture content in building materials
- Drywall tool detects moisture content up to 3/4-Inch (19 mm) deep
- Easy viewing with bright reverse-contrast display
- Nine LED bars indicate moisture range
- Easy-to-select materials with mode button; drywall, masonry, hardwood, and softwood
- Hold, Low battery, and Auto-Power off functions
- Built to withstand a 6.6 foot (2 m) drop
- Includes detector, 9V battery, and instruction manual

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET140	1 x 9V	152 mm	25 mm	64 mm	0.2 kg



CAT. NO: FT140











Specialty Testers

Light Meter

- Easy-to-operate precision meter to monitor light levels and lighting retrofit projects
- Ideal for incandescent, fluorescent, metal halide, and daylight
- Measurements in foot candles (FC) and Lux
- Auto and manual range: 4000 FC; 40,000 Lux
- Features backlit LCD display with 40-segment bar graph
- Data Hold, Max/Min, and Auto Power Off
- Includes carrying pouch, instruction manual, and 9V battery





CAT	MO.	ET130
LAI.	NU.	ELIOU

IES RECOMMENDED ILLUMINATION*					
	Location	Lux	FC		
Office	Conference Room	200-750	18-70		
	Office area	500-750	47-70		
	Lobbies, lounges	100-200	9-18		
School	Auditorium, Gymnasium	100-300	9-28		
	Classroom	200-750	18-70		
	Library, Drafting, Laboratory	500-1500	47-140		
Hospital	Rooms	100-300	9-28		
	Emergency Room	500-1000	47-93		
	Operating Room	1000-2000	93-186		
Factory	Packing work	150-300	14-28		
	Parts assembly	1500 -3000	140-280		
	Inspection work	750-1500	70-140		
Store	Stairs, Corridor	150-200	14-18		
	Stockroom	100-300	9-28		
	Merchandising	750-1500	70-140		

*The Lighting Handbook 10th Edition, Illuminating Engineering Society

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET130	1 x 9V	206 mm	36 mm	53 mm	156 g

Not suitable for LED lighting

Carbon Monoxide Meter

- Easy-to-use meter detects and measures concentration levels of carbon monoxide gas in ambient air
- User protection with short-term exposure limit (STEL) alarms: low level alarm (35 ppm) and high level alarm (200 ppm)
- Backlit display with CO measurement (0 to 1000 ppm) and temperature (°F and °C)
- Auto-power off after 20 minutes of no usage helps conserve battery life
- Includes carrying pouch, instruction manual, and 4 x AAA batteries







CAT. NO: ET110 NZ REF: KLET110

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET110	4 x AAA	197 mm	37 mm	55 mm	144 g

Meter is not intended for use as personal protection equipment







Specialty Testers

Combustible Gas Leak Detector

- Select from two levels of sensitivity: High (50 to 1000 ppm) and Low (50 to 10,000 ppm)
- Measures methane, propane, butane, and other gases to detect for leaks
- Five red LEDs (visual) and 85db audible alerts that increase with gas concentration to detect the gas leak
- Automatic zero-point calibration at power-up
- 18 inch flexible goose-neck expands sensor's reach; clips onto device for storage
- Auto power-off after 10 minutes of non-usage conserves battery life
- Includes carrying pouch, instruction manual, and 4 x AAA batteries







HE HELL KEELLES

Cat. No.	Batteries	Overall Length	Overall Height	Overall Width	Weight
ET120	4 x AAA	719 mm	70 mm	45 mm	380 g

Meter is not intended for use as personal protection equipment

USB Testers

USB-A Digital Meter and Tester

- USB digital meter and tester combination for USB-A ports only
- Tests the maximum current delivery capability of the USB port with built-in fixed loads so user need not connect to an external load
- Functions with any USB-A port that has the ability to deliver power. It requires NO BATTERIES as it draws power from the power source.
- Test maximum USB output amperage: 0.5A, 1A, 2A, 3A
- Monitor USB output: voltage, current, capacity (charge delivered mAh), energy (Wh), resistance (calculated)
- Qualcomm Quick Charge® compatible
- Voltage and current overload detection
- 10-memory storage locations
- Bright, easy-to-read LCD screen



CAT. NO: ET910

Cat. No.	Overall Length	Overall Height	Overall Width	Weight
ET910	110 mm	25 mm	45 mm	79 g

USB-A and USB-C Digital Meter

- USB digital meter for both USB-A and USB-C ports
- Functions with any USB-A and most USB-C ports that have the ability to deliver power. It requires NO BATTERIES as it draws power from the power source.
- Monitor USB output: voltage, current, capacity (charge delivered mAh), energy (Wh), resistance (calculated)
- Qualcomm Quick Charge® compatible
- Voltage and current overload detection
- 10-memory storage locations
- Bright, easy-to-read LCD screen



Cat. No.	Overall Length	Overall Height	Overall Width	Weight
ET920	75 mm	15 mm	50 mm	48 g









Voice/Data/ Video Tools, Testers & Connectors

Our comprehensive line of verification VDV products was created to prep, connect and test network, phone, CATV, home theater, satellite, and security cables for residential or commercial systems.

For Professionals... Since 1857™

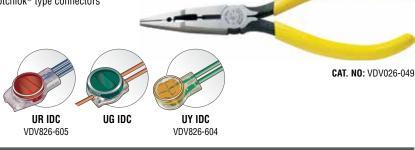


Telecom Long-Nose Pliers

Long-Nose Pliers - Connector Crimping

Crimps UR/UY/UG insulation displacement connectors (IDC) - Scotchlok® type connectors

- Grooved jaws for wire wrapping, looping and twisting
- Cleanly strips 23 to 24 AWG wire
- Hot-riveted joint ensures smooth action and no handle wobble
- Induction-hardened cutting surface for long life



Cat. No.	Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Point Diameter	Knife Length	Handle Color	Handle Finish	Weight
VDV026-049	173 mm	51 mm	18 mm	10 mm	2.41 mm x 3.17 mm	11 mm	Yellow	Plastic Dipped	0.13 kg

Voice/Data/Video Tool Kits

Coax Cable Installation Kit with Zipper Pouch

- Everything needed for preparing and connecting coax cables with F-Connectors
- Multi-Cable Cutter has precision shear-type cutting blades for easier cutting and double-dipped comfort grips with curved handles and is made in USA
- Coaxial Cable Radial Stripper with 2-level, one step prep has durable high-carbon steel pre-set cutting blades for precise, accurate cable stripping
- Compression Crimper crimps compression F-Connectors to coaxial cable; fixed plunger allows quick, easy insertion and removal of cable and connector
- Includes 6 Universal F-Compression Connectors
- Zipper bag keeps all components together

Cat. No.	Kit Contains		Weight
VDV026-211	Coax Cable Installati	0.7 kg	
	Cat. No.	Description	
	63020	Multi-Cable Cutter Klein-Kurve®	
	VDV110-061	Coaxial Cable Radial Stripper	
	VDV212-008SEN	Compression Crimper, Compact, F-Connector	_
	VDV812-606	Universal F-Compression Connectors	_
	5199BP	Polyester zipper bag	

CAT. NO: VDV026-211

Twisted Pair Installation Kit with Zipper Pouch

- All the tools needed to strip, crimp, and punch down to connect modular cables and jacks
- Radial Stripper with a durable high-carbon steel blade automatically adjusts to different cable diameters to avoid damaging conductors
- Ratcheting Modular Crimper/Stripper cuts, strips and crimps data cables
- 110-Type Punchdown Tool with Klein's exclusive DuraBlade™ precision cutting edge for clean, accurate wire termination
- Six pieces of Modular Data Plugs. RJ45-Cat5e
- Zipper bag keeps all components together

Cat. No.	Kit Contains	Weight	
VDV026-212	Twisted Pair Insta	0.6 kg	
	Cat. No.	Description	
	VDV110-261	Twisted Pair Radial Stripper	
	VDV226-011	Ratcheting Modular Crimper/Stripper	
	VDV427-897	110-Type Punchdown Tool	
	VDV826-105	Modular Data Plugs	
	5199BP	Polyester zipper bag	



CAT. NO: VDV026-212

See page 186 for additional information on warnings









Radial Strippers

Cartridge Radial Stripper

- Designed for high-volume, multiple-type cable preparation environments
- Includes storage cartridge-bay
- One-piece construction ensures precise stripping and never requires adjustment
- Large finger loop promotes rotation during use
- F-Connector "nest" assists with cable insertion
- Cartridges snap in from both sides for left or right-handed operation
- Durable high-carbon steel cartridge cutting blades are ground and honed for long life
- Additional and replacement cartridges available



CAT. NO: VDV100-801-SEN

Cat. No.	Set Contains						Weight
VDV100-801-SEN	Dual Cartridge Radial Stripper						0.05 kg
	Cat. No.	Cable Type	Color	Levels	Strip Dimensions	Prepared Cable	
	VDV110-003-SEN	RG59/RG6/RG6 QS Coaxial Cable	Black	2	8 and 6 mm		
	VDV120-005-SEN	UTP Cable (Category 3, 5, 5e and 6)	Blue	1	Variable		•

Coax Cable Radial Strippers - 2-Level

- Cat. No. VDV110-095 features two stripping cavities: one for standard size cable and one for utility size cables. Perfect for the data installer who works with utility cable as well standard cable
- Cat. No. VDV110-095 strips five different series of RG cable including: RG6, RG6-QS, RG59, RG11 and RG7
- 2-level stripping in one step 8 mm and 6 mm
- Klein's sliding cable stop pre-measures cable for fast, accurate and repeatable strips
- Durable high-carbon steel cutting blades automatically adjust to different cable diameters
- Finger loop facilitates easy, controlled rotation
- Easy debris clean-out



CAT. NO: VDV110-061

US Patent: D688927

Cat. No.	Cable Type	Handle Color	Levels	Strip Dimensions	Prepared Cable	Overall Length
VDV110-095	RG59, RG6, RG6-QS, RG7, RG11	Yellow/Gray	2	8 and 6 mm		133 mm
VDV110-061	RG59, RG6, RG6-QS	Yellow/Black	2	8 and 6 mm		117 mm

Twisted Pair Radial Strippers

- Easily and cleanly strips twisted pair cable
- Durable high-carbon steel cutting blades automatically adjust to cable diameter; won't damage internal conductors
- Finger loop design for smooth, easy rotation
- Additional external blade in a structured design allows user to slit wire jacket for mid-span access or to open lengthwise
- Cat. No. VDV110-295 is a combo stripper that features a slide depth gauge to pre-measure coax cable for quick, precise and repeatable 8 mm and 6 mm strips



Cat. No.	Cable Type	Handle Color	Levels	Strip Dimensions	Prepared Cable	Overall Length
VDV110-261	CAT3, CAT5/5e, CAT 6/6A	Yellow/Blue	1	51 mm		121 mm
VDV110-295	RG59, RG6/RG6Q; CAT3, CAT5/5e, CAT6/6A	Yellow/Blue	2	8 and 6 mm		133 mm

See page 186 for additional information on warnings.







Crimp Tool and Die Sets

Ratcheting Crimper Frame

- Professional CATV, electrical, home theater, satellite and security system ratcheting crimper frame with optional dies is perfect for fast, reliable connector installations
- Full-cycle ratchet action assures a complete, precise crimp every cycle
- Preset tension for optimum performance
- Ratchet mechanism is designed to prevent the release of the connector prior to full compression
- Safety crimp release helps eliminate rejected terminations due to incorrect positioning
- Steel body with black-oxide finish for corrosion resistance and durability
- Thumb-screws secure die-sets for quick, easy changes
- Optional, quick interchangeable die sets thumb and Phillips screw set available (see table)



CAT NO: VDV200-010

Cat. No.	Handle Color	Overall Length	Weight
VDV200-010	Black/Yellow	222 mm	0.5 kg

NOTE: Use caution when tightening thumb screws to prevent thread damage/stripping and hand tighten only; do not over-tighten the thumb screws. Over-tightening thumb-screws can damage the tool and/or die set.

Coaxial Hex-Crimp Die Sets

Cat. No.	Die Set	Nest Dimension	Cat. No.	Die Set	Nest Dimension	Cat. No.	Die Set	Nest Dimensio	n
VDV211-038	RG58/RG59/ RG6/RG62	0.256"/0.068"/ 0.213"/6.50/ 1.73/5.41 mm	VDV211-037	RG58/RG59/ RG6/RG62	0.256"/ 0.319"/ 0.068"/ 0.213"/ 6.50/ 8.10/ 1.73/5.41 mm	 VDV205-044	Non-Insulated Terminal, AWG 8-18	AWG 18-16/14 /12-10/8 DIN 0.75-1.5/ 2.54/ 4-6/ 10 mmÅ ²	
VDV205-035	Insulated Terminals, AWG 10-22	AWG 22-18/ 16-14/12-10 DIN 0.5-1.0/ 1.5-2.5/ 4-6 mmÂ ²	VDV205-039	Pin Terminal Insulated or Non-Insulated Ferrules, AWG 12-22	AWG 22/20/18/ 16/14/12 DIN 0.5/0.75/ 1.0/ 1.5/2.5/ 4 mmÅ ²	VDV212-034	CATV F Connectors RG59 RG6	0.255"/ 0.320"/ 0.350" 6.48/ 8.13/ 8.89 mm	

Coaxial Connector Compression Crimpers

Compression Crimper — Lateral, Multi-Connector

- One tool crimps most compression connectors to most coaxial cables Minicoax, RG58, RG59, RG62, RG6, RG6QS, RG7, and RG11
- Unique cable selection wheel eliminates the need to change plunger tips saving time and avoids losing parts
- Heavy-duty zinc die-cast chassis for durable, long lasting performance
- Open design with 180° capture mechanism provides easy insertion, complete compression and simple removal
- User-friendly F/BNC/RCA gauge markings on tool for accurate positioning and quick adjustments of the plunger
- Integrated handle lock for easy storage
- Spring loaded return increases user comfort and ease of use
- Yellow and black contoured grips enhance comfort, visibility and allow quick identification



CAT NO: VDV211-063



Connector markings for quick adjustments

Cat. No.	Туре	Overall Length	Color	Cable Type	Connector Type	Weight
VDV211-063	Compression Crimper	159 mm	Yellow/Black	Coaxial	BNC, F, RCA	0.5 kg









Coaxial Connector Compression Crimpers

Compact, Multi-Connector Compression Crimper

- Fast, reliable multiple-type compression connector installations
- Crimps compression BNC, F and RCA connectors to coaxial cable
- Adjustable universal plunger ensures accurate crimps on multiple types of connectors
- Open design with 180° capture mechanism provides easy insertion, complete compression and simple removal of cable and connector
- User-friendly F/BNC/RCA gauge markings on tool for accurate positioning and quick adjustments of the plunger
- Compact tool with integrated handle lock for easy storage
- Spring loaded return increases user comfort and ease of use
- Yellow contoured grips enhance comfort, visibility and allow quick identification
- Steel body with chrome finish resists corrosion and extends tool life



CAT NO: VDV211-048



Connector markings for quick adjustments

Cat. No.	Туре	Overall Length	Color	Cable Type	Connector Type	Weight
VDV211-048	Compression Crimper	142 mm	Yellow/Chrome	Coaxial	BNC, F and RCA	0.23 kg

Extended Reach Coax Compression Crimper

- Crimps F, BNC and RCA compression connectors onto coaxial cables
- Optimized for confined-space and short cable installations
- Adjustable universal plunger ensures optimized crimping on multiple types of connectors
- Open-channel design for easy insertion of all connector head styles
- Integrated leverage point to assist connector installation
- Connector markings and mm scale are lasered into tool for consistent crimping
- Made of adjustable stamped steel for added durability and frequent use



CAT NO: VDV211-100

Cat. No.	Туре	Overall Length	Color	Cable Type	Connector Type	Weight
VDV211-100	Compression Crimper	229 mm	Yellow/Black	Coaxial	F, BNC, RCA Compression Connectors to Coax	0.4 kg

F-Connector Compact Compression Crimper

- Fast, reliable F-connector installation tool
- Steel body with black-oxide finish for corrosion resistance and durability
- Fixed plunger allows quick, easy insertion and removal of cable and connector
- Fixed plunger accepts many common F-connector compression fittings
- Compact tool with integrated handle lock
- Yellow and black grips enhance comfort, visibility, and allow quick identification
- Spring loaded return increases user comfort and ease of use



CAT NO: VDV212-008-SEN

Cat. No.	Туре	Overall Length	Color	Cable Type	Connector Type	Weight
VDV212-008-SEN	Compression Crimper	142 m	Yellow/Black	Coaxial	Common F Connectors	0.05 kg







Twisted Pair Crimp/Strip Tools

Ratcheting Modular Crimper/Stripper

- Fast, reliable modular-crimp connector installation for voice and data applications
- All-in-one tool, cuts, strips and crimps paired-conductor cables (round STP/UTP and flat-satin phone cable)
- Crimps RJ45, RJ11 and RJ12 modular connectors
- Crimping dies are precision ground from high-carbon steel
- Ratchet safety-release and a blade-guard on cutting and stripping knives reduce risk of injury
- Full-cycle ratchet mechanism prevents the release of the connector prior to full compression
- Yellow and black grips enhance comfort, visibility, and allow guick identification
- Not for use with AMP® connectors
- Replacement blade set available



CAT NO: VDV226-011-SEN

Cat. No.	Cuts & Strips	Crimps	Position/Pair/Conductors	Overall Length	Handle Color	Weight
VDV226-011-SEN	STP/UTP, Flat Satin Phone Cable, and 22-28 AWG	RJ11, RJ12, and RJ45	4-Position, 1-Pair/2-Conductor, 4-Position, 2-Pair/4-Conductor 6-Position, 2-Pair/4-Conductor, 6-Position, 3-Pair/6-Conductor, 8-Position. 4-Pair/8-Conductor	191 mm	Yellow/Black	0.05 kg

Compact Ratcheting Modular Crimper

- All-inclusive tool cuts, strips and crimps voice and data cables
- Cuts and strips CAT6, CAT5e, CAT3 and flat-satin voice cables
- Crimps RJ45, RJ11 and RJ12 modular connectors
- Heavy-duty ratchet ensures complete termination
- Direct lateral crimp action provides more even, precise contact termination across all pins
- Compact, ergonomic design for natural, single-hand operation
- About 40% smaller than other crimpers for easy storage
- Quick reference connector wiring diagrams provided on the tool and downloadable to your mobile device



CAT NO: VDV226-107

Cat. No.	Cuts & Strips	Crimps	Position/Pair/Conductors	Overall Length	Handle Color	Weight
VDV226-107	STP/UTP Data Cable Flat Satin Phone Cable 28 - 22 AWG	RJ11, RJ12 and RJ45	6-Position, 2 Pair/4-Conductor; 6-Position, 3-Pair/6-Conductor; 8-Position, 4-Pair/8-Conductor	133 mm	Yellow/Black	0.32 kg

Pass-Thru™ Modular Crimpers

- Fast, reliable modular crimp-connector installation for voice and data applications
- Cable parameters: 28-22 AWG flat or round; solid or stranded telephone and data
- Trims flush to end face of connector to eliminate unintended contact between conductors
- On-tool wiring guide helps minimize wiring errors
- Not for use with standard (non Pass-Thru™) connectors
- Use with Klein Tools Pass-Thru[™] Connectors: Cat. Nos. VDV826-728, VDV826-729, VDV826-702, VDV826-703, VDV826-762, and VDV826-763

Ratcheting Modular Crimper (VDV226-110)

- All-in-one tool cuts, strips and crimps paired-conductor cables (round STP/UTP and flat-satin phone cables)
- Full-cycle ratchet mechanism ensures complete connector termination
- Rubber grip for added comfort







CAT NO: VDV226-005

Cat. No.	Cuts & Strips	Crimps	Overall Length	Handle Color	Weight
VDV226-110	STP/UTP, Flat Satin Phone Cable, and 22-28 AWG	RJ11/RJ12 Standard; Klein Tools Pass-Thru™ Connectors	155 mm	Yellow/Black	0.41 kg
VDV226-005	STP/UTP, and 22-28 AWG	RJ45 Klein Tools Pass-Thru™ Connectors	140 mm	Yellow/Black	0.29 kg

See page 186 for additional information on warnings







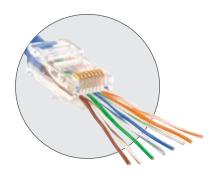


Twisted Pair Connectors

Pass-Thru™ Modular RJ45 Connectors

- Features Klein's exclusive pass-through design for fast, reliable and consistent connector installations
- Use with Klein Tools Pass Thru[™] Modular Crimper (VDV226-110)

Cat. No.	Connector Type	Cable Type	Position & Contacts	Connector Color	Package Quantity	Weight
VDV826-702	RJ45	CAT5e	8P 8C	Clear	50	30 g
VDV826-728	RJ45	CAT5e	8P 8C	Clear	10	140 g
VDV826-762	RJ45	CAT5e	8P 8C	Clear	200	280 g
VDV826-729	RJ45	CAT6	8P 8C	Clear	10	30 g
VDV826-703	RJ45	CAT6	8P 8C	Clear	50	140 g
VDV826-763	RJ45	CAT6	8P 8C	Clear	200	280 g



Punchdown Tools & Accessories

Punchdown Tool Krone Blade

- For inserting category cable wires into jacks, modules, panels, and distribution frames
- Includes swing-out combination hook and spudger
- Designed for use on Krone blocks and network infrastructure

Cat. No.	Overall Length	Color	Weight
VDV427-014	226 mm	Black	81.6 g



CAT NO: VDV427-014

Punchdown Accessories

- Blades compatible with Klein® punchdown tools and other bayonet style (twist & lock) socket tools
- Precision ground cutting-edge for clean, precise wire termination (depending on blade type)
- Terminate, and adjust cable in variety of cross-connect panels, blocks and keystone jacks
- Induction-hardened high-carbon steel blades for durability and long life
- Reversible blades with termination/cutting ends and termination only ends (depending on blade type)
- WorkEnds™ Kit* converts the Punchdown Multi-Tool chassis into a multi-bit driver



Cat. No.	Overall Length	Color	Configuration End 1	Configuration End 2	Weight
VDV427-015-SEN	53 mm	Black	110 Terminate	110 Terminate and Cut	0.05 kg
VDV770-050	81 mm		Proprietary Magnetic Hex	1/4" Female Hex	40 g

^{*}WorkEnds $\mbox{\footnote{thm}}$ Kit is only compatible with VDV427-807.







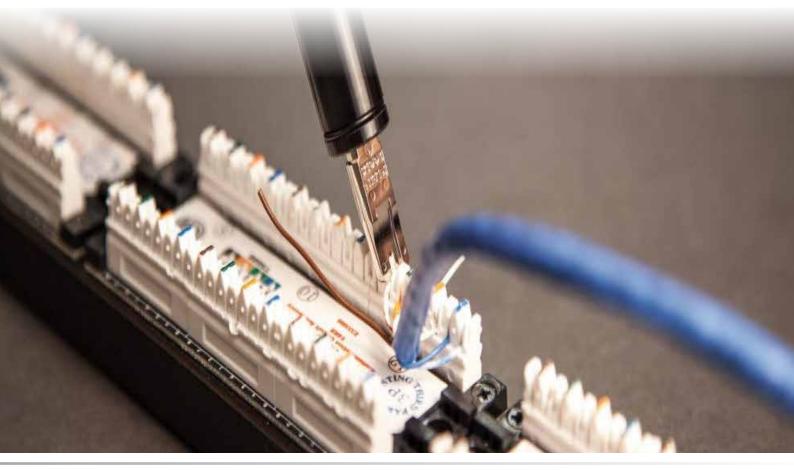
Punchdown Tools & Accessories

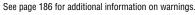
Cushion-Grip Impact Punchdown Tools

- 4-piece tool kit for complete termination of 110/66 panels, cross-connect systems and wall jacks
- Cushion-Grip Impact Punchdown Tool (VDV427-821) includes a "Hi/Lo" impact functionality for adjustable compression force on various wire gauges, blocks and jacks (US Patent D718585)
- A unique Cushion-Grip handle reduces hand fatigue and provides superior comfort when using the punchdown tool
- Pick-up, separate or remove wires, small components, covers or debris from panels, blocks or jacks with the Wire Pick (VDV327-103)
- The Wire Pick body is made of non-conductive material to prevent shorts. It also has a metal hook end and a non conductive spudger end
- The DuraBlade 110/66 Cut Combination Punchdown Blade (VDV427-104) is manufactured using a metal injecting molding (MIM) technology for better quality, durability and performance
- The blade has both 110 and 66 cut/terminate edges for clean, accurate wire insertion and trimming. It is compatible with most bayonet style (twist & lock) socket punchdown tools
- The kit-exclusive Multi-Pocket Pouch has separate compartments to store tools, a metal belt clip and a reinforced puncture-resistant bottom



Cat. No.	Set Contains					Weight
VDV427-822	Impact Punchdown	Tool Kit, Cushion-Grip, 4-Piece				0.42 kg
	Cat. No.	Overall Length	Color	Configuration End 1	Configuration End 2	
	VDV427-821	210 mm	Black/Yellow	110 Terminate and Cut	66 Terminate and Cut	_
	VDV327-103	184 mm	Yellow	Metal Hook End	Non-Conductive Spudger End	_
	VDV427-104	56 mm	Chrome	110 Terminate and Cut	66 Terminate and Cut	



















TONE & PROBE

Tone & Probe PRO Kit

- Includes a professional grade tone generator and tracing probe for non-energized wiring
- Toner-Pro features 5 distinct tone cadences, transmits 1,000+ feet
- Rugged Angled Bed of Nails (ABN) clips securely attach to wires
- RJ11 plug easily connects to telephone and RJ45 data jacks to tone wire pair
- Toner-Pro tests for continuity and polarity with results indicated by clearly labeled LEDs
- Probe-Pro features 3.5 mm headphone jack for noisy environments (headphones not included)
- Responsive probe with durable non-metallic, replaceable conductive tip (VDV999-068) sold separately
- Work light on probe tip for use in dark spaces
- Terminal block on probe to confirm the toned pair
- Each tool includes 4X AAA batteries
- Custom, padded, divided, zipper pouch for convenient storage (VDV770-500) included with kit

Cat. No.	Kit Contains		Weight
VDV500-820	TONEcube & PR	TONEcube & PROBEplus Kit	
•	Cat. No.	Description	
	VDV500-063	Toner-PRO Tone Generator	
	VDV500-123	Probe-PRO Tracing Probe	_



Toner-PRO Tone Generator

- Professional grade tone generator for non-active wiring
- For use with Probe-Pro Tracing Probe (VDV500-123) required (sold separately)
- Five distinct tone cadences
- Rugged Angled Bed of Nails (ABN) clips securely attach to wires
- RJ11 plug easily connects to telephone or RJ45 data jacks to tone individual conductors or wire pairs
- Tests for continuity and polarity with response displayed on clearly labeled, easy-to-read LEDs
- Auto Power-Off and Low Battery Indicator
- Loop for a lanyard
- (4) AAA Batteries included

Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	
VDV500-063	63 5 mm	108 mm	25 /l mm	1 v A A A	



Probe-PRO Tracing Probe

- Traces non-energized wiring when used with Toner-Pro Tone Generator (VDV500-063, sold separately)
- Responsive, durable, replaceable non-metallic, conductive tip
- Work light for use in dark spaces
- 3.5 mm headphone jack for noisy environments (headphones not included)
- Terminal block on probe to confirm the toned pair has been located
- Tool-less, twist-and-lock replacement tip (VDV999-068) available
- One push power button with power-on LED indicator no need to hold button down
- Auto power-off
- Low battery indicator
- 4 x AAA batteries included
- Includes a loop for a lanyard
- Works with Klein's Scout® Pro, Lan Scout®, Jr. and Commander™ series of testers

Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	
VDV500-123	35.6 mm	228.6 mm	30.5 mm	4 x AAA	











Cable Testers & Accessories

Scout® Pro 3 Tester Kits

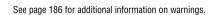
Next generation, tester kits feature a larger, backlit display, cable length and now Power over Ethernet (PoE)

- Test voice (RJ11/12), data (RJ45) and video (coax F-connector) cables
- Measure cable length (up to 2,000 feet)
- Backlit LCD screen displays cable length, wiremap, cable ID and test results
- Detect, identify and test Power over Ethernet (PoE)
- Test for Open, Short, Miswire or Split-Pair faults
- Hub Blink mode to identify port location on a hub or a switch
- Includes voltage warning, shield detection, auto power-off and low battery indicator
- Remote options include up to 12 Test + Map™ remotes and up to 18 locator remotes
- All kits include a Self-Storing Test + Map™ Remote
- These models replace the Scout® Pro 2 series of tester kits





Included Cat. No.	VDV501-851 Starter Kit	VDV501-852 Locator Remote Kit	VDV501-853 Smart Remote Kit	VDV770-850 Test + Map™ Remote Upgrade Kit	VDV770-851 Test + Map™ Remote Expansion Kit
Scout® Pro 3 Tester	•	•	•	-	-
Self-Storing Remote (#1)	•	•	•	-	-
Test + Map™ Remotes	-	-	#2 - #6	#2 - #6	#7 - #12
RJ45 Locator Remotes	5	18	_		_
F-Coax Locator Remotes	5	18	_	-	-
Coax F Adapter (female-to-female)	1	2	7	6	6
Coax Barrel Adapters (male-to-female)	-	-	7	2	-
RJ45 Jumper Cables (6")	-	2	7	7	6
RJ11 Jumper Cables (6")	-	2	2	2	2
RJ12 Jumper Cables (6")	-	2	2	2	2
9V Alkaline Battery	•	•	•	-	-







Carrying Case



VDV770-125

VDV770-125

VDV770-126

VDV770-127



Cable Testers & Accessories

Commander™ Series

- Locate, test and measure coaxial, data (RJ45) and telephone (RJ11) cables
- Measure cable length and distance-to-fault with Time Domain Reflectometry (TDR) technology
- Locate and identify cables with location ID remotes, Test-n-Map™ remotes, Link Light and Tone Generator*
- Detect, identify and test Power-over-Ethernet (PoE)
- Perform active network (Ethernet) testing
- Save up to 256 cable or network tests and export to print reports
- Battery life of 20 hours active and 10 years standby;
 Probe battery life is 25 hours active and 4 years standby



CAT NO: VDV501-828



CAT NO: VDV501-829



Cat. No.	Includes	Batteries	Weight
VDV501-828	1 Commander™ tester, Test-n-Map™ Remote #1, 5 LanMap™ ID Remotes, 5 CoaxMap™ ID remotes, 1 test cable each for USB, RJ12 and RJ45, 1 coax adapter, carrying case	(6) AA Alkaline Included	340 g
VDV501-829	1 Commander™ tester, Test-n-Map™ Remote #1, 1 PROBEplus Tone Tracing Probe, 20 LanMap™ ID Remotes, 20 CoaxMap™ ID remotes, 1 test cable each for USB, RJ12 and RJ45, 1 coax adapter, carrying case	Commander: 6 AA Alkaline Included; Probe: 1 9V Alkaline Included	341 g

^{*} Functionality requires an analog tone tracing probe VDV500-060 (Included with Cat. No. VDV501-829).

Feature	S	
	RJ-45 8-Wire Cables	•
	F-connector Coaxial Cables	•
^	Telephone Cables	with adapter
1234	Wiremap	•
×× X-	Open Fault	•
×	Short Fault	•
1 1 2	Miswire Fault	•
×××	Split-Pair Fault	•
Pass	TI568A/B & Crossover/Uplink	•
(?)	Active Ethernet Detects link speed and capabilities to 1 Gbps	•
<u> </u>	Single-End Cable Testing	•
1	Test-n-Map™ Remote (Two End Testing) Test and Indentify location in one step with remote	supports up to 8
PoE	Power Over Ethernet Testing	•
TDR	Time Domain Reflectometry Length Measurement Method	•
\longleftrightarrow	Measures Cable Length	457 m
±(5% + 1 Ft.) ±(5% + 0.3 m)	Accuracy/ Measurement Resolution	•
- \ \.	Link Light	•
ID	Cable Identification	supports up to 20
	Shield Detection	•
Ŕ	Voltage Warning	•
	Low Battery Indicator	•
	Store Test Results	256
	Print / Export Custom Reports	•
	Multiple-style Tone Generator* Down to Single Conductor/Pair/Cable	4
	Color LCD Display	69 mm
	Multiple Languages	ENG · ESP · FRA
Ft./m	Imperial or Metric Results	•
Apo	Auto Power Off	•
ø	Customizable Setup	•
•<	USB interface (for PC connection)	MICRO
	Upgradeable Firmware	









Cable Testers & Accessories

Pocket Continuity Tester for Coax Cable

- Simple compact wire tracing of coaxial cables
- Identifies and tests cable drops for pass, short faults and location via audible beep and LED indicators
- LED lights green on a correctly made cable drop, red for short fault
- Remote contains loud audible beep for easy location identification
- Female to female F-adapter (included) enables testing of loose cables and installed cable runs
- Non-slip Cushion-Grip handle for comfort and secure grip of tool
- Docked remote switches tester off to conserve battery life
- Pocket clip secures tester to shirt pocket
- AAA alkaline battery included



Cat. No.	Overall Length	Overall Height	Overall Width	Weight
VDV512-007	127 mm	19 mm	32 mm	136 g

Coax Explorer™ 2 Testers

- Test coaxial cable and map up to 4 locations
- Simple push button operation
- Easy to read LED panel indicates PASS, OPEN or SHORT conditions, simplifying cable identification
- Push-on remotes for ease of use
- Cat. No. VDV512-101 includes removable, snap-on remote holder, 4 color-coded push-on remotes, F adapter and batteries
- Snap-on remote holder, 4 color-coded push-on remotes, F adapter and batteries also available separately (Cat. No. VDV512-110)



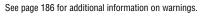
VDV512-110





Cat. No.	Overall Length	Overall Height	Overall Width	Batteries	Test-n-Map ID Remotes	Weight
VDV512-100	146 mm	25 mm	32 mm	2 x AAA	Includes Red Remote	85 g
VDV512-101	146 mm	25 mm	59 mm	2 x AAA	4 Remotes Included	136 a













Klein Gear

We understand the heavy demands on professionals at the jobsite. Klein has developed accessories with the strength to match jobsite demands and make the professional's day less stressful.

For Professionals... Since 1857™



Coolers

TRADESMAN PRO™



Tough Box Cooler

- Industrial exterior body design supports seating capacity of up to 136 kg
- No rust, stainless steel hinged lid is recessed to accommodate 1 liter water bottles and stays open at 90° to allow uninterrupted access
- Lid opens a full 180° to access interior compartment inside the lid to hold items like medicine, keys, napkins, utensils, etc.
- Shoulder strap holds lid in place while carrying and easily converts to a handle
- Lock hasp fits #1 Master Lock® or equivalent (not included)
- Patent Pending Design

Cat. No.	Capacity	Overall Length	Overall Height	Overall Width	Number of Compartments	Weight
55600	16.1 L	305 mm	305 mm	412 mm	2	3.0 kg

Master Lock® is a trademark of Master Lock Company



Tradesman Tumbler

- Tumbler uses double wall vacuum insulated stainless steel to keep liquid cold up to 12 hours and hot up to 4 hours
- Unique double-thread lid design allows easy twisting with gloves on or off
- Flip-top lid locks to form a spill-resistant seal for transport
- Textured silicone outer sleeve enables a slip-resistant grip with gloved or ungloved hands
- Slip-resistant bottom pad friction-grips to most surfaces
- Removable rare earth magnetic lanyard helps secure tumbler to metal objects
- Made from stainless steel and other BPA-free food grade materials

Cat. No.	Capacity	Overall Length	Overall Height	Overall Width	Weight
55580	590 mL (20 oz)	107 mm	213 mm	99 mm	0.5 kg



CAT NO: 55580

Soft Lunch Cooler

- Stays cool for up to 12 hours
- Double-thick, leak-resistant anti-microbial liner
- 1680d ballistic weave for durability
- Fully-molded bottom protects against the elements
- Separate upper "doghouse" compartment keeps certain items from getting crushed
- Mesh side pockets for extra items
- Front zipper pocket holds keys, napkins, medicine, etc.
- Shoulder strap and handle for easy carrying



Cat. No.	Overall Length	Overall Height	Overall Width	Number of Compartments	Weight
55601	241 mm	330 mm	305 mm	4	1.5 kg

COOL 12 DOUBLE-THICK LINER









Accessories

Tradesman Pro™ Magnetic Wristband

- Wrap around your wrist, belt, or tool bag and keep small parts easily within reach
- Contoured for a comfortable fit around most wrist sizes
- Strong rare earth magnets keep small parts close at hand
- Breathable mesh interior for comfort
- Made of durable 1680d ballistic material
- Secure adjustable hook and loop closure



Cat. No.	Overall Length	Overall Height	Overall Width	Weight
55895	337 mm	102 mm	19 mm	113 g

Telescoping Magnetic LED Pickup Tool

- Telescoping extension 610 mm beyond arm's reach to retrieve magnetically-attractive tools and parts
- Powerful magnetic head with 907 g pickup strength
- LED light provides long-lasing illumination to guide you to and from your target
- 75 mm goose-neck end bends to aid with pickup and to work around obstacles
- Pocket clip for easy, convenient storage





Cat. No.	Lumens	Batteries	Battery Life	Drop Protection	Weight
56027	25	2 x AAA Included	10 Hours	3 m	180 g

Magnetiser / Demagnetiser

- Magnetizes and demagnetizes screwdriver tips and bits using powerful rare-earth magnets
- Single swipe operation provides immediate magnetization/demagnetization
- Fits most screwdrivers including precision screwdrivers, 1/4 Slotted, #2 Phillips and #3 Phillips
- Attaches to tool bags or backpacks with the included stainless steel key ring
- No batteries required

Cat. No.	Overall Length	Overall Height	Overall Width	Weight
MAG2	56 mm	17 mm	26 mm	32 g



NZ REF: KLMAG2





See page 186 for additional information on warnings.



MIRELESS JOBSITE SPEAKER iPhone / Android compatible

Cat. No.	Overall Length	Overall Height	Overall Width	Weight
AEPJS1	98 mm	89 mm	54 mm	283 g

5 watts of high-quality sound for smart phones, tablets, computers and other audio devices via a wireless Bluetooth* connection or wired auxiliary input. It answer calls hands-free with the built-in speakerphone and can be magnetically attached to any steel surface, mounted to a standard 1/4-20 tripod, attached to a lanyard, or simply stood up on any solid, level surface.

TOP, SIDE & FRONT OF UNIT



BOTTOM & BACK OF UNIT





Klein Tools' Bluetooth® Speaker with Magnetic Strap offers great sound plus more mounting options. The flexible strap can be used on conduit, backpacks, cooler handles, belt loops...Wherever you want to go. A magnet is smartly embedded in the strap allowing you to attach it to any ferrous surface. This speaker provides high-quality, crisp treble and bold bass via a Bluetooth® wireless connection or wired auxiliary input. With great sound, the hands-free speakerphone, and superior mounting options, this rugged speaker is essential for both on and off the job site.











Entertainment

Klein Bottle Opener

- Suitable for users from the apprentice to the demanding professional
- Cushion-Grip handle resists slippage and provides the comfort needed for frequent use
- Bottle cap Tip-Ident[®], allows for quick identification in tool pouches or crowded drawers
- Professionally designed and rigorously tested by an expert team to handle both foreign and domestic applications
- High-quality stainless steel construction



CAT NO: 98002BT

val. No.	Overall Leligill	Overall Helylli	Overall Willin	weigiit
98002BT	171 mm	35 mm	32 mm	0.11 kg







Cable Glands & Accessories

With the ever changing requirements for gland performance, Alco continues to develop their glands to meet the stringent performance requirements of today's modern industry.

For Professionals... Since 1857™



Weatherproof Cable Glands

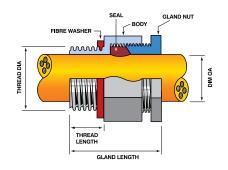
Premium Weatherproof Cable Glands For Unarmoured Cable

- For indoor or outdoor use
- Provides seal on cable sheath
- Degree of protection against ingress of water IP66/68
- Ompliance with AS 1939-1990
- Locknut is supplied as standard

Material: Brass, Nickel Plated

Seal: TPE

Temperature Range: -20°C to +80°C





	Sealing Range (Mm)				Thread		Gland Diameter		Gland Length			Orange Shroud*		
Cat. No.	Seal B OA Min	(Thick) OA Max	Seal A OA Min	(Thin) OA Max	Diameter X Length	Pitch	Across Flats	Across Points	Uncompressed	Compressed	Torque (Nm)	PVC	Silicon	Box Qty
ALCUW12	1.5	3.5	3.5	6.0	M12 x 10	1.5	17.5	18.9	32.0	25	5	_	ALCSG0S	30
ALCUW16S	1.5	3.5	3.5	6.0	M16 x 10	1.5	20.0	21.6	32.0	25	9	-	ALCSGOS	30
ALCUW16	5.0	7.5	7.5	10.0	M16 x 10	1.5	18.0	19.4	32.0	25	9	-	ALCSGOS	30
ALCUW20A	5.0	7.5	7.5	10.0	M20 x 10	1.5	23.0	24.7	32.0	25	13	ALCSG1	ALCSG1S	20
ALCUW20	10.0	11.0	11.0	15.0	M20 x 10	1.5	22.5	24.2	32.0	25	13	ALCSG1	ALCSG1S	20
ALCUW25	14.5	17.0	17.0	20.0	M25 x 12	1.5	30.0	32.3	37.5	29	21	ALCSG2L	ALCSG2LS	15
ALCUW32	20.0	23.0	23.0	26.5	M32 x 12	1.5	36.0	38.7	39.5	30	34	ALCSG3	ALCSG3S	10
ALCUW40	26.0	30.0	30.0	33.5	M40 x 15	1.5	45.0	48.4	44.5	35	53	ALCSG4	ALCSG4S	8
ALCUW50	33.0	36.0	36.0	42.0	M50 x 15	1.5	55.0	59.1	49.5	35	83	ALCSG5	ALCSG5S	5
ALCUW63	41.5	46.0	46.0	52.0	M63 x 19	1.5	67.5	72.5	56.5	45	132	ALCSG6	ALCSG6S	2
ALCUW75	51.0	56.0	56.0	65.0	M75 x 19	1.5	90.0	97.4	66.0	50	188	-	ALCSG7S	2
ALCUW82	-	-	65.0	76.0	M82 x 19	1.5	100.0	106.6	70.0	58	225	-	ALCSG8S	1
ALCUW105	75.0	80.0	82.0	89.0	M105 x 30	2.0	120.0	129.0	148.0	110	288	_	-	1
ALCUW120A	89.0	92.0	92.0	98.0	M120 x 30	2.0	140.0	150.0	148.0	110	288	_	-	1
ALCUW120B	-	-	96.0	105.0	M120 x 30	2.0	140.0	150.0	148.0	110	288	-	-	1

^{*} For Black Shroud add 'B' to part number: e.g. ALCSG3SB. Note: Mounting thread is metric with pitch 1.5mm, unless otherwise specified. Spare seals also available (lead time and MOQ applies). Available in stainless steel upon request, lead times apply.

OTHER TYPES OF GLAND RANGES

WEATHERPROOF NYLON GLANDS

HAZARDOUS NYLON GLANDS

WEATHERPROOF METAL GLANDS FOR UNARMORED CABLE
HAZARDOUS METAL GLANDS FOR UNARMORED CABLE
WEATHERPROOF METAL GLANDS FOR ARMORED CABLE

HAZARDOUS METAL GLANDS FOR ARMORED CABLE

BARRIER GLANDS

EMC METAL GLANDS

HAZARDOUS EMC METAL GLANDS



See website for fitting instructions. # All dimensions in mm unless otherwise specified

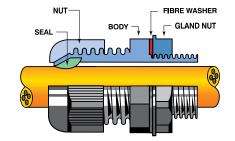


Nylon Cable Gland For Unarmoured Cable

- For indoor or outdoor use
- Provides seal on cable sheath
- Halogen Free
- UV protected
- Seals available to suit 1.5, 2.5 & 4.0mm twin and earth TPS cable (ALCMG20 and ALCMG25 only)
- IP68 (50m)
- Locknut is supplied as standard

Material: Polyamide **Seal:** Neoprene

Temperature Range: -30°C to +80°C (up to 150°C intermittent)





CAT. NO: ALCMG25

Cat. No.	Cable Sealing F	Range (Mm)	Thread	Diameter Across	Orange Shroud*		Pov Otu
Gal. NO.	Min	Max	Diameter X Length	Flats	PVC	Silicon	Box Qty
ALCMG12	3.0	6.5	M12 x 8	15	-	_	40
ALCMG16	5.0	10.0	M16 x 15	22	ALCSG1	ALCSG1S	25
ALCMG20	10.0	14.0	M20 x 15	27	ALCSG2	ALCSG2S	25
ALCMG25	11.0	17.0	M25 x 15	29	_	ALCSG2LS	15
ALCMG32	18.0	25.0	M32 x 15	42	_	ALCSG3L	5
ALCMG40	22.0	32.0	M40 x 18	53	ALCSG5	ALCSG5S	4
ALCMG50	30.0	38.0	M50 x 18	60	ALCSG5	ALCSG5S	2
ALCMG63	34.0	44.0	M63 x 18	65	ALCSG6	ALCSG6S	2
ALCMG75	48	55	M75 x 25	80	-	ALCSG6L	5

^{*}For Black Shroud add 'B' to part number: e.g. ALCSG3SB. Note: Mounting thread pitch 1.5mm unless otherwise specified. See product and/or website for fitting instructions. **No suitable shroud available, use HSTNW18/9 size heatshrink instead NPT and PG fittings available upon request, lead times apply.



 $[\]ensuremath{\textit{\#}}\xspace$ All dimensions in mm unless otherwise specified.

Conduit & Accessories

Manufactured to the highest specifications, we offer the extensive range of Anaconda conduit systems certified for any environment. With conduits to suit general usage, as well as specialised products for specific industries and applications, we have the right product for every application.

Alco also offers a range of European designed and made flexible and easy to install nylon conduit and fittings.



For Professionals... Since 1857™



Metallic Conduit

AEF Type Anaconda Flexible Metal Conduit

- Provides cable protection in harsh environments
- Provides dust and liquid tight protection of cables
- Extra flexible all-purpose wiring conduit with galvanised steel core
- Uses standard liquid-tight fittings for easy installation
- Smooth appearing cover for exposed applications with convenient markings in feet
- No copper ground wire

Approvals: IP67 rating when installed with approved connectors **Temperature Range:** -15° C to $+60^{\circ}$ C

Classification	Value	Description
Compression resistance	4	Heavy (1250 N)
Impact resistance	4	Heavy (6J)
Minimum temperature	3	-15°C
Maximum temperature	1	+60°C
Bending resistance	4	Flexible
Electrical properties	3	With continuity and insulating characteristics
Resistance to ingress of solid Foreign objects (I)	6	Protected against dust (dustproof)
Resistance to ingress of water (P)	7	Watertight (1 metre deep, 30 min.)
Corrosion resistance Inside/outside	3	Medium/High
Tensile Strength	4	Heavy (1000 N)
Resistance to flame propagation	1	Non-flame propagating
Suspended load capacity	0	None declared







	Conduit S	ize	Inside	Outside	Approx	Wainkt	TUDEAD	Laurah	Suitable Fitting	y Part Number	
Cat. No.	mm	Inches	Diameter (mm)	Diameter (mm)	Inside Bend Dia (mm)	Weight (KG/30M)	THREAD SIZE (mm)	Length (M)	Straight	45°	90°
AEF14-15	10	1/4	6.2	11.3	43.2	6.3	10	15	N/A	N/A	N/A
AEF516-15	12	5/16	9.9	14.2	50.8	6.8	12	15	N/A	N/A	N/A
AEF38-15	16	3/8	12.3	17.5	50.8	9.5	16	15	C16/M16 C16/M20	C16/M16/45A C16/M20/45A	C16/M16/90A C16/M20/90A
AEF38-30	16	3/8	12.3	17.5	50.8	9.5	16	30	C16/M16 C16/M20	C16/M16/45A C16/M20/45A	C16/M16/90A C16/M20/90A
AEF12-15	20	1/2	15.7	20.8	63.5	11.3	20	15	C20/M20	C20/M20/45A	C20/M20/90A
AEF12-30	20	1/2	15.7	20.8	63.5	11.3	20	30	C20/M20	C20/M20/45A	C20/M20/90A
AEF34-15	25	3/4	20.7	26.2	76.2	17.7	25	15	C25/M25	C25/M25/45A	C25/M25/90A
AEF34-30	25	3/4	20.7	26.2	76.2	17.7	25	30	C25/M25	C25/M25/45A	C25/M25/90A
AEF100-15	32	1	26.2	32.8	101.6	23.1	32	15	C32/M32	C32/M32/45A	C32/M32/90A
AEF100-30	32	1	26.2	32.8	101.6	23.1	32	30	C32/M32	C32/M32/45A	C32/M32/90A
AEF114-15	40	11/4	34.7	41.5	114.3	29.9	40	15	C40/M40	C40/M40/45A	C40/M40/90A
AEF112-15	50	1½	40.0	47.4	139.7	47.2	50	15	C50/M50	C50/M50/45A	C50/M50/90A
AEF200-15	63	2	51.3	59.5	177.8	61.7	63	15	C63/M63	C63/M63/45A	C63/M63/90A
AEF300	95	3	77.9	87.9	381.0	115.7	95	7.62	B21013000	N21013000	L21013000
AEF400	128	4	101.6	113.3	431.8	164.2	128	7.62	B21014000	N21014000	L21014000

Note: Larger sizes of conduit available upon request, however lead times apply. Spare grounding cones and seals also available e.g. CT/M20 for 20mm grounding cone and CTS/M20 for 20mm seal. # All dimensions in mm unless otherwise specified.



Conduit Fittings

Metal Conduit Fittings to suit Anaconda Conduit

- For indoor or outdoor wet corrosive environments
- Provides dust and liquid-tight connection to liquid-tight flexible metal conduit

Material

Body and cap: Brass, Nickel Stainless Steel Grade 316 Plated Ferrule: Tin Plated Steel Tin Plated Steel Inner seal: Polyamide 6 Polyamide 6 Throat insulator: Polyamide 6 Polyamide 6 Nut: Brass, Nickel Plated SS Grade 316 -45°C to +105°C

Temperature Range

-45°C to +105°C



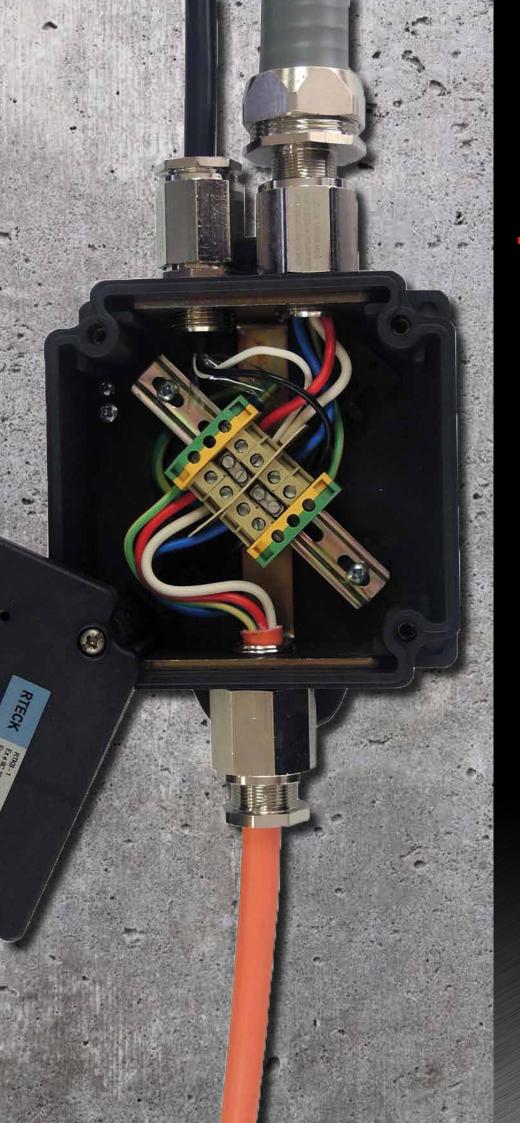






CAT. NO: C20/M20/90A

Conduit Size			Thread Size Max Internal	Body Style	Diameter Across Nut		Box Qty	
	mm	Inches	(mm)	Diamter (mm)	202, 01,10	flats (mm)	points (mm)	
C16/M16	16	3/8	16	10.2	straight	26	29	10
C16/M16-SS	16	3/8	16	10.2	straight	26	29	10
C16/M16/45A	16	3/8	16	10.2	45 degrees	26	29	10
C16/M16/90A	16	3/8	16	10.2	90 degrees	26	29	10
C16/M20	16	3/8	20	10.2	straight	26	29	10
C16/M20/45A	16	3/8	20	10.2	45 degrees	26	29	10
C16/M20/90A	16	3/8	20	10.2	90 degrees	26	29	10
C20/M20	20	1/2	20	13.5	straight	29	32.7	10
C20/M20-SS	20	1/2	20	13.5	straight	29	32.7	10
C20/M20/45A	20	1/2	20	13.5	45 degrees	29	32.7	10
C20/M20/90A	20	1/2	20	13.5	90 degrees	29	32.7	10
C25/M25	25	3/4	25	18.5	straight	35	38.6	10
C25/M25-SS	25	3/4	25	18.5	straight	35	38.6	10
C25/M25/45A	25	3/4	25	18.5	45 degrees	35	38.6	10
C25/M25/90A	25	3/4	25	18.5	90 degrees	35	38.6	10
C32/M32	32	1	32	23.5	straight	45	50	1
C32/M32-SS	32	1	32	23.5	straight	45	50	1
C32/M32/45A	32	1	32	23.5	45 degrees	45	50	1
C32/M32/90A	32	1	32	23.5	90 degrees	45	50	1
C40/M40	40	11/4	40	31.8	straight	54	60	1
C40/M40-SS	40	11/4	40	31.8	straight	54	60	1
C40/M40/45A	40	11/4	40	31.8	45 degrees	54	60	1
C40/M40/90A	40	11/4	40	31.8	90 degrees	54	60	1
C50/M50	50	1½	50	36.8	straight	63	69.2	1
C50/M50-SS	50	1½	50	36.8	straight	63	69.2	1
C50/M50/45A	50	1½	50	36.8	45 degrees	63	69.2	1
C50/M50/90A	50	1½	50	36.8	90 degrees	63	69.2	1
C63/M63	63	2	63	47.8	straight	72	85	1
C63/M63-SS	63	2	63	47.8	straight	72	85	1
C63/M63/45A	63	2	63	47.8	45 degrees	72	85	1
C63/M63/90A	63	2	63	47.8	90 degrees	72	85	1



Enclosures

Alco offers a wide range of Alco branded junction boxes and enclosures, and the R-tech and Pratley ranges of Hazardous Area junction boxes.

The Alco boxes consist of two ranges. The Alco Easy boxes come in a wide ranges of sizes from #0 (0.41) to #9 (141) and are dust and water resistant with IP56 or better rating.

For Professionals... Since 1857™



Weatherproof Enclosures

Adaptable PVC Enclosures

- Professional wide-ranging solution for juntion boxes and control enclosures
- IP56, Dust and water resistant
- High impact resistance
- Fully insulated
- Corrosion free
- Sealed cover
- Grey colour
- Threaded entries and knockouts for conduit and cably entry
- Ompliance with AS 1939-1990
- ALCEZIBOXO suplied with: 2 x 20mm & 1 x 25mm screwed adaptors



Cat. No.	Height	Width	Depth
ALCEZIBOX0	85 mm	85 mm	62 mm
ALCEZIBOX1	105 mm	105 mm	72 mm
ALCEZIBOX2	120 mm	85 mm	72 mm
ALCEZIBOX3	120 mm	120 mm	93 mm
ALCEZIBOX4	160 mm	120 mm	93 mm
ALCEZIBOX5	230 mm	120 mm	72 mm
ALCEZIBOX6	230 mm	175 mm	93 mm
ALCEZIBOX7	230 mm	175 mm	160 mm
ALCEZIBOX8	315 mm	244 mm	123 mm
ALCEZIBOX9	315 mm	244 mm	213 mm









Hand Hydraulic Crimpers

6 Ton Hand Hydraulic Crimping Range

- Flip open head with 180o opening
- Easy operation
- Rigid and anti-slip handle
- To suit Alco 6 tonne copper and aluminium dies
- Comes in sturdy, portable carry case



Head type	Crimping force	Rated Pressure	Crimping capacity	Weight
Flip top	6 Tonne	720 Bar	300mm ² (CU)/300mm ² (AL)	3.7 kg
Available Kits				
Cat. No.	Description		Kit Contains	
Gat. NO.	Description	Cat. No.	Desc	ription
ALCHC-6	6 Tonne Hand Hydraulic Crimper Tool	- -		-
ALCHC-6/WD	6 Tonne Hand Hydraulic Crimper	ALCHC-6	6 Tonne Hand Hydraulic Crimper Tool	
	Tool with Dies	ALCK6-DIEKIT	6 Tonne Die kit 10-300 mm	

12 Ton Hand Hydraulic Crimping Range

- C-head with large 42mm opening width
- Oil seal Precision design, avoid oil leakage
- Rotating the handle enable pressure relief
- Easy operation
- Rigid and anti-slip handle
- To suit Alco 12 ton copper and aluminium dies
- Comes in sturdy, portable carry case



Head type	Crimping force	Crimping capacity	Weight
C-Type	12 Tonne	Copper: 16-400mm ² Aluminium: 10-300mm ²	8.2 kg

Available Kits					
Oct No	Description	Kit Contains			
Cat. No.		Cat. No.	Description		
ALCHC-12	12 Tonne Hand Hydraulic Crimper Tool	-	-		
ALCHC-12/WD	12 Tonne Hand Hydraulic	ALCHC-12	12 Tonne Hand Hydraulic Crimper Tool		
ALCHC-12/WD	Crimper Tool with Dies	ALCK12-DIEKIT	12 Tonne Die kit 16-400 mm		





Battery Crimpers

6 Ton Battery Crimping Range

- Flip open head with 180o opening
- Suitable for crimping in narrow working spaces
- Super quick, light weight and easy to operate.
- Built in safety valve, automatic pressure-relief at Max. pressure.
- Built-in microchip controller, more crimping times with one time charge, protect the device body.
- · Crimping head rotates 360 degrees, suitable for different angles.
- Battery not included



Head type	Crimping force	Rated Pressure	Crimping capacity	Weight	
Flip top	6 Tonne	720 Bar	300mm ² (CU)/300mm ² (AL)	3.1 kg	
Available Kits					
Cat. No.	Description		Kit Contains		
0 at. 110.	Description	Cat. No.	De	scription	
ALCCT-6	6 Tonne Battery Crimper (skin only)	-		-	
ALCCT-6/WD	6 Tonne Battery Crimper Tool	ALCCT-6	6 Tonne Batte	ry Crimper (skin only)	
	with Dies	ALCK6-DIEKIT	6 Tonne D	ie kit 10-300 mm	
ALCCT-6/WA	0.7 . D. H. O	ALCCT-6	6 Tonne Batte	ry Crimper (skin only)	
	6 Tonne Battery Crimper Tool with Adaptors	ALCBAMKDW	Battery Adap	tor Makita to Dewalt	
	withAdaptoro	ALCBAMKMW	Battery Adapto	r Makita to Milwaukee	
ALCCT-6/KIT	6 Tonne Battery Crimper Kit	ALCCT-6	6 Tonne Batte	ry Crimper (skin only)	
		ALCK6-DIEKIT	6 Tonne Die kit 10-300 mm		
		ALCBAMKDW	Battery Adap	tor Makita to Dewalt	
		ALCBAMKMW	Battery Adapto	r Makita to Milwaukee	

12 Ton Battery Crimping Range

- Large opening, robust and durable, rotatable head 360°C
- Multifunctional LED light to indicate low battery charge and maintenance control
- Quick retract by pressing the button if necessary
- Ergonomic 2-compoent housing design, optimized centre of gravity for easy handling

Jaw opening

• 12-tonne output, efficient and quick, accurate crimping

Crimping force

Battery not included

Head type



туре	12 Ionne	42 mm	400mm² (CU)/240mm² (AL)	DIN)
ailable Kits				
Cat. No.		Description		Kit Contains
val. No.		Description	Cat. No.	Description
ALCCT-12	12 To	nne Battery Crimper (skin only)	=	-
ALCCT-12/WD	12 Tonn	e Battery Crimper Tool with Dies	ALCCT-12	12 Tonne Battery Crimper (skin only)
			ALCK12-DIEKIT	12 Tonne Die kit 16-400 mm
ALCCT-12/WA	12 Tonne	Battery Crimper Tool with Adaptors	ALCCT-12	12 Tonne Battery Crimper (skin only)
			ALCBAMKDW	Battery Adaptor Makita to Dewalt
			ALCBAMKMW	Battery Adaptor Makita to Milwaukee
ALCCT-12/KIT	12	2 Tonne Battery Crimper Kit	ALCCT-12	12 Tonne Battery Crimper (skin only)
			ALCK12-DIEKIT	12 Tonne Die kit 16-400 mm
			ALCBAMKDW	Battery Adaptor Makita to Dewalt
			ALCBAMKMW	Battery Adaptor Makita to Milwaukee



Crimping Tools Accessories

6 Ton Die Kit

- 6 Ton Copper Die Kit
- 12 pieces stored in convenient case
- For hexagonal crimping of cable
- Dies can also be sold individually

Cat. No.	Kit Contains	
ALCK6-DIEKIT	ALCK6-C10	6 ton copper die for 10mm² cable
	ALCK6-C16	6 ton copper die for 16mm² cable
	ALCK6-C25	6 ton copper die for 25mm² cable
	ALCK6-C35	6 ton copper die for 35mm² cable
	ALCK6-C50	6 ton copper die for 50mm² cable
	ALCK6-C70	6 ton copper die for 70mm² cable
	ALCK6-C95	6 ton copper die for 95mm² cable
	ALCK6-C120	6 ton copper die for 120mm² cable
	ALCK6-C150	6 ton copper die for 150mm² cable
	ALCK6-C185	6 ton copper die for 185mm² cable
	ALCK6-C240	6 ton copper die for 240mm² cable
	ALCK6-C300	6 ton copper die for 300mm² cable



CAT. NO: ALCK6-DIEKIT

12 Ton Die Kit

- 12 Ton Copper Die Kit
- 12 pieces stored in convenient case
- For hexagonal crimping of cable
- Dies can also be sold individually

Cat. No.	Kit Contains	
ALCK12-DIEKIT	ALCK12-C16	12 ton copper die for 16mm² cable
	ALCK12-C25	12 ton copper die for 25mm² cable
	ALCK12-C35	12 ton copper die for 35mm² cable
	ALCK12-C50	12 ton copper die for 50mm² cable
	ALCK12-C70	12 ton copper die for 70mm² cable
	ALCK12-C95	12 ton copper die for 95mm² cable
	ALCK12-C120	12 ton copper die for 120mm² cable
	ALCK12-C150	12 ton copper die for 150mm² cable
	ALCK12-C185	12 ton copper die for 185mm² cable
	ALCK12-C240	12 ton copper die for 240mm² cable
	ALCK12-C240	12 ton copper die for 300mm² cable
	ALCK12-C400	12 ton copper die for 400mm² cable



CAT. NO: ALCK12-DIEKIT



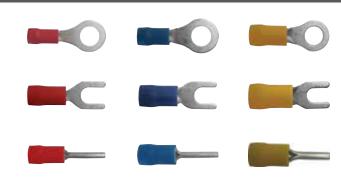


Pre-Insulated Terminals

Pre-Insulated Terminals (600V)

- Pre-insulated double crimp terminals
- Three piece construction
- Colour-coded PVC insulation for easy identification
- Easy entry
- 600V max

Operating Temperature: +105°C





Red Cat. No.	Conductor size (0.5-1.5mm²)	Stud size (mm)	Pack Qty
Ring Terminal	\$		
ALCRR3.7/100		3.7	100
ALCRR4/12		4	12
ALCRR4/100		4	100
ALCRR5/12		5	12
ALCRR5/100		5	100
ALCRR6/8		6	8
ALCRR6/100		6	100
ALCRR8/100		8	100
ALCRR10/100		10	100
ork Terminal	S		
ALCFR3.7/100		3.7	100
ALCFR4/10		4	10
ALCFR4/100		4	100
ALCFR5/100		5	100
ALCFR6/100		6	100
Pin Terminals		Pin dia (mm)	Pack Qty
ALCPINR/100		1.9	100
ip Blades		Blade width (mm)	Pack Qty
ALCLTR/100		3.0	100
Splice Termin	als		Pack Qty
ALCSPLR/12			12
ALCSPLR/100			100

						25	
Blue	01			Yellow	0 1 1		
Cat. No.	Conductor size (1.5-2.5mm²)	Stud size (mm)	Pack Qty	Cat. No.	Conductor size (4.0-6.0mm²)	Stud size (mm)	Pack Qty
Ring Terminals		'		Ring Terminal			
ALCRB3.7/100		3.7	100	ALCRY3.7/50		3.7	50
ALCRB4/10		4	10	ALCRY4/50		4	50
ALCRB4/100		4	100	ALCRY5/50		5	50
ALCRB5/100		5	100	ALCRY6/5		6	5
ALCRB6/7		6	7	ALCRY6/50		6	50
ALCRB6/100		6	100	ALCRY8/50		8	50
ALCRB8/100		8	100	ALCRY10/50		10	50
ALCRB10/100		10	100	ALCRY12/40		12	50
Fork Terminals	S			Fork Terminals	;		
ALCFB3.7/100		3.7	100	ALCFY3.7/50		3.7	50
ALCFB4/10		4	10	ALCFY4/50		4	50
ALCFB4/100		4	100	ALCFY5/50		5	50
ALCFB5/100		5	100	ALCFY6/50		6	50
ALCFB6/100		6	100	ALCFY8/50		12	50
Pin Terminals		Pin dia (mm)	Pack Qty	Pin Terminals		Pin dia (mm)	Pack Qt
ALCPINB/100		1.9	100	ALCPINY/50		1.9	50
Lip Blades		Blade width	Pack Qty	Lip Blades		Blade width	Pack Qt
		(mm)				(mm)	
ALCLTB/100		3.0	100	ALCLTY/50		3.0	50
Splice Termina	als		Pack Qty	Splice Termina	ils		Pack Qt
ALCSPLB/12			12	ALCSPLY/50			50
LCSPLB/50			50				



Pre-Insulated Disconnects Terminals (300V)

- Pre-insulated double crimp terminals
- Three piece construction
- Colour-coded PVC insulation for easy identification
- Easy entry
- 600V max (except the Quick disconnects and Tab disconnects which are 300V max)

Operating Temperature: +105°C



Red			
Cat. No.	Conductor Size (0.5-1.5mm²)	Stud size (mm)	Pack Qty
Bullet Receptacles		Bullet Dia (Mm)	
ALCBRR/100	1-1	4.0	100

Blue					
Cat. No.	Conductor Size (1.5-2.5mm²)	Stud size (mm)	Pack Qty		
Bullet receptacles		Bullet dia (mm)			
ALCBRB/100		4.0	100		
ALCBRB5/100		5.0	100		

Yellow			
Cat. No.	Conductor Size (4.0-6.0mm²)	Stud size (mm)	Pack Qty
Bullet receptac	les	Bullet dia (mm)	
ALCBRY/50		5.0	50

Bullet Terminals		Bullet dia (mm)	Pack Qty
ALCBTR/100		4.0	100

Bullet Termina	ıls	Bullet dia (mm)	Pack Qty
ALCBTB/100	100	4.0	100
ALCBTB5/100	E	5.0	100

Bullet Terminal	ls	Bullet dia (mm)	Pack Qty
ALCBTY/50	100	5.0	50

Quick Disconn	ects	Width (mm)	Pack Qty
ALCFQDR/10	-11	6.35	10
ALCFQDR/100	-11	6.35	100

Quick Disconn	ects	Width (mm)	Pack Qty
ALCFQDB/10	9.68	6.35	10
ALCFQDB/100	9.88	6.35	100

Quick Disconne	ects	Width (mm)	Pack Qty
ALCFQDY/6	<u> </u>	6.35	6
ALCFQDY/50	0	6.35	50

Fully Insulated Quick Disconnects	Width (mm)	Pack Qty
ALCFIFQDR/10	6.35	10
ALCFIFQDR/50	6.35	50

Fully Insulated Disconnects	Quick	Width (mm)	Pack Qty
ALCFIFQDB/10		6.35	10
ALCFIFQDB/50		6.35	50

Fully Insulated Disconnects	Quick	Width (mm)	Pack Qty
ALCFIFQDY/6		6.35	6
ALCFIFQDY/50		6.35	50

Tab Disconnects	Tab Width (mm)	Pack Qty
ALCMDTABR/10	6.35	10
ALCMD- TABR/100	6.35	100

Tab Width (mm)	Pack Qty
6.35	10
6.35	100
	6.35

Tab Disconnects	Tab Width (mm)	Pack Qty
ALCMDTABY/8	6.35	8
ALCMDTABY/50	6.35	50

Piggy Back Terminals	Width (mm)	Pack Qty
ALCPBR/50	6.35	50

Piggy Back Terminals		Width (mm)	Pack Qty
ALCPBB/8	-	6.35	8
ALCPBB/50	-	6.35	50

Piggy Back Ter	minals	Width (mm)	Pack Qty
ALCPBY/50	-	6.35	50

Flat Blade Terminals	Blade Length (mm)	Pack Qty
ALCFBTR10/100	10	100
ALCFBTR18/100	18	100

Flat Blade Terminals	Blade Length (mm)	Pack Qty
ALCFBTB10/100	10	100
ALCFBTB18/100	18	100

Flat Blade Terminals	Blade Length (mm)	Pack Qty
ALCFBTY10/50	10	50
ALCFBTY18/50	18	50



Bootlace Terminals

Pre-Insulated Bootlace Terminals

- Pre-insulated bootlace terminals
- Provide precise terminations to multi-stranded cable
- Reduces possibility of short-circuiting and ensures no strands stray
- Colour-coded Polyamide insulation for easy identification
- 600V max

Operating Range: +105°C

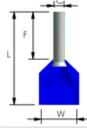


Conductor Size		Dimensions ((Mm)			2 10	
Cat. No.	(mm²)	L	F	C	W	Pack Qty	Colour
ALCBLV/100	0.25	10.0	6.0	0.75	1.9	100	Violet
ALCBLP/100	0.34	10.0	6.0	0.8	1.9	100	Pink
ALCBLW/50	0.5	12.0	8.0	1.3	3.3	50	White
ALCBLW/100	0.5	12.0	8.0	1.3	3.3	100	White
ALCBLB/100	0.75	14.8	8.0	1.5	3.5	100	Blue
ALCBLR/50	1.0	12.6	8.0	1.7	3.7	50	Red
ALCBLR/100	1.0	12.6	8.0	1.7	3.7	100	Red
ALCBLY/100	1.0	14.5	8.0	1.7	3.7	100	Yellow
ALCBLBK/50	1.5	14.5	8.0	2.0	4.0	50	Black
ALCBLBK/100	1.5	14.5	8.0	2.0	4.0	100	Black
ALCBLGY/100	2.5	15.8	8.0	2.6	4.9	100	Grey
ALCBLO/100	4.0	16.5	10.0	3.2	5.5	100	Orange
ALCBLG/50	6.0	20.5	12.0	3.9	7.0	50	Green
ALCBLG-18/50	6.0	26.0	18.0	3.5	6.3	50	Green
ALCBLBR/50	10.0	22.0	12.0	4.5	7.6	50	Brown
ALCBLBR-18/50	10.0	28.0	18.0	4.5	7.6	50	Brown
ALCBLI/50	16.0	24.0	12.0	5.8	8.8	50	lvory
ALCBLI-18/40	16.0	28.0	18.0	5.8	8.8	40	lvory
ALCBLBK25/25	25.0	30.0	16.0	8.3	12.7	25	Black
ALCBLR35/20	35.0	30.0	16.0	8.3	12.7	20	Red
ALCBLB50/10	50.0	36.0	20.0	10.3	15.0	10	Blue
ALCBLY70/7	70.0	37.0	21.0	13.5	16.0	7	Yellow
ALCBLR95/5	95.0	44.0	25.0	14.7	18.0	5	Red
ALCBLB120/4	120.0	48.0	27.0	16.7	20.0	4	Blue
ALCBLY150/3	150.0	58.0	32.0	19.5	23.0	3	Yellow

Pre-Insulated Twin Bootlace Terminals

- Pre-insulated twin bootlace terminals
- Provide precise terminations to multi-stranded cable
- Used to terminate two wires in the one terminal
- Reduces possibility of short-circuiting and ensures no strands stray
- Colour-coded Polyamide insulation for easy identification
- 600V max

Operating Temperature: +105°C



0-4 N-	Conductor	Dimensi	Dimensions (mm)				v Colour
Cat. No.	Size (mm²)	L	F	C	W	Pack Qty	Colour
ALCBLTGY/100	2 x 0.75	15.0	8.0	1.8	5.0	100	Blue
ALCBLTR/100	2 x 1.0	15.0	8.0	2.05	5.4	100	Red
ALCBLTBK/100	2 x 1.5	16.0	8.0	2.3	6.6	100	Black
ALCBLTB/100	2 x 2.5	18.5	10.0	2.8	7.8	100	Blue
ALCBLTGY4/50	2 x 4.0	23.0	12.0	3.7	8.8	50	Grey
ALCBLTY/50	2 x 6.0	26.0	14.0	4.8	10.0	50	Yellow

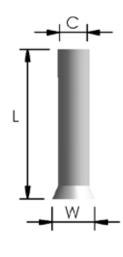


Non-Insulated Bootlace Terminals

- Non-insulated electro grade copper bootlace terminals
- Provide precise terminations to multi-stranded cable
- Reduce the possibility of short-circuiting and ensure no strands stray
- · Electro tinned finish for high conductivity

Operating Temperature: +200°C





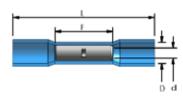
Cot No	CONDUCTOR	DIME	ISIONS ((MM)	PACK
Cat. No.	SIZE (mm²)	L	C	W	QTY
ALCBLU0.5/100	0.5	8.0	1.0	2.1	100
ALCBLU0.75/100	0.75	8.0	1.2	2.3	100
ALCBLU1.0/100	1.0	10.0	1.4	2.5	100
ALCBLU1.5/100	1.5	10.0	1.7	2.8	100
ALCBLU2.5/100	2.5	10.0	2.2	3.4	100
ALCBLU4/100	4.0	12.0	2.8	4.0	100
ALCBLU6/100	6.0	12.0	3.5	4.7	100
ALCBLU10/100	10.0	12.0	4.5	5.8	100
ALCBLU16/100	16.0	12.0	5.8	7.5	100
ALCBLU25/50	25.0	18.0	7.3	9.5	50
ALCBLU35/50	35.0	18.0	8.3	11.0	50
ALCBLU50/10	50.0	20.0	10.3	13.0	10
ALCBLU70/10	70.0	25.0	13.5	15.3	10
ALCBLU95/5	95.0	32.0	14.7	16.6	5

Heatshrink Terminals

Insulated Heatshrinkable Splice Terminals

- Heatshrinkable ring terminals provide water resistant connections
- Single crimp insulation seal
- Electro tin plated
- 600V max

Shrink temperature: $+150^{\circ}C$ Operating Range: $-10^{\circ}C$ to $+105^{\circ}C$





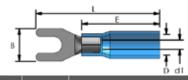
Cat. No.	Conductor Size (mm²)	Dimensio	ns (mm)	Pack Qty	Colour		
Gal. NU.		F	L	D	d	I dok Qty	Coloui
ALCHSSPLR/50	0.5-1.5	15.0	37.0	4.5	1.6	50	Red
ALCHSSPLB/50	1.5-2.5	15.0	37.0	5.5	2.3	50	Blue
ALCHSSPLY/25	4.0-6.0	15.0	41.0	6.5	3.6	25	Yellow

Insulated Heatshrinkable Fork Terminals

- · Heatshrinkable ring terminals provide water resistant connections
- Single crimp insulation seal
- Electro tin plated
- 600V max

Shrink temperature: +150°C Operating Range: -10°C to + 105°C





Cat. No.	Conductor	Dime	Dimensions (mm)				Pack Qty	Colour	
Gat. No.	Size (mm²)	Size (mm)	В	L	E	D	D1	Pack Qly	Colour
ALCHSFR3.7/100	0.5-1.5	3.7	6.4	25.5	18.5	4.5	1.7	100	Red
ALCHSFR4/100	0.5-1.5	4.0	7.2	26.0	18.5	4.5	1.7	100	Red
ALCHSFR5/100	0.5-1.5	5.0	8.0	26.0	18.5	4.5	1.7	100	Red
ALCHSFB3.7/50	1.5-2.5	3.7	6.4	26.5	20.5	5.5	2.3	50	Blue
ALCHSFB4.0/50	1.5-2.5	4.0	7.2	26.5	20.5	5.5	2.3	50	Blue
ALCHSFB5.0/50	1.5-2.5	5.0	9.5	28.5	20.5	5.5	2.3	50	Blue
ALCHSFY4.0/30	4.0-6.0	4.0	9.5	32.5	23.5	6.5	3.4	30	Yellow
ALCHSFY5.0/30	4.0-6.0	5.0	9.5	32.5	23.5	6.5	3.4	30	Yellow
ALCHSFY6.0/30	4.0-6.0	6.0	12.0	39.0	23.5	6.5	3.4	30	Yellow



Heatshrink Terminals

Insulated Heatshrinkable Ring Terminals

- · Heatshrinkable ring terminals provide water resistant connections
- Single crimp insulation seal
- Electro tin plated
- 600V max

Shrink temperature: $+150^{\circ}\text{C}$ Operating Range: -10°C to $+105^{\circ}\text{C}$



						D			
Oct No	Conductor Size (mm²)	Stud	Dime	Dimensions (mm)				Pack Qty	Colour
Cat. No.		Size (mm)	В	L	E	D	D1	r ack Qty	Colour
ALCHSRR3.7/100	0.5-1.5	3.7	8.0	26.0	18.5	4.5	1.7	100	Red
ALCHSRR4/100	0.5-1.5	4.0	8.0	26.0	18.5	4.5	1.7	100	Red
ALCHSRR5/100	0.5-1.5	5.0	8.0	26.0	18.5	4.5	1.7	100	Red
ALCHSRB3.7/50	1.5-2.5	3.7	8.5	28.5	20.5	5.5	2.3	50	Blue
ALCHSRB4.0/50	1.5-2.5	4.0	8.5	28.5	20.5	5.5	2.3	50	Blue
ALCHSRB5.0/50	1.5-2.5	5.0	9.5	28.5	20.5	5.5	2.3	50	Blue
ALCHSRY4.0/50	4.0-6.0	4.0	9.5	33.0	23.5	6.5	3.4	50	Yellow
ALCHSRY5.0/50	4.0-6.0	5.0	9.5	33.0	23.5	6.5	3.4	50	Yellow
ALCHSRY6.0/50	4.0-6.0	6.0	12.0	36.5	23.5	6.5	3.4	50	Yellow

19.2

45.5

23.5

6.5

3.4

25

Yellow

Insulated Heatshrinkable 3-Way Ring Terminals

ALCHSRY13.0/25

4.0-6.0

13.0

- Heatshrinkable 3-way ring terminals provide water resistant connections
- Single crimp insulation seal
- Electro tin plated
- 600V max

Shrink temperature: $+150^{\circ}$ C Operating Range: -10° C to $+105^{\circ}$ C



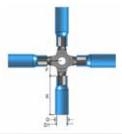


Cat Na	Conductor	Stud	Dimensi	ons (mm)			Back Oty	Calaur
Cat. No.	Size (mm²)	Size (mm)	F	E	D	D1	Pack Qty	Colour
ALCHS3WTR/15	0.5-1.5	4.0	8.0	18.5	4.5	1.7	15	Red
ALCHS3WTB/15	1.5-2.5	4.0	9.0	20.5	5.5	2.3	15	Blue
ALCHS3WTY/10	4.0-6.0	4.0	10.5	23.5	6.5	3.4	10	Yellow

Insulated Heatshrinkable 4-Way Ring Terminals

- Heatshrinkable 4-way ring terminals provide water resistant connections
- Single crimp insulation seal
- Electro tin plated
- 600V max

Shrink temperature: $+150^{\circ}C$ Operating Range: $-10^{\circ}C$ to $+105^{\circ}C$





Oak Na	Conductor Size (mm²)	Stud Size (mm)	Dimensions (mm)				Pack Qty	Colour
Cat. No.			F	E	D	D1	Pack Uly	Colour
ALCHS4WTR/15	0.5-1.5	4.0	8.0	18.5	4.5	1.7	15	Red
ALCHS4WTB/10	1.5-2.5	4.0	9.0	20.5	5.5	2.3	10	Blue
ALCHS4WTY/5	4.0-6.0	4.0	10.5	23.5	6.5	3.4	5	Yellow

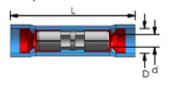


Specialty Terminals

Insulated Window Splice Terminals

- Translucent window splices allow you to see the crimp
- Double crimp
- Electro tin plated
- 600V max

Operating Temperature: + 105°C



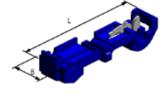
Cat. No.	Conductor	Dimens	ions (mm)	Book Oty	Colour		
Gal. NU.	Size (mm²)	L	D	d	Pack Qty	Colour	
ALCWSPLR/50	0.5-1.5	26.0	4.5	1.7	50	Red	
ALCWSPLB/50	1.5-2.5	26.0	5.0	2.3	50	Blue	
ALCWSPLY/30	4.0-6.0	30.0	6.8	3.4	30	Yellow	



T-Tap Terminals

- Electro tin plated
- 600V max

Operating Temperature: + 105°C



Cat. No.	Conductor	ctor Type Dimensions (1		sions (mm)	Pack Qty	Colour
Gal. NU.	Size (mm²)	Туре	В	L	- Fack Gly	Guluur
ALCTTAPR/25	0.5-1.0	Male	9.5	38	25	Red
ALCTTAPB/25	1.0-2.5	Male	9.5	38	25	Blue
ALCTTAPY/25	4.0-6.0	Male	9.5	38	25	Yellow
ALCTTAPMR/50	0.5-1.0	Female			50	Red
ALCTTAPMB/50	1.0-2.5	Female			50	Blue
ALCTTAPMY/25	4.0-6.0	Female			25	Yellow



Telecom Splice Connectors

- Make a clean, solid and rapid connection of your wires to keep telecommunication lines free of noise
- Handles a wide range of conductor sizes and allows you to handle higher pair wires
- RoHS compliant







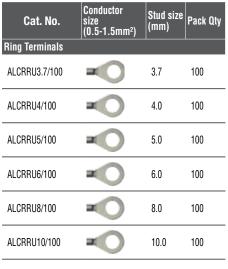
Cat. No.	Max Insulation OD (mm)	Cable Size	Colour	Material	Insulation	Pack Qty
ALCSC-R	1.67	A two or three-wire connection for Y-type divergence wire of solid copper 0.4-0.9mm (26-19 AWG) wire core or 0.4-0.65 (26-22 AWG) $$	Red	Solid copper	PC	50
ALCSC-B	1.27	A tap connector for T-type divergence wire of solid copper 0.4-0.65mm (26-22 AWG) wire core or 0.4-0.5mm (26-24 AWG) filled core cable	Blue	Solid copper	PC	100
ALCSC-Y	1.52	A two wire connector for solid copper 0.4-0.65mm (26-22 AWG) cable	Yellow	Solid copper	PC	100

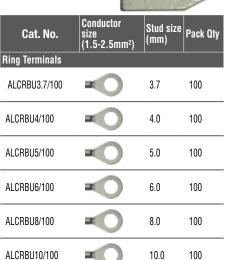


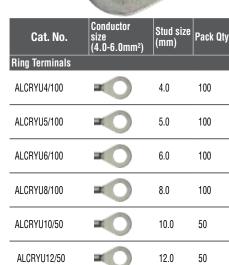
Non-insulated & Brass Terminals

Non-Insulated Ring & Fork Terminals

- Non-insulated copper terminals suitable for stranded to fine-stranded cable
- Electro tinned finish for high conductivity
- Easy to connect







Fork Terminals								
ALCFRU3.7/100		3.7	100					
ALCFRU4/100		4.0	100					
ALCFRU5/100	= _	5.0	100					
ALCFRU6/100	-	6.0	100					

Fork Terminals								
ALCFBU3.7/100		3.7	100					
ALCFBU4/100		4.0	100					
ALCFBU5/100	-	5.0	100					
ALCFBU6/100		6.0	100					

	Fork Termina	ls	
ALCFYU4/100		4.0	100
ALCFYU5/100	\sim	5.0	100
ALCFYU6/100		6.0	100

Non-Insulated Open Barrel Brass Terminals

- Non-insulated copper terminals suitable for stranded to fine-stranded cable
- Electro tinned finish for high conductivity
- Easy to connect









			Control of the last	Street, Street	· ·
Cat. No.	Туре	Plug Dimensions	Nominal cross section	Terminal Image	Pack Qty
ALCFQDU2/100	Quick Disconnect	2.8 x 0.5mm	0.5 - 1.5mm ²		100
ALCFQDU4/100	Quick Disconnect	4.8 x 0.8mm	1.5 - 2.5mm ²		100
ALCFQDU6/100	Quick Disconnect	6.4 x 0.8 mm	0.5 - 1.5mm²		100
ALCMDTABU1/100	Tab Terminal	6.4 x 0.8 mm	1.5 - 2.5mm²		100
ALCMDTABU2/100	Tab Terminal	6.4 x 0.8 mm	1.5 - 2.5mm²		100
ALCPBU/100	Piggy Back	6.4 x 0.8 mm	1.5 - 2.5mm²	->	100



Terminal Kits

Electricans Small Bootlace Terminals Kit

- 170 piece electrician's bootlace terminals kit
- Pre-insulated bootlace terminals
- Provide precise terminations to multi-stranded cable
- Reduces possibility of short-circuiting and ensures no strands stray
- Colour-coded polyamide insulation for easy identification
- 600V max

Note: for more information on terminals, see individual pages

Operating Temperature: + 105°C



Cat. No.

Cat. No.
ALCBLCKIT-535

Cat. No.

	Kit Contains		
ALCBLW		0.5 mm² White Bootlace Terminal	
	ALCBLB	0.75 mm² Blue Bootlace Terminal	
	ALCBLR	1.0 mm² Red Bootlace Terminal	
	ALCBLBK	1.5 mm² Black Bootlace Terminal	
	ALCBLGY	2.5 mm² Grey Bootlace Terminal	
	ALCBLO	4.0 mm ² Orange Bootlace Terminal	
	ALCBLG	6.0 mm² Green Bootlace Terminal	

Electricans Medium Bootlace Terminals Kit

- 535 piece electrician's bootlace terminals kit
- Pre-insulated bootlace terminals
- Provide precise terminations to multi-stranded cable
- Reduces possibility of short-circuiting and ensures no strands stray
- Colour-coded polyamide insulation for easy identification
- 600V max

Operating Temperature: + 105°C

Note: for more information on terminals, see individual pages



	Kit Contains		
	ALCBLW	0.5 mm ² White Bootlace Terminal	
	ALCBLB	0.75 mm² Blue Bootlace Terminal	
ALCBLBK 1.5 mm² Black Bootlace Tern ALCBLGY 2.5 mm² Grey Bootlace Tern		1.0 mm ² Red Bootlace Terminal	
		1.5 mm² Black Bootlace Terminal	
		2.5 mm² Grey Bootlace Terminal	
		4.0 mm ² Orange Bootlace Terminal	
	ALCBLG	6.0 mm² Green Bootlace Terminal	
	ALCBLBR	10.0 mm² Brown Bootlace Terminal	

Electricans Large Bootlace Terminals Kit

- 685 piece electrician's bootlace terminals kit
- Pre-insulated bootlace terminals
- Provide precise terminations to multi-stranded cable
- Twin bootlace terminals used to terminate two wires in the one terminal
- Reduces possibility of short-circuiting and ensures no strands stray
- Colour-coded polyamide insulation for easy identification
- 600V max

Operating Temperature: + 105°C



Kit Contains	
ALCBLW	0.5 mm² White Bootlace Terminal
ALCBLB	0.75 mm² Blue Bootlace Terminal
ALCBLR	1.0 mm² Red Bootlace Terminal
ALCBLBK	1.5 mm² Black Bootlace Terminal
ALCBLGY	2.5 mm² Grey Bootlace Terminal
ALCBLO	4.0 mm² Orange Bootlace Terminal
ALCBLG	6.0 mm² Green Bootlace Terminal
ALCBLBR	10.0 mm ² Brown Bootlace Terminal
ALCBLI	16.0 mm² Ivory Bootlace Terminal
ALCBLTBK	2 x 1.5 mm² Black Twin Bootlace Terminal
ALCBLTB	2 x 2.5 mm² Blue Twin Bootlace Terminal
ALCBLTR	2 x 1.0 mm ² Red Twin Bootlace Terminal



Electricans Insulated Bootlace Terminals Service Kit

- 486 piece pre-insulated electrician's terminals kit
- Easy cable entry
- Colour-coded insulation for easy distinction
- Suitable for any professional application



Note: for more information on terminals, see individual pages

1000	
Kit Contains	
ALCRR3.7	3.7mm ² Red Ring Terminal
ALCRR4	4.0mm ² Red Ring Terminal
ALCRR5	5.0mm ² Red Ring Terminal
ALCRB3.7	3.7mm² Blue Ring Terminal
ALCRB4	4.0mm² Blue Ring Terminal
ALCRB5	5.0mm² Blue Ring Terminal
ALCRY5	5.0mm ² Yellow Ring Terminal
ALCRY6	6.0mm ² Yellow Ring Terminal
ALCFR3.7	3.7mm² Red Fork Terminal
ALCFR4	4.0mm² Red Fork Terminal
ALCFB4	4.0mm² Blue Fork Terminal
ALCFQDR	Red Quick Disconnect
ALCFQDB	Blue Quick Disconnect
ALCMDTABR	Red Tab Disconnect
ALCMDTABB	Blue Tab Disconnect
ALCSPLR	Red Splice Terminal
ALCSPLB	Blue Splice Terminal
ALCSPLY	Yellow Splice Terminal
ALCHSSPLR	Red Heatshrink Splice
ALCHSSPLB	Blue Heatshrink Splice
ALCHSSPLY	Yellow Heatshrink Splice
	ALCRR4 ALCRR5 ALCRB3.7 ALCRB4 ALCRB5 ALCRY5 ALCRY6 ALCFR3.7 ALCFR4 ALCFGDR ALCFQDR ALCFQDB ALCMDTABR ALCMDTABR ALCSPLR ALCSPLB ALCSPLY ALCHSSPLR ALCHSSPLB

Supergrip Pre-Insulated Terminals Kit

- 800 piece pre-insulated electrician's terminals kit
- Easy cable entry
- Colour-coded PVC insulation for easy distinction
- Suitable for any professional application



=	
	CALCO DEPARTMENT THROWAL ST COMPANY THROWAL S
and information on torrainal	

ALCPREIKIT-800	ALCRR4	4.0mm ² Red Ring Terminal
	ALCRR5	5.0mm² Red Ring Terminal
	ALCRR6	6.0mm² Red Ring Terminal
	ALCRY5	5.0mm ² Yellow Ring Terminal
	ALCRY6	6.0mm ² Yellow Ring Terminal
	ALCRY8	8.0mm ² Yellow Ring Terminal
	ALCRY10	10.0mm ² Yellow Ring Terminal
	ALCRB4	4.0mm ² Blue Ring Terminal
	ALCRB5	5.0mm ² Blue Ring Terminal
	ALCRB6	6.0mm ² Blue Ring Terminal
	ALCRB8	8.0mm ² Blue Ring Terminal
	ALCFR4	4.0mm² Red Fork Terminal
	ALCFB4	4.0mm² Blue Fork Terminal
	ALCFY6	6.0mm² Yellow Fork Terminal
	ALCMDTABR	Red Tab Disconnect
	ALCMDTABB	Blue Tab Disconnect
	ALCPBB	Blue Piggy Back Terminal
	ALCFIFQDR	Red Fully Insulated Quick Disconnect
	ALCFIFQDB	Blue Fully Insulated Quick Disconnect
	ALCFIFQDY	Yellow Fully Insulated Quick Disconnect
	ALCFQDR	Red Quick Disconnect
	ALCFQDB	Blue Quick Disconnect
	ALCFQDY	Yellow Quick Disconnect
	ALCSPLR	Red Splice Terminal
	ALCSPLB	Blue Splice Terminal
	ALCSPLY	Yellow Splice Terminal

Kit Contains

Cat. No.



Electricans Bootlace Terminals Kit

- 892 piece electrician's bootlace terminals kit
- With 2 combination crimping pliers
- Pre-insulated bootlace terminals
- Provide precise terminations to multi-stranded cable
- Reduces possibility of short-circuiting and ensures no strands stray
- Colour-coded PVC insulation for easy identification
- 600V max

Operating Temperature: + 105°C



Cat. No.

	Kit Contains	
WATBLC-TC6 WATBLC-TC8		0.25 - 2.5mm ² Combination Crimping Pliers
		0.5 - 16.0mm ² Combination Crimping Pliers
	ALCBLW	0.5 mm ² White Bootlace Terminal
	ALCBLB	0.75 mm² Blue Bootlace Terminal
	ALCBLR	1.0 mm² Red Bootlace Terminal
	ALCBLY	1.0 mm² Yellow Bootlace Terminal
	ALCBLBK	1.5 mm² Black Bootlace Terminal
	ALCBLGY	2.5 mm² Grey Bootlace Terminal
	ALCBLO	4.0 mm ² Orange Bootlace Terminal
	ALCBLG	6.0 mm² Green Bootlace Terminal
	ALCBLTGY	2 x 0.75 mm² Blue Twin Bootlace Terminal
	ALCBLTR	2 x 1.0 mm² Red Twin Bootlace Terminal
	ALCBLTBK	2 x 1.5 mm² Black Twin Bootlace Terminal
	ALCBLTB	2 x 2.5 mm² Blue Twin Bootlace Terminal

Note: for more information on terminals, see individual pages

Universal Terminals, Lugs & Links Kit

- Universal 1,801 piece electrician's terminals, lugsand links mixed kit
- Pre-insulated single crimp insulation seal
- Three piece construction
- Colour-coded PVC insulation for easy distinction
- Non-insulated copper crimp terminals and bootlace terminals also included
- Suitable for any professional application



Cat. No.	Kit Contains	
ALCK007KIT	WATK007	Universal Crimping Tool
	ALCRR5	5.0mm ² Red Ring Terminal
	ALCRB5	5.0mm ² Blue Ring Terminal
	ALCRY5	5.0mm² Yellow Ring Terminal
	ALCFB6	6.0mm ² Blue Fork Terminal
	ALCFY6	6.0mm² Yellow Fork Terminal
	ALCSPLR	Red Splice Terminal
	ALCSPLB	Blue Splice Terminal
	ALCL1.5M5	1.5 mm ² Copper Crimp Lug with 5mm hole
	ALCL1.5M6	1.5 mm ² Copper Crimp Lug with 6mm hole
	ALCL2.5M4	2.5 mm ² Copper Crimp Lug with 4mm hole
	ALCL2.5M5	2.5 mm ² Copper Crimp Lug with 5mm hole
	ALCL4M5	4 mm ² Copper Crimp Lug with 5mm hole
	ALCL4M6	4 mm ² Copper Crimp Lug with 6mm hole
	ALCL6M6	6 mm ² Copper Crimp Lug with 6mm hole
	ALCBLW	0.5 mm ² White Bootlace Terminal
	ALCBLB	0.75 mm² Blue Bootlace Terminal
	ALCBLR	1.0 mm ² Red Bootlace Terminal
	ALCBLY	1.0 mm² Yellow Bootlace Terminal
	ALCBLBK	1.5 mm² Black Bootlace Terminal
	ALCBLGY	2.5 mm² Grey Bootlace Terminal
	ALCBLO	4.0 mm² Orange Bootlace Terminal



Electricans Terminals Kit

- 1,061 piece electrician's terminals promo kit
- Pre-insulated single crimp insulation seal
- Three piece construction
- Colour-coded PVC insulation for easy distinction
- Suitable for any professional application



Note: for more information on terminals, see individual pages

Cat. No.	Kit Contains	
ALCPREIKITP	WATMH3DW	Ratchet Crimping Tool
	ALCRR3.7	3.7mm ² Red Ring Terminal
	ALCRR10	10.0mm ² Red Ring Terminal
	ALCRB10	10.0mm² Blue Ring Terminal
	ALCRY3.7	3.7mm ² Yellow Ring Terminal
	ALCRY4	4.0mm ² Yellow Ring Terminal
	ALCRY12	12.0mm² Yellow Ring Terminal
	ALCFR5	5.0mm ² Red Fork Terminal
	ALCFR6	6.0mm ² Red Fork Terminal
	ALCFB6	6.0mm² Blue Fork Terminal
	ALCFY6	6.0mm² Yellow Fork Terminal
	ALCFY8	8.0mm ² Yellow Fork Terminal
	ALCPBR	Red Piggy Back Terminal
	ALCPBY	Yellow Piggy Back Terminal
	ALCBTR	Red Bullet Terminal
	ALCBTB5	Blue Bullet Terminal
	ALCBTY	Yellow Bullet Terminal
	ALCBRR	Red Bullet Receptacle
	ALCBRB5	Blue Bullet Receptacle
	ALCBRY	Yellow Bullet Receptacle
	ALCMDTABY	Yellow Tabs Disconnect

Electricans Terminals Service Kit

- 792 piece electrician's terminals service kit
- Pre-insulated single crimp insulation seal
- Three piece construction
- Colour-coded PVC insulation for easy distinction
- Non-insulated copper crimp terminals also included



 $\textbf{Note:} \ \text{for more information on terminals, see individual pages}$

Cat. No.	Kit Contains	
ALCSERVICEKIT	WATMEB100CW	Combination Crimping Pliers
	WATMH3DW	Bootlace Terminals Ratchet Crimper
	ALCRR3.7	3.7mm ² Red Ring Terminal
	ALCRB3.7	3.7mm ² Blue Ring Terminal
	ALCRY3.7	3.7mm ² Yellow Ring Terminal
	ALCFR3.7	3.7mm ² Red Fork Terminal
	ALCFB3.7	3.7mm² Blue Fork Terminal
	ALCFY3.7	3.7mm² Yellow Fork Terminal
	ALCBLW	0.5 mm² White Bootlace Terminal
	ALCBLB	0.75 mm² Blue Bootlace Terminal
	ALCBLY	1.0 mm² Yellow Bootlace Terminal
	ALCBLBK	1.5 mm² Black Bootlace Terminal
	ALCBLO	4.0 mm² Orange Bootlace Terminal
	ALCBLG	6.0 mm² Green Bootlace Terminal
	ALCLK1.5	1.5 mm² Copper Crimp Link
	ALCLK2.5	2.5 mm² Copper Crimp Link
	ALCL1.5M6	1.5 mm² Copper Crimp Lug with 6mm hole
	ALCL2.5M6	2.5 mm ² Copper Crimp Lug with 6mm hole
	ALCL4M5	4 mm² Copper Crimp Lug with 5mm hole



Economical Electricans Terminals Kit

- Economical 521 piece electrician's terminals kit
- Pre-insulated single crimp insulation seal
- Three piece construction
- Colour-coded PVC insulation for easy distinction
- Suitable for any professional application

Note: for more information on terminals, see individual pages



Cat. No.
ALCPTKIT10

Kit Contains	
WATMEB100CW	Combination Crimping Pliers
ALCRR5	5.0mm ² Red Ring Terminal
ALCRB5	5.0mm ² Blue Ring Terminal
ALCFR5	5.0mm ² Red Fork Terminal
ALCFB5	5.0mm² Blue Fork Terminal
ALCPINR	Red Pin Terminal
ALCPINB	Blue Pin Terminal
ALCSPLR	Red Splice Terminal
ALCSPLB	Blue Splice Terminal
ALCFIFQDR	Red Fully Insulated Quick Disconnect
ALCFIFQDB	Blue Fully Insulated Quick Disconnect
ALCMDTABR	Red Tabs Disconnect
ALCMDTABB	Blue Tabs Disconnect

Professional Electricans Terminals Kit

- Professional 1,231 piece electrician's terminals kit
- Pre-insulated single crimp insulation seal
- Three piece construction
- Colour-coded PVC insulation for easy distinction
- Suitable for any professional application



Cat. No.	Kit Contains	
ALCPTKIT20	WATMH3DW	Ratchet Crimping Tool
	ALCRR4	4.0mm ² Red Ring Terminal
	ALCRR5	5.0mm ² Red Ring Terminal
	ALCRR6	6.0mm ² Red Ring Terminal
	ALCRB4	4.0mm² Blue Ring Terminal
	ALCRB5	5.0mm² Blue Ring Terminal
	ALCRB6	6.0mm² Blue Ring Terminal
	ALCRY5	5.0mm ² Yellow Ring Terminal
	ALCFR4	4.0mm² Red Fork Terminal
	ALCFB4	4.0mm² Blue Fork Terminal
	ALCFY6	6.0mm² Yellow Fork Terminal
	ALCFIFQDR	Red Fully Insulated Quick Disconnect
	ALCFIFQDB	Blue Fully Insulated Quick Disconnect
	ALCFIFQDY	Yellow Fully Insulated Quick Disconnect
	ALCFQDR	Red Quick Disconnect
	ALCFQDB	Blue Quick Disconnect
	ALCFQDY	Yellow Quick Disconnect
	ALCMDTABR	Red Tabs Disconnect
	ALCMDTABB	Blue Tabs Disconnect
	ALCPBB	Blue Piggy Back Terminal
	ALCSPLR	Red Splice Terminal
	ALCSPLB	Blue Splice Terminal
	ALCSPLY	Yellow Splice Terminal

Lugs & Links

With over 20 years' experience, Alco has developed an extensive range of lugs that conform to the unique Australian standards. Our in-house engineering capability's means we have extensive knowledge, not just of the products themselves but also of the application of the range. To complement our lugs and links range, we have a wide variety of tools to meet your crimping requirements.



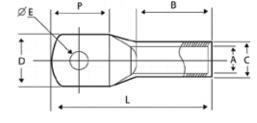
For Professionals... Since 1857™



Non-Insulated Lugs

Non-Insulated Copper Lugs

- Non-insulated electro grade copper crimp lugs suitable for stranded to fine-stranded copper cable
- Electro tinned finish for corrosion resistance
- 99.9% copper for high conductivity
- Includes inspection port
- Conform to Australian & New Zealand Standards
- Independently tested and complies to Australian/New Zealand Standard AS/NZS 4325.1 cl7 (10-400mm2)



Operating Temperature: -55°C to +155°C

	Conductor Size	onductor Size Stud Size (mm)	Dimensio	ns (MM)					
Cat. No.	(mm²)		A	С	D	P	В	L	Box Qty
ALCL1.5M4/100	1.5	4.0	1.8	3.7	8.0	9.0	7.0	18	100
ALCL1.5M5/100	1.5	5.0	1.8	3.7	9.0	10	7.0	19	100
ALCL1.5M6/100	1.5	6.0	1.8	3.7	9.0	11	7.0	20	100
ALCL2.5M4/100	2.5	4.0	2.4	4.0	8.0	9.0	7.0	18	100
ALCL2.5M5/100	2.5	5.0	2.4	4.0	8.0	10	7.0	18	100
ALCL2.5M6/100	2.5	6.0	2.4	4.0	10	12	7.0	20	100
ALCL2.5M8/100	2.5	8.0	2.4	4.0	11	16	9.0	26	100
ALCL4M5/100	4.0	5.0	3.1	4.8	11	12	9.0	22	100
ALCL4M6/100	4.0	6.0	3.1	4.8	11	12	9.0	22	100
ALCL4M8/100	4.0	8.0	3.1	4.8	11	16	11	29	100
ALCL6M5/50	6.0	5.0	3.8	5.5	10	11	12	26	50
ALCL6M6/50	6.0	6.0	3.8	5.5	10	11	12	26	50
ALCL6M8/50	6.0	8.0	3.8	5.5	12	16	12	31	50
ALCL6M10/50	6.0	10.0	3.8	5.5	17	23	12	39	50
ALCL10M5/25	10	5.0	45	6.9	12	14	11	28	25
ALCL10M6/25	10	6.0	4.5	6.9	12	14	11	28	25
ALCL10M8/25	10	8.0	4.5	6.9	12	16	11	30	25
ALCL10M10/25	10	10.0	4.5	6.9	17	20	11	35	25
ALCL10M12/25	10	12.0	4.5	6.9	17	20	11	35	25
ALCL16M6/25	16	6.0	5.9	8.0	12	15	20	39	25
ALCL16M8/25	16	8.0	5.9	8.0	12	15	20	39	25
ALCL16M10/25	16	10.0	5.9	8.0	17	26	20	50	25
ALCL16M12/25	16	12.0	5.9	8.0	17	26	20	50	25
ALCL25M6/25	25	6.0	7.0	9.7	14	16	23	42	25
ALCL25M8/25	25	8.0	7.0	9.7	14	16	23	42	25
ALCL25M10/25	25	10.0	7.0	9.7	19	23	23	50	25
ALCL25M12/25	25	12.0	7.0	9.7	19	16	23	42	25
ALCL35M6/25	35	6.0	8.4	11.5	16	19	23	46	25
ALCL35M8/25	35	8.0	8.4	11.5	16	19	23	46	25
ALCL35M10/25	35	10.0	8.4	11.5	16	19	23	46	25
ALCL35M12/25	35	12.0	8.4	11.5	19	27	23	53	25
ALCL50M6/10	50	6.0	9.5	12.7	18	20	23	49	10
ALCL50M8/10	50	8.0	9.5	12.7	18	20	23	49	10
ALCL50M10/10	50	10.0	9.5	12.7	18	20	23	49	10
ALCL50M12/10	50	12.0	9.5	12.7	18	20	23	49	10
ALCL70M6/10	70	6.0	11.1	14.3	20	23	24	54	10
ALCL70M8/10	70	8.0	11.1	14.3	20	23	24	54	10





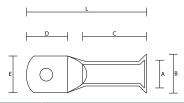
Cost. No. Conductor Size Conductor Size Cost Cos		On advistor Cine	044 0:	Dimensions (MM)						
ALCL/70M12/10 70 12.0 11.1 14.3 20 23 24 54 10 ALCL/70M12/10 70 16.0 11.1 14.3 20 23 24 54 10 ALCL/50M16/10 95 8.0 13.5 17.5 25 27 25 60 10 ALCL/50M16/10 95 10.0 13.5 17.5 25 27 25 60 10 ALCL/50M12/10 95 10.0 13.5 17.5 25 27 25 60 10 ALCL/50M12/10 95 12.0 13.5 17.5 25 27 25 60 10 ALCL/50M12/10 95 12.0 13.5 17.5 25 27 25 60 10 ALCL/50M12/10 95 16.0 13.5 17.5 25 27 25 60 10 ALCL/50M12/10 95 16.0 13.5 17.5 25 27 25 60 10 ALCL/50M16/10 95 16.0 13.5 17.5 25 27 25 60 10 ALCL/50M16/10 95 16.0 13.5 17.5 25 33 25 65 10 ALCL/50M16/10 120 8.0 15.5 20.6 29 29 32 70 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 29 32 70 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 29 32 70 10 ALCL/50M16/10 120 16.0 15.5 20.6 29 29 32 70 10 ALCL/50M16/10 120 16.0 15.5 20.6 29 29 32 75 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 32 32 75 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 32 32 75 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 32 32 77 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 32 32 70 10 ALCL/50M16/10 120 10.0 15.5 20.6 34 40 32 79 10 ALCL/50M16/10 120 10.0 15.5 20.6 29 32 32 70 10 ALCL/50M16/10 120 1.6 16.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 98 6 ALCL/50M16/10 150 16.0 16.3 22.2 31 34 32 98 6 ALCL/50M16/10 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCL/50M16/10 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCL/50M16/10 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCL/50M16/10 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCL/50M16/10 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCL/50M16/10 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCL/50M16/10 240 240 10.0 21.2 28.6 40 41 42 99 6 6 ALCL/50M16/10 240 240 10.0 21.2 28.6 40 41 41 42 99 6 6 ALCL/50M16/10 240 240	Cat. No.			A	С	D	Р	В	L	Box Qty
ALCLIZOMIGNO 70 16.0 11.1 14.3 20 23 24 54 10 ALCLIZOMIGNO 95 8.0 13.5 17.5 25 27 25 60 10 ALCLISSMIONO 95 10.0 13.5 17.5 25 27 25 60 10 ALCLISSMIONO 95 10.0 13.5 17.5 25 27 25 60 10 ALCLISSMIONO 95 10.0 13.5 17.5 25 27 25 60 10 ALCLISSMIONO 95 16.0 13.5 17.5 25 27 25 60 10 ALCLISSMIONO 95 16.0 13.5 17.5 25 27 25 60 10 ALCLISSMIONO 95 16.0 13.5 17.5 25 27 25 65 10 ALCLISSMIONO 120 8.0 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 16.0 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 16.0 15.5 20.6 29 29 32 70 10 ALCLIZOMIONO 120 16.0 15.5 20.6 29 32 32 75 10 ALCLIZOMIONO 120 10.0 15.5 20.6 29 32 32 76 10 ALCLIZOMIONO 120 10.0 15.5 20.6 29 32 32 76 10 ALCLIZOMIONO 120 10.0 15.5 20.6 29 32 32 76 10 ALCLIZOMIONO 150 10.0 15.5 20.6 29 32 32 76 10 ALCLIZOMIONO 150 10.0 15.5 20.6 29 32 32 76 10 ALCLIZOMIONO 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 15.0 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 15.0 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 15.0 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 15.0 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 15.0 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMIONO 150 15.0 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 10.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 10.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 150 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 150 16.0 18.3 24.3 34 35 32 82 6 ALCLISOMIONO 150 150 150 150 150 150 150 150 150 150	ALCL70M10/10	70	10.0	11.1	14.3	20	23	24	54	10
ALCLISSMB10 96 8.0 13.5 17.5 25 27 25 60 10 ALCLISSMB1010 95 10.0 13.5 17.5 25 27 25 60 10 ALCLISSMB1010 95 10.0 13.5 17.5 25 27 25 60 10 ALCLISSMB1010 96 12.0 13.5 17.5 25 27 25 60 10 ALCLISSMB1010 96 16.0 13.5 17.5 25 33 25 65 10 ALCLISSMB1010 120 8.0 15.5 20.6 29 29 32 70 10 ALCLIZOMB1010 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMB1010 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMB1010 120 16.0 15.5 20.6 29 29 32 70 10 ALCLIZOMB1010 120 16.0 15.5 20.6 29 29 32 70 10 ALCLIZOMB1010 120 16.0 15.5 20.6 29 29 32 70 10 ALCLIZOMB1010 120 16.0 15.5 20.6 34 40 32 79 10 ALCLIZOMB10 120 - 15.5 20.6 34 40 32 79 10 ALCLIZOMB10 150 8.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 8.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB10 150 150 16.0 16.3 22.2 31 34 32 9 78 10 ALCLISOMB10 150 2 20 20 20 20 20 20 20 20 20 20 20 20	ALCL70M12/10	70	12.0	11.1	14.3	20	23	24	54	10
ALCLISOMICIO 95 10.0 13.5 17.5 25 27 25 60 10 ALCLISMICIO 95 12.0 13.5 17.5 25 27 25 60 10 ALCLISOMICIO 95 12.0 13.5 17.5 25 27 25 60 10 ALCLISOMICIO 120 8.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 12.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 29 32 32 70 10 ALCLIZOMICIO 120 10.0 15.5 20.6 29 32 32 70 10 ALCLIZOMICIO 120 20.0 15.5 20.6 29 32 32 70 10 ALCLIZOMICIO 120 2.0 15.5 20.6 34 40 32 79 10 ALCLIZOMICIO 120 - 15.5 20.6 29 32 32 70 10 ALCLIZOMICIO 150 10 150 15.5 20.6 29 32 32 70 10 ALCLIZOMICIO 150 150 8.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 78 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 98 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 98 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 98 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 98 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 98 10 ALCLISOMICIO 150 1.0 16.3 22.2 31 34 32 98 10 ALCLISOMICIO 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	ALCL70M16/10	70	16.0	11.1	14.3	20	23	24	54	10
ALCLISHMI210 95 12.0 13.5 17.5 25 27 25 60 10 ALCLISHMI210 95 16.0 13.5 17.5 25 33 25 65 10 ALCLISHMI210 120 8.0 15.5 20.6 29 29 32 70 10 ALCLI20MA1010 120 10.0 15.5 20.6 29 29 32 70 10 ALCLI20M1210 120 12.0 15.5 20.6 29 29 32 70 10 ALCLI20M1670 120 12.0 15.5 20.6 29 29 32 70 10 ALCLI20M1670 120 16.0 15.5 20.6 29 29 32 70 10 ALCLI20M1670 120 15.5 20.6 29 32 32 75 10 ALCLI20M1670 120 15.5 20.6 29 32 32 75 10 ALCLI20M1670 120 15.5 20.6 29 32 32 75 10 ALCLI20M1670 120 10.0 15.5 20.6 29 32 32 76 10 ALCLI20M1670 120 10.0 15.5 20.6 29 32 32 76 10 ALCLI20M1670 150 10.0 15.5 20.6 29 32 32 76 10 ALCLI20M1670 150 8.0 16.3 22.2 31 34 32 78 10 ALCLI50M1070 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1070 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 10.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 27 8 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 27 8 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 27 8 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 27 8 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 32 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 150 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 16.0 16.3 22.2 31 34 34 32 78 10 ALCLI50M1670 16.0 16.3 22.2 28.6 40 41 41 42 99 6 ALCLI50M1670 240 16.0 21.2 28.6 40 41 41 42 99 6 ALCLI20M166 240 16.0 21.2 28.6 40 41 41 42 99 6 ALCLI20M1	ALCL95M8/10	95	8.0	13.5	17.5	25	27	25	60	10
ALCLISOMB/10 95 16.0 13.5 17.5 25 33 25 65 10 ALCLI20MB/10 120 8.0 15.5 20.6 29 29 32 70 10 ALCLI20MB/10 120 10.0 15.5 20.6 29 29 32 70 10 ALCLI20MB/10 120 12.0 15.5 20.6 29 29 32 70 10 ALCLI20MB/10 120 12.0 15.5 20.6 29 39 32 70 10 ALCLI20MB/10 120 10.0 15.5 20.6 29 39 32 70 10 ALCLI20MB/10 120 10.0 15.5 20.6 29 32 32 75 10 ALCLI20MB/10 120 20.0 15.5 20.6 29 32 32 32 75 10 ALCLI20MB/10 120 - 15.5 20.6 29 32 32 32 75 10 ALCLI20MB/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 98 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 98 10 ALCLISOMB/10 150 150 16.0 16.3 22.2 31 34 32 98 6 ALCLISOMB/10 150 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCLISOMB/10 150 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCLISOMB/10 150 150 16.0 18.3 24.3 34 35 32 82 6 6 ALCLISOMB/10 150 150 16.0 21.2 28.6 40 41 42 99 6 ALCLIZEDM/106 240 10.0 21.2 28.6 40 41 42 99 6 ALCLIZEDM/106 240 10.0 21.2 28.6 40 41 42 99 6 ALCLIZEDM/106 240 10.0 23.8 31.9 45 45 47 107 3 ALCLIZOMB/103 300 10.0 23.8 31.9 45 45 47 107 3 ALCLIZOMB/103 300 10.0 23.8 31.9 45 45 47 107 3 ALCLIZOMB/103 300 10.0 23.8 31.9 45 45 47 107 3 ALCLIZOMB/103 400 - 26.8 34.8 49 51 48 116 3 ALCLIZOMB/103 400 - 26.8 34.8 49 51 48 116 3 ALCLIZOMB/103 400 - 26.8 34.8 49 51 48 116 3 ALCLIZOMB/103 400 - 26.8 34.8 49 51 48 116 3	ALCL95M10/10	95	10.0	13.5	17.5	25	27	25	60	10
ALCL120M8/10 120 8.0 15.5 20.6 29 29 32 70 10 ALCL120M10/10 120 10.0 15.5 20.6 29 29 32 70 10 ALCL120M10/10 120 120 15.5 20.6 29 29 32 70 10 ALCL120M10/10 120 120 15.5 20.6 29 29 32 70 10 ALCL120M10/10 120 120 15.5 20.6 29 32 32 75 10 ALCL120M20/10 120 20.0 15.5 20.6 29 32 32 32 75 10 ALCL120M20/10 120 20.0 15.5 20.6 29 32 32 32 79 10 ALCL120M8/10 120 - 15.5 20.6 29 32 32 32 70 10 ALCL120M8/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 9 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 150 16.0 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 150 16.0 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 - 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 150 16.0 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 - 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 - 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 - 16.3 22.2 31 34 32 9 78 10 ALCL1650M10/10 150 - 16.3 22.2 31 34 32 9 9 6 ALCL240M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 41 42 99 6 AL	ALCL95M12/10	95	12.0	13.5	17.5	25	27	25	60	10
ALCL120M10/10 120 10.0 15.5 20.6 29 29 32 70 10 ALCL120M12/10 120 12.0 15.5 20.6 29 29 32 70 10 ALCL120M16/10 120 16.0 15.5 20.6 29 32 32 75 10 ALCL120M16/10 120 20.0 15.5 20.6 34 40 32 79 10 ALCL120M8/10 120 - 15.5 20.6 29 32 32 70 10 ALCL120M8/10 120 - 15.5 20.6 29 32 32 70 10 ALCL150M8/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 18.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 18.3 22.2 31 34 32 78 10 ALCL150M16/10 150 20 20 20 20 20 20 20 20 20 20 20 20 20	ALCL95M16/10	95	16.0	13.5	17.5	25	33	25	65	10
ALCL120M12/10 120 12.0 15.5 20.6 29 29 32 70 10 ALCL120M16/10 120 16.0 15.5 20.6 29 32 32 75 10 ALCL120M20/10 120 20.0 15.5 20.6 34 40 32 79 10 ALCL120M20/10 120 - 15.5 20.6 29 32 32 70 10 ALCL120M8/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 - 16.3 22.2 31 34 32 82 6 ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 41 42 99 6 ALCL240M8/6 240 20.0 21.2 28.6 40 41 41 42 99 6 ALCL240M8/6 240 240 25.8 31.9 45 45 47 107 3 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M8/3 300 10.0 20.8 34 84 49 51 48 116 3 ALCL400M8/3 400 - 26.8 34.8 49 51 48 116 3 ALCL400M8	ALCL120M8/10	120	8.0	15.5	20.6	29	29	32	70	10
ALCL120M16/10 120 16.0 15.5 20.6 29 32 32 75 10 ALCL120M20/10 120 20.0 15.5 20.6 34 40 32 79 10 ALCL120M8/10 120 - 15.5 20.6 29 32 32 32 70 10 ALCL120M8/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M8/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 12.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 12.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 12.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 - 16.3 22.2 31 34 32 28 2 6 6 ALCL150M10/10 185 10.0 18.3 24.3 34 35 32 82 6 6 ALCL155M10/6 185 10.0 18.3 24.3 34 35 32 82 6 6 ALCL155M10/6 185 16.0 18.3 24.3 34 35 32 82 6 6 ALCL240M10/6 185 16.0 18.3 24.3 34 35 32 82 6 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 16.0 23.8 31.9 45 45 45 47 107 3	ALCL120M10/10	120	10.0	15.5	20.6	29	29	32	70	10
ALCL120M2010 120 20.0 15.5 20.6 34 40 32 79 10 ALCL120MB/10 120 - 15.5 20.6 29 32 32 70 10 ALCL150M8/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 98 2 6 ALCL150M16/10 185 10.0 18.3 24.3 34 35 32 82 6 ALCL150M16/10 185 10.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M10/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL300MB/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 12.0 28.8 31.9 45 45 47 107 3 ALCL300MB/3 300 12.0 28.8 31.9 45 45 47 107 3 ALCL300MB/3 300 12.0 28.8 31.9 45 45 47 107 3 ALCL300MB/3 300 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3	ALCL120M12/10	120	12.0	15.5	20.6	29	29	32	70	10
ALCL120MB/10 120 - 15.5 20.6 29 32 32 70 10 ALCL150MB/10 150 8.0 16.3 22.2 31 34 32 78 10 ALCL150M10/10 150 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M12/10 150 150 12.0 16.3 22.2 31 34 32 78 10 ALCL150M12/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL15SMB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL18SM10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL18SM10/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL14SM16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 10.0 23.8 31.9 45 45 47 107 3 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 26.8 34.8 49 51 48 116 3 ALCL400M16/3 400 - 26.8 34.8 49 51 48 116 3 ALCL400M16/3 400 - 26.8 34.8 49 51 48 116 3 ALCL400M16/3 400 - 26.8 34.8 49 51 48 116 3	ALCL120M16/10	120	16.0	15.5	20.6	29	32	32	75	10
ALCL150M8/10 150 8.0 16.3 22.2 31 34 32 78 10	ALCL120M20/10	120	20.0	15.5	20.6	34	40	32	79	10
ALCL150M10/10 150 10.0 16.3 22.2 31 34 32 78 10 ALCL150M12/10 150 12.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 - 16.3 22.2 31 34 32 78 10 ALCL180M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL180M12/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 4	ALCL120MB/10	120	-	15.5	20.6	29	32	32	70	10
ALCL150M12/10 150 12.0 16.3 22.2 31 34 32 78 10 ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL185M12/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL285M16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 20.0 21.2 28.6 40 41 </td <td>ALCL150M8/10</td> <td>150</td> <td>8.0</td> <td>16.3</td> <td>22.2</td> <td>31</td> <td>34</td> <td>32</td> <td>78</td> <td>10</td>	ALCL150M8/10	150	8.0	16.3	22.2	31	34	32	78	10
ALCL150M16/10 150 16.0 16.3 22.2 31 34 32 78 10 ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL185M12/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL185M16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 <td>ALCL150M10/10</td> <td>150</td> <td>10.0</td> <td>16.3</td> <td>22.2</td> <td>31</td> <td>34</td> <td>32</td> <td>78</td> <td>10</td>	ALCL150M10/10	150	10.0	16.3	22.2	31	34	32	78	10
ALCL150MB/10 150 - 16.3 22.2 31 34 32 78 10 ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL185M12/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL185M16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL300M10/6 240 - 21.2 28.6 40 41	ALCL150M12/10	150	12.0	16.3	22.2	31	34	32	78	10
ALCL185M10/6 185 10.0 18.3 24.3 34 35 32 82 6 ALCL185M12/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL185M16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALC1240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALC1240M8/6 240 - 21.2 28.6 40 41 42 99 6 ALC1300M10/3 300 10.0 23.8 31.9 45 45	ALCL150M16/10	150	16.0	16.3	22.2	31	34	32	78	10
ALCL185M12/6 185 12.0 18.3 24.3 34 35 32 82 6 ALCL185M16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 <td< td=""><td>ALCL150MB/10</td><td>150</td><td>-</td><td>16.3</td><td>22.2</td><td>31</td><td>34</td><td>32</td><td>78</td><td>10</td></td<>	ALCL150MB/10	150	-	16.3	22.2	31	34	32	78	10
ALCL185M16/6 185 16.0 18.3 24.3 34 35 32 82 6 ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 16.0 23.8 31.9 45 45	ALCL185M10/6	185	10.0	18.3	24.3	34	35	32	82	6
ALCL240M10/6 240 10.0 21.2 28.6 40 41 42 99 6 ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45	ALCL185M12/6	185	12.0	18.3	24.3	34	35	32	82	6
ALCL240M12/6 240 12.0 21.2 28.6 40 41 42 99 6 ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400MB/3 400 12.0 26.8 34.8 49 51	ALCL185M16/6	185	16.0	18.3	24.3	34	35	32	82	6
ALCL240M16/6 240 16.0 21.2 28.6 40 41 42 99 6 ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400MB/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38	ALCL240M10/6	240	10.0	21.2	28.6	40	41	42	99	6
ALCL240M20/6 240 20.0 21.2 28.6 40 41 42 99 6 ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400MB/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL240M12/6	240	12.0	21.2	28.6	40	41	42	99	6
ALCL240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400MB/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL240M16/6	240	16.0	21.2	28.6	40	41	42	99	6
ALCL300M10/3 300 10.0 23.8 31.9 45 45 47 107 3 ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400MB/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL240M20/6	240	20.0	21.2	28.6	40	41	42	99	6
ALCL300M12/3 300 12.0 23.8 31.9 45 45 47 107 3 ALCL300M16/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400M12/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL240MB/6	240	-	21.2	28.6	40	41	42	99	6
ALCL300M16/3 300 16.0 23.8 31.9 45 45 47 107 3 ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400M12/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL300M10/3	300	10.0	23.8	31.9	45	45	47	107	3
ALCL300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCL400M12/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL300M12/3	300	12.0	23.8	31.9	45	45	47	107	3
ALCL400M12/3 400 12.0 26.8 34.8 49 51 48 116 3 ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL300M16/3	300	16.0	23.8	31.9	45	45	47	107	3
ALCL400MB/3 400 - 26.8 34.8 49 51 48 116 3 ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL300MB/3	300	-	23.8	31.9	45	45	47	107	3
ALCL500M12/3 500 12.0 30 38 55 60 50 130 3	ALCL400M12/3	400	12.0	26.8	34.8	49	51	48	116	3
	ALCL400MB/3	400	-	26.8	34.8	49	51	48	116	3
ALCL500MB/3 500 - 30 38 55 60 50 130 3	ALCL500M12/3	500	12.0	30	38	55	60	50	130	3
	ALCL500MB/3	500	-	30	38	55	60	50	130	3
ALCL630M12/3 630 12.0 33.5 45 64 65 57 146 3	ALCL630M12/3	630	12.0	33.5	45	64	65	57	146	3
ALCL630M16/3 630 16.0 33.5 45 64 65 57 146 3	ALCL630M16/3	630	16.0	33.5	45	64	65	57	146	3
ALCL630MB/3 630 - 33.5 45 64 65 57 146 3	ALCL630MB/3	630	-	33.5	45	64	65	57	146	3



Non-Insulated Bell Mouth Copper Lugs

- Non-insulated electro grade copper crimp lugs suitable for stranded to fine-stranded copper cable
- Electro tinned finish for high conductivity
- Includes inspection hole
- Conform to IS 191 (part V GR.ETP) specifications

Operating Temperature: -55°C to $+155^{\circ}\text{C}$





Common C	Cot No.	Conductor Size	Stud size	Dimensions (MM)					Dook Oty	
ALCLEMMONN025 10 8 4.5 6.9 12 16 11 30 25 ALCLEMMONN025 10 10 10 4.5 6.9 17 20 11 35 25 ALCLEMMONN025 16 6 5.9 8 12 15 20 39 25 ALCLEMMONN025 16 8 5.9 8 12 15 20 39 25 ALCLEMMONN025 16 10 5.9 8 17 26 20 50 25 ALCLEMMONN025 16 12 5.9 8 17 26 20 50 25 ALCLEMMONN025 16 12 5.9 8 17 26 20 50 25 ALCLEMMONN025 16 12 5.9 8 17 26 20 50 25 ALCLEMMONN025 16 12 5.9 8 17 26 20 50 25 ALCLEMMONN025 25 6 7 9.7 14 16 23 42 25 ALCLEMMONN025 25 8 7 9.7 14 16 23 42 25 ALCLEMMONN025 25 10 7 9.7 19 16 23 42 25 ALCLEMMONN025 25 10 7 9.7 19 16 23 42 25 ALCLEMMONN025 25 10 7 9.7 19 16 23 42 25 ALCLEMMONN025 25 8 8 8.4 11.5 16 19 23 46 25 ALCLEMMONN025 35 10 8.4 11.5 16 19 23 46 25 ALCLEMMONN025 35 10 8.4 11.5 16 19 23 46 25 ALCLEMMONN025 35 10 8 8 5.5 12 8 4 11.5 19 27 23 3 50 25 ALCLEMMONN0100 50 8 9.5 12 7 18 20 23 49 10 ALCLEMMONN0100 50 8 9.5 12 7 18 20 23 49 10 ALCLEMMONN0100 50 8 9.5 127 18 20 23 49 10 ALCLEMMONN0100 50 8 9.5 127 18 20 23 49 10 ALCLEMMONN0100 70 8 11.1 14.3 20 23 24 54 10 ALCLEMMONN0100 70 10 11.1 14.3 20 23 24 54 10 ALCLEMMONN0100 70 10 11.1 14.3 20 23 24 54 10 ALCLEMMONN0100 95 8 13.5 17.5 25 27 25 60 10 ALCLEMMONN0100 95 10 10 15.5 20.6 29 29 29 22 70 10 ALCLEMMONN0100 150 10 16 15.5 20.6 29 29 29 22 70 10 ALCLEMMONN0100 150 10 16 15.5 20.6 29 29 29 22 70 10 ALCLEMMONN0100 150 10 16 15.5 20.6 29 29 29 22 70 10 ALCLEMMONN0100 150 10 16 16.3 222 31 34 32 78 10 ALCLEMMONN0100 150 150 16 16.3 222 31 34 32 78 10 ALCLEMMONN0100 150 150 16 16.3 222 31 34 32 78 10 ALCLEMMONN0100 150 16 16.3 222 31 34 34 32 78 10 ALCLEMMONN0100 150 10 16 16.3 222 31 34 34 32 78 10 ALCLEMMONN0100 150 150 16 16.3 222 31 34 34 32 78 10 ALCLEMMONN0100 150 17 28 8 31.9 45 45 45 47 107 3 3 ALCLEMMONN0100 150 10 28.8 31.9 45 45 45 47 107 3 3 ALCLEMMONN0100 30 10 28.8 31.9 45 45 45 47 107 3 3 ALCLEMMONN0100 400 10 28.8 31.9 45 45 45 47 107 3 3	Cat. No.			A	В	E	D	C	L	Pack Qty
ALCIBMYONINIVES 10 10 10 4.5 6.9 17 20 11 35 25 ALCIBMYONINESS 16 6 6 5.9 8 12 15 20 39 25 ALCIBMYONINESS 16 8 5.9 8 12 15 20 39 25 ALCIBMYONINESS 16 10 8 5.9 8 17 26 20 50 25 ALCIBMYONINESS 16 12 5.9 8 17 26 20 50 25 ALCIBMYONINESS 16 12 5.9 8 17 26 20 50 25 ALCIBMYONINESS 25 16 7 9.7 14 16 23 42 25 ALCIBMYONINESS 25 8 7 9.7 14 16 23 42 25 ALCIBMOSINESS 25 5 10 7 9.7 14 16 23 42 25 ALCIBMOSINESS 25 5 10 7 9.7 19 23 23 24 22 25 ALCIBMOSINESS 35 10 8 4 11.5 16 19 23 42 25 ALCIBMOSINIOSS 35 10 8 4 11.5 16 19 23 46 25 ALCIBMOSINIOSS 35 10 8 4 11.5 16 19 23 46 25 ALCIBMOSINIOSS 35 10 8 4 11.5 16 19 23 46 25 ALCIBMOSINIOSS 35 10 8 4 11.5 16 19 23 46 25 ALCIBMOSINIOSS 35 10 8 4 11.5 19 27 23 43 40 25 ALCIBMOSINIOSS 35 10 8 4 11.5 19 27 23 43 40 25 ALCIBMOSINIOSS 35 10 8 4 11.5 19 27 23 46 25 ALCIBMOSINIOSS 35 10 8 1 1.1 14.3 20 23 49 10 ALCIBMOSINIOS 5 50 12 9.5 12.7 18 20 23 49 10 ALCIBMOSINIOS 50 10 9.5 12.7 18 20 23 49 10 ALCIBMOSINIOS 50 10 11 11 14.3 20 23 44 54 10 ALCIBMOSINIOS 50 10 11 11 14.3 20 23 24 54 10 ALCIBMOSINIOS 50 10 11 11 14.3 20 23 24 54 10 ALCIBMOSINIOS 50 10 11 11 14.3 20 23 24 54 10 ALCIBMOSINIOS 50 10 15 5 20.6 29 29 32 70 10 ALCIBMOSINIOS 50 10 15 55 20.6 29 29 32 70 10 ALCIBMOSINIOS 50 10 15 55 20.6 29 29 32 70 10 ALCIBMOSINIOS 50 10 15 15 5 20.6 29 29 32 70 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 32 78 10 ALCIBMOSINIOS 150 150 16 16.3 22.2 31 34 34 32 78 10 ALCIBMOSINIOS 150 10 10 28.8 319 45 45 47 107 3 3 ALCIBMOSINIOS 150 10 22 23 24 45 47 107 3 3 ALCIBMOSINIOS 150 10 28.8 319 45 45 45 47 107 3 3 ALCIBMOSINIOS 150 10 10 28.8 319 45 45 45 47 107 3 3 A	ALCLBM10M6/25	10	6	4.5	6.9	12	14	11	28	25
ALCLEMMINNEYS 16 6 5.9 8 12 15 20 39 25 ALCLEMMINNEYS 16 16 8 5.9 8 17 26 20 39 25 ALCLEMMINNEYS 16 10 10 5.9 8 17 26 20 50 25 ALCLEMMINNEYS 16 12 5.9 8 17 26 20 50 25 ALCLEMMINNEYS 25 16 7 9.7 14 16 23 42 25 ALCLEMMINNEYS 25 10 7 9.7 14 16 23 42 25 ALCLEMMINNEYS 25 10 7 9.7 19 23 23 23 50 25 ALCLEMMINNEYS 25 10 7 9.7 19 16 23 23 24 22 25 ALCLEMMINNEYS 25 10 7 9.7 19 16 23 23 24 52 ALCLEMMINNEYS 35 8 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 10 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 4 11.5 16 19 23 46 25 ALCLEMMINNEYS 35 12 8 10 8 1 11.5 16 19 27 23 53 25 ALCLEMMINNEYS 35 12 8 1 10 8 4 11.5 16 19 27 23 53 25 ALCLEMMINNEYS 35 12 8 1 10 8 1 10 9.5 12.7 18 20 23 49 10 ALCLEMMINNEYS 50 10 9.5 12 9.5 12.7 18 20 23 49 10 ALCLEMMINNEYS 50 11 1 11 14.3 20 23 44 54 10 ALCLEMMINNEYS 70 8 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 8 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 12 11.1 14.3 20 23 24 54 10 ALCLEMMINNEYS 70 10 11.5 15.5 20.6 29 29 32 70 10 ALCLEMMINNEYS 10 10 16.3 22.2 31 34 32 78 10 ALCLEMMINNEYS 10 10 16.3 22.2 31 34 32 78 10 ALCLEMMINNEYS 10 10 16.3 22.2 31 34 34 32 78 10 ALCLEMMINNEYS 10 10 16.3 22.2 31 34 32 78 10 ALCLEMMINNEYS 10 10 16.3 22.2 31 34 34 32 78 10 ALCLEMMINNEYS 10 10 16.3 22.2 31 34 34 32 78 10 ALCLEMMINNEYS 10 10 10 15.5 26 44 41 42 99 6 ALCLEMMINNEYS 10 10 10 28.8 31.9 45 45 45 47 107 3 3 ALCLEMMINNEYS 10 10 10 28.8 31.9 45 45 45 4	ALCLBM10M8/25	10	8	4.5	6.9	12	16	11	30	25
ALCLEM16M82S 16 8 5.9 8 12 15 20 39 25 ALCLEM16M102S 16 10 5.9 8 17 26 20 50 25 ALCLEM16M102S 16 12 5.9 8 17 26 20 50 25 ALCLEM26M16M2C5 16 12 5.9 8 17 26 20 50 25 ALCLEM26M16W2C5 25 6 7 9.7 14 16 23 42 25 ALCLEM26M16W2C5 25 8 7 9.7 14 16 23 42 25 ALCLEM26M102S 25 10 7 9.7 19 23 23 23 50 25 ALCLEM26M102S 25 10 7 9.7 19 16 23 42 25 ALCLEM26M102S 25 12 7 9.7 19 16 23 42 25 ALCLEM26M102S 35 8 8 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 16 19 23 46 25 ALCLEM36M102S 35 10 8.4 11.5 19 27 23 53 25 ALCLEM36M102S 35 12 8.4 11.5 19 27 23 53 25 ALCLEM36M102S 35 12 8.4 11.5 19 27 23 53 25 ALCLEM36M102S 35 12 8.4 11.5 19 27 23 53 25 ALCLEM36M102S 35 12 8.4 11.5 19 27 23 53 25 ALCLEM36M1010 50 8 9.5 12 8.4 11.5 19 27 23 53 25 ALCLEM36M1010 50 10 9.5 127 18 20 23 49 10 ALCLEM36M1010 50 12 9.5 127 18 20 23 49 10 ALCLEM36M1010 50 12 9.5 127 18 20 23 49 10 ALCLEM36M1010 70 8 11.1 14.3 20 23 24 54 10 ALCLEM36M1010 70 10 11.1 14.3 20 23 24 54 10 ALCLEM36M1010 70 10 11.1 14.3 20 23 24 54 10 ALCLEM36M1010 95 8 13 13.5 17.5 25 27 25 60 10 ALCLEM36M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLEM36M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLEM36M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLEM36M1010 150 10 16.3 222 31 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 16.3 222 31 34 34 32 78 10 ALCLEM36M1010 150 10 10 15.5 20.6 29 29 32 70 10 ALCLEM36M1010 150 10 10 15.5 20.6 29 29 32 70 10 ALCLEM36M1010 150 10 10 15.5 20.6 29 29 32 70 10 ALCLEM36M1010 150 10 10 15.5 20.	ALCLBM10M10/25	10	10	4.5	6.9	17	20	11	35	25
ALCLEM/GM/025 16 10 5.9 8 17 26 20 50 25 ALCLEM/GM/025 25 6 7 9.7 14 16 23 42 25 ALCLEM/SMR025 25 6 7 9.7 14 16 23 42 25 ALCLEM/SMR025 25 8 7 9.7 14 16 23 42 25 ALCLEM/SMR025 25 8 7 9.7 14 16 23 42 25 ALCLEM/SMR025 25 8 7 9.7 19 12 23 23 50 25 ALCLEM/SMR025 25 10 7 9.7 19 16 23 42 25 ALCLEM/SMR025 25 12 7 9.7 19 16 23 42 25 ALCLEM/SMR025 25 12 7 9.7 19 16 23 46 25 ALCLEM/SMR025 35 8 8 4 11.5 16 19 23 46 25 ALCLEM/SMR025 35 10 8 4 11.5 16 19 23 46 25 ALCLEM/SMR025 35 12 8 4 11.5 16 19 23 46 25 ALCLEM/SMR025 35 12 8 4 11.5 19 27 23 53 25 ALCLEM/SMR025 35 12 8 4 11.5 19 27 23 53 25 ALCLEM/SMR01025 35 12 8 4 11.5 19 27 23 53 25 ALCLEM/SMR01010 50 8 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 10 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 11 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SMR01010 50 10 11.1 14.3 20 23 24 54 10 ALCLEM/SMR01010 70 10 11.1 14.3 20 23 24 54 10 ALCLEM/SMR01010 70 10 11.1 14.3 20 23 24 54 10 ALCLEM/SMR01010 95 10 13.5 17.5 25 27 25 60 10 ALCLEM/SMR01010 95 10 13.5 17.5 25 27 25 60 10 ALCLEM/SMR01010 95 10 13.5 17.5 25 27 25 60 10 ALCLEM/SMR01010 95 10 15.5 20.6 29 29 32 70 10 ALCLEM/SMR01010 150 16 15.5 20.6 29 29 32 70 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR01010 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR010100 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR010100 150 16 16.3 222 31 34 34 32 73 10 ALCLEM/SMR010100 150 16 16.3 222 31 31 34 32 99 6 ALCLEM/SMR010103 300 10 23.8 31.9 45 45 47 107 3 3 ALCLEM/SMR010103 300 10 28.8	ALCLBM16M6/25	16	6	5.9	8	12	15	20	39	25
ALCLBMIGMI225 16 12 5.9 8 177 26 20 50 25 ALCLBM25N825 25 6 7 9.7 14 16 23 42 25 ALCLBM25N825 25 8 7 9.7 14 16 23 42 25 ALCLBM25N825 25 10 7 9.7 19 23 23 50 25 ALCLBM25N825 25 12 7 9.7 19 16 23 42 25 ALCLBM25N825 35 8 8.4 11.5 16 19 23 46 25 ALCLBM35N825 35 10 8.4 11.5 16 19 23 46 25 ALCLBM35N1025 35 10 8.4 11.5 16 19 23 46 25 ALCLBM35N1025 35 10 8.4 11.5 19 27 23 55 25 ALCLBM35N1025 35 12 8.4 11.5 19 27 23 46 25 ALCLBM35N1025 35 12 8.4 11.5 19 27 23 46 25 ALCLBM35N1025 35 12 8.4 11.5 19 27 23 55 25 ALCLBM35N1025 35 12 8.4 11.5 19 27 23 49 10 ALCLBM50N10210 50 8 9.5 12.7 18 20 23 49 10 ALCLBM50N10210 50 10 9.5 12.7 18 20 23 49 10 ALCLBM50N10210 50 12 9.5 12.7 18 20 23 49 10 ALCLBM50N10210 50 12 9.5 12.7 18 20 23 49 10 ALCLBM50N10210 70 8 11.1 14.3 20 23 24 54 10 ALCLBM50N10210 70 10 11.1 14.3 20 23 24 54 10 ALCLBM50N10210 70 10 11.1 14.3 20 23 24 54 10 ALCLBM50N10210 70 10 11.1 14.3 20 23 24 54 10 ALCLBM50N10210 70 10 11.1 14.3 20 23 24 54 10 ALCLBM50N10210 95 12 11.1 14.3 20 23 24 54 10 ALCLBM50N10210 95 10 13.5 17.5 25 27 25 60 10 ALCLBM50N10210 95 12 13.5 17.5 25 27 25 60 10 ALCLBM50N10210 95 12 13.5 17.5 25 27 25 60 10 ALCLBM50N10210 10 10 15.5 20.6 29 29 33 270 10 ALCLBM50N10210 10 10 15.5 20.6 29 29 32 70 10 ALCLBM50N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM50N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 98 6 ALCLBM150N10210 150 16 16.3 22.2 31 34 32 98 6 ALCLBM150N10210 300 10 23.8 31.9 45 45 47 107 3 ALCLBM150N1023 300 12 23.8 31.9 45 45 47 107 3 ALCLBM150N1023 300 12 23.8 31.9 45 45 47 107 3 ALCLBM150N1023 300 12 23.8 31.9 45 45 47 107 3 ALCLBM150N1023 300 12 23.8 31.9 45 45 47 107 3 ALCLBM150N1023 300 12 23.8 31.9 45 45 47 107 3	ALCLBM16M8/25	16	8	5.9	8	12	15	20	39	25
ALCLBM25M625 25 6 7 9.7 14 16 23 42 25 ALCLBM25M625 25 8 7 9.7 14 16 23 42 25 ALCLBM25M625 25 10 7 9.7 19 23 23 23 50 25 ALCLBM25M1225 25 12 7 9.7 19 16 23 42 25 ALCLBM25M1225 25 12 7 9.7 19 16 23 46 25 ALCLBM35M125 35 10 8.4 11.5 16 19 23 46 25 ALCLBM35M1225 35 10 8.4 11.5 16 19 23 46 25 ALCLBM35M1225 35 12 8.4 11.5 16 19 23 46 25 ALCLBM35M1225 35 12 8.4 11.5 19 27 23 53 25 ALCLBM35M1225 35 12 8.4 11.5 19 27 23 53 25 ALCLBM35M1225 35 12 8.4 11.5 19 27 23 53 25 ALCLBM35M1225 35 12 8.4 11.5 19 27 23 53 25 ALCLBM35M12010 50 8 9.5 12.7 18 20 23 49 10 ALCLBM35M1010 50 10 9.5 12.7 18 20 23 49 10 ALCLBM35M1010 50 10 9.5 12.7 18 20 23 49 10 ALCLBM35M1010 50 12 9.5 12.7 18 20 23 49 10 ALCLBM35M1010 70 8 11.1 14.3 20 23 24 54 10 ALCLBM35M1010 70 8 11.1 14.3 20 23 24 54 10 ALCLBM35M1010 70 10 11.1 14.3 20 23 24 54 10 ALCLBM35M1010 70 10 11.1 14.3 20 23 24 54 10 ALCLBM35M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLBM35M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLBM35M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLBM35M1010 95 10 13.5 17.5 25 27 25 60 10 ALCLBM35M1010 10 10 15.5 20.6 29 29 32 70 10 ALCLBM35M1010 10 10 16 15.5 20.6 29 29 32 70 10 ALCLBM35M1010 150 10 16 15.5 20.6 29 29 32 70 10 ALCLBM35M1010 150 10 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 10 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 10 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 10 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 16 16 3 22 31 34 32 78 10 ALCLBM35M1010 150 10 23 8 31 9 45 45 47 107 3 ALCLBM35M1020 300 12 23 8 31 9 45 45 47 107 3 ALCLBM35M1020 300 10 23 8 31 9 45 45 47 107 3 ALCLBM36M1030 300 10 28 8 31 9 45 45 47 107 3 ALCLBM36M1030 300 10 28 8 31 9 45 45 45 47 107 3 ALCLBM36M1030 400 10 26 8 34 8 49 51 48 116 3	ALCLBM16M10/25	16	10	5.9	8	17	26	20	50	25
ALCLEM/SIM8/25 25 8 7 9.7 14 16 23 42 25 ALCLEM/SIM10/25 25 10 7 9.7 19 23 23 23 50 25 ALCLEM/SIM10/25 25 12 7 9.7 19 16 23 42 25 ALCLEM/SIM10/25 35 8 8.4 11.5 16 19 23 46 25 ALCLEM/SIM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEM/SIM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEM/SIM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEM/SIM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEM/SIM10/25 35 10 8.4 11.5 18 27 23 53 25 ALCLEM/SIM10/25 35 12 8.4 11.5 19 27 23 53 25 ALCLEM/SIM10/10 50 8 9.5 12.7 18 20 23 49 10 ALCLEM/SIM10/10 50 10 9.5 12.7 18 20 23 49 10 ALCLEM/SIM10/10 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SIM10/10 70 8 11.1 14.3 20 23 24 54 10 ALCLEM/SIM10/10 70 10 11.1 14.3 20 23 24 54 10 ALCLEM/SIM10/10 70 12 11.1 14.3 20 23 24 54 10 ALCLEM/SIM10/10 95 8 13.5 17.5 25 27 25 60 10 ALCLEM/SIM10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLEM/SIM10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLEM/SIM10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLEM/SIM10/SIM10/SIM10 150 16 15.5 20.6 29 29 32 70 10 ALCLEM/SIM10/SIM10/SIM10 150 10 16.3 22.2 31 34 32 78 10 ALCLEM/SIM10/SIM10/SIM10/SIM10 150 16 16.3 22.2 31 34 32 78 10 ALCLEM/SIM10/SIM1	ALCLBM16M12/25	16	12	5.9	8	17	26	20	50	25
ALCLEM/SM10/25 25 10 7 9.7 19 23 23 50 25 ALCLEM/SM10/25 25 12 7 9.7 19 16 23 42 25 ALCLEM/SM10/25 25 12 7 9.7 19 16 23 42 25 ALCLEM/SM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEM/SM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEM/SM10/25 35 10 8.4 11.5 19 27 23 46 25 ALCLEM/SM10/25 35 10 8.4 11.5 19 27 23 46 25 ALCLEM/SM10/25 35 12 8.4 11.5 19 27 23 49 10 ALCLEM/SM10/25 35 12 8.4 11.5 19 27 23 49 10 ALCLEM/SM10/25 35 12 8.4 11.5 19 27 23 49 10 ALCLEM/SM10/20 50 8 9.5 12.7 18 20 23 49 10 ALCLEM/SM10/10 50 10 9.5 12.7 18 20 23 49 10 ALCLEM/SM10/20 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SM10/20 50 12 9.5 12.7 18 20 23 49 10 ALCLEM/SM10/20 70 8 11.1 14.3 20 23 24 54 10 ALCLEM/SM10/20 70 10 11.1 14.3 20 23 24 54 10 ALCLEM/SM10/20 70 12 11.1 14.3 20 23 24 54 10 ALCLEM/SM10/20 70 12 11.1 14.3 20 23 24 54 10 ALCLEM/SM10/20 95 8 13 13.5 17.5 25 27 25 60 10 ALCLEM/SM10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLEM/SM10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLEM/SM10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLEM/SM10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLEM/SM10/20 120 12 15.5 20.6 29 29 32 70 10 ALCLEM/SM10/20 120 16 15.5 20.6 29 29 32 70 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 32 82 6 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 32 32 82 6 ALCLEM/SM10/20 150 16 16.3 222 31 34 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 34 32 78 10 ALCLEM/SM10/20 150 16 16.3 222 31 34 45 45 47 107 3 ALCLEM/SM10/20 30 10	ALCLBM25M6/25	25	6	7	9.7	14	16	23	42	25
ALCLEMSMI2/25 25 12 7 9.7 19 16 23 42 25 ALCLEMSSM6/25 35 8 8.4 11.5 16 19 23 46 25 ALCLEMSSM6/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEMSSM1/25 35 10 8.4 11.5 16 19 23 46 25 ALCLEMSSM1/25 35 12 8.4 11.5 19 27 23 53 25 ALCLEMSSM1/25 35 12 8.4 11.5 19 27 23 53 25 ALCLEMSSM1/26 50 8 9.5 12.7 18 20 23 49 10 ALCLEMSSM1/210 50 10 9.5 12.7 18 20 23 49 10 ALCLEMSSM1/210 50 12 9.5 12.7 18 20 23 49 10 ALCLEMSSM1/210 50 12 9.5 12.7 18 20 23 49 10 ALCLEMS/COMP/10 70 8 11.1 14.3 20 23 24 54 10 ALCLEMS/COMP/10 70 10 11.1 14.3 20 23 24 54 10 ALCLEMS/COMP/10 70 10 11.1 14.3 20 23 24 54 10 ALCLEMS/COMP/10 70 12 11.1 14.3 20 23 24 54 10 ALCLEMS/COMP/10 95 8 13.5 17.5 25 27 25 60 10 ALCLEMS/SM1/10 95 10 13.5 17.5 25 27 25 60 10 ALCLEMS/SM1/210 95 12 13.5 17.5 25 27 25 60 10 ALCLEMS/SM1/210 95 12 13.5 17.5 25 27 25 60 10 ALCLEMS/SM1/210 120 10 15.5 20.6 29 29 32 70 10 ALCLEMS/COMP/10 120 10 15.5 20.6 29 29 32 70 10 ALCLEMS/COMP/10 150 10 16.3 22.2 31 34 32 78 10 ALCLEMS/COMP/10 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 12 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31 34 34 32 78 10 ALCLEMS/SM1/210 150 16 16.3 22.2 31	ALCLBM25M8/25	25	8	7	9.7	14	16	23	42	25
ALCLBMSSM6/25 35 8 8 8.4 11.5 16 19 23 46 25 ALCLBMSSM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCLBMSSM10/25 35 12 8.4 11.5 19 27 23 53 25 ALCLBMSSM10/25 35 12 8.4 11.5 19 27 23 53 25 ALCLBMSSM10/20 50 8 9.5 12.7 18 20 23 49 10 ALCLBMSSM10/20 50 10 9.5 12.7 18 20 23 49 10 ALCLBMSSM10/20 50 12 9.5 12.7 18 20 23 49 10 ALCLBMSM10/20 50 12 9.5 12.7 18 20 23 49 10 ALCLBMSM10/20 70 8 11.1 14.3 20 23 24 54 10 ALCLBMSM10/20 70 10 11.1 14.3 20 23 24 54 10 ALCLBMSM8/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBMSM8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBMSSM8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBMSSM10/20 95 12 13.5 17.5 25 27 25 60 10 ALCLBMSSM10/20 120 10 15.5 20.6 29 29 32 70 10 ALCLBMSSM10/20 120 10 15.5 20.6 29 29 32 70 10 ALCLBMSM6/10 120 10 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 99 6 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 99 6 ALCLBMSM6/10 150 16 16.3 22.2 31 34 32 99 6 ALCLBMSM6/10 20 10 23.8 31.9 45 45 47 107 3 ALCLBMSMM10/10 150 10 23.8 31.9 45 45 47 107 3 ALCLBMSM00/103 300 10 23.8 31.9 45 45 45 47 107 3 ALCLBMSM00/103 400 10 26.8 34.8 49 51 48 116 3	ALCLBM25M10/25	25	10	7	9.7	19	23	23	50	25
ALCEBMSM10/25 35 10 8.4 11.5 16 19 23 46 25 ALCEBMSSM10/25 35 12 8.4 11.5 19 27 23 53 25 ALCEBMSSM10/10 50 8 9.5 12.7 18 20 23 49 10 ALCEBMSOMS/10 50 10 9.5 12.7 18 20 23 49 10 ALCEBMSOMS/10 50 12 9.5 12.7 18 20 23 49 10 ALCEBMSOMM10/10 50 112 9.5 12.7 18 20 23 49 10 ALCEBMSOMM10/10 70 8 11.1 14.3 20 23 24 54 10 ALCEBMSOMM10/10 70 10 11.1 14.3 20 23 24 54 10 ALCEBMSOMM10/10 70 11 11.1 14.3 20 23 24 54 10 ALCEBMSOMM10/10 70 12 11.1 14.3 20 23 24 54 10 ALCEBMSOM/10/10 95 8 13.5 17.5 25 27 25 60 10 ALCEBMSOM/10/10 95 10 13.5 17.5 25 27 25 60 10 ALCEBMSOM/10/10 95 10 13.5 17.5 25 27 25 60 10 ALCEBMSOM/10/10 95 12 13.5 17.5 25 27 25 60 10 ALCEBMSOM/10/10 120 10 15.5 20.6 29 29 32 70 10 ALCEBMSOM/10/10 120 10 15.5 20.6 29 29 32 70 10 ALCEBMSOM/10/10 120 16 15.5 20.6 29 29 32 70 10 ALCEBMSOM/10/10 150 10 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 10 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCEBMSOM/10/10 150 150 16 16.3 22.3 31 34 32 78 10 ALCEBMSOM/10/10 150 150 16 16.3 22.3 31 34 32 78 10 ALCEBMSOM/10/10 150 150 16 16.3 22.3 31 34 32 32 82 6 ALCEBMSOM/10/10 150 150 16 16.3 23.8 31.9 45 45 47 107 3 ALCEBMSOM/10/10 300 10 26.8 34.8	ALCLBM25M12/25	25	12	7	9.7	19	16	23	42	25
ALCLBMSM1010 50 8 9.5 12.7 18 20 23 49 10 ALCLBMSOM10/10 50 10 9.5 12.7 18 20 23 49 10 ALCLBMSOM10/10 50 12 9.5 12.7 18 20 23 49 10 ALCLBMSOM10/10 50 12 9.5 12.7 18 20 23 49 10 ALCLBMSOM10/10 70 8 11.1 14.3 20 23 24 54 10 ALCLBMSOM10/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBMSOM10/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBMSOM10/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBMSOM10/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBMSOM10/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBMSOM10/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBMSOM10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBMSOM10/10 150 16 16.3 22.2 31 34 32 99 6 ALCLBMSOM10/10 150 150 16 16.3 24.3 34 35 32 82 6 ALCLBMSOM10/10 150 150 16 16.3 24.3 34 35 32 82 6 ALCLBMSOM10/10 240 12 21.2 28.6 40 41 42 99 6 ALCLBMSOM10/10 23 300 10 23.8 31.9 45 45 47 107 3 ALCLBMSOM10/3 300 10 28.8 31.9 45 45 47 107 3 ALCLBMSOM10/3 300 10 28.8 31.9 45 45 47 107 3 ALCLBMSOM10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM35M6/25	35	8	8.4	11.5	16	19	23	46	25
ALCLBM50M8/10 50 8 9.5 12.7 18 20 23 49 10 ALCLBM50M10/10 50 10 9.5 12.7 18 20 23 49 10 ALCLBM50M12/10 50 12 9.5 12.7 18 20 23 49 10 ALCLBM50M12/10 70 8 11.1 14.3 20 23 24 54 10 ALCLBM50M12/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBM50M12/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBM50M12/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBM95M8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM120M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 15 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M116/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM150M116/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM150M116/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM300M112/8 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300M112/8 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300M112/8 300 12 23.8 31.9 45 45 45 47 107 3 ALCLBM300M12/8 300 12 23.8 31.9 45 45 47 107 3 ALCLBM300M12/8 300 12 23.8 31.9 45 45 45 47 107 3 ALCLBM300M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM35M10/25	35	10	8.4	11.5	16	19	23	46	25
ALCLBMSOM10/10 50 10 9.5 12.7 18 20 23 49 10 ALCLBMSOM12/10 50 12 9.5 12.7 18 20 23 49 10 ALCLBMSOM12/10 70 8 11.1 14.3 20 23 24 54 10 ALCLBMSOM12/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBMSOM12/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBMSOM12/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBMSOM10/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBMSOM10/10 95 12 15.5 20.6 29 29 32 70 10 ALCLBM12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM12/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM12/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 15 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 99 6 ALCLBM15/0M12/10 150 150 16 16.3 22.2 31 34 32 99 6 ALCLBM15/0M16/10 150 16 16.3 22.2 31 34 35 32 82 6 ALCLBM15/0M16/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM15/0M16/10 150 16 16.3 22.2 31 34 35 32 82 6 ALCLBM15/0M16/10 150 150 16 16.3 24.3 34 35 32 82 6 ALCLBM15/0M16/10 150 150 16 16.3 24.3 34 35 32 82 6 ALCLBM15/0M16/10 20 20 20 20 20 20 20 20 20 20 20 20 20	ALCLBM35M12/25	35	12	8.4	11.5	19	27	23	53	25
ALCLBMSOM12/10 50 12 9.5 12.7 18 20 23 49 10 ALCLBM70M8/10 70 8 11.1 14.3 20 23 24 54 10 ALCLBM70M10/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBM95M8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM12/M10/M10/M10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM12/M10/M10/M10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM12/M10/M10/M10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM12/M10/M10/M10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 15 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 99 6 ALCLBM15/M10/M10/M10 150 16 16.3 22.2 31 34 32 99 6 ALCLBM15/M10/M10/M10/M10 150 12 21.2 28.6 40 41 42 99 6 ALCLBM24/MM10/M10/M10 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M10/M10 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M10/M10/M10/M10/M10 300 10 28.8 34.8 49 51 48 116 3	ALCLBM50M8/10	50	8	9.5	12.7	18	20	23	49	10
ALCLBM70M8/10 70 8 11.1 14.3 20 23 24 54 10 ALCLBM70M10/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBM70M10/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBM95M8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M10/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M10/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM120M10/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 15 12 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 16 16.3 22.2 31 34 32 99 6 ALCLBM150M10/10 150 16 16.3 22.2 31 34 32 99 6 ALCLBM150M10/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM150M10/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 212 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 212 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM50M10/10	50	10	9.5	12.7	18	20	23	49	10
ALCLBM70M10/10 70 10 11.1 14.3 20 23 24 54 10 ALCLBM95M8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBM95M8/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM12/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM12/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM15/10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM15/10/10 150 15 12 16.3 22.2 31 34 32 78 10 ALCLBM15/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM15/10/10 150 16 16.3 22.2 31 34 32 9 9 6 ALCLBM15/10/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM15/10/10 150 16 16.3 24.3 34 35 32 82 6 ALCLBM15/10/10 150 240 12 21.2 28.6 40 41 42 99 6 ALCLBM18/10/10/10 240 12 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300M10/3 300 10 23.8 31.9 45 45 45 47 107 3 ALCLBM300M10/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM50M12/10	50	12	9.5	12.7	18	20	23	49	10
ALCLBM70M12/10 70 12 11.1 14.3 20 23 24 54 10 ALCLBM95M8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM120M12/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M12/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM120M10/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M10/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 9 9 6 ALCLBM150M10/10 150 16 16 22 28.6 40 41 42 99 6 ALCLBM15M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM240MB/6 240 - 23.8 31.9 45 45 47 107 3 ALCLBM300MB/3 300 10 23.8 31.9 45 45 45 47 107 3 ALCLBM300M10/3 300 10 26.8 34.8 49 51 48 116 3	ALCLBM70M8/10	70	8	11.1	14.3	20	23	24	54	10
ALCLBM95M8/10 95 8 13.5 17.5 25 27 25 60 10 ALCLBM95M10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM120M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 <	ALCLBM70M10/10	70	10	11.1	14.3	20	23	24	54	10
ALCLBM95M10/10 95 10 13.5 17.5 25 27 25 60 10 ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM120M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M16/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M12/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34	ALCLBM70M12/10	70	12	11.1	14.3	20	23	24	54	10
ALCLBM95M12/10 95 12 13.5 17.5 25 27 25 60 10 ALCLBM120M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M12/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240M16/6 240 -	ALCLBM95M8/10	95	8	13.5	17.5	25	27	25	60	10
ALCLBM120M10/10 120 10 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 15 16 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 98 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240MB/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 10 26.8 34.8 49 51 48 116 3	ALCLBM95M10/10	95	10	13.5	17.5	25	27	25	60	10
ALCLBM120M12/10 120 12 15.5 20.6 29 29 32 70 10 ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M12/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8<	ALCLBM95M12/10	95	12	13.5	17.5	25	27	25	60	10
ALCLBM120M16/10 120 16 15.5 20.6 29 29 32 70 10 ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M12/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300M8/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 <td>ALCLBM120M10/10</td> <td>120</td> <td>10</td> <td>15.5</td> <td>20.6</td> <td>29</td> <td>29</td> <td>32</td> <td>70</td> <td>10</td>	ALCLBM120M10/10	120	10	15.5	20.6	29	29	32	70	10
ALCLBM150M10/10 150 10 16.3 22.2 31 34 32 78 10 ALCLBM150M12/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM120M12/10	120	12	15.5	20.6	29	29	32	70	10
ALCLBM150M12/10 150 12 16.3 22.2 31 34 32 78 10 ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM120M16/10	120	16	15.5	20.6	29	29	32	70	10
ALCLBM150M16/10 150 16 16.3 22.2 31 34 32 78 10 ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM150M10/10	150	10	16.3	22.2	31	34	32	78	10
ALCLBM185M12/6 185 12 18.3 24.3 34 35 32 82 6 ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM150M12/10	150	12	16.3	22.2	31	34	32	78	10
ALCLBM240MB/6 240 - 21.2 28.6 40 41 42 99 6 ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM150M16/10	150	16	16.3	22.2	31	34	32	78	10
ALCLBM240M12/6 240 12 21.2 28.6 40 41 42 99 6 ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM185M12/6	185	12	18.3	24.3	34	35	32	82	6
ALCLBM300MB/3 300 - 23.8 31.9 45 45 47 107 3 ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM240MB/6	240	-	21.2	28.6	40	41	42	99	6
ALCLBM300M10/3 300 10 23.8 31.9 45 45 47 107 3 ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM240M12/6	240	12	21.2	28.6	40	41	42	99	6
ALCLBM300M12/3 300 12 23.8 31.9 45 45 47 107 3 ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM300MB/3	300	-	23.8	31.9	45	45	47	107	3
ALCLBM400M10/3 400 10 26.8 34.8 49 51 48 116 3	ALCLBM300M10/3	300	10	23.8	31.9	45	45	47	107	3
	ALCLBM300M12/3	300	12	23.8	31.9	45	45	47	107	3
ALCLBM500M12/3 500 12 30 38 55 60 50 130 3	ALCLBM400M10/3	400	10	26.8	34.8	49	51	48	116	3
	ALCLBM500M12/3	500	12	30	38	55	60	50	130	3



Non-Insulated Long Barrel Copper Lugs

- Non-insulated electro grade copper crimp lugs suitable for stranded to fine-stranded copper cable
- Electro tinned finish for corrosion resistance
- 99.9% copper for high conductivity
- All sizes can be sold individually

Operating Temperature: -55°C to $+155^{\circ}\text{C}$



			DIMENSIONS (mm)							
Cat. No.	Conductor Size (mm²)	Stud size (mm)	Barrel ID	Barrel OD	Palm Width	Palm Thickness	Barrel Length	Stud Dist From Barrel	Stud Dist From Top	Total Length
		E	A	C	D	F	В	Н	G	J
ALCLLB10M6	10	6.5	4.7	7.1	12	1.8	18	7	6	35
ALCLLB16M6	16	6.5	5.5	7.9	11	2.4	21	9	7	41
ALCLLB16M8	16	8.4	5.5	7.9	14	1.7	21	9	7	41
ALCLLB25M8	25	8.4	7.1	9.5	14	2.4	29	9	7	49
ALCLLB25M10	25	10.5	7.1	9.5	16	2.0	29	10	9	52
ALCLLB25M12	25	13	7.1	9.5	18	1.7	29	13	10	56
ALCLLB35M8	35	8.4	8.2	11.2	16	3.0	35	10	9	59
ALCLLB35M10	35	10.5	8.2	11.2	18	2.6	35	10	9	59
ALCLLB35M12	35	13	8.2	11.2	20	2.4	35	13	11	64
ALCLLB50M10	50	10.5	9.5	12.8	18	3.2	44	10	8	68
ALCLLB50M12	50	13	9.5	12.8	21	2.7	46	13	11	76
ALCLLB70M10	70	10.5	11.2	14.3	21	3.2	48	13	11	78
ALCLLB70M12	70	13	11.2	14.3	21	3.2	48	13	11	78
ALCLLB95M10	95	10.5	13.5	17.4	25	3.8	54	14	12	87
ALCLLB95M12	95	13	13.5	17.4	25	3.8	54	14	12	87
ALCLLB120M10	120	10.5	15.6	20.6	30	4.7	60	14	12	94
ALCLLB120M12	120	13	15.6	20.6	30	4.7	60	14	12	94
ALCLLB150M12	150	13	16.7	22.5	32	5.3	60	18	18	105
ALCLLB150M16	150	17	16.7	22.5	32	5.3	60	18	18	105
ALCLLB185M12	185	13	18.4	24.2	36	5.4	64	18	18	111
ALCLLB240M12	240	13	21.2	28.2	41	7.0	80	21	21	134
ALCLLB300M16	300	17	23.5	31.3	46	7.7	90	23	23	149
ALCLLB400MB	400	-	26.8	34.8	50	7.9	93	28	24	163
ALCLLB500MB	500	-	30.0	39.0	56	7.6	105	27	27	174
ALCLLB630MB	630	-	34.0	45.0	64.4	9.5	110	32	32	191

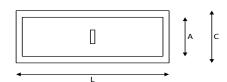


Non-Insulated Links

Non-Insulated Copper Links

- Non-insulated electro grade copper crimp links suitable for stranded to finestranded copper cable
- Long barrel
- Electro tinned finish for high conductivity
- Includes entrance chamfer and centre dimpling
- Onform to IS 191 (part V GR.ETP) specifications

Operating Temperature: -55°C to +155°C





O-A No	0	Dimensions (mm)			Pack Qty	
Cat. No.	Conductor Size (mm²)	A	С	L	- Pack Uty	
ALCLK1.5/100	1.5	2.1	3.8	15.0	100	
ALCLK2.5/100	2.5	2.5	4.0	22.0	100	
ALCLK4/50	4.0	3.1	4.8	22.0	50	
ALCLK6/50	6.0	3.8	5.5	22.0	50	
ALCLK10/50	10.0	4.5	6.9	26.0	50	
ALCLK16/25	16.0	5.9	8.0	36.0	25	
ALCLK25/25	25.0	7.0	9.7	47.0	25	
ALCLK35/25	35.0	8.4	11.5	47.0	25	
ALCLK50/25	50.0	9.5	12.7	47.0	25	
ALCLK70/10	70.0	11.1	14.3	54.0	10	
ALCLK95/10	95.0	13.5	17.5	54.0	10	
ALCLK120/10	120.0	15.5	20.6	68.0	10	
ALCLK150/6	150.0	16.3	22.2	68.0	6	
ALCLK185/6	185.0	18.3	24.3	68.0	6	
ALCLK240/6	240.0	21.2	28.6	88.0	6	
ALCLK300/3	300.0	23.8	31.9	98.0	3	
ALCLK400/3	400.0	26.8	34.8	98.0	3	
ALCLK500/3	500.0	30.0	38.0	98.0	3	
ALCLK630/3	630.0	33.5	45.0	101.0	3	



Non-Insulated Copper Reducing Links

 Uninsulated electrolytic grade copper crimp links for stranded and fine stranded copper conductors (class 2,5 and 6).

- Electro-tin plated for corrosion resistance.
- Chamfered ends for ease of entry of stranded conductors.
- Suitable for use with standard 6 tonne, 12 tonne and indent and hex crimp tools
- All sizes can be sold individually

Standards: AS 4325.1

Material: High Conductivity (Electrolytic grade) annealed copper

Finish: Tin plated

Temperature Range: -55°C to + 150°C



	Overall	Large Barrel		Small Barrel		
Cat. No.	Length	Length (mm)	ID (mm)	Length (mm)	ID (mm)	Pack Size
	A	В	D	С	E	
ALCLKR6-4	30	10	4	10	3.0	50
ALCLKR10-6	30	10	4.5	10	4.0	50
ALCLKR16-6	40	19	5.5	10	4.0	25
ALCLKR16-10	40	19	5.5	10	4.5	25
ALCLKR25-6	40	21	7.5	10	4.0	25
ALCLKR25-10	40	21	7.5	10	4.5	25
ALCLKR25-16	50	21	7.5	19	5.5	25
ALCLKR35-10	40	21	8.5	10	4.5	25
ALCLKR35-16	55	21	8.5	19	5.5	25
ALCLKR35-25	60	21	8.5	21	7.5	25
ALCLKR50-10	45	22	9.5	10	4.5	25
ALCLKR50-16	55	22	9.5	19	5.5	25
ALCLKR50-25	55	22	9.5	21	7.5	25
ALCLKR50-35	60	22	9.5	21	8.5	25
ALCLKR70-16	60	24	11.5	19	5.5	10
ALCLKR70-25	60	24	11.5	21	7.5	10
ALCLKR70-35	65	24	11.5	21	8.5	10
ALCLKR70-50	65	24	11.5	22	9.5	10
ALCLKR95-25	65	27	13.5	21	7.5	10
ALCLKR95-35	65	27	13.5	21	8.5	10
ALCLKR95-50	70	27	13.5	22	9.5	10
ALCLKR95-70	70	27	13.5	24	11.5	10
ALCLKR120-35	70	30	15.5	21	8.5	10
ALCLKR120-50	70	30	15.5	22	9.5	10
ALCLKR120-70	75	30	15.5	24	11.5	10
ALCLKR120-95	75	30	15.5	27	13.5	10
ALCLKR150-50	70	30	16.5	22	9.5	6
ALCLKR150-70	75	30	16.5	24	11.5	6
ALCLKR150-95	80	30	16.5	27	13.5	6
ALCLKR150-120	80	30	16.5	30	15.5	6
ALCLKR185-70	75	32	18.5	24	11.5	6
ALCLKR185-95	80	32	18.5	27	13.5	6
ALCLKR185-120	85	32	18.5	30	15.5	6
ALCLKR185-150	85	32	18.5	30	16.5	6
ALCLKR240-95	85	38	21.5	27	13.5	6
ALCLKR240-120	90	38	21.5	30	15.5	6
ALCLKR240-150	90	38	21.5	30	16.5	6
ALCLKR240-185	95	38	21.5	32	18.5	6

⁻ Suits building wire only



Lugs & Links Kits

Copper Lugs & Links Kit

- 801 piece electrician's copper lugs and links kit
- Electro tinned for high conductivity
- Non-insulated copper crimp terminals suitable for stranded to fine stranded copper cable

Note: for more information on Lugs & Links, see individual pages



Cat. No. ALCLLKIT10

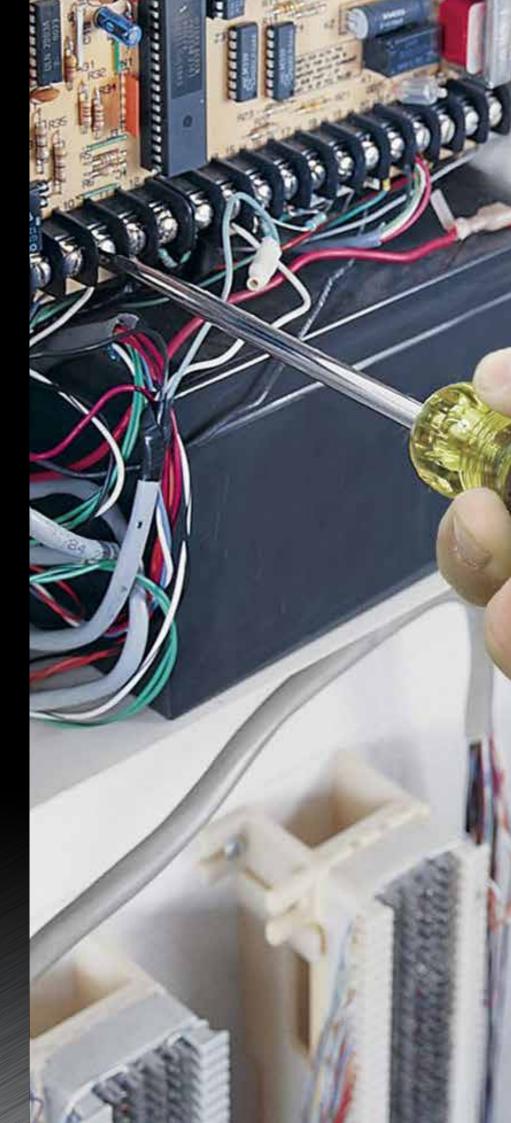
Kit Contains	
WATMH4NW	Ratchet Crimping Tool
ALCLK1.5	1.5 mm² Copper Crimp Link
ALCLK2.5	2.5 mm ² Copper Crimp Link
ALCLK6	6 mm² Copper Crimp Link
ALCLK10	10 mm² Copper Crimp Link
ALCL1.5M5	1.5 mm ² Copper Crimp Lug with 5mm hole
ALCL1.5M6	1.5 mm ² Copper Crimp Lug with 6mm hole
ALCL2.5M4	2.5 mm ² Copper Crimp Lug with 4mm hole
ALCL2.5M5	2.5 mm ² Copper Crimp Lug with 5mm hole
ALCL6M8	6 mm ² Copper Crimp Lug with 8mm hole
ALCL6M10	6 mm ² Copper Crimp Lug with 10mm hole



Fixings & Fastenings



Alco fixings and fastening range has been developed to meet the demands of todays worksite. Our extensive offer ensures you have the right product to meet all your fixing and fastening requirements.



For Professionals... Since 1857™





Clips & Saddles

Zinc Plated Metal Half Saddles

- For use indoors and outdoors
- Made from zinc plated mild steel



Cat. No.	Nominal Size	Securing Hole Diameter	Height	Length	Width	Pack Size
ALCS12H/100	12 mm	5 mm	11.5 mm	33.5 mm	16 mm	100
ALCS16H/100	16 mm	5 mm	15.5 mm	45 mm	19 mm	100
ALCS20H/100	20 mm	5 mm	20 mm	52 mm	19 mm	100
ALCS25H/100	25 mm	5.5 mm	245 mm	60 mm	25 mm	100
ALCS32H/50	32 mm	6.5 mm	31.5 mm	67 mm	25 mm	50
ALCS40H/50	40 mm	6.5 mm	40 mm	75 mm	32 mm	50
ALCS50H/25	50 mm	6.5 mm	49 mm	82 mm	39 mm	25

Zinc Plated Metal Full Saddles

- For use indoors and outdoors
- Made from zinc plated mild steel



Cat. No.	Nominal Size	Securing Hole Diameter	Height	Length	Width	Pack Size
ALCS12F/100	12 mm	5 mm	12 mm	41.5 mm	13 mm	100
ALCS16F/100	16 mm	5 mm	16 mm	47 mm	13 mm	100
ALCS20F/100	20 mm	5 mm	20 mm	51 mm	16 mm	100
ALCS25F/100	25 mm	5.5 mm	25 mm	62 mm	19 mm	100
ALCS32F/50	32 mm	5.5 mm	32 mm	75 mm	25 mm	50
ALCS40F/50	40 mm	5.5 mm	40 mm	87 mm	25 mm	50
ALCS50F/25	50 mm	5.5 mm	50 mm	102 mm	25 mm	25

Hot Dip Galvanised Half Saddles

For use indoors and outdoors



CAT.	NO:	ALCS	350HH	G/25

Cat. No.	Nominal Size	Securing Hole Diameter	Height	Length	Width	Pack Size
ALCS16HHG/100	16	5.1	17.7	44.1	18.9	100
ALCS20HHG/100	20	5.1	21.5	51.0	18.9	100
ALCS25HHG/100	25	5.1	26.2	59.4	25	100
ALCS32HHG/50	32	6.6	33.2	66.2	25	50
ALCS40HHG/50	40	6.6	41.2	72.2	32	50
ALCS50HHG/25	50	6.6	50.0	80.6	39	25





Hot Dip Galvanised Full Saddles

For use indoors and outdoors



Cat. No.	Nominal Size	Securing Hole Diameter	Height	Length	Width	Pack Size
ALCS16FHG/100	16	5.2	17.3	46.7	13.1	100
ALCS20FHG/100	20	5.6	21.8	52	16.1	100
ALCS25FHG/100	25	5.6	26.8	62.5	19.1	100
ALCS32FHG/50	32	5.6	33.7	77.9	25.1	50
ALCS40FHG/50	40	5.6	42.5	87.0	25	50
ALCS50FHG/25	50	5.6	51.6	103.5	25	25
ALCS63FHG/25	63	7	66	130	39	25
ALCS80FHG/25	80	9	92	166	39	25
ALCS100FHG/10	100	9	118	190	39	10

Spring Girder Clips

- Zinc plated
- Spring steel
- Clamps on most common I-beam sizes
- Range suits all common conduits up to 32mm

ALCGC813 Spring girder clip, zinc coated steel 8-13mm 100 ALCS16F/100 Spring girder clip, zinc coated steel 16-20mm 100	Pack Size	Description	Cat. No.
ALCS16F/100 Spring girder clip, zinc coated steel 16-20mm 100	100	Spring girder clip, zinc coated steel 8-13mm	ALCGC813
	100	Spring girder clip, zinc coated steel 16-20mm	ALCS16F/100
ALCS20F/100 Spring girder clip, zinc coated steel 25-32mm 100	100	Spring girder clip, zinc coated steel 25-32mm	ALCS20F/100



Cavity Wall Anchors

Plasterboard Anchors

- Self drilling plasterboard anchor
- Direct fixing into plasterboard
- Able to accept screw or screw hook
- Available in two types Nylon & Metal
- Flush head for flat finish
- Fast install and removal

Cat. No.	Description	Pack Size
ALCFWMNL640	Plasterboard anchors, nylon 6g x 40mm	40
ALCFWMN640P	Plasterboard anchors, nylon 6g x 40mm	100
ALCFWMZL640	Plasterboard anchors, metal 6g x 40mm	40
ALCFWMM640P	Plasterboard anchors, metal 6g x 40mm	100







Nylon Wall Anchors

- Light Duty Friction Anchor
- Usable in various substrates
- Nylon provides insulation separation
- Only needs a small drilled hole
- 3 head styles available
- Quickdrive provides collapsible shank to provide max fastening

Cat. No.	Description	Pack Size
ALCFTIM525	Nylon wall anchor, Mushroom head 5 x 25mm	50
ALCFTIM525P	Nylon wall anchor, Mushroom head 5 x 25mm	100
ALCFTIM540	Nylon wall anchor, Mushroom head 5 x 40mm	50
ALCFTIM6525	Nylon wall anchor, Mushroom head 6.5 x 25mm	50
ALCFTIM6525P	Nylon wall anchor, Mushroom head 6.5 x 25mm	100
ALCFTIM6538P	Nylon wall anchor, Mushroom head 6.5 x 38mm	100
ALCFTIM6550P	Nylon wall anchor, Mushroom head 6.5 x 50mm	100
ALCFTIR525	Nylon wall anchor, Round head 5 x 25mm	50
ALCFTIR525P	Nylon wall anchor, Round head 5 x 25mm	100
ALCFTIR538	Nylon wall anchor, Round head 5 x 38mm	50
ALCFTIR538P	Nylon wall anchor, Round head 5 x 38mm	100
ALCFTIR6525	Nylon wall anchor, Round head 6.5 x 25mm	50
ALCFTIR6538	Nylon wall anchor, Round head 6.5 x 38mm	50
ALCFTIQ530	Nylon quick drive anchor 5 x 30mm	50
ALCFTIQ645	Nylon quick drive anchor 6 x 40mm	40



Wall-Fix Anchors

- Single piece screw anchor
- Free Square drive bit included
- Large pitch thread design for quick installation
- Drill a 5mm hole in concrete/brick
- Zinc Plated
- Recommended for indoor use only

Cat. No.	Description	Pack Size
ALCWFA632	Wall Fix Anchors Pan head square drive 6 x 32mm	100
ALCWFA650	Wall Fix Anchors Pan head square drive 6 x 50mm	100





Hollow Wall Anchors

- All metal anchor
- Light duty
- 3 convenient sizes
- Zinc plated
- Recommended for indoor use only
- Phillips drive
- Large head for load bearing
- Barbs to prevent anchor turning

Cat. No.	Description	Material Thickness	Pack Size
ALCFHWA6819	Hollow wall anchor, zinc plated steel 6.8 x 19mm 10kg	8mm	50
ALCFHWA6832	Hollow wall anchor, zinc plated steel 6.8 x 32mm 10kg	12mm	50
ALCFHWA6845	Hollow wall anchor, zinc plated steel 6.8 x 45mm 10kg	24mm	50











Spring Toggle Anchors

- Toggles provide excellent load spreading
- Zinc Plated
- Recommended for indoor use only
- Phillips Drive

Cat. No.	Description	Pack Size
ALCFST550	Steel spring toggles with round head screws 5 x 50mm	25
ALCFST575	Steel spring toggles with round head screws 5 x 75mm	20



Sleeve Eye Bolt Anchor

- 2m 1 Eye bolt and anchor
- Expansion Anchor
- Friction Anchor
- Fully Assembled Anchor
- Yellow Zinc
- Recommended for indoor use only

Cat. No.	Description	Pack Size
ALCFBAE840	Eye Bolt sleeve Anchors YZP 8 x 40mm	20



Screw Bolt Anchors

- Hex flanged head
- Mech.Galvanised for protection
- Duel Thread
- Full Parallel Friction anchoring
- Forms own thread in substrate
- Screws easily and quickly into hole
- Easily removable
- Allows for close to the edge fixing

Cat. No.	Description	Pack Size
ALCHSBA650	Hex Screw Bolt Anchors 6 x 50mm	30
ALCHSBA860	Hex Screw Bolt Anchors 8 x 60mm	15
ALCHSBA8100	Hex Screw Bolt Anchors 8 x 100mm	10
ALCHSBA1060	Hex Screw Bolt Anchors 10 x 60mm	10
ALCHSBA1075	Hex Screw Bolt Anchors 10 x 75mm	5
ALCHSBA10100	Hex Screw Bolt Anchors 10 x 100mm	5
ALCHSBA1275	Hex Screw Bolt Anchors 12 x 75mm	5





Screws

Hex Head Coach Screws

- Heavy duty fixing
- Mech Galvanised for protection

Cat. No.	Description	Pack Size
ALCGSHC1040	Hex head coach screws galvanised 10g x 40mm	25
ALCGSHC1050	Hex head coach screws galvanised 10g x 50mm	20
ALCGSHC1075	Hex head coach screws galvanised 10g x 75mm	15



CAT. NO: ALCGSHC1040



CAT. NO: ALCGSHC1050



CAT. NO: ALCGSHC1075





Bugle Head Plasterboard Screws

- General Purpose screw
- Needle point for easy penetration
- Will pierce 0.8mm sheet metal
- Takes a standard #2 Phillips bit
- Good stability while driving in.
- Zinc plated
- Bugle head will not tear plasterboard

Cat. No.	Description	Pack Size
ALCB620/100	Bugle head plasterboard screws Yellow Zinc Plated 6g x 20mm	100
ALCB720/100	Bugle head plasterboard screws Yellow Zinc Plated 7g x 20mm	100
ALCB720/1000	Bugle head plasterboard screws Yellow Zinc Plated 7g x 20mm	1000
ALCB725/100	Bugle head plasterboard screws Yellow Zinc Plated 7g x 25mm	100
ALCB725/1000	Bugle head plasterboard screws Yellow Zinc Plated 7g x 25mm	1000
ALCB730/100	Bugle head plasterboard screws Yellow Zinc Plated 7g x 30mm	100
ALCB730/1000	Bugle head plasterboard screws Yellow Zinc Plated 7g x 30mm	1000
ALCB735/100	Bugle head plasterboard screws Yellow Zinc Plated 7g x 35mm	100
ALCB740/100	Bugle head plasterboard screws Yellow Zinc Plated 7g x 40mm	100
ALCB745/100	Bugle head plasterboard screws Yellow Zinc Plated 7g x 45mm	100
ALCB745/500	Bugle head plasterboard screws Yellow Zinc Plated 7g x 45mm	500
ALCB850/100	Bugle head plasterboard screws Yellow Zinc Plated 8g x 50mm	100
ALCB863/100	Bugle head plasterboard screws Yellow Zinc Plated 8g x 63mm	100
ALCB875/100	Bugle head plasterboard screws Yellow Zinc Plated 8g x 75mm	100

Washer / Button Head Screws

- Head gives large bearing surface
- Drill point will penetrate 2.5mm Steel
- Use #2 Phillips drive bit
- Low profile head
- Zinc Plated

Cat. No.	Description	Pack Size
ALCWS812/100	Washer/button head self drilling screws 8g x 12mm	100
ALCWS812/1000	Washer/button head self drilling screws 8g x 12mm	1000
ALCWS825/100	Washer/button head self drilling screws 8g x 25mm	100
ALCWS825/500	Washer/button head self drilling screws 8g x 25mm	500
ALCWS832/100	Washer/button head self drilling screws 8g x 32mm	100



Pancake (Wafer) Head Screws

- Use #2 Phillips drive bit
- Ideal for concealed fixing
- 10g for heavier loads
- Point will penetrate 2.5mm Steel
- Zinc plated
- Recommended for indoor use only

Cat. No.	Description	Pack Size
ALCWF1022/100	Pancake head drill point screws YZP 10g x 40mm	100
ALCWF1030/100	Pancake head drill point screws YZP 10g x 50mm	100



Cable Jointing

Alco has the range of products for all your LV jointing needs, from heatshrink tube to resin fill joints. Alco heatshrink tube in available in a huge range of sizes and colours to give you all the choice you need. It comes in standard thin wall for identification and jointing and in glue lines for those applications where weatherproof sealing is a requirement.



For Professionals... Since 1857™



NO DRIPPING NO GRACKING NO BREAKDOWN

Heatshrink & Accessories

Low shrink temperature and flame retardant Flexible & UV
Resistant for longer



Heatshrink Tubing Range Thin Wall

- Heatshrink is ideally used for heavy duty and general purpose use i.e. electrical insulation, termination, splicing, bundling, cable protection and strain relief
- Suitable for insulation colour-coding and cable terminations
- Low shrink temperature and flame retardant
- Flexible and UV resistant

Shrink Temperature: Above 110 $^{\circ}$ C Shrink Ratio: Radial Shrinking Ratio: > 50% Longitudinal Shrinking Ratio: < 10%

Tensile Strength: 15.5 MPa Elongation at Break: 580% Material: Ethylene Vinyl Acetate

Operating Temperature: -55°C to +125°C

Property		Test Method	Standard
Physical	Tensile strength (Mpa)	ASTM D2671	≥10.4
	Elongation (%)	ASTM D2671	≥200
	Tensile strength after aging (Mpa)	UL 224 158°C*168hrs	≥7.3
	Elongation after aging (%)	UL 224 158°C*168hrs	≥100
	Heat shock	UL 224 250°C*4hrs	No Dripping, No Cracking
Electrical	Cold blend	UL 224 -30°C*1hrs	No cracking
	Dielectric strength(kV/mm)	IEC 243	≥15
	Dielectric withstand-300V	UL 224	No breakdown for 1500V
	Dielectric withstand-600V	UL 224	No breakdown for 2500V
	Volume resistivity (Ω.cm)	IEC 93	≥1*1014
Chemical	Corrosion of bare copper	UL 224 158°C*168hrs	Pass
	Copper stability	UL 224 158°C*168hrs	Pass
	Flammability	UL 224	VW-1



Thin Wall Heatshrink Tubing Range

Cat. No.	Diameter As Supplied	Fully Recovered Diameter	Fully Recovered Wall	Colour	Length (m)
	(Mm)	After Heating (Mm)	Thickness (Mm)		Length (m)
HSTNW1.5/0.75BK	1.5	0.65	0.28	black	1.2
HSTNW1.5/0.75BL	1.5	0.65	0.28	blue	1.2
HSTNW1.5/0.75CL	1.5	0.65	0.28	clear	1.2
HSTNW1.5/0.75RD	1.5	0.65	0.28	red	1.2
HSTNW1.5/0.75WH	1.5	0.65	0.28	white	1.2
HSTNW1.5/0.75YG	1.5	0.65	0.28	yellow/ green	1.2
HSTNW2.0/1.0BK	2.5	1.0	0.35	black	1.2
HSTNW2.0/1.0BL	2.5	1.0	0.35	blue	1.2
HSTNW2.0/1.0CL	2.5	1.0	0.35	clear	1.2
HSTNW2.0/1.0RD	2.5	1.0	0.35	red	1.2
HSTNW2.0/1.0WH	2.5	1.0	0.35	white	1.2
HSTNW2.0/1.0YG	2.5	1.0	0.35	yellow/ green	1.2
HSTNW2.5/1.25BK	3.0	1.5	0.40	black	1.2
HSTNW2.5/1.25BL	3.0	1.5	0.40	blue	1.2
HSTNW2.5/1.25CL	3.0	1.5	0.40	clear	1.2
HSTNW2.5/1.25RD	3.0	1.5	0.40	red	1.2
HSTNW2.5/1.25WH	3.0	1.5	0.40	white	1.2
HSTNW2.5/1.25YG	3.0	1.5	0.40	yellow/ green	1.2
HSTNW5.0/2.5BK	5.5	2.5	0.55	black	1.2
HSTNW5.0/2.5BL	5.5	2.5	0.55	blue	1.2
HSTNW5.0/2.5CL	5.5	2.5	0.55	clear	1.2
HSTNW5.0/2.5RD	5.5	2.5	0.55	red	1.2
HSTNW5.0/2.5WH	5.5	2.5	0.55	white	1.2
HSTNW5.0/2.5YG	5.5	2.5	0.55	yellow/ green	1.2
HSTNW7.0/3.55BK	7.5	3.5	0.55	black	1.2
HSTNW7.0/3.55BL	7.5	3.5	0.55	blue	1.2
HSTNW7.0/3.55CL	7.5	3.5	0.55	clear	1.2
HSTNW7.0/3.55RD	7.5	3.5	0.55	red	1.2
HSTNW7.0/3.55WH	7.5	3.5	0.55	white	1.2
HSTNW7.0/3.55YG	7.5	3.5	0.55	yellow/ green	1.2
HSTNW10.0/5.0BK	10.5	5.0	0.60	black	1.2
HSTNW10.0/5.0BL	10.5	5.0	0.60	blue	1.2
HSTNW10.0/5.0CL	10.5	5.0	0.60	clear	1.2
HSTNW10.0/5.0RD	10.5	5.0	0.60	red	1.2
HSTNW10.0/5.0WH	10.5	5.0	0.60	white	1.2
HSTNW10.0/5.0YG	10.5	5.0	0.60	yellow/ green	1.2
HSTNW13/6.5BK	13.5	6.5	0.65	black	1.2
HSTNW13/6.5BL	13.5	6.5	0.65	blue	1.2
HSTNW13/6.5CL	13.5	6.5	0.65	clear	1.2
HSTNW13/6.5RD	13.5	6.5	0.65	red	1.2
HSTNW13/6.5WH	13.5	6.5	0.65	white	1.2
HSTNW13/6.5YG	13.5	6.5	0.65	yellow/ green	1.2
HSTNW18/9BK	19.0	9.0	0.80	black	1.2
HSTNW18/9BL	19.0	9.0	0.80	blue	1.2
HSTNW18/9CL	19.0	9.0	0.80	clear	1.2
HSTNW18/9RD	19.0	9.0	0.80	red	1.2
	19.0			white	
HSTNW18/9WH	13.0	9.0	0.80	WIIILE	1.2



Thin Wall Heatshrink Tubing Range

Cat Na	Diameter As Supplied	Fully Recovered Diameter	Fully Recovered Wall	Colour	Longib (m)
Cat. No.	(Mm)	After Heating (Mm)	Thickness (Mm)	Colour	Length (m)
HSTNW18/9YG	19.0	9.0	0.80	yellow/ green	1.2
HSTNW22/11BK	24.0	11.0	0.80	black	1.2
HSTNW22/11BL	24.0	11.0	0.80	blue	1.2
HSTNW22/11CL	24.0	11.0	0.80	clear	1.2
HSTNW22/11RD	24.0	11.0	0.80	red	1.2
HSTNW22/11WH	24.0	11.0	0.80	white	1.2
HSTNW22/11YG	24.0	11.0	0.80	yellow/ green	1.2
HSTNW25/12BK	25.0	12.0	0.80	black	1.2
HSTNW25/12BL	25.0	12.0	0.80	blue	1.2
HSTNW25/12CL	25.0	12.0	0.80	clear	1.2
HSTNW25/12RD	25.0	12.0	0.80	red	1.2
HSTNW25/12WH	25.0	12.0	0.80	white	1.2
HSTNW25/12YG	25.0	12.0	0.80	yellow/ green	1.2
HSTNW40/20BK	41.5	20.0	1.00	black	1.2
HSTNW40/20BL	41.5	20.0	1.00	blue	1.2
HSTNW40/20CL	41.5	20.0	1.00	clear	1.2
HSTNW40/20RD	41.5	20.0	1.00	red	1.2
HSTNW40/20WH	41.5	20.0	1.00	white	1.2
HSTNW40/20YG	41.5	20.0	1.00	yellow/ green	1.2
HSTNW50/25BK	51.0	25.0	1.00	black	1.2
HSTNW50/25BL	51.0	25.0	1.00	blue	1.2
HSTNW50/25CL	51.0	25.0	1.00	clear	1.2
HSTNW50/25RD	51.0	25.0	1.00	red	1.2
HSTNW50/25WH	51.0	25.0	1.00	white	1.2
HSTNW50/25YG	51.0	25.0	1.00	yellow/ green	1.2
HSTNW70/35BK	70.0	36.0	1.30	black	1.2
HSTNW70/35BL	70.0	36.0	1.30	blue	1.2
HSTNW70/35CL	70.0	36.0	1.30	clear	1.2
HSTNW70/35RD	70.0	36.0	1.30	red	1.2
HSTNW70/35WH	70.0	36.0	1.30	white	1.2
HSTNW70/35YG	70.0	36.0	1.30	yellow/ green	1.2
HSTNW100/50BK	100.0	51.0	1.46	black	1.2
HSTNW100/50BL	100.0	51.0	1.46	blue	1.2
HSTNW100/50CL	100.0	51.0	1.46	clear	1.2
HSTNW100/50RD	100.0	51.0	1.46	red	1.2
HSTNW100/50WH	100.0	51.0	1.46	white	1.2
HSTNW100/50YG	100.0	51.0	1.46	yellow/ green	1.2
HSTNW120/60BK	120.0	61.0	1.56	black	1.2
HSTNW120/60BL	120.0	61.0	1.56	blue	1.2
HSTNW120/60CL	120.0	61.0	1.56	clear	1.2
HSTNW120/60RD	120.0	61.0	1.56	red	1.2
HSTNW120/60WH	120.0	61.0	1.56	white	1.2
HSTNW120/60YG	120.0	61.0	1.56	yellow/ green	1.2
HSTNW150/75BK	150.0	76.0	1.56	black	1.2
HSTNW150/75BL	150.0	76.0	1.56	blue	1.2
HSTNW150/75CL	150.0	76.0	1.56	clear	1.2
HSTNW150/75RD	150.0	76.0	1.56	red	1.2
I IO I IMW I JULI JULI	100.0	10.0	1.00	เซน	1,4



Heatshrink Kits

Small Multi Purpose Heatshrink Kit

- Environmentally friendly, flexible, flame-retardant, heat Shrink tubing
- Complies to UL224
- Dielectric Strength: 15kV/mm
- Operating Temp: -45°C to + 125°C
- Minimum Shrink Temp: 90°C
- Shrink Ratio: 2:1
- RoHS Compliant



		Kit Contai	ins	
at. No.		Size (mm)	Colour	Length (mm)
LCHSKIT1	HSTNW2.5/1.25BK	2.5/1.25	Black	50
	HSTNW2.5/1.25BL	2.5/1.25	Blue	50
	HSTNW2.5/1.25RD	2.5/1.25	Red	50
	HSTNW2.5/1.25WH	2.5/1.25	White	50
	HSTNW2.5/1.25Y	2.5/1.25	Yellow	50
	HSTNW5.0/2.5BK	5.0/2.5	Black	50
	HSTNW5.0/2.5BL	5.0/2.5	Blue	50
	HSTNW5.0/2.5RD	5.0/2.5	Red	50
	HSTNW5.0/2.5WH	5.0/2.5	White	50
	HSTNW5.0/2.5Y	5.0/2.5	Yellow	50
	HSTNW10.0/5.0BK	10.0/5.0	Black	50
	HSTNW10.0/5.0BL	10.0/5.0	Blue	50
	HSTNW10.0/5.0RD	10.0/5.0	Red	50
	HSTNW10.0/5.0WH	10.0/5.0	White	50
	HSTNW10.0/5.0Y	10.0/5.0	Yellow	50
	HSTNW13/6.5BK	13/6.5	Black	70
	HSTNW13/6.5BL	13/6.5	Blue	70
)	HSTNW13/6.5RD	13/6.5	Red	70
	HSTNW13/6.5WH	13/6.5	White	70
	HSTNW13/6.5Y	13/6.5	Yellow	70

Large Multi Purpose Heatshrink Kit

- Environmentally friendly, flexible, flame-retardant, heat Shrink tubing
- Complies to UL224
- Dielectric Strength: 15kV/mm
- Operating Temp: -45°C to + 125°C
- Minimum Shrink Temp: 90°C
- Shrink Ratio: 2:1
- RoHS Compliant



		Kit Conta	ins	
at. No.		Size (mm)	Colour	Length (mm)
LCHSKIT2	HSTNW2.5/1.25BK	2.5/1.25	Black	50
	HSTNW5.0/2.5BL	5.0/2.5	Blue	50
	HSTNW5.0/2.5CL	5.0/2.5	Clear	50
	HSTNW5.0/2.5RD	5.0/2.5	Red	50
	HSTNW5.0/2.5Y	5.0/2.5	Yellow	50
	HSTNW5.0/2.5YG	5.0/2.5	Yellow/Green	50
	HSTNW5.0/2.5BK	5.0/2.5	Black	50
	HSTNW7.0/3.55BK	7.0/3.55	Black	50
	HSTNW7.0/3.55RD	7.0/3.55	Red	50
	HSTNW7.0/3.55WH	7.0/3.55	White	50
	HSTNW10.0/5.0BK	10.0/5.0	Black	85
	HSTNW10.0/5.0CL	10.0/5.0	Clear	85
	HSTNW13/6.5BK	13/6.5	Black	85
	HSTNW13/6.5CL	13/6.5	Clear	85
	HSTNW18/9BL	18/9	Blue	85
	HSTNW18/9CL	18/9	Clear	85
	HSTNW18/9RD	18/9	Red	85
	HSTNW18/9Y	18/9	Yellow	85
	HSTNW18/9BK	18/9	Black	100
	HSTNW13/6.5BK	13/6.5	Black	100
	HSTNW25/12.5BK	25/12.5	Black	250
	HSMWGL10/3L	10	Black	250
	HSMWGL25/8L	25	Black	250



Cable Ties

Industrial Nylon Cable Ties

- Industrial cable ties designed for the mobile worker
- Designed for use wherever you need to bundle wire, cable or pipe
- Easily adjustable and made from polyamide 66
- Available in black and white
- Halogen free
- UV resistant (black only)

Material: Polyamide 66 UL94V2 Operating temperature range: 0-85°C



CAT. NO: ALCTIE140B



CAT. NO: ALCTIE140W









Cat. No. Length (mm) (mm) Wridth (mm) Max Bundle Dia Strength (kg) Colour Pack Size ALCTIE90B 100 2.5 21 8 Black 100 ALCTIE90W 100 2.5 21 8 Black 1000 ALCTIE90W/1000 100 2.5 21 8 White 100 ALCTIE140B 150 3.5 37 18 Black 100 ALCTIE140B/1000 150 3.5 37 18 Black 100 ALCTIE140W/1000 150 3.5 37 18 White 1000 ALCTIE140W/1000 150 3.5 37 18 White 1000 ALCTIE185B 199 4.6 54 22 Black 100 ALCTIE185B/1000 199 4.6 54 22 White 100 ALCTIE185W/1000 199 4.6 54 22 White 100 ALCTIE280LDB 200 2.5							
ALCTIE90B/1000	Cat. No.	Length (mm)				Colour	Pack Size
ALCTIE90W	ALCTIE90B	100	2.5	21	8	Black	100
ALCTIE90W/1000 100 2.5 21 8 White 1000 ALCTIE140B 150 3.5 37 18 Black 100 ALCTIE140B/1000 150 3.5 37 18 White 100 ALCTIE140W/1000 150 3.5 37 18 White 100 ALCTIE185B 199 4.6 54 22 Black 100 ALCTIE185B/1000 199 4.6 54 22 Black 100 ALCTIE185W/1000 199 4.6 54 22 White 100 ALCTIE185W/1000 199 4.6 54 22 White 100 ALCTIE200LDW 199 4.6 54 22 White 100 ALCTIE20DLDW 200 2.5 52 8 Black 100 ALCTIE20DLDW 200 2.5 52 8 White 100 ALCTIE20OFB 200 7.5 54	ALCTIE90B/1000	100	2.5	21	8	Black	1000
ALCTIE140B	ALCTIE90W	100	2.5	21	8	White	100
ALCTIE140B/1000 150 3.5 37 18	ALCTIE90W/1000	100	2.5	21	8	White	1000
ALCTIE140W 150 3.5 37 18	ALCTIE140B	150	3.5	37	18	Black	100
ALCTIE140W/1000 150 3.5 37 18 White 1000	ALCTIE140B/1000	150	3.5	37	18	Black	1000
ALCTIE185B 199	ALCTIE140W	150	3.5	37	18	White	100
ALCTIE185B/1000 199 4.6 54 22 Black 1000 ALCTIE185W 199 4.6 54 22 White 100 ALCTIE185W/1000 199 4.6 54 22 White 1000 ALCTIE200LDB 200 2.5 52 8 Black 100 ALCTIE200LDW 200 2.5 52 8 Whilte 100 ALCTIE200MDB 200 3.5 52 18 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200WW 200 4.6 54 22 Pellow 100 ALCTIE200WW 200 4.6 81 22	ALCTIE140W/1000	150	3.5	37	18	White	1000
ALCTIE185W 199 4.6 54 22 White 100 ALCTIE185W/1000 199 4.6 54 22 White 1000 ALCTIE200LDB 200 2.5 52 8 Black 100 ALCTIE200MDB 200 2.5 52 8 White 100 ALCTIE200RD 200 3.5 52 18 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200W 200 4.6 68 22 Black 100 ALCTIE290B 250 4.6 81 22 Bla	ALCTIE185B	199	4.6	54	22	Black	100
ALCTIE185W/1000 199 4.6 54 22 White 1000 ALCTIE200LDB 200 2.5 52 8 Black 100 ALCTIE200LDW 200 2.5 52 8 White 100 ALCTIE200MDB 200 3.5 52 18 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200GN 200 4.6 54 22 Green 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200PW 200 4.6 54 22 Red 100 ALCTIE290BW 200 4.6 68 22 Black 100 ALCTIE290B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 <td< td=""><td>ALCTIE185B/1000</td><td>199</td><td>4.6</td><td>54</td><td>22</td><td>Black</td><td>1000</td></td<>	ALCTIE185B/1000	199	4.6	54	22	Black	1000
ALCTIE200LDB 200 2.5 52 8 Black 100 ALCTIE200LDW 200 2.5 52 8 Whilte 100 ALCTIE200MDB 200 3.5 52 18 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200GN 200 4.6 54 22 Green 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200W 200 4.6 54 22 Pellow 100 ALCTIE200W 200 4.6 68 22 Black 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290W 288 4.6 81 22 Whi	ALCTIE185W	199	4.6	54	22	White	100
ALCTIE200LDW 200 2.5 52 8 Whilte 100 ALCTIE200MDB 200 3.5 52 18 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200WW 200 4.6 54 22 Yellow 100 ALCTIE290WW 200 4.6 68 22 Black 100 ALCTIE290B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22	ALCTIE185W/1000	199	4.6	54	22	White	1000
ALCTIE200MDB 200 3.5 52 18 Black 100 ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200GN 200 4.6 54 22 Red 100 ALCTIE200RD 200 4.6 54 22 Yellow 100 ALCTIE200YW 200 4.6 54 22 Yellow 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290GN 290 4.6 81 22	ALCTIE200LDB	200	2.5	52	8	Black	100
ALCTIE200FB 200 7.5 54 54 Black 100 ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200GN 200 4.6 54 22 Green 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200YW 200 4.6 54 22 Yellow 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 100 ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290RD 290 4.6 81 22	ALCTIE200LDW	200	2.5	52	8	Whilte	100
ALCTIE200BL 200 4.6 54 22 Blue 100 ALCTIE200GN 200 4.6 54 22 Green 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200YW 200 4.6 54 22 Yellow 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22	ALCTIE200MDB	200	3.5	52	18	Black	100
ALCTIE200GN 200 4.6 54 22 Green 100 ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200YW 200 4.6 54 22 Yellow 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290BL 290 4.6 81 22 White 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290TW 290 4.6 81 22 Red 100 ALCTIE290TW 290 4.6 81 22 Red 100 ALCTIE290SB 371 4.6 3 - 106 22	ALCTIE200FB	200	7.5	54	54	Black	100
ALCTIE200RD 200 4.6 54 22 Red 100 ALCTIE200YW 200 4.6 54 22 Yellow 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 100 ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290YW 290 4.6 81 22 Red 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SW 371 4.6 3 - 106 22	ALCTIE200BL	200	4.6	54	22	Blue	100
ALCTIE200YW 200 4.6 54 22 Yellow 100 ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 100 ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 100 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SW/1000 371 4.6 3 - 106 <td< td=""><td>ALCTIE200GN</td><td>200</td><td>4.6</td><td>54</td><td>22</td><td>Green</td><td>100</td></td<>	ALCTIE200GN	200	4.6	54	22	Green	100
ALCTIE250B 250 4.6 68 22 Black 100 ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 White 1000 ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 1000 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106	ALCTIE200RD	200	4.6	54	22	Red	100
ALCTIE290B 288 4.6 81 22 Black 100 ALCTIE290B/1000 288 4.6 81 22 Black 1000 ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 1000 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360FB 370 7.5 3 - 106	ALCTIE200YW	200	4.6	54	22	Yellow	100
ALCTIE290B/1000 288 4.6 81 22 Black 1000 ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 1000 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE250B	250	4.6	68	22	Black	100
ALCTIE290W 288 4.6 81 22 White 100 ALCTIE290W/1000 288 4.6 81 22 White 1000 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Red 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290B	288	4.6	81	22	Black	100
ALCTIE290W/1000 288 4.6 81 22 White 1000 ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 White 100 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290B/1000	288	4.6	81	22	Black	1000
ALCTIE290BL 290 4.6 81 22 Blue 100 ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290W	288	4.6	81	22	White	100
ALCTIE290GN 290 4.6 81 22 Green 100 ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290W/1000	288	4.6	81	22	White	1000
ALCTIE290RD 290 4.6 81 22 Red 100 ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290BL	290	4.6	81	22	Blue	100
ALCTIE290YW 290 4.6 81 22 Yellow 100 ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290GN	290	4.6	81	22	Green	100
ALCTIE360SB 371 4.6 3 - 106 22 Black 100 ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290RD	290	4.6	81	22	Red	100
ALCTIE360SB/1000 371 4.6 3 - 106 22 Black 1000 ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE290YW	290	4.6	81	22	Yellow	100
ALCTIE360SW 371 4.6 3 - 106 22 White 100 ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE360SB	371	4.6	3 - 106	22	Black	100
ALCTIE360SW/1000 371 4.6 3 - 106 22 White 1000 ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE360SB/1000	371	4.6	3 - 106	22	Black	1000
ALCTIE360FB 370 7.5 3 - 106 54 Black 100	ALCTIE360SW	371	4.6	3 - 106	22	White	100
	ALCTIE360SW/1000	371	4.6	3 - 106	22	White	1000
ALCTIE360FB/500 370 7.5 3 - 106 54 Black 500	ALCTIE360FB	370	7.5	3 - 106	54	Black	100
	ALCTIE360FB/500	370	7.5	3 - 106	54	Black	500
ALCTIE360FW 370 7.5 3 - 106 54 White 100	ALCTIE360FW	370	7.5	3 - 106	54	White	100
ALCTIE360FW/500 370 7.5 3 - 106 54 White 500	ALCTIE360FW/500	370	7.5	3 - 106	54	White	500
ALCTIE430B 430 4.6 125 22 Black 100	ALCTIE430B	430	4.6	125	22	Black	100
ALCTIE510XHDB 510 12.7 150 110 Black 25	ALCTIE510XHDB	510	12.7	150	110	Black	25
ALCTIE530B 530 4.6 160 22 Black 100	ALCTIE530B	530	4.6	160	22	Black	100
ALCTIE540FB 540 7.5 160 54 Black 100	ALCTIE540FB	540	7.5	160	54	Black	100
ALCTIE610XHDB 610 12.7 181 110 Black 25	ALCTIE610XHDB	610	12.7	181	110	Black	25
ALCTIE770HDB 770 8.7 226 80 Black 25	ALCTIE770HDB	770	8.7	226	80	Black	25
ALCTIE770HDW 770 8.7 226 80 White 25	ALCTIE770HDW	770	8.7	226	80	White	25
ALCTIE1100HDB 1160 8.7 335 80 Black 25	ALCTIE1100HDB	1160	8.7	335	80	Black	25
ALCTIE1530HDB 1530 8.7 460 80 Black 25	ALCTIE1530HDB	1530	8.7	460	80	Black	25
Nylon Mounting Head Cable Ties	Nylon Mounting He	ad Cable Ties					

Mounting Head Hole Dia (mm)

5.1

Tensile Strength (kg)

22kg

22kg

Colour

White

Black

Pack Size

100

100

200

200

Cat. No.

ALCTIE200MHW

ALCTIE200MHB

Length

(mm)

Width

(mm)

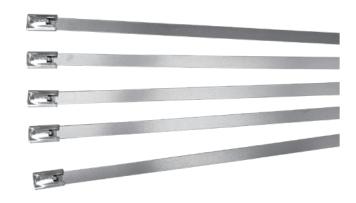
4.6

4.6



Stainless Steel Cable Ties

- Stainless steel grade 316 cable ties
- Stainless steel cable tie with unique ball locking
- mechanism allow the cable tie to be quickly and easily installed
- Installation is much easier and quicker than traditional metal strapping systems
- Stainless steel cable ties are suitable for environmentally harsh conditions including outdoors, underground, marine oil rigs etc.
- Stainless steel cables ties superior corrosion resistance
- Strong and durable tie for bundling applications in all environmental conditions
- SS316 is especially durable against water or salt spray
- Easy installation by hand or cable tie gun, WATSSCTG
- Fire Rating WS52W to AS/NZ:3013.



Cat. No.	Length (mm)	Width (mm)	Bundle Dia (mm)	Tensile Strength (kg)	Surface Treatment	Heavy Duty	Pack Size
TIE201-SS	201	4.6	50	45	-	No	100
TIE201-HD-SS	201	7.9	50	113	-	Yes	100
TIE362-SS	362	4.6	102	45	-	No	100
TIE362-HD-SS	362	7.9	102	113	-	Yes	100
TIE521-SS	521	4.6	152	45	-	No	100
TIE521-HD-SS	521	7.9	152	113	-	Yes	100
TIE679-SS	679	4.6	203	45	-	No	100
TIE679-HD-SS	679	7.9	203	113	-	Yes	100
TIE838-HD-SS	838	7.9	254	113	-	Yes	50
TIE1067-HD-SS	1067	7.9	327	113	-	Yes	50
TIE1500-HD-SS	1500	7.9	464	113	-	Yes	50

Extra Features For Coated Stainless Steel Ties

- SS316 Stainless steel cable tie with black epoxy coating provides excellent resistance to chemical and salt spray
- Coating provides extra protection to cables to help prevent damage
- Coating also provides additional insulation between cable tie bundle materials
- Low smoke Halogen free
- UV Stabilized (coated only)
- Fire Rating WS52W to AS/NZ:3013.



Cat. No.	Length (mm)	Width (mm)	Bundle Dia (mm)	Tensile Strength (kg)	Surface Treatment	Heavy Duty	Pack Size
TIE201-C-SS	201	4.6	50	45	Coated	No	100
TIE201-CHD-SS	201	7.9	50	90	Coated	Yes	100
TIE362-C-SS	362	4.6	102	45	Coated	No	100
TIE362-CHD-SS	362	7.9	102	90	Coated	Yes	100



Hand Tools

Wattmaster strippers, cutters, and crimpers are designed to get jobs done with precision and quality.

For Professionals... Since 1857™

CAT. NO: WATMA880EF

Pliers & Side Cutters

Marvel Heavy Duty Linesmans Pliers

- Diamond pattern nose grip for cleaner, sharper edges and better grip
- Radiused chain grip for gripping, pulling, bending and turning
- Precise tip clearance as blades are individually adjusted and checked
- Extra-long cutter blades for cutting multi-stranded flat cables with one snip
- Made from drop forged hardened steel and fully heat treated
- Black baked finish with heavy duty comfort handle grips



Cat. No.	Cutting capacity copper wire	Cutting capacity steel wire	Cutting capacity 30 flat cable	C Crimping capacity non-insulated terminals	Handle Color	Handle Finish	Overall Length	Weight
WATMA880	0-3.2mm ²	0-2.6mm ²	0-2.0mm ²	2.5-6.0mm ²	Yellow	Plastic Dipped	225 mm	0.400 kg

Heavy Duty Linesmans Pliers

- 225mm combination pliers
- Soft comfort handle grips
- Heavy duty non-slip handles
- Tested to 1000V

Cat. No.

WATMA880EF

- Multi-fit nut holder
- Cross thatched pliers
- Precision machined and hardened cutting jaws

Cutting capacity copper wire

16mm²

Made from drop forged and heat treated steel





CRIMPER
Crimps non-insulated terminals up to 10mm²

0-2.0mm²



Cutting capacity 3C Crimping capacity Handle Co flat cable non-insulated terminals

up to 10mm²

CUTTER
Copper up to 16mm² &
SWA strands to 2mm Ø

Yellow



MULTI FIT NUT HOLDER

lor	Steel Material	Overall Length	Weight	
	CR-MO	225 mm	0.360 kg	

1000 V Insulated High Leverage Linesmans Pliers

2mm

Cutting capacity SWA Strands

- 225mm heavy duty pliers
- High leverage
- Low profile handles
- Precision machined and hardened cutting jaws
- Drop forged and heat treated
- Double grip crimpers



Cat. No.	Cutting capacity copper wire	Cutting capacity steel wire	Crimping capacity non-insulated terminals	Steel Material	Handle Color	Handle Finish	Overall Length	Weight
WATMA880W	6.0-16mm ²	0-4.0mm ²	2.5-6.0mm ²	CR-MO	Yellow	Plastic Dipped	225 mm	0.410 kg

Marvel Cable Cutting Pliers

- Machine polished blades cut cable without distortion
- Built-in terminal crimping die on handle side of pivot
- · Cross hatch nose grip helps grip thin materials easily
- Heavy duty comfort handle grips
- For cutting TPS cable and circular cable
- Cuts copper cable only; not designed to cut steel



Cat. No.	Cutting capacity copper wire	Cutting capacity 3C flat cable	Crimping capacity non-insulated terminals	Handle Color	Handle Finish	Overall Length	Weight	
WATMVA200	0-25mm ²	0-2.6mm ²	1.25 – 2.0mm ²	Orange	Plastic Dipped	215 mm	0.340 kg	

Cable Cutting Pliers

- 1000V Insulated handles
- High Leverage
- Machine polished blades cut cable without distortion
- Built-in terminal crimping die
- Cross hatch nose grip helps grip thin materials easily
- · Heavy duty non slip comfort handle grips



Cat. No.	Cutting capacity copper wire	Cutting capacity 3C flat cable	Crimping capacity non- insulated terminals	Handle Color	Overall Length	Weight
WATMVA200W	0-25mm ²	0-2.6mm ²	1.25 – 2.0mm ²	Yellow	215 mm	0.340 kg

Cable Cutting Pliers

- 220mm long
- Heavy duty
- Diamond pattern nose grip
- Chain grip
- Precise tip clearance
- Extra-long cutter blades
- Made from drop forged hardened steel
- Crimping capacity: 2.5-6.0mm² non-insulated terminals



Cat. No.	Cutting capacity copper wire	Cutting capacity 3C flat cable	Crimping capacity non- insulated terminals	Handle Color	Overall Length	Weight
WATMVA200R	0-25mm ²	0-2.6mm ²	1.25 – 2.0mm ²	Red	220 mm	0.340 kg

Marvel Long Nose Pliers

- Long nose pliers with side cutters
- Used for wiring, assembly and repair work
- Made from drop forged chrome vanadium steel
- Long serrated inside jaws
- Fully heat treated beveled side cutting pliers
- Black baked finish with polished jaws



Cat. No.	Cutting capacity copper wire	Cutting capacity steel wire	Handle Color	Handle Finish	Overall Length	Weight
WATMA500200	0-2.6mm ²	0-1.5mm ²	Yellow	Plastic Dipped	200 mm	0.260 kg

Marvel Diagonal Cutting Nippers

- Flush cutting nippers for soft wire
- Black finish with polished jaws
- Fully heat treated with dipped vinyl handle grips
- Made from drop forged chrome vanadium steel
- Ground head



Cat. No.	Cutting capacity copper wire	Cutting capacity steel wire	Handle Color	Handle Finish	Overall Length	Weight
WATMA600	0-2.6mm ²	0-1.6mm ²	Red	Plastic Dipped	150 mm	0.120 kg

Marvel High Leverage Cutting Nippers

- High leverage design with beveled blades
- For heavy duty cutting of steel wire
- Made from drop forged chrome vanadium steel
- Fully heat treated, black finish with polished jaws
- Ground head with dipped vinyl handle grips



Cat. No.	Cutting capacity copper wire	Cutting capacity stee wire	l Cutting capacity 3C flat cable	Handle Color	Handle Finish	Overall Length	Weight
WATMA730	0-3.0mm ²	0-2.6mm ²	0-2.0mm ²	Yellow	Plastic Dipped	200 mm	0.340 kg

High Leverage Cutting Nippers

- High leverage
- Drop forged
- Heavy duty non slip comfort handle grips
- Heavy duty beveled blades
- Cuts steel and copper wire



Cat. No.	Cutting capacity copper wire	Cutting capacity flat cable	Cutting capacity stee catenary wire	el Cutting capacity ste armour wire	el Handle Color	Overall Length	Weight
WATMA730W	16mm²	3 x 4mm ²	7/1.25mm ²	2.6mm ²	Yellow	200 mm	0.300 kg

Conduit & Cable Cutters

PVC Pipe / Duct Cutter

- PVC pipe and duct cutter with anvil
- Special steel blades
- Ergonomically designed handles to minimize effort
- Gives clean edges and a professional finish to all pipe and duct cutting
- Ratcheting action
- Anvil is marked for accurate 45° mitre cuts



Cat. No.	Cutting capacity	Weight
WATM42	Up to 38mm ² diameter PVC pipe and 25mm x 25mm ² diameter duct	0.225 kg
Accessories		
Cat. No.	Description	
WATM42SA	Spare Anvil	
WATM42SB	Spare Blade	

PVC Pipe / Duct Cutter

- Quick release
- Cuts PVC pipe up to a maximum of 42mm diameter
- Also cuts PPR pipe, PE pipe and EXP pipe
- Multiple step cutting action requires less effort
- Creates a square and smoother cut
- Low profile design gets in to tight areas
- Handle lock for extra safety
- Made from aluminum alloy
- High quality stainless steel blade



Cat. No.	Cutting capacity	Weight
WATM42	Up to 38mm ² diameter PVC pipe and 25mm x 25mm ² diameter duct	0.210 kg

Cable Strippers

Jokari Swivel Blade Cable Stripper

- For precise cable stripping of common round cables
- Adjustable cutting depth
- Lightweight and dual purpose cable strippers
- Made from wear resistant nylon for longer life
- · Centre or end stripping; supplied with spare blade
- Strips rubber, PVC, teflon and polyethylene



Cat. No.	Stripping capacity	Overall Length	Weight
WAT10160	4-16mm² diameter cable	122 mm	0.075 kg
Accessories			
Cat. No.	Description		
WAT19000	Spare Blades (3 pack)		

Cable Stripper / Crimper / Cutter

- Stripper/crimper/cutter in one tool
- Special light pressured handles
- Lightweight



Cat. No.	Crimping Capacity Pre-Insulated Terminals	Crimping Capacity Non-Insulated Terminals	Crimping Capacity Ignition Terminals	Cutting Capacity Diameter Cable	Stripping Capacity Diameter Cable	Overall Length	Weight
WATSTCRS9	0.5-6.0mm ²	0.5-6.0mm ²	7.0-8.0mm ²	0.2-6.0mm ²	0.2-6.0mm ²	210 mm	0.290 kg

Jokari Solar Cable Strippers

- Suitable for quick and precise cable stripping of all common security and energy cables. E.g. flame-retardant cables, short-circuit and earthing protection cables, halogen free cables 1.5 - 16mm2
- Including series wire stopper/length scale 8 10 -12mm
- For perfect crimping of special insulated ferrules
- No adjustment of cutting depth necessary

Cat. No.	Stripping Capacity diameter cable
WAT30180	1.5 mm ²
WAT30190	2.5 - 6 mm ²
WAT30200	10 - 16 mm ²



Hand Tools



- Crimping Tool for pre-insulated, non-insulated and bootlace terminal
- Dies can be changed within seconds by simple "click" action
- Dies not in use can be stored in handles
- Hardened die sets; ratchet mechanism
- Made from hardened 3mm special alloy steel
- Ergonomic bi-component handles
- Crimper supplied with WATK106010, WATK106011, WATK106012 dies

Cat. No.	Crimping capacity pre-insulated terminals	Crimping capacity non-insulated terminals	Crimping capacity bootlace terminals	Overall Length	Weight	
WATK007	0.5-6.0mm ²	0.5-10.0mm ²	0.5-10.0mm ²	240 mm	0.690 kg	
Accessories						
Cat. No.	Description			Crimping capacity		
WATK106010	Die for pre-insulated termina	ls and connectors		0.5 - 1.5/1.5 - 2.5/2.5 -6 .0	mm²	
WATK106011	Die for pre-insulated termina	ls and connectors		1.5/2.5/6.0/10.0mm ²		
WATK106012	Die for pre-insulated and non-insulated bootlace terminals			0.5/0.75/1.0/1.5/2.5/4.0/6.0/10.0mm ²		
WATK106013	Die for open barrel terminals and connectors			0.5-1.0/1.5-2.5/4.0-6.0mm ²		
WATK106014	Die for pre-insulated and nor	i-insulated bootlace terminals		16.0/25.0/35.0mm ²		
WATK106015	Die for BNC plugs (coaxial ca	bles)		RG 58/59/62/174		
WATK106016	Die for unshielded 6 pole mo	dular plugs (Type SS, AMP)		RJ 11 (6P4C)/RJ 12 (6P4C) p	olugs	
WATK106017	Die for unshielded 6 pole mo	dular plugs (Type SS, AMP)		RJ 45 (8P8C) plugs		
WATK106018	Die for shielded 8 pole modu	lar plugs, CAT 5		RJ 45 (8P8C) plugs		
WATK106019	Die for shielded 8 pole modular plugs, CAT 5 (Type Hirose RM 11/21)			RJ 45 (8P8C) plugs		
WATK106027	Die for solar connector		MC3 2.5-6mm			
WATK106028	Die for solar connector			MC4 2.5-6mm		

























Ratchet Crimper

- Quick release crimping tool for pre-insulated, non-insulated and bootlace terminals
- Also suitable for crimping open barrel terminals (sold separately)
- Dies can be changed within seconds
- Hardened die sets, ratchet mechanism



Cat. No.		Overall	Length		Weight		
WATK005	260 mm				0.620 kg		_
Accessories							
Cat. No.		Descrip	tion		Crimping capac	ity	
WATK005-13051		Die for	insulated colour code nes	t terminal	0.5-1.0/1.5-2.5/4	-6mm²	
WATK005-13053		Die for	insulated male disconnec	tor terminal	0.5-1.0/1.5-2.5/4	-6mm²	
WATK005-1307		Die for	non-insulated open barrel	l terminal	0.5-1.0/1.5-2.5/4	4-6mm²	
WATK005-1308		Die for	fully insulated quick disco	onnect terminals	0.5-1.0/1.5-2.5/4	-6mm²	
WATK005-1332		Die for	insulated and non-insulat	ed bootlace terminals	25/50mm ²		
WATK005-1333		Die for	insulated and non-insulat	ed bootlace terminals	25/35mm ²		
WATK005-1370		Die for	insulated and non-insulat	ed bootlace terminals	0.5/0.75/1.0/1.5/2.5/4mm ²		
WATK005-1371	Die for insulated and non-insulated bootlace terminals			s 6/10/16mm ²			
WATK005-1396		Die for	insulated and non-insulat	ed bootlace terminals	10-35mm ²		
WATK005-1516		Die for	non-insulated terminals		0.3-16mm ²		
WATK005-1618		Die for	insulated and non-insulat	ed bootlace terminals	0.5/0.75/1.0/1.5/	2.5/4/6/10/16mm ²	
WATK005-1328		Die for	RG59 and RG6 F-Type CA	T V connectors	RG59, RG6		
WATK005-1347		Die for	RG59 and RG6 for both 5	0 & 750HM Cable	RG59		
WATK005-1404F		Die for	RJ22 connectors		RJ22		
WATK005-1406F		Die for	RJ11 connectors		RJ11		
WATK005-1408F		Die for	RJ45 connectors		RJ45		
		0 0 0 05-115-25 46 0				2 2 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
WATK005-13051	WATK005-13053	WATK005-1307	WATK005-1308*	WATK005-1332	WATK005-1333*	WATK005-1370	WATK005-1371



WATK005-1396*



WATK005-1516*





WATK005-1618*



Cat. No.

WATK005-KIT









Ratchet Crimper Kit

- · Quick release crimping tool for pre-insulated, non-insulated and bootlace terminals
- Also suitable for crimping open barrel terminals (sold separately)
- Dies can be changed within seconds
- Hardened die sets, ratchet mechanism



KIL GUIILAIIIS		
Cat. No.	Description	Crimping capacity
WATK005	Quick release crimping tool	
WATK005-1308	Die for fully insulated quick disconnect terminals	0.5-1.0/1.5-2.5/4-6mm ²
WATK005-1516	Die for non-insulated terminals	0.3-16mm ²
WATK005-1333	Die for insulated and non-insulated bootlace terminals	25/35mm²
WATK005-1618	Die for insulated and non-insulated bootlace terminals	0.5/0.75/1.0/1.5/2.5/4/6/10/1 6mm ²
WATK005-1396	Die for insulated and non-insulated bootlace terminals	10-35mm²

Combination Hand Crimpers

Combination Crimping Pliers

- Crimping tool for bootlace terminals
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate



Cat. No.	Crimping capacity	Overall Length	Weight
WATBLC-TC6	0.25, 0.34, 0.5, 0.75, 1.0, 1.5 and	160 mm	0.200 kg
	2.5mm ² bootlace terminals		

Combination Crimping Pliers

- Crimping tool for bootlace terminals
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate



Cat. No.	Crimping capacity	Overall Length	Weight
WATBLC-TC8	0.5, 0.75, 1.0, 1.5, 2.5, 4.0, 6.0,	190 mm	0.240 kg
	10.0 and 16.0mm ² bootlace terminals		

Marvel Combination Crimping Pliers

- Crimper, stripper and cutter combined in one tool
- Crimping tool suitable for pre-insulated terminals
- Pressed from special tool steel
- Black baked enamel finish
- Rigid plastic cushioned vinyl handle grips
- Precision machined and fully heat treated



Cat. No.	Crimping capacity pre-insulated terminals	Stripping capacity cable	Cutting capacity ISO bolts	Overall Length	Weight
WATMEB100C	0.5-1.5, 1.5-2.5 and	0.75 to 6.0mm ²	2.6, 3.0, 3.5, 4.0 and	220 mm	0.220 kg
	2.5-6.0mm ²		5.0mm		
	2.5 0.011111		J.0111111		

CAT. NO: WATMEB100C

Combination Crimping Pliers

- Crimper, stripper and cutter combined in one tool
- · Crimping tool suitable for pre-insulated and non-insulated terminals
- Pressed from special tool steel
- Black baked enamel finish with metric bolt cutter included
- Rigid plastic vinyl handle grips
- Precision machined and fully heat treated



Cat. No.	Crimping capacity pre-insulated terminals	Crimping capacity non-insulated terminals	Stripping capacity cable	Cutting capacity ISO bolts	Overall Length	Weight
WATMEB100CW	0.5–1.5, 1.5–2.5 and 2.5–6.0mm ²	1.5, 2.5 and 4.0-6.0mm ²	0.75 to 6.0mm ²	2.6, 3.0, 3.5, 4.0 and 5.0mm	220 mm	0.220 kg

Bootlace Terminal Hand Crimpers

Front Crimp Bootlace Crimper

- For crimping bootlace terminals 0.6 to 6 mm2
- Nose crimper excellent for narrow, confined places like switch boxes.
- Made in Germany



		LUONI VIEW		\ <u>\\\</u>
Cat. No.	Crimping capacity	Overall Length	Weight	Product
WATBLC-FC6	0.6 - 6.0mm ²	180 mm	0.235 ka	

Bootlace Crimper

- For crimping bootlace terminals 0.25 to 16 mm2
- Marked half-round dies for reliable connections between the sleeve and the conductor

Made in Germany				CAT. NO: WATBLC-TC16
Cat. No.	Crimping capacity	Overall Length	Weight	
WATBLC-TC16	0.25 - 16.0mm ²	180 mm	0.250 kg	

Self-Adjusting Bootlace Terminals Crimper

Self-adjusting crimping tool for bootlace terminals

Crimping capacity

0.08-10.0mm2 bootlace terminals

- Ergonomically designed handles
- Made from steel casting
- Lightweight and easy to operates



WATBLC-DL10

220 mm

Self-Adjusting Bootlace Terminals Crimper

- Self-adjusting crimping tool for bootlace terminals
- Ergonomically designed handles
- Made from steel casting
- Lightweight and easy to operates



ı	Cat. No.	Crimping capacity	Overall Length	Weight
	WATBLC-DL16	0.5-16.0mm ² bootlace terminals	185 mm	0.600 kg

Self-Adjusting Bootlace Terminals Crimper

- Ratchet crimping tool for bootlace terminals
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate

Cat. No.

WATKSBLC

Ratchet controlled for consistent results



Bootlace Terminals Crimpers

Crimping capacity

0.5-16.0mm² bootlace terminals

- Ergonomically designed handles
- Ratchet controlled for consistent results
- Lightweight and easy to operate



Cat. No.	Crimping capacity	Overall Length	Weight
WATKSBLC-T2X6	2 x 0.5 – 2 x 6mm2		
	twin bootlace terminals	5	
WATKSBLC-35	$10 - 35 \text{mm}^2$	270 mm	0.620 kg
	bootlace terminals		
WATKSBLC-95	50 - 95mm² bootlace	330 mm	0.800 kg
	terminals		
WATKSBLC-150	120 – 150mm² boot- lace terminals	360 mm	0.920 kg







CAT. NO: WATMH14W

Non-Insulated Terminal Hand Crimpers

Marvel Non-Insulated Terminal Ratchet Crimper

- Crimping tool for non-insulated terminals
- Jaws made from chrome molybdenum steel
- Handles and dies cast from carbon alloy steel and are fully
- · Lightweight and easy to use, complete crimp with one hand
- Long lasting precision tool with black baked finished jaws

Cat. No.	Crimping capacity non-insulated terminals	Overall Length	Weight	
WATMH14	1.5. 2.5. 6.0.10.0 and 16.0mm ²	240 mm	0 460 ka	

CAT. NO: WATMH14

Non-Insulated Terminal Ratchet Crimper

- · Crimping tool for non-insulated terminals
- Jaw made from chrome molybdenum steel
- Handles and dies cast from carbon alloy steel and are fully heat treated
- Non-slip TPR handle grips
- · Lightweight and easy to use, complete with one hand
- Long lasting precision tool with black baked finished jaws

Cat. No.	Crimping capacity non-insulated terminals	Overall Length	Weight	
WATMH14W	1.5, 2.5, 6.0 10.0 and 16.0mm ²	240 mm	0.460 kg	

Non-Insulated Terminal Ratchet Crimper

- · Crimping tool for non-insulated terminals
- Lightweight and easy to operate
- Ratchet controlled for consistent results

Ergonomically deMade from drop f	signed handles forged carbon steel			CAT. NO: WATMH4NW
Cat. No.	Crimping capacity non-insulated terminals	Overall Length	Weight	
WATMH4NW	0.5-1.5, 1.5-2.5, 4.0-6.0and 8.0mm ²	260 mm	0.600 kg	

Non-Insulated Terminal Combination **Crimping Pliers**

- · Crimping tool for non-insulated terminals
- Jaws made from chrome molybdenum steel
- Handles and dies cast from carbon alloy steel and are fully heat treated
- Lightweight and easy to use, complete crimp with one hand
- Long lasting precision tool with black baked finished jaws

Cat. No.	Crimping capacity non-insulated terminals	Overall Length	Weight	
WATKS2045E	1.5, 2.5, 6.0 10.0 and 16.0mm ²	240 mm	0.460 kg	



Specialty Hand Crimpers

Open Barrel Terminals Crimper

- · Ratchet crimping tool for open barrel terminals
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate

Cat. No.

Cat. No.

WATMH3DHS

WATMH4N0B

Ratchet controlled for consistent results



Heatshrinkable Terminals Crimper

Crimping capacity

open barrel terminals

0.5 - 1.5, 1.5 - 2.5 & 4.0 - 6.0mm²

- · Ratchet crimping tool for heat shrinkable terminals
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate
- Ratchet controlled for consistent results



Professional	Modular	Data	Crimper

Crimping capacity

heatshrinkable terminals

0.5 - 1.5, 1.5 - 2.5 & 4.0 - 6.0mm²

- · All-in-one tool cuts, strips and crimps all types of modular plugs
- No need to change dies
- · High quality tool with non-slip comfort handle grips
- 6mm stripping length
- Built-in round cable stripper



Cat. No.

WATDAT-2008A



Crimping capacity







CAT. NO: WATDAT-2008A

CAT. NO: WATSC-MC2/6-G

Solar Connector Crimper

- Crimper for multi-contact MC4 solar PV core connector
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate

WATSC-MC2/6

Ratchet controlled for consistent results



Guided Solar Connector Crimper

Crimping capacity

MC4 2.5, 4 & 6mm² solar connectors

- Crimper for multi-contact MC4 solar PV core connector
- With regulating and locating housing
- Ergonomically designed handles
- Made from drop forged carbon steel
- Lightweight and easy to operate
- Ratchet controlled for consistent results

riatoriot contro	nou for consistent results			
Cat. No.	Crimping capacity	Overall Length	Weight	<u> </u>
WATSC-MC2/6-G	MC4 2.5, 4 & 6mm ² solar connectors	200 mm	0.380 kg	- duct
				Produce

BACK OF HEAD

Mechanical Hand Crimpers

Hand Operated Mechanical Crimper

- Hand operated mechanical crimping tool for copper lugs and links
- Built-in crimp die set to range of different sizes

Crimp Type

Hexagonal

Hexagonal

- No dies to replace; simply rotate die to required crimp size
- High tolerance and high precision

Cat. No.

WATMECH650P

WATMECH6120P



Hand Operated Mechanical Crimper with Detachable Handles

6.0-50.0mm²

6.0-120.0mm²



Built-in crimp die set for all standard conductor sizes from 6 to 120mm2.

Dies lock into place for consistent crimping.

 No dies to replace; simply rotate and unlock die to required crimp size

 Comes with detachable click in handles in a handy carry case the keeps pieces together and prolongs tool life.



 Cat. No.
 Crimp Type
 Crimping Capacity Non-Insulated Terminals
 Overall Length Veight Support Su



Screwdrivers

Witte 6 Piece Insulated Screwdriver Set

- 6 piece 1000V insulated screwdriver set
- Individually tested in water up to 10,000V to ensure maximum safety
- Tested in accordance with DIN EN 60900 and IEC900
- Burnished blades of high alloy steel
- Ergonomically designed handles with soft and hard grip
- VDE approved
- Made in Germany

Cat. No.	Kit Contains	Kit Contains				
Gal. NO.	Туре	Head Size	Shaft Length			
WAT620757	Slotted	0.5 x 3.0mm	100 mm			
	Slotted	0.8 x 4.0mm	100 mm			
	Slotted	1.0 x 5.5mm	125 mm			
	Slotted	1.2 x 6.5mm	150 mm			
	Phillips	No.1	80 mm			
	Phillips	No.2	100 mm			



Witte 6 Piece Insulated Slimline Screwdriver Set

- 6 piece 1000V insulated screwdriver set
- Smaller blade diameter with no overlying insulation
- Provides easy access to small openings or screws that are hard to reach
- Ideal for tackling sunken screw and spring elements in live components
- Individually tested in water up to 10,000V to ensure maximum safety
- Cold impact testing at -40°C, complies with DIN EN IEC 60900
- VDE approved
- Easy-grip soft zones for optimum torque
- Burnished blades of high alloy steel
- Ergonomic designed handles with soft and hard grip
- Made in Germany

Cat. No.	Kit Contains				
Gal. NO.	Туре	Head Size	Shaft Length		
WAT620757-S	Slotted	0.5 x 3.0mm	100 mm		
	Slotted	0.8 x 4.0mm	100 mm		
	Slotted	1.0 x 5.5mm	125 mm		
	Slotted	1.2 x 6.5mm	150 mm		
	Phillips	No.1	80 mm		
	Phillips	No.2	100 mm		



Cable Tie Guns

Nylon Cable Tie Gun

- · Helps eliminate sharp edges on cut cable ties
- Suitable for cable ties from 2.2-4.8mm in width
- Tension adjustment allows the user to adapt the tool to the size of the cable tie
- Durable metal construction

Cat. No.	Cable tie material	Tool material	Max width of cable tie	Overall Length	Weight
WATNCTG	Nylon	Metal	4.8mm	155 mm	0.300 kg



Stainless Steel Cable Tie Gun

- Helps eliminate sharp edges on cut cable ties
- Suitable for cable ties from 2.2-4.8mm in width
- Tension adjustment allows the user to adapt the tool to the size of the cable tie
- Durable metal construction

Cat. No.	Cable tie material	Tool material	Max width of cat tie	ole Overall Length	Weight
WATSSCTG	Steel	Metal	4.6mm	210 mm	0.560 kg



Stainless Steel Cable Tie Gun

- Automatically tensions and cuts cable ties
- Suitable for stainless steel cable ties up to 7.9mm in width and 0.3mm thick
- Four tension levels
- Durable metal construction

Cat. No.	Cable tie material	Max width of cable tie	Overall Length	Weight
WATSSCTG	Steel	7.9mm	140 mm	0.560 kg
Accessories				
Cat. No.		Description		
WATSSCTG-RRS		Replaceable ratchet s	et	
WATSSCTG-RCB		Replaceable cutting set		



General Electricans Tools

Micro Gas Torch

- Ideal for situations where a high volume of portable heat source is required for soldering, brazing and heatshrinking
- Suitable for automotive, plumbing and working with plastic
- Butane gas powered with safety lock and instant electronic ignition
- Refillable cordless and portable
- Adjustable flame control
- 1300°C heating temperature

Cat. No.	Working Time	Dimensions	Weight
WATRK2121	60mins approx. on full tank	186 (L) x 115 (W) x 45mm diameters	0.300 kg



CAT. NO: WATRK2121

Conduit Flaring Tool

- Makes conduit bells
- No more wasted conduit
- Make your own custom bends; any shape, any size
- Made in Australia
- For use with 20, 25, 32 and 40mm conduit

Cat. No.	Dimensions	Weight	
WATBM	168mm x 168mm	0.158 kg	



Electrical Bracket Buddy

- Locates electrical brackets in plaster wall
- A must for all electricians and tradesman
- Easy to use and extremely accurate
- No batteries required
- · Halves your cut-out time
- No unnecessary holes

Cat. No.	Dimensions	Weight	
WATBRKBUDDY	111 mm x 76 mm	0.150 ka	



GPO Level

- GPO level plaster cut out template
- 2 Resin Vials
- Aligns power point
- · Can be used as a template for cut-out
- Convenient and easy to use

Cat. No.	Dimensions	Weight
WATGPOLVL	87mm x 52mm	0.010 kg



CAT. NO: WATGPOLVL

Heat Gun

- 2000W powered heat gun with six piece accessory set
- 2 heat settings: 350°C and 550°C
- 240V, 50Hz input power
- Hanging ring
- Conveniently stored in plastic carry case
- Kit includes heat gun, cone nozzle, glass protector nozzle, reflector nozzle, fish tail nozzle, handle and scraping head
- Heat settings: 350°C and 550°C

Cat. No.	Heat settings	Weight
WATHGK	350°C and 550°C	1.720 kg (including case)



CAT. NO: WATHGK

Volt Stick

- Tests for the presence of AC voltage in cables, wall sockets, switches etc. without metal contact
- Pocket sized non-contact voltage sensor with light and sound indication
- Beeping sound indicates live wire
- Fully insulated body and safety hand guard
- Still illuminates at low battery charge; no sound means change batteries
- New positive screw cap



CAT. NO: WATVS

Cat. No.	Voltage range	Sensitivity	Power supply	Category rating	Material	Dimensions	Weight
WATVS	230-1000V AC	Indicates within 4mm of wire carrying 230V AC	2 standard AAA batteries (included)	CAT III 1000V AC	Pa6, PP-COP	146 x 18mm	0.400 kg

Caution: Only to be used by a competent person. Prove on known live before and after testing. Does not detect voltage in all circumstances



Holemaking

Made of top-of-the-line materials for longer lasting performance, Wattmaster's diverse range of Marvel holemaking products and accessories provide accuracy and consistency to get the job done right.

For Professionals... Since 1857™

Holesaws

Marvel High Speed Steel Holesaws

- Long lasting cutters allow fast accurate cutting of steel and alloy sheet
- For use with hand-held electric drill or drill press
- Blade and centre drill are machined from high speed steel and are heat treated
- Blades have a sand blast finish
- Three piece construction (arbor, blade and centre drill) allows replacement of blade or centre drill



Part	No Size (mm)	Cutting Depth (mm)	Туре	Suitable Arbor	Suitable Drill	Suitable Blade
WATMHE13C	13	7	complete unit	WATMHA1	WATMHD648	WATMHE13B
WATMHE16C	16	7	complete unit	WATMHA1	WATMHD648	WATMHE16B
WATMHE20C	20	7	complete unit	WATMHA1	WATMHD648	WATMHE20B
WATMHE22C	22	7	complete unit	WATMHA1	WATMHD648	WATMHE22B
WATMHE23C	23	7	complete unit	WATMHA1	WATMHD648	WATMHE23B
WATMHE25C	25	7	complete unit	WATMHA2	WATMHD648	WATMHE25B
WATMHE29C	29	7	complete unit	WATMHA2	WATMHD648	WATMHE29B
WATMHE32C	32	7	complete unit	WATMHA2	WATMHD648	WATMHE32B
WATMHE40C	40	7	complete unit	WATMHA3	WATMHD648	WATMHE40B
WATMHE44C	44	7	complete unit	WATMHA3	WATMHD648	WATMHE44B
WATMHE50C	50	7	complete unit	WATMHA4	WATMHD648	WATMHE50B
WATMHE64C	64	7	complete unit	WATMHA5	WATMHD648	WATMHE64B
WATMHE76C	76	7	complete unit	WATMHA5	WATMHD648	WATMHE76B
WATMHE89C	89	7	complete unit	WATMHA5	WATMHD648	WATMHE89B
WATMHE100C	100	7	complete unit	WATMHA5	WATMHD648	WATMHE100B

10 Piece High Speed Steel Bi-Metal Holesaws Kit

- Ten piece high speed bi-metal holesaw kit
- Variable pitch teeth and longer cutting life
- One touch system
- Ideal for cutting metal, aluminum, hardwood and PVC
- Includes a double arbor that is designed to enlarge existing holes

Cat. No.	Kit Contains			
Cal. No.	Cat. No.	Description		
WATR9593M	WATR510	16mm Bi-Metal Holesaw		
	WATR513	20mm Bi-Metal Holesaw		
	WATR516	25mm Bi-Metal Holesaw		
	WATR520	32mm Bi-Metal Holesaw		
	WATR525	40mm Bi-Metal Holesaw		
	WATR532	51mm Bi-Metal Holesaw		
	WATR5514	14-30mm Arbor		
	WATR5545	32-152mm Arbor		
	WATR5511	Arbor Adaptor		
	WATR5515	14-150mm Double Arbor		



Wood Bits

High Speed Steel Wood Bits

- Glass shot finish with cutting groove
- Hexagonal shank for electric drills
- Used for drilling large holes
- For use with power drill only
- Made from high quality molybdenum steel

Cat. No.	Diameter	Overall Length
WATHSWB10	10.0 mm	170 mm
WATHSWB16	16.0 mm	170 mm
WATHSWB20	20.0 mm	170 mm
WATHSWB22	22.0 mm	170 mm
WATHSWB25	25.0 mm	170 mm
WATHSWB32	32.0 mm	170 mm
WATHSWBE	-	310 mm



CAT. NO: WATHSWBE

High Speed Steel Wood Bit Kit

- 11 piece wood bit set
- Hexagonal shank for electric drills
- Made from high quality molybdenum steel
- Set includes 6, 10, 12, 16, 20, 22, 25, 32 and 40mm wood bits
- Supplied with 150mm extension bit and 2.5mm hex key wrench
- Packed in a convenient plastic case

Oak Na	Kit Contains			
Cat. No.	Cat. No.	Description		
WATHSWBKIT	-	6 mm wood bit		
	WATHSWB10	10 mm wood bit		
	-	12 mm wood bit		
	WATHSWB16	16 mm wood bit		
	WATHSWB20	20 mm wood bit		
	WATHSWB22	22 mm wood bit		
	WATHSWB25	25 mm wood bit		
	WATHSWB32	32 mm wood bit		
	-	40 mm wood bit		
	-	150mm wood bit extension		
	-	2.5mm hex key wrench		



Cable Pulling

Pulling wire and working with conduit is incredibly challenging without the proper tools. Wattmaster's complete line of cable pulling tools allows you to get the job done while saving time, effort, and materials.



For Professionals... Since 1857™

Lubricant

'Econo Slide' Cable Pulling Lubricant

- Low cost and economical
- Easy to use and clean up; non-staining
- High performance, slow-drying, water based lubricant
- · Compatible with a wide range of cable jacket materials
- Good friction reducing properties
- Non-toxic; washes off with water

Cat. No.	Size	Weight
WATECOSL	1 Litre Bottle	1.0 ka



CAT. NO: WATECOSL

Snakes & Pull Throughs

30m PVC Cable Snake

- Twist, kink and cut resistant
- Triple strands of polyester with coiled spring leader
- Lightweight, non-conducting electrician's PVC snake
- · High tensile strength and abrasion resistance
- Runs easily through more bends due to unique design
- Stored in convenient tubular holder (WATMWC-50L)

Cat. No.	Length	Diameter	Weight	Safe Worki Load	ng Breaking Strength
WATMW6030LPH	30 m	6.0 mm ²	2.0 kg	500 KGF	800 KGF



Glow-in-the-Dark Pull Through

- Phosphorus based plastic line
- Glow in the dark cable pull through glows longer and brighter
- · Highly visible in dark areas e.g. under roofs and floors
- Saves time and allows for quicker wire installation
- Great for one person installations
- Slotted at each end
- Recharge by exposing to an ultra violet source e.g. sunlight or fluorescent light

Cat. No.	Length
WATGLOKING	3.6 m

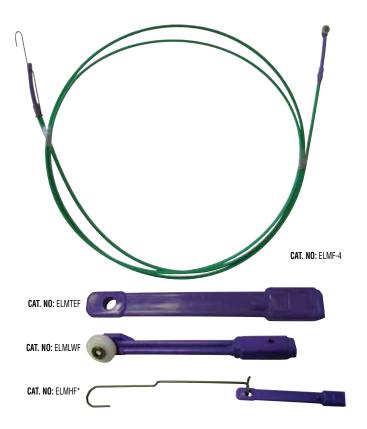


The Ferret Pull Through

- New hi-tech fibreglass rod pull through
- Easy to uncoil and stays straight
- Makes wiring quick and easy
- Runs cables in wall cavities and confined ceiling spaces
- Aids in electrical wiring of data cables, antenna cables, phone wiring etc.
- Allows for one person operation
- Oomes complete with tail end, leader wheel and hook
- All accessories are suitable for 4m and 8m Ferret pull through
- Cable can be tied to end of tail end to start pulling cable
- · Leader wheel rolls over obstacles e.g. wall cavities
- Hook can be attached to tail end to start pulling cable

Cat. No.	Description	Length	Hecommended Hole Size	
ELMF-4	4m Ferret™	4 m	20 mm	
ELMF-8	8m Ferret™	4 m	20 mm	
Accessories				
Cat. No.	Description			
ELMTEF	S	pare Tail End for Fe	rret Pull Through	
ELMLWF	Spare Leader Wheel for Ferret Pull Through			
ELMHF*	Spare Hook for Ferret Pull Through			

Note: tail end and hook sold separately



Cable Drum Handling

Electrican's Cable Stand

- Easy to assemble and load
- No lifting large rolls as it doses the hard work for you
- Single and multiple rolls can be used simultaneously
- Compact storage
- Heavy duty construction
- Universal

Cat. No.	Load Capacity	Max. diameter cable drum	Max. width cable drum	Total Width	Height off the ground
WATCST	3.6 m	365 mm ²	770 mm	770 mm	370 mm







Electrical & Specialty Tape

Wattmaster range of electrical and specialty tapes come in a wide variety of colours and sizes to meet your day to day requirements.

For Professionals... Since 1857™

CAT. NO: WATPVCRP

Electrical Tape

PVC Electrical Insulation Tape

- For superior insulation of electrical cables
- Self-adhesive tape for bundling cables and wires
- Safe and easy to use
- Highly flexible low temperature tape
- Rainbow pack contains 3 x black, 2 x blue, 2 x red, 2 x white and 1 x yellow/green

Temperature range: -10°C to +80°C



Cat. No.	Colour	Tape Image	Thickness (mm)	Width (mm)	Length (m)	Weight (G)
WATPVCBLALT	Black		0.18	18	20	10
WATPVCBLULT	Blue		0.18	18	20	10
WATPVCBRLT	Brown		0.18	18	20	10
WATPVCGLT	Grey		0.18	18	20	10
WATPVCGYLT	Yellow/Green		0.18	18	20	10
WATPVCOLT	Orange		0.18	18	20	10
WATPVCRLT	Red		0.18	18	20	10
WATPVCWLT	White		0.18	18	20	10
WATPVCRP	Rainbow Pack		0.18	18	20	720

Caution Tape

100m Underground Marking Tape

- Bright non-adhesive PVC underground identification tape
- Printed "CAUTION-ELECTRICAL CABLE BELOW"
- Acts as a warning for dangerous situations and great for trench identification
- Eye catching large letters printed on non-adhesive tape
- Bright orange reflective tape for vibrant daytime visibility
- Orange colour
- Manufactured to AS 2648 1:1995

Cat. No.	Width	Length	Weight
WATUMT100	150 mm	100 m	2.0 kg



CAT. NO: WATUMT100

500m Underground Marking Tape

- Bright non-adhesive PVC underground identification tape
- Printed "CAUTION-ELECTRICAL CABLE BELOW"
- · Acts as a warning for dangerous situations and great for trench identification
- Eye catching large letters printed on non-adhesive tape
- Bright orange reflective tape for vibrant daytime visibility
- Orange colour
- Manufactured to AS 2648 1:1995

Cat. No.	Width	Length	Weight
WATPVCUMT	150 mm	500 m	5.0 kg



250m Underground Detectable Marking Tape

- Non-adhesive PVC tape with wire tracer
- · Acts as a warning for dangerous situations and ideal for trench identification
- Printed "WARNING COMMUNICATION CABLE BELOW"
- Eye catching large letters
- White colour
- Standards-AS/NZS 2648 PART 1 1995 4275 PART 0 1995

Cat. No.	Width	Length	Weight
WATUMTW250	150 mm	250 m	4.0 ka



CAT. NO: WATUMTW250

500m Underground Marking Tape

- Non-adhesive PVC tape without wire tracer
- Acts as a warning for dangerous situations and ideal for trench identification
- Printed "CAUTION COMMUNICATIONS CABLE BELOW"
- Eye catching large letters
- White colour
- Manufactured to AS 2648 1:1995

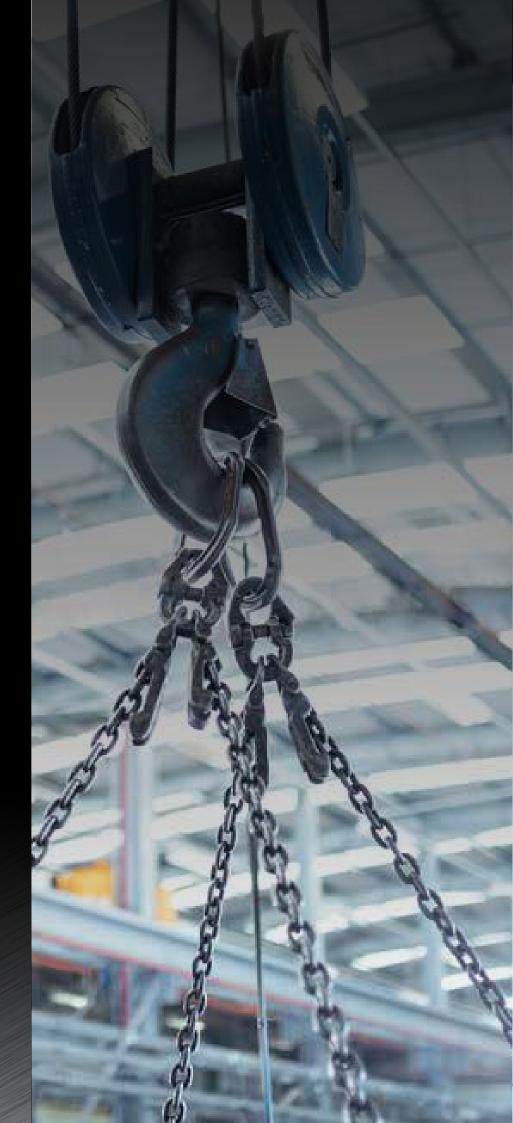
Cat. No.	Width	Length	Weight
WATUMTW500	150 mm	500 m	5.0 kg



CAT. NO: WATUMTW500

Everyday Electrical Needs

Wattmaster range of everyday needs allows you to get the job done whilst saving time & effort



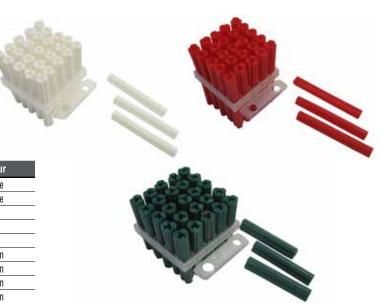
For Professionals... Since 1857™

Everyday Consumeables

Wall Plugs

- Strong screw retention wall plugs
- Handy drill and screw size check
- For best results, use recommended drill and screw sizes
- Now with tapered head (chamfer end)
- Sold in box quantities only
- 25 pieces included per frame

Cat. No.	Screw size	Drill size	Length	Box Qty	Colour
WATP25W	4-6	5	25	500	White
WATP38W	4-6	5	38	500	White
WATP25R	8-9	6	25	500	Red
WATP38R	8-9	6	38	500	Red
WATP50R	8-9	6	50	250	Red
WATP25G	10-12	7	25	500	Green
WATP32G	10-12	7	32	500	Green
WATP38G	10-12	7	38	500	Green
WATP50G	10-12	7	50	250	Green



Commercial Wall Clock

- Taiwanese quartz movement with glass mineral lens
- Plastic bands and dial
- White with black numerals
- Batteries not included

Cat. No.	Model	Type of indication	Housing shape	Colour housing	Face Diameter	Total Diameter
WATCL8400	Quartz clock, battery	Analogue	Round	White	264mm	295mm



Jack Chain

- Galvanized steel
- WATJCB & WATJCDLB can be dispensed through lid
- · Remainder can be stored in the container
- Do not double up







CAT. NO: WATJCB

CAT. NO: WATJCDLB

CAT. NO: WATJCB3

Cat. No.	Model	Chain Diameter	Length	Safe Working Load	Material	Surface Treatment	Package Type	Weight
WATJCB	Single link	2.5 mm	30 m	7.0 kg	Steel	Galvanized	Bucket	3.5 kg
WATJCDLB	Double link	2.0 mm	30 m	9.0 kg	Steel	Galvanized	Bucket	3.0 kg
WATJCB3	Single link	3.15 mm	30 m	10.0 kg	Steel	Galvanized	Box	5.5 kg

Catenary Wire & Accessories

Catenary Wire

- Heavily galvanized catenary wire
- Zinc coated
- AS 1394
- Composed of centric layers of wire
- Corrosion resistant
- Indoor use only for WATCW6112, WATCW7125D & WATCW180D











CAT. NO: WATCW6112



CAT. NO: WATCW180DPVC

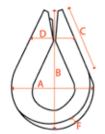
Cat. No.	Number of strand and size	Diameter	Breaking load	Length	Material	Surface Treatment	Package Type	Weight
WATCW6112	6 x 1.12 mm	3.0 mm	2300 N	30m	Steel	Galvanized zinc coated	Roll	1.64 kg
WATCW7125D	7 x 1.25mm	3.5 mm	3400 N	100m	Steel	Galvanized zinc coated	Drum	6.48 kg
WATCW180D	7 x 0.90mm	2.7 mm	1670 N	180m	Steel	Galvanized zinc coated	Drum	6.64 kg
WATCW180DPVC	7 x 0.90mm	3.3 mm	1670 N	180m	PVC coated steel	Galvanized zinc coated	Drum	8.0 kg

Thimbles for Catenary Wire

- Prevents kinking of catenary wire
- Helps guide cable into curving shape
- Provides protection against

Surface treatment: Galvanized zinc coated

Material: Mild Steel





CAT. NO: WATTH5

Cat. No. Size	Bracket Notch Width	Bracket Height	Straight Length	Width At Join	Depth	Otv	
	Dim A	Dim B	Dim C	Dim D	Dim E	Qty	
WATTH5	5 mm	25 mm	38 mm	25 mm	12 mm	9 mm	50
WATTH6	6 mm	27 mm	48 mm	30 mm	14 mm	9 mm	50
WATTH8	8 mm	32 mm	53 mm	30 mm	16 mm	10 mm	50
WATTH10	10 mm	40 mm	60 mm	38 mm	19 mm	12 mm	50

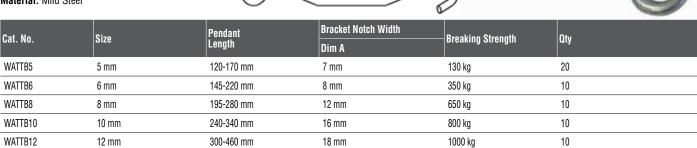
CAT. NO: WATTB5

Turnbucklles for Catenary Wire

- Used to adjust the tension of catenary wire
- Ideal for applications where high level of tension is required
- Can be sold individually

Surface treatment: Galvanized zinc coated

Material: Mild Steel

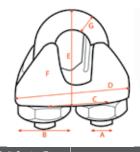


Wire Rope Grips for Catenary Wire

- Used for gripping the ends of catenary wire together
- Can be sold individually

Surface treatment: Galvanized zinc coated

Material: Mild Steel





САТ	MU-	WAT	WR	GF
UAI.	NU.	WAI	W	uι

Cat. No.	Bracket Notch Width	Nut Width Across Angle	U-Bolt Centre To Centre	Bracket Width	Bracket To U-Bolt Height	Bracket Height	Qty
	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	
WATWRG5	5 mm	12 mm	15 mm	27 mm	20 mm	12 mm	100
WATWRG6	6 mm	13 mm	16 mm	32 mm	30 mm	13 mm	100
WATWRG8	8 mm	14 mm	17 mm	35 mm	32 mm	16 mm	100
WATWRG10	10 mm	15 mm	22 mm	39 mm	37 mm	20 mm	100
WATWRG12	12 mm	20 mm	28 mm	50 mm	60 mm	23 mm	100



Workplace Safety

Workplace safety and hygiene is now more important and prevalent then ever before. Wattmaster's new range aims to provide hygienic solutions to all your site and office needs.



For Professionals... Since 1857™



Sanitiser

Hand Sanitiser Pump Bottle

- Antibacterial hand sanitiser
- Kills 99.9% of germs without use of water
- 500mL Pump Bottle
- 70% Ethanol

Cat. No.	Size	Weight	
WATHANDSAN	500 ml	0.450 kg	
Disclaimer: Not reco	mmended for use in	nospital grade environments.	



CAT. NO: WATHANDSAN

Sanitising Wipes

- Antibacterial sanitising wipes
- Kills 99.9% of germs
- 75% Alcohol
- 15cm x 20cm large wipes

Cat. No.	Size	Weight			
WATSANWIPES	50 pack	0.300 kg			
Disclaimer: Not recommended for use in hospital grade environments					



CAT. NO: WATSANWIPES

Sanitising Wipes

- Hospital grade
- Disinfectant Bactericidal Wipes
- 70% Isopropyl Alcohol
- 42cm x 14cm wipe size
- Resealable cannister

Cat. No.	Size	Weight
WATFW-S101	75 wipes per cannister	0.450 kg



CAT. NO: WATFW-S101

Rollacase Storage

The worlds market & technology leader of vehicle & mobile storage systems.

Provides innovative and flexible product's that are lightweight, engineered designed and tested to meet the day to day needs of any tradesperson.



For Professionals... Since 1857™

Cases

Small Parts Box

- 20 adjustable compartments
- 1 tool compartment in front of case
- Corrosion proof
- Lid opens 180 degrees
- Sturdy locking system
- Divided goods will not interchange when shaken
- Unique lid design keeps storage locked in place
- Movable handle

Cat. No.	Dimensions	Case Colour	Lid Colour
WATRC001	W 370mm x	Orange	Orange
	D 370mm x		
	H 85mm		



Small Parts Box

- 1 large compartment
- 1 tool compartment
- Corrosion proof
- Lid opens 180 degrees
- Sturdy locking system
- Divided goods will not interchange when shaken
- Unique lid design keeps storage locked in place
- Movable handle

Cat. No.	Dimensions	Case Colour	Lid Colour
WATRC002	W 370mm x	Blue	Blue
	D 370mm x		
	H 85mm		



Large Parts Box

- Small parts box with lift out tray
- 1 large tool compartment
- Plus a 3 compartment lift out tray, with further compartments below
- Corrosion proof
- Lid opens 180 degrees
- Sturdy locking system
- Divided goods will not interchange when shaken
- Unique lid design keeps storage locked in place
- Adjustable compartments
- Various configurations
- Movable handle

Cat. No.	Dimensions	Case Colour	Lid Colour
WATRC003	W 370mm x	Orange	Orange
	D 370mm x		
	H 130mm		





CAT. NO: WATRCOO3



Warning Symbols



Safety alert symbol: Indicates a hazard.



Always ensure that you and the persons in the vicinity wear approved eye protection.



NOT insulated. Plastic-dipped or slip-on plastic handles are NOT intended for protection against electrical shock.

Never use on or near live electrical circuits.



Do NOT use to pry.



Do NOT use to chisel.



Do NOT extend handle length.



Do NOT use to push or hammer.



It is important that users of these products read, understand, and follow all instructions, cautions, and warnings that are attached to and/or packed with the product.



Strong magnetic field.



Wear approved hand protection.



Use a safe work position to avoid loss of balance.

Test and Measurement

AWARNINGS:

- To ensure safe operation and service of the tester, follow these instructions.
- Failure to observe these warnings can result in severe injury or death.
- Before each use, verify meter operation by measuring a known voltage or current.
- Never use a meter on a circuit with voltages that exceed the category based rating of the meter.
- · Do not use the meter during electrical storms or in wet weather.
- · Do not use the meter or test leads if they appear to be damaged.
- · Ensure meter leads are fully seated, and keep fingers away from the metal probe contacts when making measurements.
- Never assume neutral or ground wires are de-energized. Neutrals in multi-wire branch circuits may be energized when disconnected and must be retested before handling.
- Do not open the meter to replace batteries while the probes are connected.
- Use caution when working with voltages above 60V DC, or 25V AC RMS.
- Such voltages pose a shock hazard.
- To avoid false readings that can lead to electrical shock, replace batteries
 if a low battery indicator appears.
- Unless measuring voltage or current, shut off and lock out power before measuring resistance or capacitance.
- Always adhere to local and national safety codes. Use individual protective equipment to prevent shock and arc blast injury where hazardous live conductors are exposed.

Non-Contact Voltage Tester (Additional Warnings)

AWARNINGS:

- Use caution with voltages above 30V AC as a shock hazard may exist
- · A single blinking LED or a steady glowing LED and an audible beep indicate
- voltage present. If no indication, voltage could still be present.
- Before and after each use, verify operation by testing a known working circuit that is within the rating of this unit.
- The tester WILL NOT detect voltage if:
- · The wire is shielded.
- The operator is not grounded or is otherwise isolated from an effective earth ground.
- The voltage is DC.
- The tester MAY NOT detect voltage if:
- . The user is not holding the tester.
- The user is insulated from the tester with a glove or other materials.
- The wire is partially buried or in a grounded metal conduit.
- . The tester is at a distance from the voltage source.
- The field created by the voltage source is being blocked, dampened, or otherwise interfered with.
- The frequency of the voltage is not a perfect sine wave between 50 and 500Hz.
- The tester is outside of operation conditions (listed in Specifications section).
 Operation may be affected by differences in socket design and insulation thickness and type.
- In bright light conditions, the LED visual indicators will be less visible.
- Do not use if "power on" LED is not illuminated.
- Do not use if tester appears damaged or is not operating properly. If in doubt, replace the tester.
- Do not apply more than the rated voltage as marked on the tester (1000V).
- Detection above 12V is specified under "normal" conditions as specified below.
 The tester may detect at a different threshold at different conditions, or may not detect at all unless:
- The tip of the tester is within 0.25" of an AC voltage source radiating unimpeded.
- The user is holding the body of the tester with his or her bare hand.
- The user is standing on or connected to earth ground.
- The air humidity is nominal (50% relative humidity non-condensing).
- . The tester is held still.
- Always wear approved eye protection.
- · Comply with local and national safety requirements
- If this product is used in a manner not specified by the manufacturer, protection provided by the product may be affected.
- Do not attempt to repair this tester. It contains no serviceable parts.
- Do not expose the product to extremes in temperature or high humidity.

Insulated Tools



⚠WARNING: Only use tools that are marked with the official international 1000-volt rating symbol shown below, if there is any chance that the tools will make contact with an energized source.

⚠WARNING: Wear approved eye protection. Always inspect your tools before use. Do not use if orange coating cracks, breaks or becomes damaged. Destroy tool if white layer shows through orange layer

AWARNING: Do NOT touch uninsulated portion of the tool or any conductive object when either might contact an energized source.

AWARNING: Whenever possible, always de-energize lines and equipment prior to working on or around them. Klein insulated tools are designed only to reduce the chance of injury where the tool may make contact with an energized source.

⚠WARNING: Because moisture, films, or other surface contaminants are conductive, Klein insulated tools must be kept clean, dry, and free of any surface contaminants.

Infrared Thermometer

CAUTION: Reflective materials may be hotter than indicated. Laser radiation-do NOT stare into beam. Class 2 laser product.

Wire Pulling Grips

AWARNING: Grips are to be used for temporary installation, not for permanent anchorage.

AWARNING: When used on/or near energized lines, ground, insulate, or isolate grip before pulling.

⚠WARNING: Do not exceed rated capacity.

MARNING: Always match proper size and type of grip to application.

MARNING: Before each use, clean jaw area and inspect grip for proper operation to avoid slippage.



TOOLS 1009 1011M 1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L 1613-30		27400 27450 3 3005CR 31737 322288 32228INS 32229INS 32243INS 32244INS 32245INS 32245INS 32247INS 32247INS 32258INS	48 48 48 13 46 18 19 19 19 19 19	44220 44222 45201 46037 48036 5 5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104 5104CLR17	30 30 34 31 32 74 74 47 17 74 73	55439BPTB 55452RTB 55456BPL 55469 55470 55473RTB 55475 55485 55488 55580 55597 55600 55601	65 66 64 65 69 66 64 64 54 101 63 101	64306 69133 69401 69406 69410 69417 69420 69445 7	48 76 82 82 82 82 82 82 46 46
1009 1011M 1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	13 12 18 13 13 17 6 30 30 31 18 41 40	3 3005CR 31737 322288 32228INS 32229INS 32229INS 32243INS 32244INS 32245INS 32246INS 32247INS 32247INS	13 46 18 19 19 19 19 19 19 19	45201 46037 48036 5 5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	34 31 32 74 74 47 17	55456BPL 55469 55470 55473RTB 55475 55485 55488 55580 55597 55600	64 65 69 66 64 64 54 101 63	69401 69406 69410 69417 69420 69445 7 702-12	82 82 82 82 82 82 82
1011M 1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	13 12 18 13 13 17 6 30 30 31 18 41 40	3005CR 31737 322288 32228INS 32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32247INS	46 18 19 19 19 19 19 19 19	46037 48036 5 5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	31 32 74 74 47 17 74	55469 55470 55473RTB 55475 55485 55488 55580 55597 55600	65 69 66 64 64 54 101 63	69406 69410 69417 69420 69445 7 702-12 725	82 82 82 82 82 82
1011M 1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	13 12 18 13 13 17 6 30 30 31 18 41 40	3005CR 31737 322288 32228INS 32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32247INS	46 18 19 19 19 19 19 19 19	48036 5 5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	74 74 74 47 17 74	55470 55473RTB 55475 55485 55488 55580 55597 55600	69 66 64 64 54 101 63	69410 69417 69420 69445 7 702-12 725	82 82 82 82 46
1011M 1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	13 12 18 13 13 17 6 30 30 31 18 41 40	31737 322288 32228INS 32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	46 18 19 19 19 19 19 19 19	5 5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	74 74 47 17 74	55473RTB 55475 55485 55488 55580 55597 55600	66 64 64 54 101 63	69417 69420 69445 7 702-12 725	82 82 82 46
1011M 1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS	13 12 18 13 13 17 6 30 30 31 18 41 40	322288 32228INS 32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	18 19 19 19 19 19 19 19	5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	74 47 17 74	55475 55485 55488 55580 55597 55600	64 64 54 101 63	69420 69445 7 702-12 725	82 82 46
1019 11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS	12 18 13 13 17 6 30 30 31 18 41 40	32228INS 32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	19 19 19 19 19 19 19	5003-18 5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	74 47 17 74	55485 55488 55580 55597 55600	64 54 101 63 101	69420 69445 7 702-12 725	82 82 46
11054-EINS 11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	18 13 13 17 6 30 30 31 18 41 40	32228INS 32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	19 19 19 19 19 19 19	5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	74 47 17 74	55485 55488 55580 55597 55600	64 54 101 63 101	69445 7 702-12 725	82 46
11061 11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	13 13 17 6 30 30 31 18 41 40	32229INS 32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	19 19 19 19 19 19	5003-20 50031 502-10-EINS 510216SPBLK 5103S 5104	74 47 17 74	55488 55580 55597 55600	54 101 63 101	7 702-12 725	46
11063W 12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	13 17 6 30 30 31 18 41 40	32230INS 32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	19 19 19 19 19	50031 502-10-EINS 510216SPBLK 5103S 5104	47 17 74	55580 55597 55600	101 63 101	725	
12098-EINS 12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	17 6 30 30 31 18 41 40	32243INS 32244INS 32245INS 32246INS 32247INS 32258INS	19 19 19 19 19	502-10-EINS 510216SPBLK 5103S 5104	17 74	55597 55600	63 101	725	
12098 1550-24 1550-4 1570-3 1571-INS 1604-20L	6 30 30 31 18 41 40	32244INS 32245INS 32246INS 32247INS 32258INS	19 19 19 19	510216SPBLK 5103S 5104	74	55600	101	725	
1550-24 1550-4 1570-3 1571-INS 1604-20L	30 30 31 18 41 40	32245INS 32246INS 32247INS 32258INS	19 19 19	5103S 5104			• • • •	_	46
1550-4 1570-3 1571-INS 1604-20L	30 31 18 41 40	32246INS 32247INS 32258INS	19 19	5104	/3	55601	101	0	
1570-3 1571-INS 1604-20L	31 18 41 40	32247INS 32258INS	19				• • • •	8	
1571-INS 1604-20L	18 41 40	32258INS		510101 D17	72	55625	94		
1604-20L	41 40		, ~		72	55629	53	86000	57
1604-20L	41 40	32259INS	19	5104CLR22	72	55655	65	86520	44
	40		19	5104CLRFR	72	55895	102	86522	45
	• • • •	32290	23	5104FR	72	56026	61	86524	45
1613-40		32291	23	5104S	72	56027	102	86526	44
	• • • •	32305	24	5104VT	73	56028	61	86528	44
1613-40H	40	32316INS	19	5109	72	56048	60	88904	49
1625-20	41	32317INS	19	5109PS	72	56205	49	89030	49
162520-7/8	41	32318INS	19	5109S	72	56220	60	89554	45
162830N	39	32319INS	19	5109SLR	72	56221	61	09004	40
1628300	39				• • • •			9	
162830P	39	32500	23	5139	70	56325	50		
162830R	39	32510	25	5139B	70	56350	50	935	56
162830S	39	3255	48	5139L	70	56382	50	935DAG	57
162830T	39	32561	25	5140	70	56403	61	935R	56
162830U	39	3256	48	5141	69	57032	26	935RB	56
1656-20	39	32581	25	51425	54	<u></u>		9375	57
1656-30	39	32593	25	5184	66	6		93LCLG	58
1656-40	39	32596	24	5189	66	60090	52	93LCLS	58
	39	32690INS	19	5240	67	60093	52	93LDM65	58
1656-50		32717	24	5241	67	601-4-INS	21	98002BT	104
1656-60	39	32807MAGM	26	5242	67	601-7-INS	21		• • • • • • • • • • • • • • • • • • • •
1671-10	42	33524	20	5243	67	60135	53	Α	
1684-5	40	33528	20	53721	47			AEPJS1	102
1684-5F	40					60136	53		103
1684-5H	40	33532-INS	20	53722	47	60184	53	AEPJS2	103
1684-74	40	33734-INS	20	53731	46	603-7-INS	21	C	
1685-20	42	4		5416	73	60439	52	_	
1685-31	42			5416T	73	60465	52	CL120	78
1692-5	40	44034	29	5416TBR	73	60466	52	CL150	80
1716-60	41	44037	30	5416TC	73	605-7-INS	21	CL220	78
1716-70	41	44101	32	5416TSR	73	63020	14	CL320	78
	• • •	44103	32	54439	71	63035	34	CL360	80
2		44130	28	5539BLU	69	63050-EINS	18	CL390	78
	17	44131	28	5539NAT	69	63050	14	CL450	78
2000-28-EINS	17	44133	28	5539RED	69	63060	34	CL600	78
2000-48-EINS	17	44135	28	5539YEL	69	63213	14	CL700	78
2000-9NE-EINS	16	44136	29	554158-14	67	63217	14	CL800	
203-6-EINS	17								
203-7-EINS	17	44142	29	5541610-14	67	6334INS	21	CL900	78
203-8-EINS	17	44200	31	55419SP-14	67	6337INS	21	D	
213-8NE-EINS	16	44201	29	55421BP-14	63	63607	35	ט	
213-9NE-EINS	16	44218	31	55421BP-14CAN		63700	35	D2000-28	7
220-6-EINS	17	44219	32	55437	60	63800ACSR	35	D2000-48	



Item	Page	Item	Page	Item	Page	Item	Page	Item	Page
D2000-49	7	17		VDV427-014	94	ALCB745/500	143	ALCBRR/10	00 119
D2000-9NE	5	K		VDV427-015-		ALCB850/100		ALCBRY/50	
D2000-9NECR	5	K12065CR	12	VDV427-822	95	ALCB863/100		ALCBTB/10	
D2000-9NETH	6	K19	26	VDV500-820	96	ALCB875/100		ALCBTB5/1	
D203-6	9	K23	26	VDV501-828	98	ALCBLB/100	120	ALCBTR/10	
D203-7	9	K28	26	VDV501-829	98	ALCBLB120/		ALCBTY/50	
D203-8	10	K34	26	VDV501-851	97	ALCBLB50/10		7120311700	
D203-8N	10	K36	26	VDV501-852	97	ALCBLBK/10		ALCC	
D209-5C	8	K38	26	VDV501-853	97	ALCBLBK/50	120	ALCCT-12/F	KIT 115
D210-6C	8	K44	26	VDV512-007	99	ALCBLBK25/		ALCCT-12/\	
D213-9NE-CR	5	K46	26	VDV512-100	99	ALCBLBR-18		ALCCT-12/\	
D213-9NE	5	K48	26	VDV512-101	99	ALCBLBR/50	120	ALCCT-12	115
D228-8	7	KT4802	42	VDV770-050	94	ALCBLCKIT-1		ALCCT-6/KI	
D245-5	8			VDV770-850	97	ALCBLCKIT-5		ALCCT-6/W	
D248-8	7	M		VDV770-851	97	ALCBLCKIT-6		ALCCT-6/W	
D252-6	8	MAG2	102	VDV826-702	94	ALCBLCKIT	127	ALCCT-6	115
D257-4C	8	MM300	81	VDV826-703	94	ALCBLG-18/5		712001 0	
D259-4C	8	MM400	81	VDV826-728	94	ALCBLG/50	120	ALCE	
D275-5	9	MM600	81	VDV826-729	94	ALCBLGY/10		ALCEZIBOX	(0 112
D302-6	10	MM700	81	VDV826-762	94	ALCBLI-18/4		ALCEZIBOX	
D502-10	11			VDV826-763	94	ALCBLI/50	120	ALCEZIBOX	
D504-12	11	N		121020100		ALCBLO/100	120	ALCEZIBOX	
D504-7	11	NCVT-1	77			ALCBLP/100	120	ALCEZIBOX	
_	• • • • •	NCVT-2P	77	1	1	ALCBLR/100	120	ALCEZIBOX	
Е		NCVT-3P	77	-4	lco	ALCBLR/50	120	ALCEZIBOX	
ET05	83	NCVT-4IR	77			ALCBLR35/2		ALCEZIBOX	
ET110	86	NCVT-6	77			ALCBLR95/5	120	ALCEZIBOX	
ET120	86			AEF		ALCBLTB/100		ALCEZIBOX	
ET130	86	S		AE14-15F	109	ALCBLTBK/10		NEOLLIDON	
ET140	85	S1613-40H	40	AEF100-15	109	ALCBLTGY/1		ALCF	
ET20	83	SK234	26	AEF100-30	109	ALCBLTGY4/		ALCFB3.7/1	100 118
ET260	76			AEF112-15	109	ALCBLTLR/10		ALCFB4/10	
ET40	76	T		AEF114-15	109	ALCBLTY/50	120	ALCFB4/10	
ET600	85	TI250	85	AEF12-15	109	ALCBLU0.5/1		ALCFB5/10	
ET60	76	TT1	54	AEF12-30	109	ALCBLU0.75		ALCFB6/10	
ET910	86	TT2	54	AEF200-15	109	ALCBLU1.0/1		ALCFBAE84	
ET920	86			AEF300	109	ALCBLU1.5/1		ALCFBTB10	
	• • • • •	V		AEF34-15	109	ALCBLU10/1		ALCFBTB18	
		VDV026-049	9 89	AEF34-30	109	ALCBLU16/1		ALCFBTR10	
IR10	84	VDV026-21		AEF38-15	109	ALCBLU2.5/1		ALCFBTR18	
IR5	84	VDV026-21		AEF38-30	109	ALCBLU25/5		ALCFBTY10	
	• • • • •	VDV100-80		AEF400	109	ALCBLU35/5		ALCFBTY18	
J		VDV110-06		AEF516-15	109	ALCBLU4/10		ALCFBU3.7	
J1005	10	VDV110-09		_		ALCBLU50/1		ALCFBU4/1	
J12098	6	VDV110-26		ALCB		ALCBLU6/10		ALCFBU5/1	
J2000-28	7	VDV110-29		ALCB620/100	143	ALCBLU70/1		ALCFBU6/1	
J2000-48	7	VDV200-01		ALCB720/100		ALCBLU95/5	121	ALCFHWA6	
J2000-59	8	VDV211-04		ALCB720/100		ALCBLV/100	120	ALCFHWA6	
J2000-9NECR	5	VDV211-06		ALCB725/100		ALCBLW/100		ALCFHWA6	
J203-6	9	VDV211-10		ALCB725/100		ALCBLW/50	120	ALCFIFQDB	
J206-8C	10	VDV212-00		ALCB730/100		ALCBLY/100	120	ALCFIFQDB	
J213-9NECR	5	VDV226-00		ALCB730/100		ALCBLY150/3		ALCFIFQDR	
J2139NECRN	5	VDV226-01		ALCB735/100		ALCBLY70/7	120	ALCFIFQDR	
J215-8CR	6	VDV226-10		ALCB740/100		ALCBRB/100	119	ALCFIFQDY	
J228-8	7	VDV226-11		ALCB745/100		ALCBRB5/10		ALCFIFQDY	
			· · · · · · · · · · · · · · · · · · ·						



Item	Page	Item	Page	Item	Page	Item	Page	Item	Page
ALCFQDB/100	119	ALCHC-12	114	ALCL120M10/10	132	ALCL6M6/50	131	ALCLK240	/6 135
ALCFQDB/10	119	ALCHC-6/WD	114	ALCL120M12/10	132	ALCL6M8/50	131	ALCLK25/2	25 135
ALCFQDR/100	119	ALCHC-6	114	ALCL120M16/10	132	ALCL70M10/10	132	ALCLK300	/3 135
ALCFQDR/10	119	ALCHS3WTB/1	5 122	ALCL120M20/10	132	ALCL70M12/10		ALCLK35/2	25 135
ALCFQDU2/100	124	ALCHS3WTR/1	5 122	ALCL120M8/10	132	ALCL70M16/10		ALCLK4/50	135
ALCFQDU4/100	124	ALCHS3WTY/1		ALCL120MB/10	132	ALCL70M6/10	131	ALCLK400	/3 135
ALCFQDU6/100	124	ALCHS4WTB/1		ALCL150M10/10	132	ALCL70M8/10	131	ALCLK50/2	
ALCFQDY/50	119	ALCHS4WTR/1		ALCL150M12/10	132	ALCL95M10/10		ALCLK500	
ALCFQDY/6	119	ALCHS4WTY/5		ALCL150M16/10	132	ALCL95M12/10		ALCLK6/50	
ALCFR3.7/100	118	ALCHSBA1010		ALCL150M8/10	132	ALCL95M16/10		ALCLK630/	
ALCFR4/100	118	ALCHSBA1060	• • • • •	ALCL150MB/10	132	ALCL95M8/10	132	ALCLK70/1	
ALCFR4/100	118	ALCHSBA1075	142	ALCL16M10/25	131	ALCLBM10M10		ALCLK95/1	
ALCFR5/100	118	ALCHSBA1275	142	ALCL16M12/25	131	ALCLBM10M6/2		ALCLKR10	
	118	ALCHSBA650	142	ALCL16M6/25	131	ALCLBM10M8/		ALCLKR12	
ALCFR6/100 ALCFRU3.7/100		ALCHSBA8100	142	ALCL16M8/25	131	ALCLBM120M1		ALCLKR12	
	• • • •	ALCHSBA860	142	ALCL185M10/6	132	ALCLBM120M1		ALCLKR12	
ALCFRU4/100	124	ALCHSFB3.7/5		ALCL185M12/6	132	ALCLBM120M1		ALCLKR12	
ALCFRU5/100	124	ALCHSFB4.0/5		ALCL185M16/6	132	ALCLBM150M1		ALCLKR15	
ALCFRU6/100	124	ALCHSFB5.0/50		ALCL2.5M4/100	131	ALCLBM150M1		ALCLKR15	
ALCFST550	142	ALCHSFR3.7/1		ALCL2.5M4/100	131	ALCLBM150M1		ALCLKR15	
ALCFST575	142	ALCHSFR4/100		ALCL2.5M5/100	131	ALCLBM150M1		ALCLKR15	
ALCFTIM525	141	ALCHSFR5/100		ALCL2.5M8/100	131	ALCLBM16M12		ALCLKR16	
ALCFTIM525P	141	ALCHSFY4.0/30		ALCL2.5M6/100	132	ALCLBM16M1/2		ALCLKR16	
ALCFTIM540	141						• • • •		
ALCFTIM6525	141	ALCHSFY5.0/3		ALCL240M12/6	132	ALCLBM16M8/		ALCLKR18	
ALCFTIM6525P	141	ALCHSFY6.0/3	* * * * *	ALCL240M16/6	132	ALCLBM185M1	• • • • •	ALCLKR18	
ALCFTIM6538P	141	ALCHSKIT1	148	ALCL240M20/6	132	ALCLBM240M1	• • • • •	ALCLKR18	
ALCFTIM6550P	141	ALCHSKIT2	148	ALCL240MB/6	132	ALCLBM240MB	• • • • •	ALCLKR18	
ALCFTIQ530	141	ALCHSRB3.7/5		ALCL25M10/25	131	ALCLBM25M10	• • • •	ALCLKR24	
ALCFTIQ645	141	ALCHSRB4.0/5	* * * * * * * * * * * * * * * * * * * *	ALCL25M12/25	131	ALCLBM25M12	• • • • •	ALCLKR24	
ALCFTIR525	141	ALCHSRB5.0/5		ALCL25M6/25	131	ALCLBM25M6/2	• • • • •	ALCLKR24	
ALCFTIR525P	141	ALCHSRR3.7/1		ALCL25M8/25	131	ALCLBM25M8/	• • • • •	ALCLKR24	
ALCFTIR538	141	ALCHSRR4/100		ALCL300M10/3	132	ALCLBM300M1		ALCLKR25	
ALCFTIR538P	141	ALCHSRR5/100		ALCL300M12/3	132	ALCLBM300M1		ALCLKR25	
ALCFTIR6525	141	ALCHSRY13.0/	* * * * * * * * * * * * * * * * * * * *	ALCL300M16/3	132	ALCLBM300MB		ALCLKR25	
ALCFTIR6538	141	ALCHSRY4.0/5	* * * * * * * * * * * * * * * * * * * *	ALCL300MB/3	132	ALCLBM35M10	• • • • •	ALCLKR35	
ALCFWMM640F	140	ALCHSRY5.0/5		ALCL35M10/25	131	ALCLBM35M12	• • • •	ALCLKR35	
ALCFWMN640P	140	ALCHSRY6.0/5		ALCL35M12/25	131	ALCLBM35M6/		ALCLKR35	
ALCFWMNL640	140	ALCHSSPLB/50		ALCL35M6/25	131	ALCLBM400M1		ALCLKR50	
ALCFWMZL640	140	ALCHSSPLR/5		ALCL35M8/25	131	ALCLBM500M1		ALCLKR50	
ALCFY3.7/50	118	ALCHSSPLY/25	121	ALCL400M12/3	132	ALCLBM50M10		ALCLKR50	
ALCFY4/50	118	Λ		ALCL400MB/3	132	ALCLBM50M12		ALCLKR50	
ALCFY5/50	118	ALCK		ALCL4M5/100	131	ALCLBM50M8/		ALCLKR6-	
ALCFY8/50	118	ALCK007KIT	127	ALCL4M6/100	131	ALCLBM70M10		ALCLKR70	-16 136
ALCFYU4/100	124	ALCK12-DIEKI	Γ117	ALCL4M8/100	131	ALCLBM70M12	/10 133	ALCLKR70	-25 136
ALCFYU5/100	124	ALCK6-DIEKIT	116	ALCL500M12/3	132	ALCLBM70M8/	10 133	ALCLKR70	-35 136
ALCFYU6/100	124	Λ		ALCL500MB/3	132	ALCLBM95M10	/10 133	ALCLKR70	-50 136
Λ		ALCL		ALCL50M10/10	131	ALCLBM95M12	/10 133	ALCLKR95	-25 136
ALCG		ALCL1.5M4/10	0 131	ALCL50M12/10	131	ALCLBM95M8/	10 133	ALCLKR95	-35 136
ALCGC813	140	ALCL1.5M5/10	0 131	ALCL50M6/10	131	ALCLK1.5/100	135	ALCLKR95	-50 136
ALCGSHC1040	142	ALCL1.5M6/10	0 131	ALCL50M8/10	131	ALCLK10/50	135	ALCLKR95	-70 136
ALCGSHC1050	142	ALCL10M10/25	5 131	ALCL630M12/3	132	ALCLK120/10	135	ALCLLB10	M6 134
ALCGSHC1075	142	ALCL10M12/25	5 131	ALCL630M16/3	132	ALCLK150/6	135	ALCLLB12	0M10 134
Δ.	• • • •	ALCL10M5/25	131	ALCL630MB/3	132	ALCLK16/25	135	ALCLLB12	0M12 134
ALCH		ALCL10M6/25	131	ALCL6M10/50	131	ALCLK185/6	135	ALCLLB15	0M12 134
ALCHC-12/WD	114	ALCL10M8/25	131	ALCL6M5/50	131	ALCLK2.5/100	135	ALCLLB15	0M16 134
	• • •								



Item	Page	Item	Page	Item	Page	Item	Page	Item	Page
ALCLLB16M6	134	ALCPTKIT10	129	ALCS16H/100	139	ALCTIE200YV	V 149	ALCWF1030	0/100 143
ALCLLB16M8	134	ALCPTKIT20	129	ALCS16HHG	/100 139	ALCTIE250B	149	ALCWFA63	2 141
ALCLLB185M12	134	Δ		ALCS20F/100	139	ALCTIE290B/	1000 149	ALCWFA650	0 141
ALCLLB240M12	134	ALCR		ALCS20F/100	140	ALCTIE290B	149	ALCWS812	/1000 143
ALCLLB25M10	134	ALCRB10/10	0 118	ALCS20FHG/	100 140	ALCTIE290BL	149	ALCWS812	/100 143
ALCLLB25M12	134	ALCRB3.7/10		ALCS20H/100		ALCTIE290GN	· · · · · · ·	ALCWS825	
ALCLLB25M8	134	ALCRB4/100		ALCS20HHG		ALCTIE290RD		ALCWS825	
ALCLLB300M16	• • • • •	ALCRB4/10	118	ALCS25F/100		ALCTIE290W/		ALCWS832	
ALCLLB35M10	134	ALCRB5/100		ALCS25FHG/		ALCTIE290W	149	ALCWSPLB	
ALCLLB35M12	134	ALCRB6/100		ALCS25H/100		ALCTIE290YV		ALCWSPLR	
ALCLLB35M8	134	ALCRB6/7	118	ALCS25HHG		ALCTIE360FB		ALCWSPLY	
ALCLLB400MB	134	ALCRB8/100		ALCS32F/50	139	ALCTIE360FB			120
								C	
ALCLLB500MB	134	ALCRBU10/1		ALCS32FHG/		ALCTIE360FW		C16/M16-S	S 110
ALCLLB50M10	134	ALCRBU3.7/		ALCS32H/50	139	ALCTIE360FW		C16/M16/4	
ALCLLB50M12	134	ALCRBU4/10		ALCS32HHG	*****	ALCTIE360SB		C16/M16/90	
ALCLLB630MB	134	ALCRBU5/10		ALCS40F/50	139	ALCTIE360SB	149		
ALCLLB70M10	134	ALCRBU6/10		ALCS40FHG/		ALCTIE360SV		C16/M16	110
ALCLLB70M12	134	ALCRBU8/10		ALCS40H/50	139	ALCTIE360SV	V 149	C16/M20-4	
ALCLLB95M10	134	ALCRR10/10	0 118	ALCS40HHG	/50 139	ALCTIE430B	149	C16/M20/90	
ALCLLB95M12	134	ALCRR3.7/10	00 118	ALCS50F/25	139	ALCTIE510XH	IDB 149	C16/M20	110
ALCLLKIT10	137	ALCRR4/100	118	ALCS50FHG/	25 140	ALCTIE530B	149	C20/M20-S	
ALCLTB/100	118	ALCRR4/12	118	ALCS50H/25	139	ALCTIE540FB	149	C20/M20/45	5A 110
ALCLTR/100	118	ALCRR5/100	118	ALCS50HHG	/25 139	ALCTIE610XH	IDB 149	C20/M20/90	0A 110
ALCLTY/50	118	ALCRR5/12	118	ALCS63FHG/	25 140	ALCTIE770HD)B 149	C20/M20	110
Δ.		ALCRR6/100	118	ALCS80FHG/	25 140	ALCTIE770HD	W 149	C25/M25-S	S 110
ALCM		ALCRR6/8	118	ALCSC-B	123	ALCTIE90B/10	000 149	C25/M25/45	5A 110
ALCMDTABB/10	0 119	ALCRR8/100	118	ALCSC-R	123	ALCTIE90B	149	C25/M25/90	0A 110
ALCMDTABB/10	119	ALCRRU10/1	00 124	ALCSC-Y	123	ALCTIE90W/1	000 149	C25/M25	110
ALCMDTABR/10	0 119	ALCRRU3.7/	100 124	ALCSERVICE		ALCTIE90W	149	C32/M32-S	S 110
ALCMDTABR/10	119	ALCRRU4/10	00 124	ALCSPLB/10		ALCTTAPB/25		C32/M32/45	5A 110
ALCMDTABU1/1		ALCRRU5/10		ALCSPLB/12		ALCTTAPMB/		C32/M32	110
ALCMDTABU2/1		ALCRRU6/10		ALCSPLR/10		ALCTTAPMR/	• • • • • •	C32/M3290	A 110
ALCMG12	107	ALCRRU8/10		ALCSPLR/12		ALCTTAPMY/	• • • • • •	C40/M40-S	S 110
ALCMG16	107	ALCRY10/50		ALCSPLY/50	118	ALCTTAPR/25	• • • • • •	C40/M40/45	5A 110
ALCMG20	107	ALCRY12/50				ALCTTAPY/25	• • • • • •	C40/M40/90	0A 110
ALCMG25	107	ALCRY3.7/50		ALCT		ALOTTAL 1/20	120	C40/M40	110
ALCMG32	107	ALCRY4/50			HDB 149	ALCU		C50/M50-S	
			118	ALCTIE1100I	~~~		106	C50/M50/45	
ALCMG40	107	ALCRY5/50	118	ALCTIE140B		ALCUW105	106	C50/M50/90	
ALCMG50	107	ALCRY6/50	118	ALCTIE140B	149	ALCUW120A	106	C50/M50	110
ALCMG63	107	ALCRY6/5	118	ALCTIE140W		ALCUW120B	106	C63/M63-S	
ALCMG75	107	ALCRY8/50	118	ALCTIE140W		ALCUW12	106	C63/M63/45	
ALCMG75	107	ALCRYU10/5		ALCTIE1530I		ALCUW16	106	C63/M63/90	
1		ALCRYU12/5		ALCTIE185B		ALCUW16S	106		
ALCP		ALCRYU4/10		ALCTIE185B	149	ALCUW20	106	C63/M63	110
ALCPBB/50	119	ALCRYU5/10		ALCTIE185W		ALCUW20A	106	Н	
ALCPBB/8	119	ALCRYU6/10		ALCTIE185W		ALCUW25	106		(0.7EDI(.440
ALCPBR/50	119	ALCRYU8/10	0 124	ALCTIE200BI		ALCUW32	106		0.75BK 146
ALCPBU/100	124	Λ		ALCTIE200FE		ALCUW40	106		0.75BL 146
ALCPBY/50	119	ALCS		ALCTIE200GN	149	ALCUW50	106		0.75CL 146
ALCPINB/100	118	ALCS100FHG	G/10 140	ALCTIE200LI	OB 149	ALCUW63	106		0.75RD 146
ALCPINR/100	118	ALCS12F/100	139	ALCTIE200LI	DW 149	ALCUW75	106	HSTNW1.5/	0.75WH 146
ALCPINY/50	118	ALCS12H/100		ALCTIE200M	DB 149	ALCUW82	106	HSTNW1.5/	0.75YG 146
ALCPREIKIT-486		ALCS16F/100		ALCTIE200M		Λ		HSTNW10.0	0/5.0BK 146
ALCPREIKIT-800	• • • • •	ALCS16F/100		ALCTIE200M		ALCW		HSTNW10.0	0/5.0BL 146
ALCPREIKITP	128	ALCS16FHG/		ALCTIE200R	~~ ' * * '	ALCWF1022/	100 143	HSTNW10.0	0/5.0CL 146
• • • • • • • • • • • • • • • • • • • •	= 5				• • • • • •				

SKU No. Index Wattmaster

Item	Page
HSTNW10.0/5.0RD	146
HSTNW10.0/5.0WH	•
HSTNW10.0/5.0YG	146
HSTNW100/50BK	147
HSTNW100/50BL	147
HSTNW100/50CL	147
HSTNW100/50RD	147
HSTNW100/50WH	147
HSTNW100/50YG	147
HSTNW120/60BK	147
HSTNW120/60BL	147
HSTNW120/60CL	147
HSTNW120/60RD	147
HSTNW120/60WH	147
HSTNW120/60YG	147
HSTNW13/6.5BK	146
HSTNW13/6.5BL	146
HSTNW13/6.5CL	146
HSTNW13/6.5RD	146
HSTNW13/6.5WH	146
HSTNW13/6.5YG	146
HSTNW150/75BK	147
HSTNW150/75BL	147
HSTNW150/75CL	147
HSTNW150/75RD	147
HSTNW18/9BK	146
HSTNW18/9BL	146
HSTNW18/9CL	146
HSTNW18/9RD	146
HSTNW18/9WH	146
HSTNW18/9YG	147
HSTNW2.0/1.0BK	146
HSTNW2.0/1.0BL	146
HSTNW2.0/1.0CL	146
HSTNW2.0/1.0RD	146
HSTNW2.0/1.0WH	146
HSTNW2.0/1.0YG	146
HSTNW2.5/1.25BK	146
HSTNW2.5/1.25BL	146
HSTNW2.5/1.25CL	146
HSTNW2.5/1.25RD	• •
HSTNW2.5/1.25WH	•
HSTNW2.5/1.25YG	146
HSTNW22/11BK	147
HSTNW22/11BL	147
HSTNW22/11CL	147
HSTNW22/11RD	147
HSTNW22/11WH	147
HSTNW22/11YG	147
HSTNW25/12BK	147
HSTNW25/12BL	147
HSTNW25/12CL	147
HSTNW25/12RD	147
HSTNW25/12WH	147
HSTNW25/12YG	147

Item	Page
HCTNWAO/OODY	1.47
HSTNW40/20BK	147 147
HSTNW40/20BL	• 0
HSTNW40/20CL	147
HSTNW40/20RD	147
	147 147
HSTNW40/20YG	• 1
HSTNW5.0/2.5BK	•
HSTNW5.0/2.5BL	
HSTNW5.0/2.5CL HSTNW5.0/2.5RD	•
HSTNW5.0/2.5WH	• (
HSTNW5.0/2.5YG	• (
HSTNW50/25BK	147
HSTNW50/25BK	147
HSTNW50/25BL	147
HSTNW50/25CL	147
	147
HSTNW50/25WII	147
HSTNW7.0/3.55BK	• •
HSTNW7.0/3.55BL	• 0
HSTNW7.0/3.55CL	• 0
HSTNW7.0/3.55RD	• 0
HSTNW7.0/3.55WF	• 0
HSTNW7.0/3.55YG	• 1
HSTNW7.0/3.58K	147
HSTNW70/35BL	147
HSTNW70/35CL	147
HSTNW70/35RD	147
	147
HSTNW70/35WII	147
	. 177
T	
TIE1067-HD-SS	150
TIE1500-HD-SS	150
TIE201-C-SS	150
TIE201-CHD-SS	150
TIE201-HD-SS	150
TIE201-SS	150
TIE362-C-SS	150
TIE362-CHD-SS	150
TIE362-HD-SS	150
TIE362-SS	150
TIE521-HD-SS	150
TIE521-SS	150
TIE679-HD-SS	150
TIE679-SS	150
TIE838-HD-SS	150

Item	Page
Wattmas	ter
Е	
ELMF-4	174
ELMF-8	174
ELMFHF	174
ELMLWF	174
ELMTEF	174
W _{AT1}	
WAT10160	156
WAT19000	156
W _{AT3}	
WAT30180	156
WAT30190	156
WAT30200	156
W _{AT6}	
WAT620757-S	165
WAT620757	165
W _{ATB}	
WATBLC-DL10	160
WATBLC-DL16	161
WATBLC-FC6	160
WATBLC-TC16	160
WATBLC-TC6	159
WATBLC-TC8	159
WATBM	167
WATBRKBUDDY	167
V V ATC	
WATCL8400	179
WATCST	174
WATCW180D	180
WATCW180DPVC	180
WATCW7105D	180
WATCW7125D	180
WATD	400
WATDAT-2008A	163
V V ATE	470
WATECOSL	173
VVAIF WATFW-S101	100
1 //	183
VVATG	470
WATGLOKING	173
WATGPOLV	168
Wath	
WATHANDSAN	183
WATHGK	168
	••

Item	Page
WATHSWB10	171
WATHSWB16	171
WATHSWB20	171
WATHSWB22	171
WATHSWB25	171
WATHSWB32	• 1
	171
WATHSWBE	171
WATHSWBKIT	171
W_{ATJ}	
WATJCB	179
WATJCB3	179
WATJCDLB	179
١٨/	• 0
VV ATK	
WATK005-13051	158
WATK005-13053	158
WATK005-1307	158
WATK005-1308	158
WATK005-1328	158
WATK005-1332	158
WATK005-1333	158
WATK005-1347	158
WATK005-1370	158
WATK005-1371	158
WATK005-1396	158
WATK005-1404F	158
WATK005-1406F	158
WATK005-1408F	158
WATK005-1516	158
WATK005-1618	158
WATK005-KIT	158
WATK005	158
WATK007	157
WATK106010	157
WATK106011	157
WATK106012	157
WATK106013	157
WATK106014	157
WATK106015	157
WATK106016	157
WATK106017	157
WATK106018	157
WATK106019	157
WATK106027	157
WATK106028	157
WATKS2045E	163
WATKSBLC-150	161
WATKSBLC-35	161
WATKSBLC-95	161
WATKSBLC-T2X6	161
WATKSBLC	161
14/	
VV ATM	
WATM42	155
WATM42W	155

Item	Page
WATMA500200	154
WATMA600	154
WATMA730	154
WATMA730W	155
WATMA880	152
WATMA880EF	152
WATMA880W	152
WATMEB100C	159
WATMEB100CW	160
WATMECH6120P	164
	• •
WATMECH650P	164
WATMH14	162
WATMH14W	162
WATMH3DHS	163
WATMH4NOB	163
WATMH4NW	162
WATMHE100C	170
WATMHE13C	170
WATMHE16C	170
WATMHE20C	170
WATMHE22C	170
WATMHE23C	170
WATMHE25C	170
WATMHE29C	170
WATMHE32C	170
WATMHE40C	170
WATMHE44C	170
WATMHE50C	170
WATMHE64C	170
WATMHE76C	170
WATMHE89C	170
WATMVA200	153
WATMVA200R	153
WATMVA200W	153
WATMW6030LPH	173
\// _{0.781}	• •
V V ATN WATNCTG	166
\//	
V V ATP	170
WATP25G	179
WATP25R	179
WATP25W	179
WATP32G	179
WATP38G	179
WATP38R	179
WATP38W	179
WATP50G	179
WATP50R	179
WATPVCBLULT	176
WATPVCBRLT	176
WATPVCGLT	176
WATPVCGYLT	176
WATPVCLALT	176
WATPVCOLT	176

Wattmaster

Item	Page
WATPVCRLT	176
WATPVCRP	176
WATPVCUMT	177
WATPVCWLT	176
Watr	
WATR510	170
WATR513	170
WATR516	170
WATR520	170
WATR525	170
WATR532	170
WATR5511	170
WATR5514	170
WATR5515	170

Item	Page
WATR5545	170
WATR9593M	170
WATRC001	185
WATRC002	185
WATRC003	185
WATRK2121	167
Wats	
WATSANWIPES	183
WATSC-MC2/6-G	164
WATSC-MC2/6	164
WATSSCTG-RCB	166
WATSSCTG-RRS	166
WATSSCTG	166
WATSTCRS9	156

Item	Page
W _{ATT}	
WATTB10	181
WATTB12	181
WATTB5	181
WATTB6	181
WATTB8	181
WATTH10	180
WATTH5	180
WATTH6	180
WATTH8	180
W _{ATU}	
WATUMT100	176
WATUMTW250	177

Item	Page
WATUMTW500	177
Watv	
WATVS	168
W _{ATW}	
WATWRG10	181
WATWRG12	181
WATWRG5	181
WATWRG6	181
WATWRG8	181

Notes	

KIEIN_® TOUS



NEW ZEALAND

Home to all the brands you know and trust

KLEIN. TOOLS



- **f** Klein Tools New Zealand
- @klein_tools_nz

Wattmaster

- **f** Wattmaster
- @wattmaster_au

MUMME

- **f** Mumme T<u>ools</u>
- @mumme_tools



- **f** Alco
- @alco_cableglands

TRADES CLUB



SIGN UP TODAY!

Visit www.kleintoolsnz.com for new products, innovations and chances to win FREE tools!

- ELECTRICAL
- DATA COM
- HVAC
- TELECOM
- UTILITY
- PLUMBING
- HEAVY INDUSTRY
- STEEL & CONCRETE CONSTRUCTION



2021 Product Catalogue

P: 0800 KLEIN NZ | 0800 553 466

E: sales@kleintoolsnz.com

See our complete range of products at www.kleintoolsnz.com