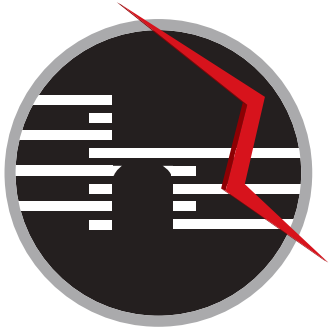




hENCHMAN
electronics





henchman
e l e c t r o n i c s

helping you to work, professionally

Our story...

At Henchman, we understand that quality products and timely delivery is largely what our customers demand and deserve. Over the last 15 years Henchman has gained respect, loyalty and presence in the industry being fully dedicated to customer satisfaction. We realize that our greatest asset is you, our customer.

Henchman operates a Quality Management System that conforms to the requirements of ISO 9001, reinforcing our dedication to customer service. Henchman has set the benchmark for quality technician's tools to the Electronics Industry.

Our vision...

- Commitment to impeccable customer service
- Being recognized for best range of superior renowned tools
- Providing the ultimate "tool buying" experience and after sales support

We value our clients. They trust our experience

ABN 76 107 346 113

FREE: 1800 091 109

Aus Ph: +612 4956 7111

NZ Ph: +643 544 4989

E-mail: sales@henchman.com.au

Website: www.henchman.com.au



Contents

Contents

Contents Pages	3-5
----------------------	-----

Toolcases/ Kits & Storage

Toolbags Empty	8- 14
Toolkits Complete	15-32
Tool Roll Cabs & Trolleys.....	33-34
Treston Cabinets.....	35-37
Explorer Transit Cases.....	38-43
Hofbauer Storage Cases.....	44-45

Hand Tools

Screwdrivers	48-55
Screwdrivers, Blade System.....	56-58
Hex Keys & Torx Keys.....	59-61
Pliers.....	62-73
Tweezers.....	74-75
Service Aids	76-77
Crimping Tools	78-79
Wire Strippers.....	80-83
Cable Shears & Knives	84-85
Measuring & Marking Tools.....	86-87
General Engineering Tools	87-89
Torque Screwdrivers/Wrenches	90-93
Sockets & Ratchets.....	94-97
Spanners.....	98-107
Torches & Portable Lights.....	108-109

Test Equipment

Scopemeters.....	112-115
Multimeters.....	116-125
CNX Wireless	126-127
Electrical Testers.....	128-129
Current Clamps.....	130-135
Current Adapters.....	136-137
Insulation/Ground Testers	138-145
Portable Appliance Tester.....	147, 185
Phase Rotation Meters	148
Power Quality.....	149-155
Laser Distance Meter.....	156
Process Tools	157-166
Thermal Imagers.....	167-171
Thermometers.....	172-177
Air Measurement.....	178-179
Instrument Accessories	180-184
Specialist Instruments	185
Owon Oscilloscopes.....	186-187

Soldering Equipment

JBC Soldering Stations	190-197
JBC Tips.....	198-201
Hakko Soldering Stations	202-205
Hakko Tips	206-212
OKI/Metcalf Tips	212-213
Weller Mains Irons & Tips.....	213
Solder Pots.....	214
Pace Soldering Stations	215
Portable Gas Irons	216
Chipquick	217
Solder Wick.....	218
Solder Wire.....	219
Fluxes & Pastes.....	220-221

Production/Laboratory Equipment

Fume Extraction	224-225
Dispensing Equipment	226-229
Bench Inspection	230-231
Andilog Testing Systems	232-234
Desoutter Tightening Systems	235-236
Pick & Place Machines	236-237
Component Forming Machines	238
Ultrasonic Cleaners.....	239

Static Control

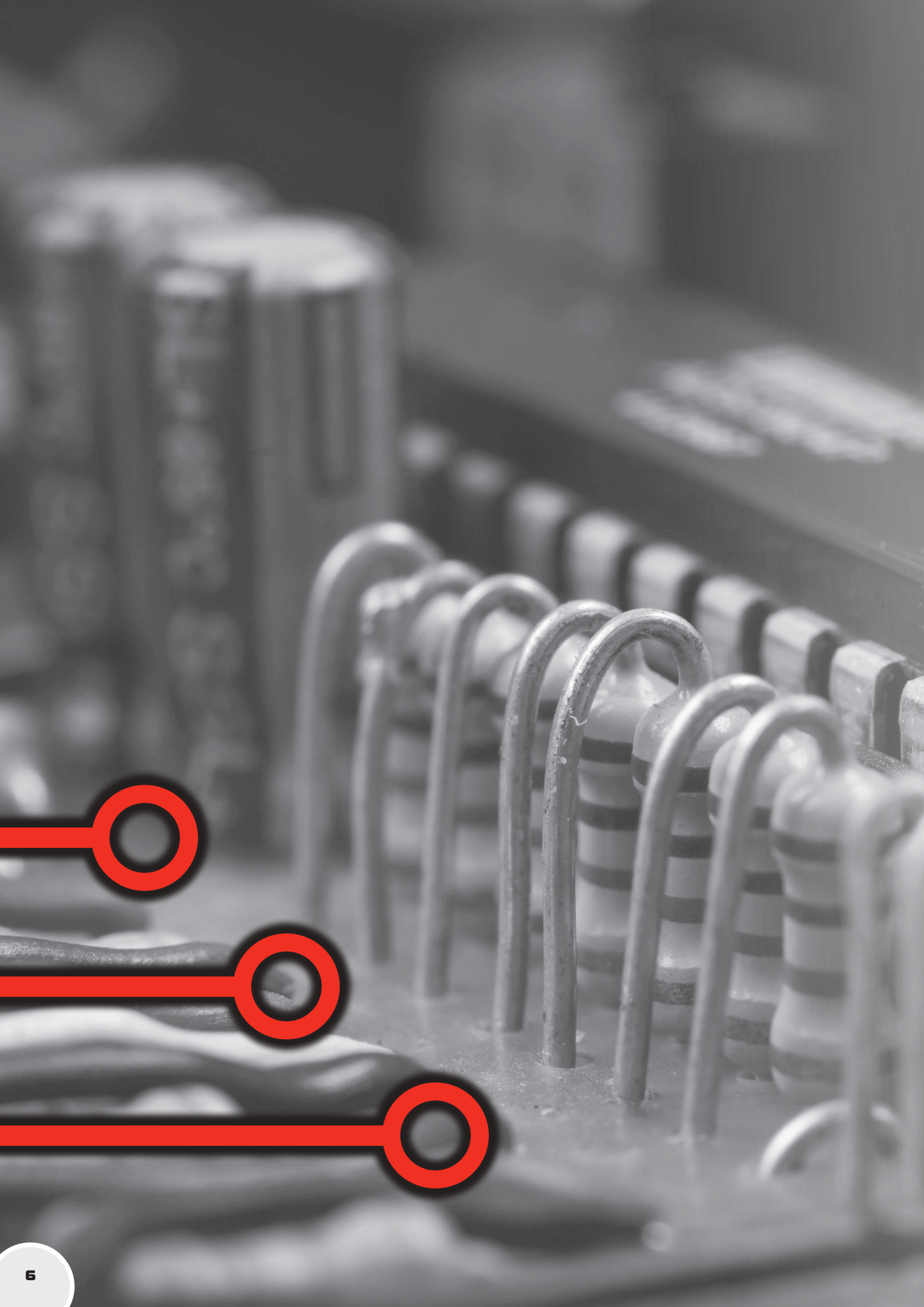
ESD Mats	242
Wrist Straps	243
ESD Clothing	244-245
Ionizers	245
ESD Maintenance Products	246
Conductive Storage	247
ESD Test Equipment.....	248-249
ESD Cleaning Brushes	250
ESD Shielding Bags.....	251

Specialist Tools, Power Tools & Other

Telecomms/Fiber Optics	254-255
Insulated Live Working Tools	256-259
Toner Vacuums	260-261
Glue Guns	262
Heat Guns	263
Panasonic Battery Tools.....	264-265
Electric Power Tools.....	266
Panavise.....	267

Consumables

Screwdriver Bits.....	270-272
Holesaws	273
Drill Bits	273-274
Aerosols, various	275-283
Gloves	283
Wipes.....	284
Lubricants.....	285



Toolcases/ Kits & Storage

Toolbags Empty	8- 14
Toolkits Complete	15-32
Tool Roll Cabs & Trolleys	33-34
Treston Cabinets	35-37
Explorer Transit Cases	38-43
Hofbauer Storage Cases.....	44-45

Hard Toolcases - Empty

Your choice in every case

Gtline range of rugged tool cases, unsurpassed in Australia/New Zealand, cover every requirement from small lightweight cases up to large wheeled cases to suit Electronics Technicians and Engineers. Manufactured in Italy according to the strictest quality control measures, our range of cases are accepted in the market as *the* "industry standard" by which other cases are judged.

TURTLE TOOLCASE

Indestructible tool trolley made entirely of HDPE polyethylene, a real shield against accidental shocks. Special extra thick aluminium trim for tight closure. High capacity case ideal for air travelling engineers that carry both tools, spare parts and components.

- 2 pallets with FLEXI POUCHES PLUS™, one with pouches on one side and the other with pouches on both sides
- Large pocket with closing flap
- 1 document wallet
- 3 small component boxes
- 2 handles
- 2 locks with keys
- large base area



EMPTY CASE

Part No.	Pallet Type	Size
TTL350PTS	Pouches	470 x 390 x 347mm
TTL350PEL	Elastics	470 x 390 x 347mm

MEGAWHEELS TOOLCASE

The double wall construction technique features shock-proof high density polyethylene, with great resistance to high and low temperatures and to most of the corrosive chemical substances, grant to this case the highest level of reliability on the market. Air transportation handling resistant.

- blow moulded polyethylene shell with incorporated feet
- Bottom area with adjustable dividers
- ergonomic handle, rubber coated grip
- 2 metal lid safety support stays
- wheels and telescopic handle
- 2 locks with keys



EMPTY CASE

Part No.	Pallet Type	Size
TMW-PTS	Pouches	453 x 345 x 218mm
TMW-PEL	Elastics	453 x 345 x 218mm

BOMBER TOOLCASE

Modern and exceptionally strong, this case is studied to resist even in the most extreme use conditions. The double wall construction and the body in shock-proof high density Polyethylene, with great resistance to high and low temperatures and to most of the corrosive chemical substances, grant to this product the highest levels of reliability on the market

- Blow moulded Polyethylene shells with incorporated feet
- 2 metal lid support stays with safety spring pawl and doublefixing point
- 2 locks with keys
- Steel hinge riveted in various points
- ergonomic handle, rubber coated grip
- document wallet
- bottom with adjustable dividers
- 2 small component boxes

EMPTY
CASE



Part No.	Pallet Type	Size
BOMBER-PTS	Pouches	422 x 327 x 185mm
BOMBER-PEL	Elastics	422 x 327 x 185mm

ATOMIK TOOLCASE WITH WHEELS

New, technologically advanced, injection moulded, high thickness Polypropylene tool case on wheels, fitted so that the travelling position is with horizontal case. This type of material, makes the case extremely resistant against chemical corrosion, shock, high and low temperature. The injection technique, ensures constant material thickness, even in the corners. Large and thick aluminium trim, makes the case ideal for daily, heavy duty use. The case can accommodate up to 3 tool pallets.

- 1 lid tool pallet with FLEXI POUCHES PLUS™ on two sides
- 1 bottom tool pallet with FLEXI POUCHES PLUS™ on one side
- document area
- bottom area with removable dividers
- 2 metal lid safety support stays
- 2 metal locks with keys
- 3 metal hinges for maximum strength
- ergonomic handle, rubber coated grip
- address label
- telescopic handle

EMPTY
CASE



Part No.	Size
ATOMIK WH PTS	465 x 352 x 255mm

ATOMIK TOOLCASE

New, technologically advanced, injection moulded, high thickness Polypropylene tool case. This type of material makes the case extremely resistant against chemical corrosion, shock, high and low temperature. The injection technique ensures constant material thickness, even in the corners. Large and thick aluminium trim, makes the case ideal for daily, heavy duty use. The case can accommodate up to 3 tool pallets.

- 2 metal lid safety support stays
- 3 metal hinges for maximum strength
- ergonomic handle, rubber coated grip
- 1 lid tool pallet with elastics on one side
- 1 bottom tool pallet with elastics on one side
- bottom area with removable dividers
- 2 metal locks with keys
- address label
- document area

EMPTY
CASE



Part No.	Pallet Type	Size
ATOMIK-PTS	Pouches	465 x 352 x 215mm
ATOMIK-PEL	Elastics	465 x 352 x 215mm

ATOMIK TWIN TOOLCASE

New member of the ATOMIK family - technologically advanced, injection moulded, high thickness Polypropylene shell tool case. This material makes the case extremely resistant against chemical corrosion, shock, high and low temperature. The injection technique, ensures constant material thickness, and allow you to make thicker, more resistant corners. Special large and thick aluminium trim, makes possible to open upper and lower compartment separately or together. The extremely high storage capacity makes the ATOMIK TWIN PTS an ideal case for daily, heavy duty use, with maximum accessibility to a large quantity of hand tools.

- 1 tool pallet with Flexipouches plus and elastic band on 2 sides
- 1 tool pallet with PSS system and elastic band on one side large elastic bands on the other side
- 1 tool pallet with Flexipouches plus and elastic band on 1 side
- 1 vertical tool pallet with pouches and elastic band on both sides
- 4 metal locks with keys
- 4 metal safety support stays for the vertical section
- 6 metal hinges for maximum strength

EMPTY
CASE



Part No.	Size
ATOMIK TWIN PTS	465 x 352 x 230mm

INNOVA TOOLCASE - ABS

New ABS model is made of vacuum formed, high thickness ABS. The new design of the shell and the interiors characterizes by a modern and functional look, representing the constant research of the best quality/price ratio.

- 2 metal locks with keys
- 2 metal lid safety support stays
- 3 metal hinges
- bottom area with removable dividers
- soft grip handle
- document area



Part No.	Pallet Type	Size
INNOVA 1	Pouches	440 x 340 x 190mm
INNOVA 2	Elastics	440 x 340 x 190mm

BOXER TOOLCASE

Polypropylene case realized with the injection moulding technique, unique in Europe which has been studied specifically for the transport of tools, with an unbeatable quality/price ratio. It has a modern design, with compact dimensions, high capacity and lightweight. The aluminium profile grants a further strength to this product.

- useful chromed handle
- central lock with key
- document wallet
- 2 tool pallets with pouches
- vacuum formed bottom tray
- 2 small component boxes
- Metal lid support stay



Part No.	Size
BOXER-PTS	430 x 340 x 156mm

REVOWHEELS TOOLCASE - ABS

Lightweight robust cases, made in vacuum formed ABS, using the most advanced technological solutions and standardized automated production processes. A system of adjustable dividers is directly fitted into the ribbed bottom tray, forming a more spacious and perfectly organized compartment. Without the addition of a separate internal bottom, the new case is much lighter and just as resistant and compact. The lightweight and robust telescopic handle completely collapses into the body of the case making it more practical even when fully loaded.

- central combination lock with 3 digits
- 2 side locks
- 2 pallets with FLEXI POUCHES PLUS™
- wheels with ball bearings
- telescopic handle



Part No.	Size
REVO-WH-PTS	439 x 312 200mm

3818 WATERPROOF RUGGED TOOLCASE

Watertight to 10 m. depth and perfectly sealed thanks to the exclusive neoprene "O" ring and to the purge valve, these cases grant an absolute protection. Made of unbreakable lightweight resin, they are provided with strong locks and a useful and ergonomic handle. They are ideal for the most different applications, particularly in the industrial, aeronautical, military and nautical fields.

- Waterproof and airtight
- Interstackable
- Corrosionproof, sandproof and dustproof
- shockproof and crushproof
- Temperature rating -33°C/+90°C
- Ergonomic handle, rubber coated grip



Part No.	Pallet Type	Size
GTB3818-PTS	Pouches	380 x 270 x 180mm

4419 WATERPROOF RUGGED TOOLCASE

Watertight to 10 m. depth and perfectly sealed thanks to the exclusive neoprene "O" ring and to the purge valve, these cases grant an absolute protection. Made of unbreakable lightweight resin, they are provided with strong locks and a useful and ergonomic handle. They are ideal for the most different applications, particularly in the industrial, aeronautical, military and nautical fields.

- Waterproof and airtight
- Interstackable
- Corrosionproof, sandproof and dustproof
- shockproof and crushproof
- Temperature rating -33°C/+90°C
- Ergonomic handle, rubber coated grip

EMPTY CASE



Part No.	Pallet Type	Size
GTB4419-PTS	Pouches	445 x 345 x 190mm

5823 WATERPROOF RUGGED TOOLCASE

IP67 Watertight and perfectly sealed thanks to the exclusive O-ring and to the purge valve, this tool case grants an absolute protection. Made of unbreakable lightweight resin, the GT 58-23 is provided with 2 tool pallets, strong locks, a handy ergonomic central handle, 2 side handles for 2 people carriage and a trolley with telescopic handle. Crush-proof, watertight, corrosion-proof and airtight with unique storage capacity.

- 1 padlock with key included
- Sealing O-ring
- Manual pressure release valve
- I.D. label with protective cover
- Corrosion proof metal reinforced hinges
- Positive stacking location
- Organised document wallet in the lid
- Bottom compartment with precubed foam

EMPTY CASE



Part No.	Pallet Type	Size
GTB5823-PTS	Pouches / Elastics	580 x 440 x 220mm

REVO TOOLCASE - ABS

Lightweight robust cases, made in vacuum formed ABS, using the most advanced technological solutions and standardized automated production processes. A system of adjustable dividers is directly fitted into the ribbed bottom tray, forming a more spacious and perfectly organized compartment. Without the addition of a separate internal bottom, the new case is much lighter and just as resistant and compact.

- central combination lock with 3 digits
- 2 side locks
- 2 pallets with FLEXI POUCHES PLUS™

EMPTY CASE



Part No.	Pallet Type	Size
REVO-PTS	Pouches	439 x 312 x 170mm

REVO SLIM TOOLCASE - ABS

Lightweight robust cases, made in vacuum formed ABS, using the most advanced technological solutions and standardized automated production processes. A system of adjustable dividers is directly fitted into the ribbed bottom tray, forming a more spacious and perfectly organized compartment. Without the addition of a separate internal bottom, the new case is much lighter and just as resistant and compact.

- central combination lock with 3 digits
- 2 side locks
- 2 pallets with FLEXI POUCHES PLUS™

EMPTY CASE



Part No.	Pallet Type	Size
REVO-SLIM-PTS	Pouches	439 x 312 x 135mm



Soft Toolbags - Empty

The technicians choice

BACKPACK TOOLBAG WITH WHEELS

- Wheeled Toolbag/backpack
- Curved Telescopic Handle
- Padded Comfortable Back Pack Straps
- Laptop compartment
- Size: 555 x 410 x 210mm



EMPTY BAG

Replacement Dragbag coming soon!

Part No.	Description
TZK3590	BackPack Toolbag With Wheels

PROTECH ZIPPER CASE

Zipper toolbag with two pouches and document storage -
Size: 430 x 330 x 105mm



EMPTY BAG

Part No.	Description
TZK802	Protech Zipper Case

DOUBLE PROTECH CASE

Double zipper toolcase with two sections for tools
Size: 430 x 330 x 150mm



EMPTY BAG

Part No.	Description
TZK803	Double Zipper Protec Case

MINITECH ZIPPER CASE

Minitech case with an external pocket,
Ideal for a technician on the move
Size: 300 x 175 x 95mm

EMPTY BAG



Part No.	Description
TZK302	Minitech Zipper Toolcase

DOUBLE MINITECH ZIPPER CASE

Double zipper Minitech case.
Size: 380 x 240 x 70mm

EMPTY BAG



Part No.	Description
TZK304	Double Minitech Case

DOUBLE PROTECH CASE WITH LAPTOP BAG

Double zipper toolcase with
internal laptop bag
Size: 450 x 360 x 170mm



EMPTY BAG

Part No.	Description
TZK804	Protech with Laptop Bag

Work Line Toolbags

Premium Toolbags

- Tear resistant fabric made of 600D polyester, resistant to chemical agents and low temperatures, matched with 3M reflective stripes
- Reinforced bottoms and stitchings
- Padded adjustable shoulder straps and easy carry handles with rubber grips provide maximum comfort even when fully loaded
- Padded adjustable shoulder straps and easy carry handles with rubber grips provides maximum comfort even when fully loaded

TOOLBAG WITH WHEELS

This case is an ideal companion for technicians on the go, designed for carrying a limited set of tools as well as a notebook computer.

- extractable rear straps to transform it into a backpack
- easy extractable telescopic handle
- two internal double-sided reversible pallets, one with pouches for tools and the other with a soft padded area for notebook.
- two frontal pouches for documents, accessories, measuring tape and spares.



EMPTY BAG

Part No.	Description
TT-01	Wheeled Toolbag

TOP 05 TOPLINE BAG

- Multifunctional tool and laptop bag in tear resistant fabric
- Internal and external tool pouches
- Padded area for laptop
- Document pockets
- Rubber grip ergonomic handle
- Adjustable shoulder belt
- Reflective stripe



EMPTY BAG

Part No.	Size
TOP 05	410 x 320 x 100mm

TOP 06 TOPLINE BAG

- Tool bag in tear resistant fabric
- Large internal area and side tool pouches
- Padded external pouches
- Reinforced bottom
- Adjustable shoulder belt
- Reflective stripe



EMPTY BAG

Part No.	Size
TOP 06	510 x 200 x 270mm

TOP ROLLER TOPLINE BAG

- Trolley in tear resistant fabric
- Large wheels
- Telescopic handle
- Large internal area and side tool pouches
- Padded external pouches
- Reinforced bottom
- Adjustable shoulder belt
- Reflective stripe



EMPTY BAG

Part No.	Size
TOP ROLLER	510 x 400 x 220mm

TOP 07 TOPLINE BACKPACK

- Tool backpack in tear resistant fabric
- Internal and external pouches for tools, accessories and documents
- Reflective stripe



EMPTY BAG

Part No.	Size
TOP 07	300 x 400 x 120mm

TOP 04 TOPLINE BAG

- Tool bag in tear resistant fabric
- Large internal area and side tool pouches
- Padded external pouches
- Reinforced bottom
- Adjustable shoulder belt
- Reflective stripe



EMPTY BAG

Part No.	Size
TOP 04	320 x 210 x 240mm

TOP 08 TOPLINE BAG

- Tool and document bag in tear resistant fabric
- Tool and accessory internal pouches
- Middle removable notebook folder
- External A4 size document pouch
- Rubber grip handles
- Reflective stripes



EMPTY BAG

Part No.	Size
TOP 08	385 x 290 x 70mm

TOP 09 TOPLINE BAG

- Tool and document bag in tear resistant fabric
- Tool and accessory internal pouches
- External document pouch
- Reflective stripes



EMPTY BAG

Part No.	Size
TOP 09	385 x 290 x 60mm

TOP 10 TOPLINE BAG

- Multifunctional notebook, documents and tool bag in tear resistant fabric
- Two separated areas, one is padded for the notebook and equipped with pouches for documents and accessories, the other is supplied with tool pouches
 - Rubber grip handle
 - Adjustable shoulder belt
 - Reflective stripes



EMPTY BAG

Part No.	Size
TOP 10	400 x 320 x 130mm

TOPLINE TOOL WAIST POUCH

- Adaptable to the belt model TOP BELT
- Organized tool waist pouch in tear resistant fabric
- Reflective stripes



EMPTY BAG

Part No.	Size
TOP ELECTRA	280 x 285 x 50mm

TOPLINE BUMBAG

- Tool bumbag in tear resistant fabric
- Spacious internal tool area with padded divider
- External tool pouches
- Practical double zip closing



EMPTY BAG

Part No.	Size
TOP BUMBAG	300 x 210 x 95mm

TOPLINE DRILL HOLSTER

- Drill or screwer waist scabbard in tear resistant fabric
- Reflective stripe
- Adaptable to the belt model TOP BELT



EMPTY HOLSTER

Part No.	Size
TOP DRILL	180 x 340mm

TOPLINE TOOL ROLL

- Tool roll in tear resistant fabric
- Stitched internal pouches and elastic strips for tools
- Two metal rings to hang the tool roll on the wall
- Adjustable "Velcro" closing strap - Rubber grip handle



EMPTY BAG

Part No.	Size
TT-ROLL	600 x 530mm (Open)

BUCKET BOSS TOOL ROLL

Heavy-duty tool organizers are constructed of 100% cotton duck fabric. This tool Roll features 22 pockets to hold a variety of hand tools. Sockets fit securely in their own pouches.



EMPTY BAG

Part No.	Stowage Type	Size
CE51-070	Pouches	685 x 355mm (open)

RIGID SOFT CASE

Robustness and lightweight are the features condensed into this case, together with a particular care for recent safety standard requirements. They are water resistant and manufactured in wear resistant nylon and anti-tug fabric. They are ideal for use in low temperature environments, and perfect for heavy-duty use. The rigid injection moulded bottom compartment with adjustable dividers has been designed to remain steady even in the event of collisions and accidental overturning of the bag.

- bottom with adjustable dividers
- zip with padlockable metal clip
- 2 extractable tool pallets with FLEXI POUCHES PLUS™
- rubber corner reinforcements
- shoulder strap



EMPTY BAG

Part No.	Pallet Type	Size
TZK901	Pouches	439 x 312 x 135mm

Professional Toolkits

Made by professionals for professionals

UTILITY ELECTRONICS KIT - WITH TOOL SELECTION AB

Our most basic yet essential selection of tools for almost any electronic maintenance work. Set out in our popular Minitech 302 case which provides a place for multimeter storage.



MINITECH ZIPPER CASE

Size: 300 x 170 x 95mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
 Z360-14504 145mm Long Nose Pliers - Electronic
 Z441-11504 115mm Side Cutters- Electronic
 1425 140mm Straight Tweezers
 302030 3 X 80 Flat Screwdriver
 302040 4 X 100 Flat Screwdriver
 302055 5.5 X 125 Flat Screwdriver
 3110060 0 X 60 Phillips Screwdriver
 3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
 Z120 16005 160mm Side Cutters
 HH14LED Torch With Batteries
 SB115-1Y Trimming Knife
 2553L Neon Tester Screwdriver
 302065-6 6.5 X 150 Flat Screwdriver
 3112100 2 X 100 Phillips Screwdriver

Part No.

Description

TZK 302 AB

Utility Electronics Toolkit in Minitech

TZK 302

Empty Minitech Toolcase

COMPACT SERVICE KIT - WITH TOOL SELECTION ABI

The tool selected for this kit suit technicians maintaining office equipment and many other areas. This case suits the technician who needs to carry a lot in as small a case as possible - large enough to hold a comprehensive range of tools, yet small enough to tuck under your arm.



**Suggested Addition:
 Panasonic EY6220NQ**

MINITECH DOUBLE ZIPPER

Size: 380 x 240 x 70mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
 Z360-14504 145mm Long Nose Pliers - Electronic
 Z441-11504 115mm Side Cutters- Electronic
 1425 140mm Straight Tweezers
 302030 3 X 80 Flat Screwdriver
 302040 4 X 100 Flat Screwdriver
 302055 5.5 X 125 Flat Screwdriver
 3110060 0 X 60 Phillips Screwdriver
 3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
 Z120 16005 160mm Side Cutters
 HH14LED Torch With Batteries
 SB115-1Y Trimming Knife
 2553L Neon Tester Screwdriver
 302065-6 6.5 X 150 Flat Screwdriver
 3112100 2 X 100 Phillips Screwdriver

SELECTION I

341MAG55 5.5mm Magnetic Nutdriver
 341070 7.0mm Nutdriver
 341100 10.00mm Nutdriver
 BBM-1716 Blower Brush
 302065-1 6.5 X 25mm Flat Stubby Screwdriver
 3111025 1 X 25mm Phillips Screwdriver
 P0369 100g Hammer

Part No.

Description

TZK 304 ABI

Compact Service Toolkit in Minitech Double

TZK 304

Empty Minitech Double Zipper Toolcase

COMPREHENSIVE ELECTRONICS KIT - WITH TOOL SELECTION ABCD

The comprehensive electronics kit in the Protech double zipper case provides quick and convenient access for all tools. Every design feature has been thoroughly tested in extensive field trials over years of proven use.



PROTECH DOUBLE ZIPPER CASE
Size: 430 x 330 x 150mm

KIT CONTENTS:

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5.5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
HH14LED	Torch With Batteries
SB115-1Y	Trimming Knife
Z553L	Neon Tester Screwdriver
302065-6	6.5 X 150 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver

SELECTION C

HT108	Adjustable Wire Stripper
1-603	3.2 X 0.5 Trimming Tool
1-605	3.2 X 0.4 Trimming Tool
1-181	Hex Trimming Tool
P0369	100g Hammer
1005 SS	145mm Straight Scissor
7-425	25mm Brush
302065-1	6.5 X 25mm Flat Stubby Screwdriver
3111025	1 X 25mm Phillips Stubby Screwdriver
TBCM8025	8m Tape Measure

SELECTION D

330105	0.7mm Solder Dispenser
USG 056	Plastic Inspection Mirror
KPX 90 03 125	125mm Water Pump Pliers
LPM 58	Magnifying Glass
1449	140mm Bent Tweezers
PIER PD	Solder Sucker
341055	5.5mm Nutdriver
341070	7.0mm Nutdriver
341100	10.0mm Nutdriver

Suggested Additions:

SKC 70 Gas Iron
Fluke 179 DMM

Part No.	Description
TZK 803 ABCD	Comp. Electronics Toolkit in Protech
TZK 901 ABCD	Comp. Electronics Toolkit in Zipper Brief Case
INNOVA ABCD	Comp. Electronics Toolkit in Innova

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION ABCD



TZK901 ZIPPER BRIEFCASE
Size: 430 x 310 x 150mm



INNOVA TOOLCASE (ABS)
Size: 430 x 335 x 195mm

ELECTRONIC SERVICE KIT - WITH TOOL SELECTION ABC

A useful combination of tools for the electronic service technician or student technician. Add a Fluke multimeter and soldering iron of your choice to complete this kit.



PROTECH ZIPPER CASE
Size: 430 x 330 x 105mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters - Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
2553L Neon Tester Screwdriver
302065-6 6.5 X 150 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION C

HT108 Adjustable Wire Stripper
1-603 3.2 X 0.6 Trimming Tool
1-605 3.2 X 0.4 Trimming Tool
1-181 Hex Trimming Tool
P0369 100g Hammer
1005 SS 145mm Straight Scissor
7-425 25mm Brush
302065-1 6.5 X 25mm Flat Stubby Screwdriver
3111025 1 X 25mm Phillips Stubby Screwdriver
TBCM8025 8m Tape Measure

Part No.	Description
TZK 802 ABC	Electronic Service Toolkit in Protech
TZK 802	Protech Zipper Case

FIELD SERVICE KIT - WITH TOOL SELECTION ABF

Selected as a more general purpose electronic toolkit with a few larger type tools than the Electronic Service Kit above. By adding a multimeter and soldering iron, you will have a very useful and versatile kit.



PROTECH ZIPPER CASE
Size: 430 x 330 x 105mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters - Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
2553L Neon Tester Screwdriver
302065-6 6.5 X 150 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION F

330105 0.7mm Solder Dispenser - 100g
USG 056 Plastic Inspection Mirror
Z050 20005 200mm Long Nose Plier
Z210 25004 250mm Water Pump Pliers
LPSH02 175mm Spring Hook
PIER PD Solder Sucker
302 080 8.0 X 150 Flat Screwdriver

Part No.	Description
TZK 802 ABF	Field Service Toolkit in Protech
TZK 802	Protech Zipper Case

PLANT ENGINEERS TOOLKIT - WITH TOOL SELECTION ABEF

A well chosen selection of high quality tools which will please the most fastidious user. Ideal for maintenance in plant applications, and particularly remote-site service operations. The Atomik case is an extremely lightweight, yet robust, polypropylene toolcase suited to the busy life of a technician.



ATOMIK TOOLCASE
Size: 465 x 352 x 215mm

- KIT CONTENTS:**
- SELECTION A**
- PXM9006 150mm Shifting Spanner
 - Z360-14504 145mm Long Nose Pliers - Electronic
 - Z441-11504 115mm Side Cutters - Electronic
 - 1425 140mm Straight Tweezers
 - 302030 3 X 80 Flat Screwdriver
 - 302040 4 X 100 Flat Screwdriver
 - 302055 5.5 X 125 Flat Screwdriver
 - 3110060 0 X 60 Phillips Screwdriver
 - 3111080 1 X 80 Phillips Screwdriver
- SELECTION B**
- Z010 16005 160mm Combination Pliers
 - Z120 16005 160mm Side Cutters
 - HH14LED Torch With Batteries
 - SB115-1Y Trimming Knife
 - Z5531 Neon Tester Screwdriver
 - 302065-6 6.5 X 100 Flat Screwdriver
 - 3112100 2 X 100 Phillips Screwdriver
- SELECTION E**
- P0369 100g Hammer
 - Z550 16005 160mm Heavy Duty Wire Stripper
 - SB29-702 190mm All Purpose Shears
 - 11000623 150mm Flat File - Second Cut
 - 7-425 25mm Brush
 - 302065-1 6.5 X 25mm Flat Stubby Screwdriver
 - 3111025 1 X 25mm Phillips Stubby Screwdriver
 - TMT3516 3.5m Tape Measure
- SELECTION F**
- 330105 0.7mm Solder Dispenser
 - USG 056 Plastic Inspection Mirror
 - Z050 20005 200mm Long Nose Plier
 - Z210 25004 250mm Water Pump Pliers
 - LPSH01 175mm Spring Hook
 - PIER PD Solder Sucker
 - 302 080 8.0 X 150 Flat Screwdriver

Part No.	Description
ATOMIK ABEF	Plant Engineers Toolkit in Atomik case
TZK 803 ABEF	Plant Engineers Toolkit in Protech
TMW ABEF	Plant Engineers Toolkit in MegaWheels

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION ABEF



PROTECH DOUBLE ZIPPER
Size: 430 x 330 x 150mm



MEGAWHEELS TOOLCASE
Size: 453 x 345 x 218mm

COMPREHENSIVE ELECTRONICS KIT - WITH TOOL SELECTION ABCD IN FOAM TRAYS

NEW

This toolkit is a very popular choice providing two useful tray of tools in foamkit in the Atomik case providing quick and convenient access for all tools. The foam tool tray system gives excellent visual checking that no tools are left behind. Every design feature has been developed working closely to meet the needs of our customers in extensive field trials over many years.



ATOMIK TOOLCASE
Size: 465 x 352 x 215mm

KIT CONTENTS:

SELECTION A

- PXM9006 150mm Shifting Spanner
- Z360-14504 145mm Long Nose Pliers - Electronic
- Z441-11504 115mm Side Cutters- Electronic
- 1425 140mm Straight Tweezers
- 302030 3 X 80 Flat Screwdriver
- 302040 4 X 100 Flat Screwdriver
- 302055 5.5 X 125 Flat Screwdriver
- 3110060 0 X 60 Phillips Screwdriver
- 3111080 1 X 80 Phillips Screwdriver

SELECTION B

- Z010 16005 160mm Combination Pliers
- Z120 16005 160mm Side Cutters
- HH14LED Torch With Batteries
- S8115-1Y Trimming Knife
- Z553L Neon Tester Screwdriver
- 302065-6 6.5 X 100 Flat Screwdriver
- 3112100 2 X 100 Phillips Screwdriver

SELECTION E

- P0369 100g Hammer
- Z550 16005 160mm Heavy Duty Wire Stripper
- S829-702 190mm All Purpose Shears
- 11000623 150mm Flat File - Second Cut
- 7-425 25mm Brush
- 302065-1 6.5 X 25mm Flat Stubby Screwdriver
- 3111025 1 X 25mm Phillips Stubby Screwdriver
- TMT3516 3.5m Tape Measure

SELECTION F

- 330105 0.7mm Solder Dispenser
- USG 056 Plastic Inspection Mirror
- Z050 20005 200mm Long Nose Plier
- Z210 25004 250mm Water Pump Pliers
- LPSH01 175mm Spring Hook
- PIER PD Solder Sucker
- 302 080 8.0 X 150 Flat Screwdriver



Selection AB



Selection EF

ALTERNATIVE CASE OPTION TO ACCEPT TOOL SELECTION AB EF IN FOAM TRAYS



ATOMIK WH PTS
Size: 465 x 352 x 255mm

Part No.	Description
ATOMIK-F-ABEF	Plant Engineers Toolkit in Atomik case - Foam Tool Trays
ATOMIK -F-WH-ABEF	Plant Engineers Toolkit in Wheeled Atomik case - Foam tool Trays

TOOLCASES, KITS & STORAGE

PHOTOCOPIER TECHNICIANS KIT - WITH TOOL SELECTION ABIJ

The ideal technicians kit for photocopier repair, set out in the popular Innova ABS toolcase. The Innova is an economically ABS case with lid and base pallets, document pouch and divided base area for organised storage of multimeter, solvent bottles, cleaning rags, etc. A multimeter and soldering iron to suit your needs completes this kit.



Suggested Addition:
Multimeter DT-9915

INNOVA CASE (ABS)
Size: 440 x 335 x 150mm

KIT CONTENTS:

SELECTION A	
PXM9006	150mm Shifting Spanner
2360-14504	145mm Long Nose Pliers - Electronic
2441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5.5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver
SELECTION B	
2010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
HH14LED	Torch With Batteries
S8115-1Y	Trimming Knife
2553L	Neon Tester Screwdriver
302065-6	6.5 X 150 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver
SELECTION I	
341MAG55	5.5mm Magnetic Nutdriver
341070	7.0mm Nutdriver
341100	10.00mm Nutdriver
BBM-1716	Blower Brush
302065-1	6.5 X 25mm Flat Stubby Screwdriver
3111025	1 X 25mm Phillips Screwdriver
P0369	100g Hammer
SELECTION J	
2340 A0	Circ'ljs Plier External 3-10mm
4-392	Jewellers Screwdriver Set
351 H7	Metric Allen Key Set
R401 WM	Feeler Gauge
LPSH01	Spring Hook
5-261	Contact File
418 30	Oiler Bottle, Telescopic
70166	Magnet Pick Up, Telescopic
70180	Mirror Swivel, Telescopic
RN 408-3	Pin Punch

Part No.	Description
INNOVA ABIJ	Copier Technicians Toolkit in Innova
REVO ABIJ	Copier Technicians Toolkit in RevoWheels
TZK 3590 ABIJ	Copier Technicians kit in Dragbag +2 pallets

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION ABIJ



REVOWHEELS CASE (ABS)
Size: 439 x 312 x 170mm



TZK3590 (Supplied standard with 1 tool pallet, additional 1 required for ABIJ)
Size: 555 x 410 x 210mm

PHOTOCOPIER TECHNICIANS KIT - WITH TOOL SELECTION ABIJ IN FOAM TRAYS

NEW

The ideal technicians kit for photocopier repair, set out foam tool trays in the popular Innova ABS toolcase. This ABS case with two foam trays plus a lid pallet and divided base area gives you enough space to pack in a multimeter, solvent bottles, cleaning rags and aiduster can, etc. Select a multimeter and soldering iron to suit your needs to complete this kit.



INNOVA CASE (ABS)
Size: 440 x 335 x 150mm

KIT CONTENTS:

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5.5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
HH14LED	Torch With Batteries
SB115-1Y	Trimming Knife
2553L	Neon Tester Screwdriver
302065-6	6.5 X 150 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver

SELECTION I

341MAG55	5.5mm Magnetic Nutdriver
341070	7.0mm Nutdriver
341100	10.00mm Nutdriver
BBM-1716	Blower Brush
302065-1	6.5 X 25mm Flat Stubby Screwdriver
3111025	1 X 25mm Phillips Screwdriver
P0369	100g Hammer

SELECTION J

Z340 A0	Circclip Plier External 3-10mm
4-392	Jewellers Screwdriver Set
351 H7	Metric Allen Key Set
R401 WM	Feeler Gauge
LPSH01	Spring Hook
5-261	Contact File
418 30	Oiler Bottle, Telescopic
70166	Magnet Pick Up, Telescopic
70180	Mirror Swivel, Telescopic
RN 408-3	Pin Punch



Selection AB



Selection IJ

Advantages of Foam Inserts

Our foam system sets you above the rest...

- Quick & easy selection of tools from trays
- A place for every tool in its place
- Visual inventory check before leaving site
- Professional image to your customer

helping you to work, professionally

Part No.

INNOVA-F-ABIJ

Description

Copier Technicians Toolkit in Innova case - Foam Tool Trays

MEDICAL MAINTENANCE KIT - WITH TOOL SELECTION ABJP

Toolkit for biomedical engineering technicians, set out in Atomik polypropylene toolcase. Ideal for installation and maintenance of medical equipment, like laser and imaging equipment. Add a multimeter and soldering iron of your choice to complete this kit.



Ask about our new **SERVICE VACUUMS** with hepa filtration suited to **MEDICAL** applications

ATOMIK TOOLCASE
Size: 465 x 352 x 215mm

KIT CONTENTS:

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5.5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
ST3000	Torch With Batteries
SB115-1Y	Trimming Knife
Z553L	Neon Tester Screwdriver
302065-6	6.5 X 150 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver

SELECTION J

Z340 A0	Circlip Plier External 3-10mm
4-392	Jewellers Screwdriver Set
351 H7	Metric Allen Key Set
R401 WM	Feeler Gauge
LPSH01	Spring Hook
5-261	Contact File
418 30	Oilier Bottle, Telescopic
70166	Magnet Pick Up, Telescopic
70180	Mirror Swivel, Telescopic
RN 408-3	Pin Punch

SELECTION P

NF10	Needle File Set
RNC408-3	Centre Punch
TS02	Miniature Spanners 3.2 - 9.0mm
7WR	Vise Grips
TE8805	Scriber
Z050 20005	Long Nose VDE 200mm

Part No.	Description
ATOMIK ABJP	Medical Maintenance Kit in Atomik
TMW ABJP	Medical Maintenance Kit in MegaWheels

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION ABJP



MEGAWHEELS TOOLCASE
Size: 435 x 345 x 218mm

TITANIUM TOOLS FOR MRI AND MEDICAL APPLICATIONS - PLEASE ENQUIRE

NEW



Titanium toolkit in foam trays

SERVICE SPECIALIST KIT - WITH TOOL SELECTION ABD

A useful combination of tools for service technicians or office equipment, copiers, fax machines, etc. Select a suitable soldering iron and multimeter to complete this kit.



Suggested Addition:
DT-9915 Multimeter

PROTECH SINGLE ZIPPER CASE

Size: 430 x 330 x 105mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters - Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
Z5531 Neon Tester Screwdriver
302065-6 6.5 X 150 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION D

330105 0.7mm Solder Dispenser- 100g
USG 056 Plastic Inspection Mirror
KPX 90 03 125 125mm Water Pump Pliers
LPM 58 Magnifying Glass
1449 140mm Bent Tweezers
PIER PD Solder Sucker
341055 5.5mm Nutdriver
341070 7.0mm Nutdriver
341100 10.0mm Nutdriver

Part No.	Description
TZK 802 ABD	Service Specialist Toolkit in Protech
TZK 802	Empty Protech single Zipper Case

DATANET KIT - WITH TOOL SELECTION ABH

A tried and tested kit of tools ideal for installation and repair of networks and associated equipment. Ideal kit for today's fast moving computer technician. The choice is yours for the selection of a multimeter and soldering iron.



Suggested Additions:
SKC 70 Gas Iron
DT-9915 Multimeter

PROTECH SINGLE ZIPPER CASE

Size: 430 x 330 x 105mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters - Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
Z5531 Neon Tester Screwdriver
302065-6 6.5 X 150 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION H

HT268 RJ45 Crimp Tool
HT336A Bnc-5/6mm Crimp Tool
RS 232 TEST Mini Tester
DB255/ DE09P Gender Bender - 25- 9 Way
HT312B RG 58 Coax Stripper
KPX 95 05 165 Cable Shear

Part No.	Description
TZK 802 ABH	Data Net Toolkit in Protech
TZK 802	Empty Protech single Zipper Case

LAN TOOLKIT - WITH TOOL SELECTION ABGH

The LAN kit is specifically designed for installing and maintaining networks. Covers all frequently needed hand tools for networking.



MEGA WHEELS TOOLCASE

Size: 555 x 410 x 210mm

KIT CONTENTS:

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5-5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
HH14LED	Torch With Batteries
SB115-1Y	Trimming Knife
Z553L	Neon Tester Screwdriver
302065-6	6.5 X 150 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver

SELECTION G

6089 2003 00	Krone Tool
CE116-681	Multi-pair Ringer
CE23-018	Can Wrench
CE412-654	Probe - Pic
CE420-944	Scotch-lock Plier
IDEAL	Tone And Probe Set

SELECTION H

HT268	Rj45 Crimp Tool
HT336A	Bnc-5/6mm Crimp Tool
RS 232 TEST	Mini Tester
DP255/ DE09P	Gender Bender - 25- 9 Way
HT312B	RG 58 Coax Stripper
KPX 95 05 165	Cable Shear

Part No.

TMW ABGH

Description

LAN Toolkit in MegaWheels

TELECOMS KIT - WITH TOOL SELECTION ABG

The field of telecommunications in both voice and data transmitters requires specific tooling and test equipment. This kit includes tools like a punch-down tool, scotch-lock pliers and an inductive tone and probe kit, which are all essential to this industry.



PROTECH ZIPPER CASE

Size: 430 x 330 x 105mm

KIT CONTENTS:

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5-5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
HH14LED	Torch With Batteries
SB115-1Y	Trimming Knife
Z553L	Neon Tester Screwdriver
302065-6	6.5 X 100 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver

SELECTION G

6089 2003 00	Krone Tool
CE116-681	Multi-pair Ringer
CE23-018	Can Wrench
CE412-654	Probe - Pic
CE420-944	Scotch-lock Plier
IDEAL	Tone And Probe Set

Part No.

TZK 802 ABG

Description

Telecoms Kit

MASTER LAN TOOLKIT - WITH TOOL SELECTION ABCDGH

This kit contains an ideal selection of networking tools. Space is provided in the base of the case for further tooling requirements. Set out in the MegaWheels Case for those long passages in city office blocks.



MEGAWHEELS TOOLCASE

Size: 453 x 345 x 218mm

KIT CONTENTS

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5.5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005	160mm Combination Pliers
Z120 16005	160mm Side Cutters
HH14LED	Torch With Batteries
SB115-1Y	Trimming Knife
2553L	Neon Tester Screwdriver
302065-6	6.5 X 150 Flat Screwdriver
3112100	2 X 100 Phillips Screwdriver

SELECTION C

HT108	Adjustable Wire Stripper
1-603	3.2 X 0.6 Trimming Tool
1-605	3.2 X 0.4 Trimming Tool
1-181	Hex Trimming Tool
P0369	100g Hammer
1005 5S	145mm Straight Scissor
7-425	25mm Brush
302065-1	6.5 X 25mm Flat Stubby Screwdriver
3111025	1 X 25mm Phillips Stubby Screwdriver
TBCM8025	8m Tape Measure

SELECTION D

330105	0.7mm Solder Dispenser- 100g
USG 056	Plastic Inspection Mirror
KPX 90 03 125	125mm Water Pump Pliers
LPM 58	Magnifying Glass
1445	140mm Bent Tweezers
PIER PD	Solder Sucker
341055	5.5mm Nutdriver
341070	7.0mm Nutdriver
341100	10.0mm Nutdriver

SELECTION G

6089 2003 00	Krone Tool
CE116-681	Multi-pair Ringer
CE23-018	Can Wrench
CE412-654	Probe - Pic
CE420-944	Scotch-lock Plier
IDEAL	Tone And Probe Set

SELECTION H

HT268	RJ45 Crimp Tool
HT336A	8nc-5/6mm Crimp Tool
RS 232 TEST	Mini Tester
DP255/ DE09P	Gender Bender - 25- 9 Way
HT312B	RG 58 Coax Stripper
KPX 95 05 165	Cable Shear

Part No.

Description

TMW ABCDGH

Master LAN Toolkit in MegaWheels

TZK 803 ABCDGH

Master LAN Toolkit in Protech

ALTERNATIVE CASE OPTION TO ACCEPT TOOL SELECTION ABCDGH



PROTECH DOUBLE ZIPPER

Size: 430 x 330 x 150mm

If you did not find what you were looking for, please call our sales team now!

FIBRE OPTIC KIT - WITH TOOL SELECTION AN

Compact kit with the basic tools for fibre optic termination to suit ST, SC, FC and LC connectors. Contact us for information on fusion splicers, polishing fixtures and epoxy consumables, etc.



Suggested Additions:

45-332 Fibrescope X100
BLR-1L Sharps Bin

MINITECH ZIPPER CASE

Size: 300 x 170 x 95mm

KIT CONTENTS:

SELECTION A

PXM9006	150mm Shifting Spanner
Z360-14504	145mm Long Nose Pliers - Electronic
Z441-11504	115mm Side Cutters- Electronic
1425	140mm Straight Tweezers
302030	3 X 80 Flat Screwdriver
302040	4 X 100 Flat Screwdriver
302055	5.5 X 125 Flat Screwdriver
3110060	0 X 60 Phillips Screwdriver
3111080	1 X 80 Phillips Screwdriver

SELECTION N

415-681	Fibre Optic Stripper 125µ
118-823	No-nik Stripper 125-150µ
262-600	Sapphire Scribe 60°
HT335B	Outer Sheath Stripper
HT108	Adjustable Stripper
SB29-503	Kevlar Shears

Part No.

Description

TZK 302 AN

Fibre Optic Kit in MiniTech

FACILITIES MAINTENANCE KIT

A choice of tools selected based on customer input, set out in foam trays permanently stowed in two zipper bags which snugly fit inside the wheeled backpack. This unique system gives you the best of every world:

- A highly manoeuvrable wheeled bag.
- A backpack for heading up stairs or congested areas.
- Foam trays for the ultimate tool stowage, giving you that professional look and perfect visual control on your tools.



Wheeled Backpack

Size: 510 x 360 x 230mm

NEW

KIT CONTENTS

SELECTION 0215

1611	Wiha offset screwdriver ph1 & 2
207035	Wiha offset screwdriver 3.5 mm
38414125	Wiha magnetic bit holder 125mm blade
320N030	Wiha vde slotted s/driver 3.0 x 100mm
320N040	Wiha vde slotted s/driver 4.0 x 100mm
320N065	Wiha VDE Slotted Screwdriver 6.5 x 150mm
321N1	Wiha VDE Phillips Screwdriver PH1 x 80mm
321N2	Wiha VDE Phillips Screwdriver PH2 x 100mm
7944-505TR	X Selector 11 PCS Torx
X2-2Y	Intrinsically Safe Torch
Z050 160VDE	Long Nose Plier VDE
Z120 180VDE	Side Cutter VDE
302100	Wiha Slotted Screwdriver 10 x 200mm
1521	Steel Rule 150mm Metric/Imperial
38957	Flat Hand Needle File
137496	Flat Tapered Needle File
J704	Wrench Adjustable 4
J708	Wrench Adjustable 8
2011 22001 SB	Linesmans Pliers with Crimper
Z210 25005	Multigrips - Box Joint
GW 9260	Double Box Ratcheting Metric Spanner Set
GW 9113	Ratcheting Combination Spanner 13mm
GW 9110	Ratcheting Combination Spanner 10mm
351PG7	Hex Key Set in Pocketstar 7 PCS



Internal Zipper Bags are stowed in the Wheeled bag



Part No.

Description

TZK 3590-F-0215

Facilities Maintenance Kit

ELECTRICIANS SERVICE KIT - WITH TOOL SELECTION KLP

A popular choice of tools to suit the average sparky. Add a few more specifically required tools and/or test equipment to cover all your requirements.



Suggested Addition:
Fluke 376 Clamp

PROTECH ZIPPER CASE
Size: 430 x 330 x 105mm

KIT CONTENTS:

SELECTION K

HT336H	Crimper Red/Blue/Yellow
320N025	2.5 X 75 Flat VDE
320N035	3.5 X 100 Flat VDE
320N045	4.5 X 100 Flat VDE
321N0	0 X 60 Phillips VDE
321N1	1 X 80 Phillips VDE

SELECTION L

61-063	Voltage Detector
PXM9008	Shifter 200mm
320N055	5.5 X 125 Flat VDE
321N2	2 X 100 Phillips VDE
Z160 200VDE	Side Cutter VDE 200mm
Z01 180VDE	Combi Plier VDE 180

SELECTION P

NF10	Needle File Set
RNC408-3	Centre Punch
TS02	Miniature Spanners 3.2 - 9.0mm
7WR	Vise Grips
TE8805	Scriber
Z050 20005	Long Nose VDE 200mm

Part No.	Description
TZK 802 KLP	Electricians Service Kit in Protech 802
TJK KLP	Electricians Service Kit in Jacket
TZK 504 KLP	Electricians Service Kit in Workline TOP 04

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION KLP



WORKLINE JACKET
Size: 480 x 660mm



TOP 04 Toolbag
Size: 320 x 210 x 240mm

ELECTROMECHANICAL SERVICE KIT - WITH TOOL SELECTION KLM

Our Electromechanical Kit set out in the robust Atomik toolcase of polyethylene, covers a wide variety of needs. Includes insulated 1000V hand tools and complete set of combination spanners.



ATOMIC TOOLCASE
Size: 465 x 352 x 215mm

KIT CONTENTS:

SELECTION K	
HT336H	Crimper Red/Blue/Yellow
320N025	2.5 X 75 Flat VDE
320N035	3.5 X 100 Flat VDE
320N045	4.5 X 100 Flat VDE
321N0	0 X 60 Phillips VDE
321N1	1 X 80 Phillips VDE
SELECTION L	
61-063	Voltage Detector
PXM9008	Shifter 200mm
320N055	5.5 X 125 Flat VDE
321N2	2 X 100 Phillips VDE
Z160 200VDE	Side Cutter VDE 200mm
Z01 180VDE	Combi Plier VDE 180
SELECTION M	
KD 81902	Spanner Set 8-22mm (15pcs)

Part No.	Description
ATOMIK KLM	Electromechanical Service Kit in Atomik
TZK 802 KLM	Electromechanical Service Kit in Protech
TZK 504 KLM	Electromechanical Service Kit in Workline

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION KLM



PROTECH ZIPPER CASE
Size: 430 x 330 x 105mm



TOP 04 Toolbag
Size: 320 x 210 x 240mm

MASTER ELECTRO-MECHANICAL KIT - WITH TOOL SELECTION KLMP

A comprehensive selection of tools to suit a wide variety of requirements of electro-mechanical work. Supplied with a full range of spanners, VDE pliers, VDE screwdrivers plus many more vitally useful hand tools to ensure you have what is needed for every requirement. Simply add a multimeter and soldering iron of your choice to complete this kit.



Suggested Additions:

Fluke 1587 Insulation Tester
SKC 70 Gas Iron

TURTLE 350 TOOLCASE
Size: 470 x 390 x 347mm

KIT CONTENTS:

SELECTION K

HT336H	Crimper Red/Blue/Yellow
320N025	2.5 X 75 Flat VDE
320N035	3.5 X 100 Flat VDE
320N045	4.5 X 100 Flat VDE
321N0	0 X 60 Phillips VDE
321N1	1 X 80 Phillips VDE

SELECTION L

61-063	Voltage Detector
PXM9008	Shifter 200mm
320N055	5.5 X 125 Flat VDE
321N2	2 X 100 Phillips VDE
Z160 200VDE	Side Cutter VDE 200mm
Z01 180VDE	Combi Plier VDE 180

SELECTION M

KD 81902	Spanner Set 8-22mm
----------	--------------------

SELECTION P

NF10	Needle File Set
RNC408-3	Centre Punch
TS02	Miniature Spanners 3.2 - 9.0mm
7WR	Vise Grips
TE8805	Scriber
Z050 200VDE	Long Nose VDE 200mm

Part No.

Description

TTL350 KLMP	Electromechanical Service Kit in Turtle
TZK 803 KLMP	Electromechanical Service Kit in Protech
TBX KLMP	Electromechanical Service Kit in Boxer

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION KLMP



PROTECH DOUBLE ZIPPER CASE
Size: 430 x 330 x 105mm



BOXER TOOLCASE
Size: 430 x 340 x 156mm

MECHANICAL SUPPORT KIT - WITH TOOL SELECTION ABMP

This kit is to meet the requirements of the service technician who has more mechanical service work. Fitted with standard non-insulated screwdrivers for easier access for non-electrical work. Supplied in the Megawheels case to suit travel.



Suggested Addition:
Fluke 376 Clamp

MEGAWHEELS TOOLCASE
Size: 453 x 345 x 218mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters- Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

Z010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
Z553L Neon Tester Screwdriver
302065-6 6.5 X 100 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION M

KD 81902 Spanner Set 8-22mm

SELECTION P

NF10 Needle File Set
RNC408-3 Centre Punch
TS02 Miniature Spanners 3.2 - 9.0mm
7WR Vise Grips
TE8805 Scriber
Z050 20005 Long Nose VDE 200mm

Part No.	Description
TMW ABMP	Mechanical Support Kit
ATOMIK ABMP	Mechanical Support Kit
TZK 803 ABMP	Mechanical Support Kit

ALTERNATIVE CASE OPTIONS TO ACCEPT TOOL SELECTION ABMP



ATOMIK TOOLCASE
Size: 465 x 352 x 215mm



PROTECH DOUBLE ZIPPER CASE
Size: 430 x 330 x 105mm

MILITARY READY KIT - WITH TOOL SELECTION ABJO

This toolkit is selected to suit technicians working with Milspec connectors and working in harsh conditions, eg. Naval vessels. Set out in the waterproof Explorer case with space in the divided base area for tools and consumables. To complete this kit, select a multimeter and soldering iron of your choice.

Suggested Addition:
Fluke 289 Multimeter



EXPLORER TOOLCASE
Size: 445 x 345 x 190mm

KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters- Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

2010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
Z553L Neon Tester Screwdriver
302065-6 6.5 X 100 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION J

Z340 A0 Circlip Plier External 3-10mm
4-392 Jewellers Screwdriver Set
351 H7 Metric Allen Key Set
R401 WM Feeler Gauge
LPSH01 Spring Hook
5-261 Contact File
418 30 Oiler Bottle, Telescopic
70166 Magnet Pick Up, Telescopic
70180 Mirror Swivel, Telescopic
RN 408-3 Pin Punch

SELECTION O

AFB Crimp Frame
TH1A Turret Head
529-10 Connector Soft Jaw Plier
45-171 Custom Stripmaster 16-26 AWG

Part No.	Description
GTB 4419 ABJO	Military Ready Kit in Explorer

COMPREHENSIVE FIELD SERVICE KIT - WITH TOOL SELECTION ABFEKM

Comprehensive tool kit set out in three layers CNC cut foam trays, providing easy tool selection. The best way to ensure that you don't leave your tools behind. and provides quick and easy tool selection when in use.. Keep your tools neat a tidy in their place.

MEGAWHEELS TOOLCASE
Size: 453 x 345 x 218mm



Foam tool layouts



KIT CONTENTS:

SELECTION A

PXM9006 150mm Shifting Spanner
Z360-14504 145mm Long Nose Pliers - Electronic
Z441-11504 115mm Side Cutters- Electronic
1425 140mm Straight Tweezers
302030 3 X 80 Flat Screwdriver
302040 4 X 100 Flat Screwdriver
302055 5.5 X 125 Flat Screwdriver
3110060 0 X 60 Phillips Screwdriver
3111080 1 X 80 Phillips Screwdriver

SELECTION B

2010 16005 160mm Combination Pliers
Z120 16005 160mm Side Cutters
HH14LED Torch With Batteries
SB115-1Y Trimming Knife
Z553L Neon Tester Screwdriver
302065-6 6.5 X 100 Flat Screwdriver
3112100 2 X 100 Phillips Screwdriver

SELECTION E

P0369 100g Hammer
Z550 16005 160mm Heavy Duty Wire Stripper
SB29-702 190mm All Purpose Shears
11000623 150mm Flat File - Second Cut
7-425 25mm Brush
302065-1 6.5 X 25mm Flat Stubby Screwdriver
3111025 1 X 25mm Phillips Stubby Screwdriver
TMT3516 3.5m Tape Measure

SELECTION F

330105 0.7mm Solder Dispenser
USG 056 Plastic Inspection Mirror
Z050 20005 200mm Long Nose Plier
Z210 25004 250mm Water Pump Pliers
LPSH01 175mm Spring Hook
PIER PD Solder Sucker
302 080 8.0 X 150 Flat Screwdriver

SELECTION K

HT336H Crimper Red/Blue/Yellow
320N025 2.5 X 75 Flat VDE
320N035 3.5 X 100 Flat VDE
320N045 4.5 X 100 Flat VDE
321N0 0 X 60 Phillips VDE
321N1 1 X 80 Phillips VDE

SELECTION M

KD 81902 Spanner Set 8-22mm

Part No.	Description
TMWF- ABFEKM	Comprehensive Field Service Kit

JENSEN ELECTRONIC KIT

The deluxe field service kit from the popular Jensen Tools range is one of many available to order, This kit comes with three tool pallets and over 125 tools.



JENSEN TOOLCASE

Size: 450 x 368 x 235mm

KIT CONTENTS:

Alignment tools x 2,
Feeler gauge,
Hammer, ball pien, 4 oz.
Handle, driver blades x 2; 3-1/8"; 4-1/8"
10pc Hex key set; 0.25 - 5/32"
7pc Hex key set, Fold up 1.5 - 6mm
Hexdriver blades x 9;
0.50" 1/16" 5/64"
3/32" 7/64" 1/8"
9/64" 5/32" 3/16"
Icepick scribe
Electrician's knife
Inspection mirror
Nutdriver blades x 9;
3/16" 7/32" 1/4"
9/32" 5/16" 1-1/32"
3/8" 7/16" 1/2"
Penlight, with batteries
Pliers x 6;
Diagonal cutter; 4-1/4"
Diagonal cutter; 5-1/4"
Groove joint; 10"
Long nose; 4-3/4"
Long nose with cutter; 6-3/4"
Retaining ring, external/internal
Centre punch; 3/32"
Pin punch x 2;
1/16"
1/8"
Stainless rule; 6"
Screwdriver, offset ratchet, Phillips/slotted
Screwdriver, Phillips #0 x 3", pocket clip
Screwdriver, Phillips x 3;
#1 x 3"
#2 x 1-1/4"
#2 x 4"
Slotted screwdriver; 3/32 x 3", pocket clip
Slotted screwdriver; slotted, x 6;
1/8 x 4" 1/8 x 8"
3/16 x 3" 1/4 x 1-1/4"
1/4 x 4" 5/16 x 6"
Screwdriver set, jeweller's, x 7
Screwstarter, Phillips/slotted
14 pc Socket set, 1/4" drive
Solder aid, fork and hook
Soldering iron, 115V*
Spring tool, push/pull
Tweezer, reverse action
Wire crimper/stripper
Wire stripper/cutter
Wrench, adjustable x 2; 4", 8"
Wrench set, ignition, 8 pcs
Brushes x 2;
scratch, brass;
scpewriter, nylon
Calliper, dial' 6"
Extension blade; 7"
Files, flexible x 3
Hacksaw
Handle, driver, blades, T-style
Hemostats x 2; 3-1/2"; 6"
Lamp extractor
Lead former
Parts boxes, x 2
Pliers x 2; ignition, 5"; locking, 7"
Reamer blade
Soldering iron
Solder removal tool
Spudger
Tape measure; 12"
Trimpot tool
Tri-tap tool
Tool case with pallets

Part No.

Description

JTK-77DST

Jensen Electronic Toolkit

377-306

Empty Toolcase with Pallets

JENSEN ELECTRO-MECHANICAL KIT

The Jensen Electro-mechanical Toolkit with removable wing pallets allows a technician to carry them only when required. Supplied with over 135 tools.



JENSEN TOOLCASE

Size: 450 x 324 x 150mm

KIT CONTENTS:

13pc Balldriver set, inch; .050 - 3/8"
9pc Balldriver set, metric; 1.5 - 10mm
Brush, steel scratch
Extension, driver blade, 4"
Handle, 4-1/2"
Knife, light-duty
Knife blades, #11
Mirror/magnet tool
9 pc Nutdriver blade set; 3/16 - 1/2"
10pc Nutdriver blade set; 4 - 11mm
Pliers x 6;
Chain nose with cutter; 6-1/2"
Chain nose, mini; 4-3/4"
Diagonal cutters, mini; 4"
Groove joint; 10"
Locking; 5"
Slip joint; 6"
Scissors, electrician's
Screwdrivers, Phillips x 4;
#0 x 3" pocket clip
#1 x 6"
#2 x 4"
#2 x 1-1/4" stubby
Screwdrivers, slotted x 6;
1/8 x 3" pocket clip;
1/8 x 4"
3/16 x 3"
3/16 x 8"
1/4 x 1-1/4" stubby
1/4 x 4"
Screwdriver, Phillips/slotted, ratcheting offset
Screwstarter, double-ended
9pc Socket set, 1/4" drive; 3/16 - 1/2"
9pc Socket set, 1/4" drive; 4 - 12mm
Soldering iron, 25W
Solder, pocket pack
10pc Spline key set
Stripper, 16-26 AWG
Stripper/cutter/crimper
Tape measure, inch/metric
Torxdrivers x 4;
TT8
TT10
TT15
TT20
Wrench, adjustable, 6"
13pc Wrench set OE; 13/64 - 7/8"
13pc Wrench set OE; 4 - 19mm
Toolcase with pallets

Part No.

Description

JTK-88

Jensen Electromechanical Toolkit

191-133

Empty Toolcase with Pallets

Tool Cabinets

TOOL BOXES



Part No.	Description	Size (W x D x H)
TB100	Handy Small Toolbox	378 x 152 x 126
TB500	Cantilever 5-tray toolbox	460 x 205 x 230

TOOL CHEST

- 7 Drawers 172W x 408D x 48H (mm)
- 1 Drawer 172W x 408D x 103H (mm)
- 2 Drawers 575W x 408D x 48H (mm)
- 1 Drawer 575W x 408D x 95H (mm)
- 1 Tray 520W x 210D x 45H (mm)
- Now fitted with gas struts
- Ball bearing drawer slides



Part No.	Description	Dimensions mm
TC510B	Tool Chest	660W x 455D x 524H

TOOL CABINET - 3 DRAWER



- Ball Bearing Drawers slides
- Lockable drop front
- 125Kg capacity castors
- 3 Drawers Int: 582W x 403D x 100H (mm)

Part No.	Description	Dimensions mm
TC499B	3 Drawer Roll Cab	675W x 460D x 910H

UTILITY CART



- 1 Drawer 566W x 268D x 65H (mm)
- Ball bearing drawer slides

Part No.	Description	Dimensions mm
TC700B	Utility Cart	718W x 415D x 910H

TOOL CABINETS

TC491B - 7 Drawer

- Ball Bearing Drawers slides
- Lockable drop front
- 125Kg capacity castors
- 4 Drawers Int: 582W x 402D x 45H (mm)
- 3 Drawers Int: 582W x 402D x 100H (mm)



TC496B - 11 Drawer

- Ball Bearing Drawers slides
- Lockable drop front
- 250Kg capacity castors
- 4 Drawers Int: 274W x 402D x 45H (mm)
- 4 Drawers Int: 582W x 402D x 45H (mm)
- 2 Drawers Int: 582W x 402D x 100H (mm)
- 1 Drawer Int: 582W x 402D x 150H (mm)



Part No.	Description	Dimensions mm
TC491B	7 Drawer Roll Cab	675W x 460D x 910H
TC496B	11 Drawer Roll Cab	675W x 460D x 925H

SIDE SHELF



- Suits TC491B & TC496B

Part No.	Description	Dimensions mm
TC518	Side Shelf	465W x 362D x 41H

TOOL CABINET - 16 DRAWER



- Ball Bearing Drawers slides
- Lockable drop front
- 250Kg capacity castors
- 5 Drawers Int: 302W x 402D x 45H (mm) Left
- 2 Drawers Int: 302W x 402D x 100H (mm) Left
- 1 Drawers Int: 302W x 402D x 150H (mm) Left
- 5 Drawers Int: 580W x 402D x 45H (mm) Right
- 2 Drawers Int: 580W x 402D x 100H (mm) Right
- 1 Drawers Int: 580W x 402D x 150H (mm) Right

Part No.	Description	Dimensions mm
TC753B	16 Drawer Roll Cab	1043W x 461D x 870H

TOOL CABINET - 13 DRAWER



- Ball Bearing Drawers slides
- 250Kg capacity castors
- 1 Drawers Int: 1302W x 530D x 90H (mm) Top
- 5 Drawers Int: 625W x 530D x 60H (mm) Left
- 1 Drawers Int: 625W x 530D x 125H (mm) Left
- 5 Drawers Int: 625W x 530D x 60H (mm) Right
- 1 Drawers Int: 625W x 530D x 125H (mm) Right

Part No.	Description	Dimensions mm
TC880B	13 Drawer Roll Cab	1425W x 610D x 1000H

RUXXAC CART - MADE IN GERMANY

Incredibly lightweight **German-made** trolley which folds down to convenient slim size for easy stowage in motor vehicle. Loading capacity 125kg.



Part No.	Description
CT-92	Ruxxac Cart - Long Toe

PORTABLE FOLDING CART

Collapsible luggage cart, folds up extremely compact. Similar to the Ruxxac cart.



Part No.	Description
HT1000C	Luggage Cart

PORTABLE FOLDING CART, LIGHT DUTY

Collapsible luggage cart made of powder coated steel tubing with a sturdy platform extension and elastic straps



Part No.	Description
LTM44	Portable Folding Cart

If you did not find what you were looking for, please call our sales team now!

SERIES 290 - VISIBLE STORAGE CABINETS

Model: TR290C-3



Model: TR290-3



Model: TR291-3



Model: TR292-3



Model: TR294-3



Model: TR296-3



Model: TR297-3



Part No.	No. Drawers	Drawer Type	Drawer Dim. (mm)	Optional Cross Dividers	Optional Length Dividers
TR290-3	30	L-00	175D x 55W x 37H	V-00 (5pc max P/Draw)	N/A
TR291-3	24	L-01	175D x 69W x 37H	V-01 (5pc max P/Draw)	V-012 (1pc max P/Draw)
TR292-3	12	L-02	175D x 138W x 37H	V-02 (5pc max P/Draw)	V-012 (3pc max P/Draw)
TR294-3	12	L-04	175D x 92W x 59H	V-04 (5pc max P/Draw)	V-0456 (1pc max P/Draw)
TR296-3	4	L-06	175D x 277W x 59H	V-06 (5pc max P/Draw)	V-0456 (5pc max P/Draw)
TR297-3	6	L-07	175D x 138W x 81H	V-07 (5pc max P/Draw)	V-078 (3pc max P/Draw)
TR290C-3	16	L-01, L-04, L-06	- Refer to L-01, L04, L06	V-01, V-04, V-06	V-012, V-0456

SERIES 550 - VISIBLE STORAGE CABINETS

Model: TR554-3



Model: TR550-3



Model: TR551-3



Model: TR552-3



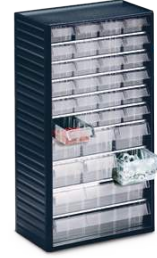
Model: TR556-3



Model: TR557-3



Model: TR550C-3



Part No.	No. Drawers	Drawer Type	Drawer Dim. (mm)	Optional Cross Dividers	Optional Length Dividers
TR550-3	60	L-00	175D x 55W x 37H	V-00 (5pc max P/Draw)	N/A
TR551-3	48	L-01	175D x 69W x 37H	V-01 (5pc max P/Draw)	V-012 (1pc max P/Draw)
TR552-3	24	L-02	175D x 138W x 37H	V-02 (5pc max P/Draw)	V-012 (3pc max P/Draw)
TR554-3	24	L-04	175D x 92W x 59H	V-04 (5pc max P/Draw)	V-0456 (1pc max P/Draw)
TR556-3	8	L-06	175D x 277W x 59H	V-06 (5pc max P/Draw)	V-0456 (5pc max P/Draw)
TR557-3	12	L-07	175D x 138W x 81H	V-07 (5pc max P/Draw)	V-078 (3pc max P/Draw)
TR550C-3	32	L-01, L-04, L-06	- Refer to L-01, L04, L06	V-01, V-04, V-06	V-012, V-0456

ESD STORAGE CABINETS

Model: TR291-4ESD



Model: TR294-4ESD



Model: TR551-4ESD



Model: TR554-4ESD



Part No.	No. Drawers	Drawer Type	Drawer Dim. (mm)	Optional Cross Dividers
TR291-4ESD	24	L-61-4ESD	175D x 55W x 37H	V-00 (5pc max P/Draw)
TR294-4ESD	12	L-64-4ESD	175D x 69W x 37H	V-01 (5pc max P/Draw)
TR551-4ESD	48	L-61-4ESD	175D x 138W x 37H	V-02 (5pc max P/Draw)
TR554-4ESD	24	L-64-4ESD	175D x 92W x 59H	V-04 (5pc max P/Draw)

TURNTABLES

Model: TR12-550

- This unit includes a ball bearing base and dividing trays
- The assembly holds 12 visible storage cabinets of series 550 in three layers.
- Each layer consist of four cabinets which are ordered separately
- Load capacity 400 kg
- Complete assembly's dimensions D x W x H : 500 x 500 x 1730 mm
- ***Cabinets not included***

Suggested Set Contains:

- 1 x Spacemiser 12-550
- 4 x Small parts storage cabinet 551-3
- 4 x Small parts storage cabinet 554-3
- 4 x Small parts storage cabinet 557-3

Model: TR12-550ESD

- This unit consists of a combination ball bearing base/ baseplate and dividing
- trays and top plate and will hold 12 small parts storage cabinets 551/554 ESD
- in three layers. Each layer contains four cabinets which are ordered separately
- Load capacity 400 kg
- Earth via protective 1 megohm resistor
- Complete assembly's dimensions D x W x H : 500 x 500 x 1730 mm
- ***Cabinets not included***

ESD Suggested Set Contains:

- Spacemiser 12-550 ESD
- 6 x Small parts cabinet 551 ESD
- 6 x Small parts cabinet 554 ESD

Model: TR12-550



Model: TR12-550ESD



Part No.

Description

TR12-550

Turntable only (No Storage Cabinet included, please select combinations from previous page)

TR12-550ESD

Turntable only (No Storage Cabinet included, please select combinations from previous page)

CHROME WIRE SHELVING/TROLLEYS



A system of chrome plated sheving well suited to Electronics environments. Hi-tech look providing maximum air ventilation and minimum dust capture

Simply place a "snap together sleeve" onto post and slide shelf down over sleeve. Adjustment possible at 25mm intervals.(1 x sleeve per connection)

Load capacity 250kg per shelf and maximum 1000kg



Please note, due to the wide combination of sizes and in order to offer attractive pricing, our chrome wire shelving system is ordered directly from the manufacturer to order only.

Part No.

Description

S2424

Post 1.4m

S2430

Post 1.6m

S2436

Post 1.9m

S2442

Post 2.2m

U18C

Handle 460mm

U24C

Handle 610mm

W5SET

Conductive Wheels 125mm (Set of 4)

S-25C

Snap-Together-Sleeves, Positive Lock

450mm Shelf

Part No.

Shelf

S1824

460 x 610mm

S1830

460x 760mm

S1836

460 x 910mm

S1842

460 x 1070mm

S1848

460 x 1220mm

S1860

460 x 1520mm

600mm Shelf

Part No.

Shelf

S2424

610 x 610mm

S2430

610 x 760mm

S2436

610 x 910mm

S2442

610 x 1070mm

S2448

610 x 1220mm

S2460

610 x 1520mm

Explorer Cases

The extreme case

Explorer Cases are the first of their kind to be manufactured in Europe, indeed their clean lines and good looks reflect their Italian heritage. A range of virtually indestructible durable waterproof cases provide a solution for any equipment requiring a high level of protection. Their dust and waterproof qualities offer absolute protection making them ideal for use in the harshest of environments.

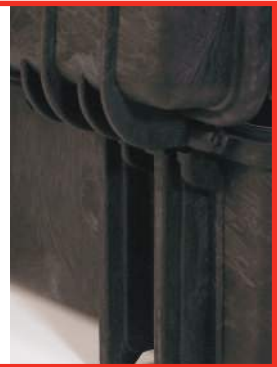
Applications for these cases are for:

- Offshore/ Marine industry
- Military
- Police, Fire & Rescue
- Medical
- Photographic & Broadcasting
- Mining
- Emergency, Fire Brigade, Police services
- Industrial
- Diving & Hunting

EXPLORER CASES - "BEAR THE STRAIN"



Explorer cases are fitted with counter-balance supports to prevent the case toppling backwards when the lid is opened, especially if the lid has been fitted out.





Explorer cases have NSN codification numbers, ready for Defence applications

Explorer Cases are stocked in black and orange as a standard in Australia, green is available as a preferred colour in Italy and other colours can be made to order.

Applications range from military, aerospace, computer, photographic and general equipment/instrument housing.

Explorer Cases have been subjected to a series of controlled laboratory tests to prove their suitability for use in the most extreme and hazardous applications.

Explorer Cases meet the exacting standards of:

- IP67 dustproof/waterproof defence standard 81-41 (Part 3)
- Issue 4 STANAG 4280 (Edition 2) conformity with the directive 2002/95/EC

HARMFUL ONLY IN CASE OF SWALLOWING



EXPLORER CASES SMALL SERIES

The Explorer range covers a wide range of cases from small to very large. The smaller versions are ideally suited to the storage of instruments or cameras and can be used as a rugged housing for building test equipment into the case. Larger versions suit computer and and even heavier equipment where cases are required to have wheels.



Panel supports are available in metal or plastic to avoid drilling through the case if panel mounting is required, (which would defeat the object of a sealed case.) They fit virtually every size of Explorer case. They are sold in a set of six pieces.

KIT SUPP.PLAST (plastic set of 6)
KIT SUPP.EXPL (metal set of 6)



1913BE



1918B

Part No.	External mm	Internal mm(base+lid)	Colour	Foam
1908.BE	216 x 180 x 102	190 x 125 x (20+65)	Black	-
1908.OE	216 x 180 x 102	190 x 125 x (20+65)	Orange	-
1908.B	216 x 180 x 102	190 x 125 x (20+65)	Black	√
1908.O	216 x 180 x 102	190 x 125 x (20+65)	Orange	√
1913.BE	216 x 180 x 152	190 x 125 x (20+115)	Black	-
1913.OE	216 x 180 x 152	190 x 125 x (20+115)	Orange	-
1913.B	216 x 180 x 152	190 x 125 x (20+115)	Black	√
1913.O	216 x 180 x 152	190 x 125 x (20+115)	Orange	√
2209.BE	246 x 215 x 112	220 x 160 x (20+75)	Black	-
2209.OE	246 x 215 x 112	220 x 160 x (20+75)	Orange	-
2209.B	246 x 215 x 112	220 x 160 x (20+75)	Black	√
2209.O	246 x 215 x 112	220 x 160 x (20+75)	Orange	√
2214.BE	246 x 215 x 162	220 x 160 x (20+125)	Black	-
2214.OE	246 x 215 x 162	220 x 160 x (20+125)	Orange	-
2214.B	246 x 215 x 162	220 x 160 x (20+125)	Black	√
2214.O	246 x 215 x 162	220 x 160 x (20+125)	Orange	√
2712.BE	305 x 270 x 144	276 x 200 x (35 +85)	Black	-
2712.OE	305 x 270 x 144	276 x 200 x (35 +85)	Orange	-
2712.B	305 x 270 x 144	276 x 200 x (35 +85)	Black	√
2712.O	305 x 270 x 144	276 x 200 x (35 +85)	Orange	√
2717.BE	305 x 270 x 194	276 x 200 x (35+135)	Black	-
2717.OE	305 x 270 x 194	276 x 200 x (35+135)	Orange	-
2717.B	305 x 270 x 194	276 x 200 x (35+135)	Black	√
2717.O	305 x 270 x 194	276 x 200 x (35+135)	Orange	√

EXPLORER CASES MEDIUM SERIES



Some of small to medium Explorer cases have a removable lid, which slides off in a certain open position when grub screws are loosened. This is ideal for building equipment into the case without the hindrance of a lid.

Part No	External mm	Internal mm (base+lid)	Colour	Foam
3317.BE	360 x 304 x 194	330 x 234 x (68+102)	Black	-
3317.OE	360 x 304 x 194	330 x 234 x (68+102)	Orange	-
3317.B	360 x 304 x 194	330 x 234 x (68+102)	Black	✓
3317.O	360 x 304 x 194	330 x 234 x (68+102)	Orange	✓
3317W.BE	360 x 420 x 194	330 x 350 x (68 + 102)	Black	-
3317W.OE	360 x 420 x 194	330 x 350 x (68 + 102)	Orange	-
3317W.B	360 x 420 x 194	330 x 350 x (68 + 102)	Black	✓
3317W.O	360 x 420 x 194	330 x 350 x (68 + 102)	Orange	✓
3818.BE	410 x 340 x 205	380 x 270 x (45+135)	Black	-
3818.OE	410 x 340 x 205	380 x 270 x (45+135)	Orange	-
3818.B	410 x 340 x 205	380 x 270 x (45+135)	Black	✓
3818.O	410 x 340 x 205	380 x 270 x (45+135)	Orange	✓
4412.BE	474 X 415 X 149	445 X 345 X (47+78)	Black	-
4412.OE	474 X 415 X 149	445 X 345 X (47+78)	Orange	-
4412.B	474 X 415 X 149	445 X 345 X (47+78)	Black	✓
4412.O	474 X 415 X 149	445 X 345 X (47+78)	Orange	✓
4419.BE	474 X 415 X 214	445 X 345 X (47+143)	Black	-
4419.OE	474 X 415 X 214	445 X 345 X (47+143)	Orange	-
4419.B	474 X 415 X 214	445 X 345 X (47+143)	Black	✓
4419.O	474 X 415 X 214	445 X 345 X (47+143)	Orange	✓
4820.BE	520 x 435 x 230	480 x 370 x (45 + 155)	Black	-
4820.OE	520 x 435 x 230	480 x 370 x (45 + 155)	Orange	-
4820.B	520 x 435 x 230	480 x 370 x (45 + 155)	Black	✓
4820.O	520 x 435 x 230	480 x 370 x (45 + 155)	Orange	✓
5117.BE	546 x 347 x 197	517 x 277 x (50 + 123)	Black	-
5117.OE	546 x 347 x 197	517 x 277 x (50 + 123)	Orange	-
5117.B	546 x 347 x 197	517 x 277 x (50 + 123)	Black	✓
5117.O	546 x 347 x 197	517 x 277 x (50 + 123)	Orange	✓



3317BE



3317B

EXPLORER CASES LARGE SERIES



Combination Padlock or Standard Padlock with key to suit the Explorer cases.

EXPL. COMBI LOCK
EXPL. PADLOCK

Part No	External mm	Internal mm (lid+base)	Colour	Foam	Wheels
5122.BE	546 x 347 x 247	517 x 277 x (50 + 123)*	Black	-	√
5122.OE	546 x 347 x 247	517 x 277 x (50 + 123)*	Orange	-	√
5122.B	546 x 347 x 247	517 x 277 x (50 + 123)*	Black	√	√
5122.O	546 x 347 x 247	517 x 277 x (50 + 123)*	Orange	√	√
5325.BE	607 x 475 x 275	538 x 405 x (60 + 190)	Black	-	-
5325.OE	607 x 475 x 275	538 x 405 x (60 + 190)	Orange	-	-
5325.B	607 x 475 x 275	538 x 405 x (60 + 190)	Black	√	√
5325.O	607 x 475 x 275	538 x 405 x (60 + 190)	Orange	√	√
5326.BE	627 x 475 x 292	538 x 405 x (60 + 190)	Black	-	√
5326.OE	627 x 475 x 292	538 x 405 x (60 + 190)	Orange	-	√
5326.B	627 x 475 x 292	538 x 405 x (60 + 190)	Black	√	√
5326.O	627 x 475 x 292	538 x 405 x (60 + 190)	Orange	√	√
5822.BE	650 x 510 x 242	580 x 440 x (60 + 160)	Black	-	-
5822.OE	650 x 510 x 242	580 x 440 x (60 + 160)	Orange	-	-
5822.B	650 x 510 x 242	580 x 440 x (60 + 160)	Black	√	√
5822.O	650 x 510 x 242	580 x 440 x (60 + 160)	Orange	√	√
5823.BE	650 x 510 x 242	580 x 440 x (60 + 160)	Black	-	-
5823.OE	650 x 510 x 242	580 x 440 x (60 + 160)	Orange	-	-
5823.B	650 x 510 x 242	580 x 440 x (60 + 160)	Black	√	-
5823.O	650 x 510 x 242	580 x 440 x (60 + 160)	Orange	√	-
5833.BE	682 x 510 x 355	580 x 440 x (60 + 270)	Black	-	√
5833.OE	682 x 510 x 355	580 x 440 x (60 + 270)	Orange	-	√
5833.B	682 x 510 x 355	580 x 440 x (60 + 270)	Black	√	√
5833.O	682 x 510 x 355	580 x 440 x (60 + 270)	Orange	√	√
7630.BE	860 x 560 x 330	765 x 485 x (60 + 245)	Black	-	√
7630.OE	860 x 560 x 330	765 x 485 x (60 + 245)	Orange	-	√
7630.B	860 x 560 x 330	765 x 485 x (60 + 245)	Black	√	√
7630.O	860 x 560 x 330	765 x 485 x (60 + 245)	Orange	√	√
7641.BE	860 x 560 x 435	765 x 485 x (60 + 355)	Black	-	√
7641.OE	860 x 560 x 435	765 x 485 x (60 + 355)	Orange	-	√
7641.B	860 x 560 x 435	765 x 485 x (60 + 355)	Black	√	√
7641.O	860 x 560 x 435	765 x 485 x (60 + 355)	Orange	√	√
10840.BE	1178 x 718 x 427	1080 x 620 x (200 + 200)	Black	-	√
10840.B	1178 x 718 x 427	1080 x 620 x (200 + 200)	Black	√	√
9413.BE	989 x 415 x 157	939 x 352 x (43 + 94)	Black	-	√
9413.B	989 x 415 x 157	939 x 352 x (43 + 94)	Black	√	√
11413.BE	1189 x 415 x 159	1136 x 350 x (42 + 93)	Black	-	√
11413.B	1189 x 415 x 159	1136 x 350 x (42 + 93)	Black	√	√
13513.B E	1410 x 415 x 159	1350 x 350 x (42 + 93)	Black	-	√
13513.B	1410 x 415 x 159	1350 x 350 x (42 + 93)	Black	√	√
13527.BE	1430 x 415 x 296	1350 x 350 x (42 + 230)	Black	-	√
13527.B	1430 x 415 x 296	1350 x 350 x (42 + 230)	Black	√	√

* In model 5122, the internal dimensions given are calculated on the deepest bottom area. However, the depth is shallower in places when allowance is made for the wheel wells and the telescopic handle well.

Some Explorer cases are fitted with self oiling free running wheels

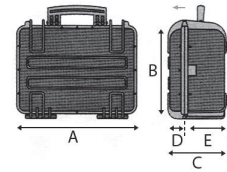


EXPLORER CASES QUICK REFERENCE TABLE

* In model 5122, the internal dimensions given are calculated on the deepest bottom area. However, the depth is shallower in places when allowance is made for the wheel wells and the telescopic handle well.

** Maximum weight capacity when contents are evenly distributed that maintains buoyancy level just below the lid closure line.

*** **BLACK and ORANGE cases stocked in Australia** - Green to special order only as well as other custom colours available to order according to minimum manufacturing requirements, please enquire.



	Part No.			Foam insert	Wheels	Remov. lid	Internal Dimensions (mm)					External Dimensions (mm)			Weight Kg.	Buoyancy Kg. max.**
	BLACK	ORANGE	GREEN				A	B	C	D	E	A	B	C		
Small Cases	1908.B E	1908.O E	1908.G E	empty			190	125	85	20	65	216	180	102	0.70	1.4
	1908.B	1908.O	1908.G	with foam			190	125	85	20	65	216	180	102	0.80	
	1913.B E	1913.O E	1913.G E	empty			190	125	135	20	115	216	180	152	0.85	2.4
	1913.B	1913.O	1913.G	with foam			190	125	135	20	115	216	180	152	0.92	
	2209.B E	2209.O E	2209.G E	empty			220	160	95	20	75	246	215	112	0.88	2.3
	2209.B	2209.O	2209.G	with foam			220	160	95	20	75	246	215	112	0.99	
	2214.B E	2214.O E	2214.G E	empty			220	160	145	20	125	246	215	162	1.16	3.9
	2214.B	2214.O	2214.G	with foam			220	160	145	20	125	246	215	162	1.29	
	2712.B E	2712.O E	2712.G E	empty		•	276	200	120	35	85	305	270	144	1.62	4.2
	2712.B	2712.O	2712.G	with foam		•	276	200	120	35	85	305	270	144	1.83	
Medium Cases	2717.B E	2717.O E	2717.G E	empty		•	276	200	170	35	135	305	270	194	1.93	6.7
	2717.B	2717.O	2717.G	with foam		•	276	200	170	35	135	305	270	194	2.12	
	3317.B E	3317.O E	3317.G E	empty		•	330	234	170	68	102	360	304	194	2.29	7.0
	3317.B	3317.O	3317.G	with foam		•	330	234	170	68	102	360	304	194	2.51	
	3317W.BE	3317W.OE	-	empty			330	350	170	68	102	360	420	194	2.92	10.6
	3317W.B	3317W.O	-	with foam			330	350	170	68	102	360	420	194	3.30	
	3818.B E	3818.O E	3818.G E	empty			380	270	180	45	135	410	340	205	3.14	12.4
	3818.B	3818.O	3818.G	with foam			380	270	180	45	135	410	340	205	3.58	
	4412.B E	4412.O E	4412.G E	with BAG-PC44		•	445	345	125	47	78	474	415	149	3.40	10.7
	4412.B	4412.O	4412.G	empty		•	445	345	125	47	78	474	415	149	3.90	
	4412.B C	4412.O C	4412.G C	with foam		•	445	345	125	47	78	474	415	149	4.20	10.7
	4419.B E	4419.O E	4419.G E	empty		•	445	345	190	47	143	474	415	214	4.00	19.7
	4419.B	4419.O	4419.G	with foam		•	445	345	190	47	143	474	415	214	4.70	
	4820.B E	4820.O E	4820.G E	empty			480	370	200	45	155	520	435	230	4.64	24.7
	4820.B	4820.O	4820.G	with foam			480	370	200	45	155	520	435	230	5.40	
	5117.B E	5117.O E	5117.G E	empty		•	517	277	173	50	123	546	347	197	3.80	15.8
	5117.B	5117.O	5117.G	with foam		•	517	277	173	50	123	546	347	197	4.50	
	5122.B E	5122.O E	5122.G E	empty		•	517	277	217	50	167*	546	347	247	6.00	21.5
	5122.B	5122.O	5122.G	with foam		•	517	277	217	50	167*	546	347	247	7.00	
	Large Cases	5325.BE	5325.OE	5325.GE	empty			538	405	250	60	190	607	475	275	7.0
5325.B		5325.O	5325.G	with foam			538	405	250	60	190	607	475	275	8.25	
5326.BE		5326.OE	5326.GE	empty		•	538	405	250	60	190	607	475	292	10.0	37.2
5326.B		5326.O	5326.G	with foam		•	538	405	250	60	190	607	475	292	11.25	
5822.B E		5822.O E	5822.G E	empty			580	440	220	60	160	650	510	242	6.96	36.7
5822.B		5822.O	5822.G	with foam			580	440	220	60	160	650	510	242	8.19	
5823.BE		5823.OE	5823.GE	empty		•	580	440	220	60	160	650	510	242	6.96	36.7
5823.B		5823.O	5823.G	with foam		•	580	440	220	60	160	650	510	242	8.19	
5833.B E		5833.O E	5833.G E	empty		•	580	440	330	60	270	682	510	355	9.55	62.0
5833.B		5833.O	5833.G	with foam		•	580	440	330	60	270	682	510	355	11.66	
7630.B E		7630.O E	7630.G E	empty		•	765	485	305	60	245	860	560	330	11.20	81.8
7630.B		7630.O	7630.G	with foam		•	765	485	305	60	245	860	560	330	14.03	
7641.B E		7641.O E	7641.G E	empty		•	765	485	415	60	355	860	560	435	12.07	118.5
7641.B		7641.O	7641.G	with foam		•	765	485	415	60	355	860	560	435	15.92	
10840.BE	-	10840.GE	empty		•	1080	620	400	200	200	1178	718	427	19.80	120.6	
10840.B	-	10840.G	with foam		•	1080	620	400	200	200	1178	718	427	26.30		
9413.BE	-	9413.GE	empty		•	939	352	137	43	94	989	415	157	6.70	27.9	
9413.B	-	9413.G	with foam		•	939	352	137	43	94	989	415	157	7.70		
11413.BE	-	11413.GE	empty		•	1136	350	135	42	93	1189	415	159	7.80	33.3	
11413.B	-	11413.G	with foam		•	1136	350	135	42	93	1189	415	159	8.80		
13513.B E	-	13513.G E	empty		•	1350	350	135	42	93	1410	415	159	8.70	39.5	
13513.B	-	13513.G	with foam		•	1350	350	135	42	93	1410	415	159	9.95		
13527.BE	-	13527.GE	empty		•	1350	350	272	42	230	1430	415	296	11.70	97.5	
13527.B	-	13527.G	with foam		•	1350	350	272	42	230	1430	415	296	14.90		

EXPLORER MUB UTILITY BOX



Explorer also offer a Multi Utility Box of high impact polypropylene which is water resistant (not immersible) with moulded lifting points on both ends. Perfect answer to slightly lower level environment demands and a less expensive option for storage and handling of a wide variety of requirements.

- It is fitted with a hinged pull handle and wheels.
- Has stacking points.
- Can be used in high/low temperature environments
- Lightweight, but sturdy construction.



Part No.	Description	External Dimensions mm
MUB78	Multi Utility Box (empty)	807 x 470 x 345

Hofbauer Cases

Cases packed with ideas

Cases for storing equipment or presenting your product, from Germany.

XTRA BAG



- Stylish design for professional presentation
- Lightweight yet durable industrial presentation case.
- Ergonomic handle for user comfort
- Reliable snap shut-catches and interlocking hinge
- Excellent surface finish - ideal for printed logos
- Injection moulded construction: hard wearing & reliable

Part No.	Size	Colour
95 74 00	258 x 246 x 49mm	Black
95 74 10	320 x 308 x 81mm	Black
95 74 20	397 x 377 x 96mm	Black

MINI BAG

- Compact, versatile, perfect for promotion & product presentation
- Durable, one-piece moulded case with snap shut catches.
- Excellent surface finish - ideal for printed logos
- Injection moulded in PP



Part No.	Size	Colour
95 70 11	230 x 187 x 45mm	Black
95 70 01	265 x 225 x 50mm	Black
95 70 21	327 x 275 x 55mm	Black
95 86 000	345 x 284 x 83mm	Black

EURO BAG

- Contemporary design, for multiple uses
- Reliable clip-catches and interlocking hinge
- Elegant matt surface with a fine emboss
- Injection moulded in PP Material and ABS
- Sturdy yet eye-catching
- Range of 12 sizes
- Solid feet



Part No.	Size	Colour
95 91 022	184 x 171 x 44mm	Black
95 91 009	251 x 220 x 52mm	Black

MAXI BAG



Sophisticated case solution with streamlined design and integral pivot catch.

- Durable living hinge
- Moulded in tough ABS
- Scuff resistant surface
- Attractive design & adaptable functionality
- User-friendly, reliable snap-shut catches
- Surface finish suited to printing / branding

Part No.	Size	Colour
95 71 00	387 x 334 x 87mm	Black
95 71 10	447 x 380 x 87mm	Black
95 71 20	447 x 380 x 107mm	Black
95 71 30	447 x 380 x 127mm	Black

MEGA BAG

Robust blow-moulded case of polypropylene. Available in grey or black with lid stays.



Part No.	Size	Colour
91 36 01	455 x 366 x 166mm	Black
91 36 02	455 x 366 x 166mm	Grey
91 30 11	534 x 427 x 157mm	Black
91 30 12	534 x 427 x 157mm	Grey
91 30 21	534 x 427 x 182mm	Black
91 30 22	534 x 427 x 182mm	Grey
91 30 31	534 x 427 x 207mm	Black
91 30 32	534 x 427 x 207mm	Grey



Small component parts boxes are available to suit toolkit applications or as a convenient carrycase version.

Part No.	Compartments	Size
1H031	1	185 x 115 x 32mm
1H030	5	185 x 115 x 32mm
1H150	21	432 x 370 x 85mm

Custom Foam Inlays

Customised CNC Cut foam

CUSTOMIZED SOLUTIONS

If you require cases with CUSTOM FOAM INSERTS. We have positioned ourselves as the leading custom case insert provider. Our long experience in customising superbly fitting foam case interiors for a large range of applications allows us to deliver a superior service, product and price.

Manufactured from high density Polyethylene (PE) foam and faced with a hard layer of chemical resistant Polypropylene (PP), your individual products are digitised into our CAD software to enable customising to individual case layouts.

Industries

- Military
- Police, Fire & Rescue
- Medical
- Photographic & Broadcasting
- Mining
- Emergency, Fire Brigade, Police services
- Industrial
- Diving & Hunting



- In-house design and manufacture
- High Density Closed Cell Foam
- Hard PP top for increased protection and visuals
- Custom made to any configuration



Polypropylene layer, perfect for marking or labeling.

Excellent tool control, missing tools stand out clearly due to the contrast of colour

High density Polyethylene closed cell foam.

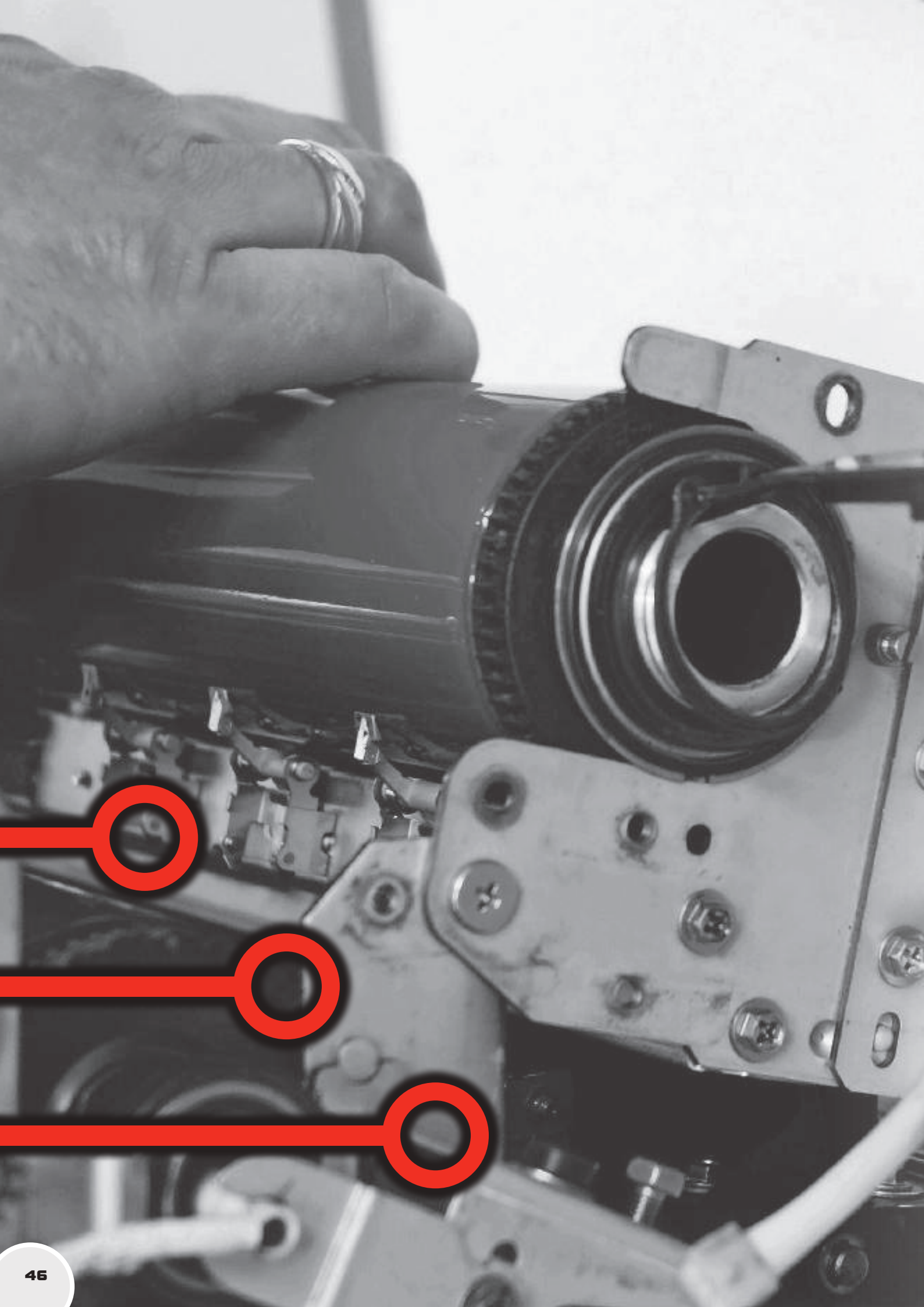
Black foam is standard, however other colours are available depending on QTY required.

Polypropylene layer, available in a range of colours.

Cases fully customised to your requirements

Applications

- Visual Tool Control
- OEM Applications
- Presentation Cases
- Toolbox foam



Hand Tools

Screwdrivers	48-55
Screwdrivers, Blade System	56-58
Hex Keys & Torx Keys.....	59-61
Pliers	62-73
Tweezers	74-75
Service Aids	76-77
Crimping Tools	78-79
Wire Strippers.....	80-83
Cable Shears & Knives.....	84-85
measuring & Marking Tools	86-87
General Engineering Tools	87-89
Torque Screwdrivers/Wrenches.....	90-93
Sockets & Ratchets	94-97
Spanners	98-107
Torches & Portable Lights	108-109

Wiha PicoFinish Screwdrivers

- Ergonomic handle design with soft zone for comfortable work
- Easy-movement rotating cap for rapid hand action
- Colour-coded marking of the drive symbol for easy identification
- Through-hardened, chrome-plated blade made of chrome-vanadium-molybdenum steel for a long tool life
- Wiha ChromTop tip guarantees a secure hold in the screw head
- Ideal for all fine, filigree applications in electronics and precision-mechanics applications, as well as DIY and model-building.



SLOTTED SCREWDRIVERS PICOFINISH



Part No.	⌀	↔	⌀	⌀	↔
260 P08040	0.8	40	0.16	2.0	134
260 P10040	1.0	40	0.18	2.0	134
260 P12040	1.2	40	0.2	2.0	134
260 P15040	1.5	40	0.25	2.0	134
260 P18040	1.8	40	0.3	2.0	134
260 P20040	2.0	40	0.4	2.0	140
260 P25050	2.5	50	0.4	2.5	150
260 P25100	2.5	100	0.4	2.5	200
260 P30050	3.0	50	0.5	3.0	150
260 P30100	3.0	100	0.5	3.0	200
260 P30150	3.0	150	0.5	3.0	250
260 P35060	3.5	60	0.6	3.5	160
260 P40060	4.0	60	0.8	4.0	160
260 P40100	4.0	100	0.8	4.0	200
260 P40150	4.0	150	0.8	4.0	250

PHILLIPS SCREWDRIVERS PICOFINISH



Part No.	⊕	↔	⌀	↔	↔
261 P000	PH000	40	2.0	134	9
261 P00	PH00	40	2.0	134	9
261 P0	PH0	50	3.0	150	18
261 P1	PH1	60	4.0	160	18
261 P1080	PH1	80	4.0	180	18
261 P1150	PH1	150	4.0	250	18

POZIDRIV SCREWDRIVERS PICOFINISH



Part No.	⊕	↔	⌀	↔
262 P0	PZ0	50	3.0	150
262 P1	PZ1	60	4.0	160

TORX® SCREWDRIVERS PICOFINISH



Part No.	⊕	↔	⌀	↔
267 P03	T3	40	2.5	134
267 P04	T4	40	2.5	134
267 P05	T5	40	2.5	134
267 P06	T6	40	2.5	140
267 P07	T7	40	2.5	140
267 P08	T8	40	2.5	140
267 P09	T9	50	3.0	150
267 P10	T10	50	3.0	150
267 P15	T15	60	3.5	160
267 P20	T20	60	4.0	160

HEX SCREWDRIVERS PICOFINISH



Part No.	⊕	↔	⌀	↔
263 P07	0.7	40	0.028	134
263 P09	0.9	40	0.035	134
263 P13	1.3	40	0.050	134
263 P15	1.5	50	-	144
263 P20	2.0	50	5/64	150
263 P25	2.5	60	-	160
263 P30	3.0	60	-	160
263 PZ116	1/16	50	-	144
263 PZ332	3/32	60	-	160
263 PZ764	7/64	60	-	160
263 PZ180	1/8	60	-	160

HEX BALLPOINT SCREWDRIVERS PICOFINISH



Part No.	Tip Size	Length	Tip Width	Tip Depth
264 P13	1.3	40	0.050	134
264 P15	1.5	50	-	150
264 P20	2.0	50	-	150
264 P25	2.5	60	-	160
264 P30	3.0	60	-	160
264P Z116	1/16	50	-	150
264P Z564	5/64	50	-	150
264P Z332	3/32	50	-	150
264P Z764	7/64	60	-	160
264P Z180	1/8	60	-	160
264P Z964	9/64	60	-	160
264P Z532	5/32	60	-	160

NUTDRIVERS PICOFINISH



Part No.	Tip Size	Length	Tip Width	Tip Depth
265 P015	1.5	60		160
265 P018	1.8	60		160
265 P020	2	60		160
265 P025	2.5	60		160
265 P030	3	60		160
265 P032	3.2	60		160
265 P035	3.5	60		160
265 P040	4	60		160
265 P045	4.5	60		160
265 P050	5	60		160
265 P055	5.5	60		160
265 P060	6	60		160
265 P070	7	60		160
265P Z332	3/32	60		160
265P Z764	7/64	60		160
265P Z180	1/8	60		160
265P Z964	9/64	60		160
265P Z532	5/32	60		160
265P Z316	3/16	60		160
265P Z732	7/32	60		160
265P Z140	1/4	60		160

SLOTTED & PHILLIPS SET 6PCS

• Contains:

- 260P 1.5 x 40
2.0 x 40
2.5 x 50
3.0 x 50
- 261P PH00 x 40
PH0 x 50



Part No.	Description
260PK6	PicoFinish Screwdriver Set

BALLPOINT HEX SET PICOFINISH

• Contains:

- 263P 0.9 x 40
- 264P 1.3 x 40
1.5 x 50
2.0 x 50
2.5 x 60
3.0 x 60



Part No.	Description
264PK6	PicoFinish Hexdriver Set

TORX® SET PICOFINISH

• Contains:

-
- 267P T7 x 40
T8 x 40
T9 x 50
T10 x 50
T15 x 60
T20 x 60



Part No.	Description
267PK6	PicoFinish Hexdriver Set

NUTDRIVER SET PICOFINISH

• Contains:

-
- 265P 2.5 x 60
3.0 x 60
3.5 x 60
4 x 60
5 x 60
5.5 x 60



Part No.	Description
265PK6	PicoFinish Nutdriver Set

SLOTTED & PHILLIPS SET 7PCS

• Contains:

-
- 260 1.5 x 40
2.0 x 40
2.5 x 50
3.0 x 50
-
- 261P PH00 x 40
PH0 x 50
PH1 x 60



Part No.	Description
260PK7	PicoFinish Screwdriver Set

Wiha SoftFinish Screwdrivers



- The Wiha SoftFinish® zone features a solid moulded core with soft outer grip. This requires less force, yet achieves 40% more torque than conventional handles.
- The handle is shaped to fit comfortably in the hand, providing maximum torque forces in dry and general working conditions.

SLOTTED SCREWDRIVERS



Part No.	⌀	↔	⌀	●	↔
302020	2.0	65	0.4	2.0	169
302025	2.5	75	0.4	2.5	179
302030	3.0	80	0.5	3.0	184
302030100	3.0	100	0.5	3.0	204
302030150	3.0	150	0.5	3.0	254
302030200	3.0	200	0.5	3.0	304
302035	3.5	100	0.6	3.5	204
302035200	3.5	200	0.5	3.5	304
302040	4.0	100	0.8	4.0	211
302040150	4.0	150	0.8	4.0	261
302040200	4.0	200	0.8	4.0	311
302040300	4.0	300	0.8	4.0	411
302045080	4.5	80	0.8	4.5	191
302045	4.5	125	0.8	4.5	236
302055	5.5	125	1.0	5.5	236
302055150	5.5	150	1.0	5.5	261
302055200	5.5	200	1.0	5.5	311
302055300	5.5	300	1.0	5.5	411
302060100	6.0	100	1.2	6.0	218
302060150	6.0	150	1.2	6.0	268
302065100	6.5	100	1.2	6.0	218
302065	6.5	150	1.2	6.0	268
302065200	6.5	200	1.2	6.0	318
302080150	8.0	150	1.2	7.0	274
302080	8.0	175	1.2	7.0	299
302100	10.0	200	1.6	8.0	324
302120	12.0	250	2.0	8.0	374
302140	14.0	250	2.5	11.0	374

STUBBY SLOTTED SCREWDRIVERS



Part No.	⌀	↔	⌀	●	↔
302040025	4.0	25	0.8	4.0	81
302055025	5.5	25	1.0	5.5	81
302065025	6.5	25	1.2	6.5	81
302080025	8.0	25	1.2	8.0	81

PHILLIPS SCREWDRIVERS



Part No.	⊕	↔	●	↔	↕
3110060	PH0	60	3.0	164	23
3110100	PH0	100	3.0	204	23
3111080	PH1	80	4.5	191	30
3111100	PH1	100	4.5	211	30
3111200	PH1	200	4.5	311	30
3111300	PH1	300	4.5	411	30
3112100	PH2	100	6.0	218	36
3112150	PH2	150	6.0	268	36
3112200	PH2	200	6.0	318	36
3112300	PH2	300	6.0	418	36
3113150	PH3	150	8.0	274	41
3114200	PH4	200	10.0	324	41

PHILLIPS STUBBY SCREWDRIVERS



Part No.	Tip	Length	Shaft Dia	Handle Length	Weight
3111025	PH1	25	4.5	81	34
3112025	PH2	25	6.0	81	34
3113025	PH3	25	8.0	81	34

POZIDRIV SCREWDRIVERS



Part No.	Tip	Length	Shaft Dia	Weight
3130060	PZ0	60	3.0	164
3131080	PZ1	80	4.5	191
3131300	PZ1	300	4.5	411
3132100	PZ2	100	6.0	218
3132300	PZ2	300	6.0	418
3133150	PZ3	150	8.0	274

STUBBY POZIDRIV



Part No.	Tip	Length	Shaft Dia	Weight
3131025	PZ1	25	4.5	81
3132025	PZ2	25	6.0	81
3133025	PZ3	25	8.0	81

TORX® SCREWDRIVERS



Part No.	Tip	Length	Shaft Dia	Weight
362 T3	T3	60	2.5	164
362 T4	T4	60	2.5	164
362 T5	T5	60	2.5	164
362 T6	T6	60	3.5	164
362 T7	T7	60	3.5	164
362 T8	T8	60	3.5	164
362 T9	T9	60	4.0	171
362 T10	T10	80	4.0	191
362 T15	T15	80	4.0	191
362 T20	T20	100	4.0	211
362 T25	T25	100	4.5	211
362 T27	T27	115	5.5	233
362 T30	T30	115	6.0	233
362 T40	T40	130	7.0	254
362 T45	T45	130	8.0	254

SECURITY TORX® SCREWDRIVERS



Part No.	Tip	Length	Shaft Dia	Weight
362 TR07	T7H	60	3.5	164
362 TR08	T8H	60	3.5	164
362 TR09	T9H	60	4.0	171
362 TR10	T10H	80	4.0	191
362 TR15	T15H	80	4.0	191
362 TR20	T20H	100	4.0	211
362 TR25	T25H	100	4.5	211
362 TR27	T27H	115	5.5	233
362 TR30	T30H	115	6.0	233
362 TR40	T40H	130	7.0	254

NUTDRIVERS



Part No.	Tip	Length	Weight
341040	4	125	236
341050	5	125	236
341055	5.5	125	236
341060	6	125	236
341070	7	125	243
341080	8	125	243
341090	9	125	243
341100	10	125	243
341110	11	125	243
341120	12	125	249
341130	13	125	249
341140	14	125	249
341150	15	125	249
341160	16	125	249
341170	17	125	249
U347 53	3/16	125	231
U347 59	1/4	125	238
U347 65	5/16	125	238
U341 71	3/8	125	238
U347 74	7/16	125	246
U347 77	1/2	125	246

NUTDRIVERS WITH MAGNETS



Part No.	Tip	Length	Weight
341 MAG55	5.5	125	236
341 MAG55-10	5.5	250	367
341 MAG70	7.0	125	243

FOR HEX NUTS - FLEXIBLE SHAFT



Part No.	⊙	↔	↔
372050	5	150	261
372055	5.5	150	261
372060	6	150	261
372070	7	150	268
372080	8	150	268
372100	10	175	293
372130	13	175	293
38614	1/4	150	268

BIT HOLDER 1/4" - MAGNETIC



Part No.	⊙	↔	↔
38414125	1/4	125	225
38414300	1/4	300	400

FOR HEX SCREWS



Part No.	⊙	↔	↔
356025	2.5	75	179
356030	3	75	179
356040	4	75	186
356050	5	75	186
356060	6	100	218
356080	8	100	218

FOR HEX SCREWS - BALL POINT



Part No.	⊙	↔	↔
36701501	1.5	75	179
36702001	2	100	204
36702501	2.5	100	204
36703001	3	100	204
36704001	4	100	211
36705001	5	100	211
36706001	6	125	243
36708001	8	150	268
36710001	10	150	271
36712001	12	150	271

SCREWDRIVER SET

- Contains:
- 302 ⊙ 3.5 x 100
4.5 x 125
5.5 x 150
6.5 x 150
- 311 ⊕ PH1 x 80
PH2 x 100



Part No.	Description
302 HK6 SO	Screwdriver Set

TORX® SET

- Contains:
- 362 ⊕ T10 x 80
T15 x 80
T20 x 100
T25 x 100
T30 x 115
T40 x 130



Part No.	Description
362 K6 SO	TORX® Screwdriver Set

NUTDRIVER SET

- Contains:
- 341 ⊙ 5.5 x 125
7 x 125
8 x 125
10 x 125
13 x 125



Part No.	Description
341 K5	Nutdriver Set

NUTDRIVER SET, INTERCHANGEABLE BLADES

- Contains:
- ⊙ 5.0 x 170
5.5 x 170
6.0 x 170
7.0 x 170
8.0 x 170
10.0 x 170
13.0 x 170



Part No.	Description
U 106T8	Nutdriver Set in Wallet

NEON MAINS TEST SCREWDRIVER



Part No.	⊙	↔	↔	↔
2553L	3.0	60	135	14

PHILLIPS SCREW-HOLDING DRIVER



Part No.	⊕	↔	↔	↔
397-0	PH0	100	195	24
397-1	PH1	125	230	28
397-2	PH2	175	290	32

SLOTTED SCREW-HOLDING DRIVER



Part No.	⊖	↔	↔	↔
398-25	2.5	75	186	30
398-30	3.0	100	211	30
398-40	4.0	125	243	36
398-50	5.0	150	268	36
398-60	6.0	175	293	36

OFFSET SLOTTED SCREWDRIVERS



Part No.	⊖	↔	↔	↔	⊖
207035	3.5	0.6	90	8.5	3.5
207040	4.0	0.8	100	9.0	4.0
207055	5.5	1.0	125	10.5	5.5
207065	6.5	1.2	125	13.5	6.5
207080	8.0	1.2	150	17.0	8.0
207100	10.0	1.6	175	24.0	9.0
207120	12.0	2.0	200	27.0	10.0

OFFSET PHILLIPS SCREWDRIVERS



Part No.	⊕	⊕	↔	↔	⊖
1611	PH1	PH2	125	14.5	5.5
1612	PH2	PH3	150	21.0	8.0
1613	PH3	PH4	200	25.0	10.0

MAGNETISER/DEMAGNETISER



Part No.	Description
400 10	Magnetiser/Demagnetiser

BIT HOLDER SET WITH BITS

NEW



Part No.	⊖	⊕	⊕	⊕
3809-8-STD	5.5, 6.5mm	PH1, 3x PH2		
3809-8-TORX			T6,T8,T10,T15, T20,T25,T30,T40	
3809-8-PPS	6.5mm	PH1, PH2, PH3	T15, T20, T25	PZ2

STUBBY BIT HOLDER SET

NEW



Part No.	⊖	⊕	⊕	⊕
3801-6-STD	4.5, 6.5, 8.0mm	PH1, PH2, PH3		
3801-6-TORX			T10,T15, T20, T25,T30,T40	
3801-6-PPS	4.5, 6.5, 8.0mm			PZ1, PZ2, PZ3

MINI RATCHET SET

- 44 piece mini ratchet set, spline drive 12° ratcheting arc



Part No.	Description
117-735	Spline Ratchet Set

STUBBY BIT-HOLDING DRIVER



Part No.	⊕	⊖	↔	↔	⬡
DST-06	PH1	4.5	15	41	1/4"
DST-07	PH2	6.0	16	42	1/4"

RATCHET DRIVE BITS SET



0.050	9/64			
1/16	5/32			
5/64	3/16			
3/32	7/32			
7/64	1/4			
1/8	5/16			
1/4" square drive adapter	6.35 x 25	9.0 x 25	⊕	PH1 x 25 PH2 x 25

- Contains Ratchet Driver, handle, extension and 17 bits:

Part No.	Description
90-200	Ratchet Set, 20 pcs

Wiha ESD Screwdrivers

SoftFinish® German design



- The Wiha SoftFinish® ESD screwdrivers correspond to the internationally specified ESD standards DIN EN 61340-5-1/61340-5-2.
- The electrostatic energy is discharged in a controlled manner, the surface resistance of the handle is in the range of $10^6 - 10^9$ Ohms.



ESD SLOTTED SCREWDRIVERS



Part No.	⌀	↔	⌀	⌀	↔
302 ESD025	2.5	75	0.4	2.5	179
302 ESD030	3.0	100	0.4	3.0	204
302 ESD040	4.0	100	0.8	4.0	211
302 ESD055	5.5	125	1.0	5.5	236
302 ESD065	6.5	150	1.2	6.0	268

ESD PHILLIPS SCREWDRIVERS



Part No.	⊕	↔	⌀	↔	↔
311 ESD0060	PH0	60	3.0	164	23
311 ESD1080	PH1	80	4.5	191	30
311 ESD2100	PH2	100	6.0	218	36

If you did not find what you were looking for, please call our sales team now!

ESD TORX® SCREWDRIVERS



Part No.	⊕	↔	⌀	↔	↔
362 ESD-T4	T4	60	2.5	164	23
362 ESD-T5	T5	60	3.5	164	23
362 ESD-T6	T6	60	3.5	164	23
362 ESD-T8	T8	60	3.5	164	23
362 ESD-T9	T9	60	4.0	171	30
362 ESD-T10	T10	80	4.0	191	30

ESD SLOTTED & PHILLIPS SCREWDRIVER SET

- Contains:

302ESD

3.0 x 100
4.0 x 100



311ESD



PH0 X 60
PH1 x 80
PH2 X 100



Part No.	Description
302ESDHK501	ESD Screwdriver Set

Wiha SoftFinish® Electric Screwdrivers

- The high quality blade insulation is moulded directly onto the blade and therefore guarantees safety when working on live equipment up to 1500V DC or 1000V AC.
- To maintain this safety, each screwdriver of the SoftFinish® Electric series is individually tested in a water bath at 10,000 Volts, according to DIN EN 60900.



SLOTTED SCREWDRIVER INSULATED



Part No.	⌀	↔	⌀	↔	↕
320N0200060	2.0	60	0.4	164	23
320N025075	2.5	75	0.4	179	23
320N030100	3.0	100	0.5	204	23
320N035100	3.5	100	0.6	204	23
320N040100	4.0	100	0.8	211	30
320N045125	4.5	125	1.0	236	30
320N045175	4.5	175	1.0	286	30
320N055125	5.5	125	1.0	243	36
320N055175	5.5	175	1.0	293	36
320N060150	6.0	150	1.2	268	36
320N065150	6.5	150	1.2	268	36
320N080175	8.0	175	1.2	299	41

PHILLIPS SCREWDRIVER INSULATED



Part No.	⊕	↔	↔	↕
321N0	PH0	60	164	23
321N1	PH1	80	191	30
321N2	PH2	100	218	36
321N3	PH3	150	268	41

NUTDRIVER INSULATED



Part No.	⌀	↔	↔	↕
322055	5.5	125	236	30
322060	6	125	236	30
322070	7	125	243	36
322080	8	125	243	36
322090	9	125	243	36
322100	10	125	243	36
322110	11	125	243	41
322120	12	125	243	41
322130	13	125	243	41

SLOTTED & PHILLIPS SCREWDRIVER SET

- Contents:

320N

3.0 x 100
4.0 x 100
5.5 x 100
6.5 x 150



321 N



PH1 X 180
PH2 X 100



Part No.	Description
320NK6	VDE Screwdriver Set

Wiha Reversible Blade Systems

The Flexible, Versatile Interchangeable Tools

The Wiha SYSTEM 6 and SYSTEM 4 reversible blade systems are high-quality, industrial quality products, made with state-of-the-art materials and finished to the highest standard of workmanship. The 150mm long reversible blades are made of high quality chrome-vanadium-molybdenum steel, are through hardened and chrome plated.

The various handles are especially ergonomically designed and guarantee optimal force transmission.

The Wiha reversible blade systems provide the right tool for every application - ideal for industry, trade and the ambitious handyman

SYSTEM 6 HANDLES



Part No.	Description	⊙	↔	⬆
284 SF	System 6 Handle	6.0	115	36
284 ESD	ESD Safe Handle	6.0	115	36

SYSTEM 6 STARTER SET



NEW

Part No.	⊙	⊕	⊙
281 T6	3.5-4.5, 4.0-6.0, 5.5-6.5	PH1-PH2	5.0-5.0

SYSTEM 6 NUTDRIVER SET



NEW

Part No.	⊙
U106 T8	5.0, 5.5, 6.0, 7.0, 8.0, 10.0, 13.0

SYSTEM 6 NUTDRIVER SET

NEW



Part No.	⊙
U106 T12	4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 13mm

SYSTEM 6 SLOTTED BLADES



Part No.	⊙	⊙	↔	⬆
276270	3.5	4.5	150	6.0
006297	4.0	6.0	150	6.0
006303	5.5	6.5	150	6.0

SYSTEM 6 SLOTTED / PHILIPS BLADES



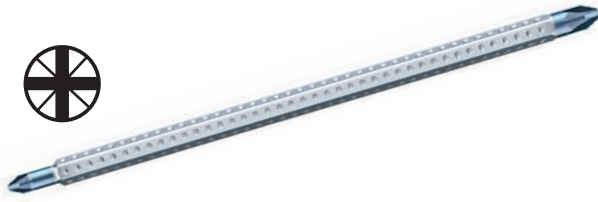
Part No.	⊙	⊕	↔	⬆
006655	4.0	PH1	150	6.0
006662	6.0	PH2	150	6.0
006679	6.5	PH3	150	6.0

SYSTEM 6 PHILIPS BLADES



Part No.	⊕	⊕	↔	⬆
006310	PH1	PH2	150	6.0
276287	PH2	PH3	150	6.0

SYSTEM 6 POZI BLADES



Part No.				
006327	PZ1	PZ2	150	6.0
276294	PZ2	PZ3	150	6.0

SYSTEM 6 BALL END HEX BLADES



Part No.				
006358	2.5	2.5	150	6.0
006365	3	3	150	6.0
006372	4	4	150	6.0
006389	5	5	150	6.0
006396	6	6	150	6.0

SYSTEM 6 TORX BLADES



Part No.				
006549	T6	T8	150	6.0
006556	T7	T9	150	6.0
006563	T10	T15	150	6.0
006570	T20	T25	150	6.0
006587	T30	T40	150	6.0

SYSTEM 6 BIT HOLDER BLADE



Part No.			
U10900	1/4	164	6.0

SYSTEM 4 HANDLE



- System 4 Handle for telescopic, reversible blades (adjustable 18-90mm length)



Part No.	Description			
2691	System 4 Handle	4.0	105	23

SYSTEM 4 BLADES SET 4PC

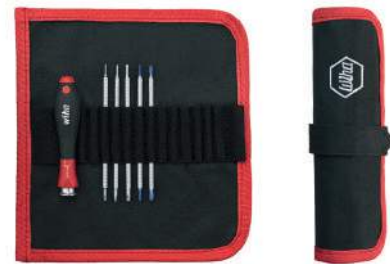
NEW



Part No.		
269 T4	2.0-PH00, 3.0-PH0, 4.0-PH1	

SYSTEM 4 BLADES SET 6PC

NEW



Part No.				
269 T6	1.5-3.0, 2.0-3.5, 2.5-4.0		PH000 - PH00, PH0 - PH1	

SYSTEM 4 BLADES SET 11PC

NEW



Part No.						
3809-8-STD	1.5-3.0, 2.0-3.5, 2.5-4.0		PH000 - PH00, PH0 - PH1		1.3, 1.5, 2.0, 2.5, 3.0	

NOTE: Many more interchangeable blades and sets available to order, please enquire.

Ratcheting Screwdrivers



Access
- Interchangeable shafts allow access to nearly any fastener

Productivity
- 8° ratcheting mechanism
- Ratcheting or non-ratcheting mode

Design
- Dual durometer ergonomic shape handle helps reduce fatigue and improve grip and high torque

Design
- Removable end cap allows for convenient storage for up to 12 bits

GEARDRIVER™ RATCHETING SCREWDRIVER SYSTEM

Part No.	Description
GW 890001	GearDriver™ Handle
GW 890005	Stubby GearDriver™ Handle
GW 890006	GearDriver™ T-Handle
GW 310901	GearDriver™ Magnetic Bit Shaft 3-1/2"
GW 310902	GearDriver™ Magnetic Bit Shaft 6"
GW 310903	GearDriver™ Magnetic Bit Shaft 10"
GW 311901	GearDriver™ 1/4" Dr. Skt. Shaft 3-1/2"
GW 311902	GearDriver™ 1/4" Dr. Skt. Shaft 6"
GW 311903	GearDriver™ 1/4" Dr. Skt. Flex Shaft 6ww"
GW 311904	GearDriver™ 1/4" Dr. Skt. Shaft 10"
GW 312901	GearDriver™ adaptor for 13mm Vortex™ Skt
GW 890008	11" 180° Flex Bit Shaft
GW 890009	11" 180° Flex Socket Shaft

STD RATCHETING DRIVER SET

GearDriver™ Set
1 x GearDriver™ Handle, 3 x Magnetic Bit Driver Shafts: 3-1/2", 6" & 10", 3 x 1/4" Dr. Socket Shafts: 3-1/2", 6" & 10", 1 x Flexible Shaft - 6" 1/4" socket to bit adaptor, 30 x Drive Bits



Part No.	Description
GW 8939	39 Piece Set

STUBBY RATCHETING DRIVER SET

Stubby GearDriver™ Set
1 x Stubby GearDriver™ Handle, 3 x Magnetic Bit Driver Shafts: 3-1/2", 6" & 10", 1 x 180° Cable Drive, 1 x Flex Bit Drive Shaft: 11", 10 x Drive Bits



Part No.	Description
GW 8915	15 Piece Set

GEARDRIVER NUT DRIVER SET SAE

8 Piece SAE GearDriver™ Nut Driver Set
1 Stubby GearDriver Handle™, 7 Interchangeable Fractional Nut Driver Shafts: 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2"



Part No.	Description
GW 8908	SAE Nut Driver Set

GEARDRIVER NUT DRIVER SET METRIC

8 Piece Metric GearDriver™ Nut Driver Set
1 Stubby GearDriver™ Handle™, 7 Interchangeable Metric Nut Driver Shafts: 5, 6, 7, 8, 9, 10, 11, 12mm



Part No.	Description
GW 8909	Metric Nut Driver Set

GEARDRIVER SAE NUT DRIVER SHAFTS



Part No.	Description
GW 890060	3/16" Nut Driver Shaft
GW 890080	1/4" Nut Driver Shaft
GW 890100	5/16" Nut Driver Shaft
GW 890110	11/32" Nut Driver Shaft
GW 890120	3/8" Nut Driver Shaft
GW 890140	7/16" Nut Driver Shaft
GW 890160	1/2" Nut Driver Shaft

GEARDRIVER METRIC NUT DRIVER SHAFTS



Part No.	Description
GW 891050	5mm Nut Driver Shaft
GW 891060	6mm Nut Driver Shaft
GW 891070	7mm Nut Driver Shaft
GW 891080	8mm Nut Driver Shaft
GW 891090	9mm Nut Driver Shaft
GW 891100	10mm Nut Driver Shaft
GW 891110	11mm Nut Driver Shaft
GW 891120	12mm Nut Driver Shaft

Wiha Hex - Keys



MAGICRING®

- Suitable for removing sunkhead standard screws and for inserting and working on screws in horizontal, inclined or deep pocket holes
- Holds screws made of steel and non-magnetisable materials such as stainless steel, titanium and aluminium
- Ideal for applications where there is insufficient space for a simple hex key
- No troublesome searching for dropped screws

BALLPOINT HEX WITH MAGICRING®

- Ballpoint Hex L-key Set in ProStar, with MagicRing®
- Chrome-plated
- 9 pieces



Part No.	Set Contents						
369 RS9	1.5	2	2.5				(non ball type)
	3	4	5	6	8	10	(ballpoint type)

BALLPOINT HEX, STANDARD SERIES

- Ballpoint Hex L-key Set in Holder
- Manganese-phosphated



Part No.	Set Contents								
369 H9B	1.5	2	2.5	3	4	5	6	8	10
369 HZ8	5/64	3/32	1/8	5/32	3/16	7/32	1/4	5/16	
369SZ13B	0.05	1/16	5/64	3/32	7/64	1/8	9/64	5/32	
	3/16	7/32	1/4	5/16	3/8				

- Ballpoint Hex L-key Set in ProStar, with MagicRing®
- Chrome-plated
- 13 pieces, inch sizes



Part No.	Set Contents												
369 RSZ13	0.05	1/16	5/64	3/32	7/64								(non ball type)
	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8					(ballpoint Type)

HEX L-KEYS, SHORT SERIES

- Hex L-key set, short
- Nickel-plated
- In holder



Part No.	Set Contents								
351 H7	1.5	2	2.5	3	4	5	6		
351 H9	1.5	2	2.5	3	4	5	6	8	10
351 HZ8	5/64	3/32	1/8	5/32	3/16	7/32	1/4	5/16	
351 SZ13	0.05	1/16	5/64	3/32	7/64	1/8	9/64	5/32	
	3/16	7/32	1/4	5/16	3/8				

If you did not find what you were looking for, please call our sales team now!

BALLPOINT HEX CHROME SERIES

- Ballpoint Hex L-key Set in Holder
- Chrome-plated, 9 pcs



Part No.	Set Contents
369 H9C	1.5 2 2.5 3 4 5 6 7 8

POCKETSTAR FOR HEX SCREW, BALLPOINT WITH MAGICRING®

- Ballpoint Hex keys in fold out holder
- With MagicRing®
- In large PocketStar



Part No.	Set Contents
369 RP7	2 2.5 3 4 5 6 8
369 RPZ9	5/64 3/32 7/64 1/8 9/64 5/32 3/16 7/32 1/4

POCKETSTAR FOR HEX SCREW, STANDARD TYPE

- Hex keys in fold out holder
- In large PocketStar



Part No.	Set Contents
351 PG7	2 2.5 3 4 5 6 8
351 PZ9	5/64 3/32 7/64 1/8 9/64 5/32 3/16 7/32 1/4

T-HANDLE HEX DRIVERS

- Hex Driver with T-handle
- Chrome-vanadium steel, through hardened, nickel-plated blade
- Wiha T-handle
- For high torque transfer with minimal effort



Part No.	Hex Size	Length	Blade Length	Blade Width	Blade Thickness
33420	2	100	-	126	80
33425	2.5	100	-	126	80
33430	3	150	-	176	80
33440	4	150	-	176	80
33450	5	150	-	182	100
334 Z332	3/32	150	182	80	26
334 Z764	7/64	150	182	80	26
334 Z180	1/8	150	182	80	26
334 Z964	9/64	150	182	80	26
334 Z532	5/32	150	182	80	26
334 Z316	3/16	150	182	100	32
334 Z732	7/32	150	182	100	32
334 Z140	1/4	150	182	100	32
334 Z516	5/16	150	182	100	32
334 Z380	3/8	150	182	120	38

WIHA SHORT ALLEN KEYS (METRIC AND IMPERIAL)



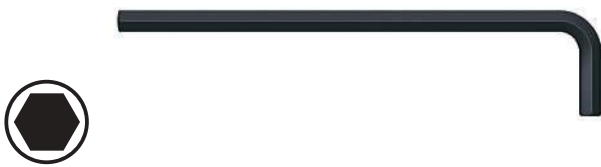
Part No.	Hex Size	Length	Blade Length	Metric Equ.
351 1.5	1.5	46	15	-
351 2.0	2	51	18	-
351 2.5	2.5	57	20	-
351 3.0	3	64	23	-
351 3.5	3.5	70	26	-
351 4.0	4	72	29	-
351 4.5	4.5	80	31	-
351 5.0	5	83	33	-
351 5.5	5.5	90	35	-
351 6.0	6	94	38	-
351 7.0	7	99	41	-
351 8.0	8	105	44	-
351 9.0	9	114	47	-
351 10	10	119	50	-
351 11	11	129	53	-
351 12	12	134	57	-
351 14	14	151	70	-
351 17	17	173	80	-
351 19	19	195	89	-
351Z0.05	0.05	41	13	1.27
351Z116	1/16	47	16	1.59
351Z564	5/64	51	18	1.98
351Z332	3/32	55	22	2.38
351Z764	7/64	58	21	2.78
351Z18	1/8	61	23	3.18
351Z964	9/64	65	25	3.57
351Z532	5/32	72	29	3.97
351Z316	3/16	76	30	4.76
351Z732	7/32	84	34	5.56
351Z14	1/4	94	37	6.35
351Z516	5/16	106	43	7.94
351Z38	3/8	117	48	9.53
351Z12	1/2	143	59	12.7
351Z916	9/16	158	64	14.29
351Z58	5/8	178	71	15.88
351Z34	3/4	198	89	19.05

WIHA BALLPOINT IMPERIAL ALLEN KEYS



Part No.	Hex Size	Length	Blade Length	Metric EQ
369Z0.05	0.05	72	13	1.27
369Z116	1/16	80	15	1.59
369Z564	5/64	88	18	1.98
369Z332	3/32	101	20	2.38
369Z764	7/64	111	21	2.78
369Z18	1/8	121	23	3.18
369Z964	9/64	136	27	3.57
369Z532	5/32	148	29	3.97
369Z316	3/16	163	33	4.76
369Z732	7/32	176	36	5.56
369Z14	1/4	191	38	6.35
369Z516	5/16	210	43	7.94
369Z38	3/8	232	50	9.53

WIHA METRIC ALLEN KEYS



Part No.	Hex Size	Length	Width
352B 0.7	0.7	67	6
352B 0.9	0.9	70	9
352B 1.3	1.3	80	13
352B 1.5	1.5	91	15
352B 2.0	2	101	18
352B 2.5	2.5	113	20
352B 3.0	3	128	23
352B 4.0	4	142	29
352B 5.0	5	163	33
352B 6.0	6	184	38
352B 7.0	7	194	41
352B 8.0	8	206	44
352B 10.0	10	231	50
352B 12.0	12	259	57
352B 14.0	14	291	70

WIHA METRIC ALLEN KEYS



Part No.	Hex Size	Length	Width
352 1.5	1.5	91	15
352 2.0	2	101	18
352 2.5	2.5	113	20
352 3.0	3	128	23
352 4.0	4	142	29
352 5.0	5	163	33
352 6.0	6	184	38
352 7.0	7	194	41
352 8.0	8	206	44
352 10	10	231	50
352 12	12	259	57
352 14	14	291	70
352 17	17	333	80
352 19	19	375	89

WIHA BALLPOINT METRIC ALLEN KEYS



Part No.	Hex Size	Length	Width
369 1.5	1.5	91	15
369 2.0	2	101	18
369 2.5	2.5	113	20
369 3.0	3	128	23
369 4.0	4	142	29
369 5.0	5	163	33
369 6.0	6	184	38
369 7.0	7	194	41
369 8.0	8	206	44
369 10.0	10	231	50
369 12.0	12	259	57

T-HANDLE HEX SET WITH MAGICRING®

- T-handle Hex Set with MagicRing®
- Chrome-plated
- 6 pieces



Part No.	Set Contents
334RVB	3x100, 4x150, 5x150, 6x150 8x200, 10x200

Wiha Torx - Keys

- Ballpoint Hex keys in fold out holder
- With MagicRing®
- In large PocketStar



Part No.	Set Contents
363 HM7	T6 T7 T8 T9 T10 T15 T20
363 H9	T8 T9 T10 T15 T20 T25 T27 T30 T40

BALLPOINT TORX® L-KEYS

- BallpointTorx L-key Set in Holder
- Manganese -phosphated, 8 pcs



Part No.	Set Contents
366K H8	T9 T10 T15 T20 T25 T27 T30 T40

Wiha Professional Pliers

German precision in your hand



Dynamic Joint
New joint construction for long-term cutting efficiency. The dynamic joint provides effective low loss of force -Means up to 40% less force required for cutting.

- Drop forged from the best selected, suitable carbon or chrome-vanadium steels for the best technical properties
- Individually hardened and tempered with a high frequency induction procedure for optimum hardness
- Cutting edges are additionally induction hardened to 64 HRC for maximum service life and cutting results. Gripping teeth are also additionally hardened.

COMBINATION PLIERS



- Extra long cutting edge for flat and round cables
- Serrated gripper jaws
- Cutting edges additionally inductively hardened to approx. 60 HRC

Part No.	mm	inches	○	○	○
Z010 16005	160	6 1/2	3.0	2.0	-
Z010 18005	180	7	3.3	2.2	-
Z010 20005	200	8	3.6	2.5	-
Z010 22505	225	9	4.4	3.0	2.5

HEAVY DUTY DIAGONAL CUTTERS



- Semi-circular, Swedish style head
- Low wear lap joint, riveted and able to withstand high loads

Part No.	mm	inches	○	○	○
Z120 14005	140	5 1/2	4.0	2.5	1.8
Z120 16005	160	6 1/2	4.0	2.8	2.0
Z120 18005	180	7	4.0	3.0	2.5
Z120 20005	200	8	4.2	3.0	2.5

SNIPE NOSE PLIERS



- Straight head shape
- Extra long cutting edge for flat and round cables

Part No.	mm	inches	○	○
Z050 16005	160	6 1/2	2.5	1.6
Z050 20005	200	8	2.8	1.8

BENT SNIPE NOSE PLIERS



- Angled head, approx. 40°
- Extra long cutting edge for flat and round cables

Part No.	mm	inches	○	○
Z051 16005	160	6 1/2	2.5	1.6
Z051 20005	200	8	2.8	1.8

Details of cutting results of cutting pliers.

Symbol	Types of wire	Example	Tensile strength ca. N/mm²
○	Soft wire	Copper, aluminium	220 - 250
○	Medium hard wire	Iron nail	750 - 800
●	Hard wire	Spring wire, steel nails	1.600 - 1.800
●	Piano wire	Hardened spring steel	2.200 - 2.300

Test wires standardised in DIN ISO 5744

FLAT NOSE PLIERS



- Extra long head
- Gripping surfaces serrated and inductively hardened

Part No.	mm	inches
Z070 16005	160	6 1/2

ROUND NOSE PLIERS



- Extra long head
- Gripping surfaces serrated and inductively hardened

Part No.	mm	inches
Z090 16005	160	6 1/2

WIRE STRIPPER



- Precision cutting edge prism for even cutting of cable insulation
- An easy to use adjusting screw allows the stripping diameter to be set

Part No.	mm	inches
Z550 16005	160	6 1/2

MULTIGRIPS - BOX JOINT



- Narrow head, appropriate for work in small spaces
- Precision adjustment joint providing optimum adaptation to object to be gripped

Part No.	mm	inches	Style
Z210 25001	250	10	Slip-Joint
Z220 25005	250	10	Push Button

MULTIGRIPS - QUICK FIX



- Narrow head, appropriate for work in small spaces
- Automatic precision adjustment joint providing optimum adaptation to object to be gripped

Part No.	mm	inches	Style
Z230 05 250	250	10	Quick fix

CIRCLIP PLIERS, INTERNAL/STRAIGHT



- Straight shape head
- Drop forged, cylindrical precision tips

Part No.	mm	inches	☺
Z330 J00	140	5	8-13
Z330 J10	140	5	12-25
Z330 J20	180	7	19-60

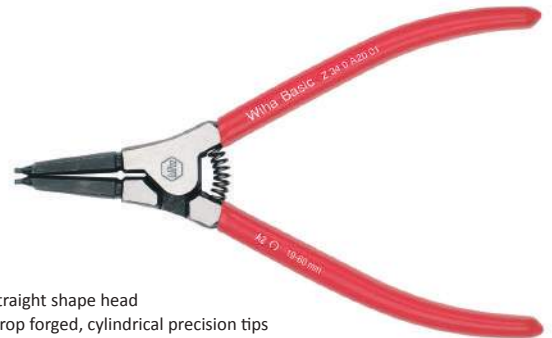
CIRCLIP PLIERS, INTERNAL/BENT



- Head shape D: 90° angle shape
- Drop forged, cylindrical precision tips

Part No.	mm	inches	☺
Z331 J01	140	5	8-13
Z331 J11	140	5	12-25
Z331 J21	180	7	19-60

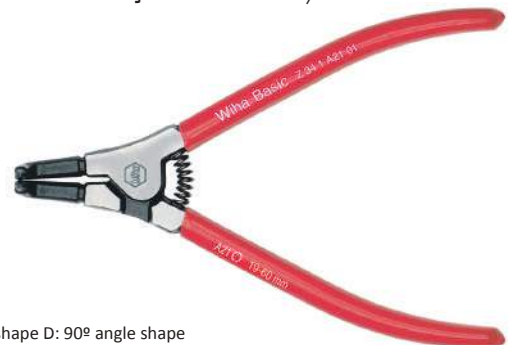
CIRCLIP PLIERS, EXTERNAL/STRAIGHT



- Straight shape head
- Drop forged, cylindrical precision tips

Part No.	mm	inches	☺
Z340 A00	140	5	3-10
Z340 A10	140	5	10-25
Z340 A20	180	7	19-60

CIRCLIP PLIERS, EXTERNAL/BENT



- Head shape D: 90° angle shape
- Drop forged, cylindrical precision tips

Part No.	mm	inches	☺
Z341 A01	140	5	3-10
Z341 A11	140	5	10-25
Z341 A21	180	7	19-60

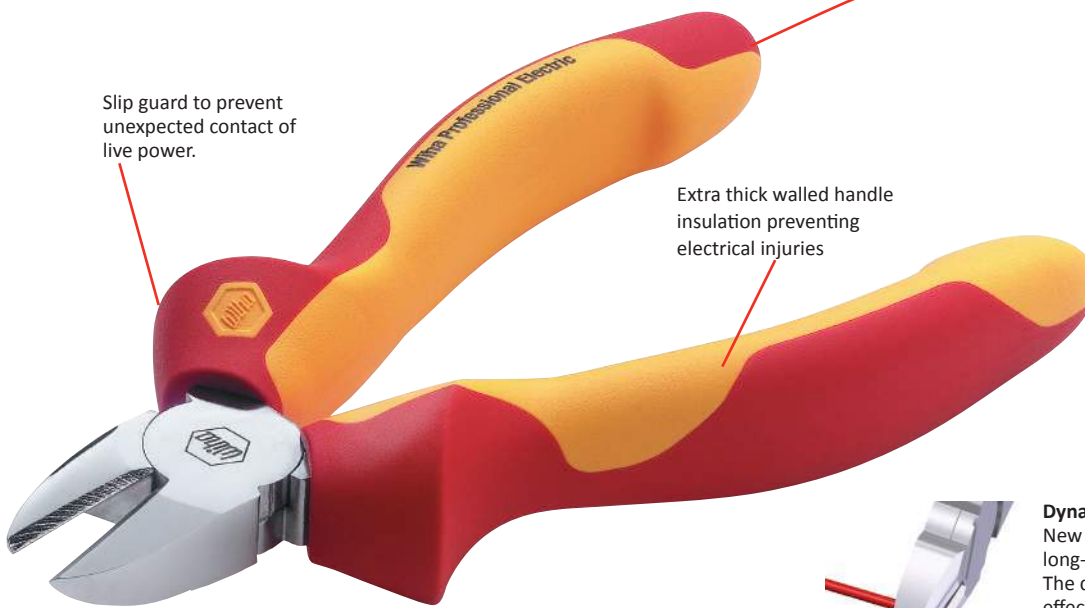
Wiha Electric VDE Pliers

Professional electricians pliers

Soft, rounded handle ends, durable and impact resistant

Slip guard to prevent unexpected contact of live power.

Extra thick walled handle insulation preventing electrical injuries



Dynamic Joint
New joint construction for long-term cutting efficiency. The dynamic joint provides effective low loss of force - Up to 40% less force required for cutting.

- Tested in accordance with IEC DIN EN 60900 and authorised for use on parts electrically live up to 1000V AC or 1500V DC, taking all other safety requirements into consideration.
- Comprehensive mechanical and electrical material tests ensure that the handle insulation contains all the properties to provide maximum user safety under all conditions. Each set of pliers is then individually tested by means of a 10 000V electric shock test.

VDE COMBINATION PLIERS



- Extra long cutting edge for flat and round cables
- Serrated gripper jaws
- Cutting edges additionally inductively hardened to approx. 60 HRC

Part No.	mm	inches	○	○	○
Z010 160VDE	160	6 1/2	3.0	2.0	-
Z010 180VDE	180	7	3.3	2.2	-
Z010 200VDE	200	8	3.6	2.5	-
Z010 225VDE	200	8	3.8	2.7	2.3

VDE SIDE CUTTERS



- Semi-circular, Swedish style head
- Low wear lap joint, riveted and able to withstand high loads

Part No.	mm	inches	○	○	○
Z120 140VDE	140	5 1/2	4.0	2.5	1.8
Z120 a160VDE	160	6 1/2	4.0	2.8	2.0
Z120 180VDE	180	7	4.6	3.0	2.5

VDE SNIPE NOSE PLIERS



- Straight head shape
- Extra long cutting edge for flat and round cables

Part No.	mm	inches	○	○
Z050 160VDE	160	6 1/2	2.5	1.6
Z050 200VDE	200	8	2.8	1.8

VDE WIRE STRIPPER



- Precision cutting edge prism for even cutting of cable insulation
- An easy to use adjusting screw allows the stripping diameter to be set

Part No.	mm	inches
Z550 160VDE	160	6 1/2

Details of cutting results of cutting pliers.

Symbol	Types of wire	Example	Tensile strength ca. N/mm ²
○	Soft wire	Copper, aluminium	220 - 250
○	Medium hard wire	Iron nail	750 - 800
●	Hard wire	Spring wire, steel nails	1.600 - 1.800
●	Piano wire	Hardened spring steel	2.200 - 2.300

Test wires standardised in DIN ISO 5744

Ceta Form Pliers

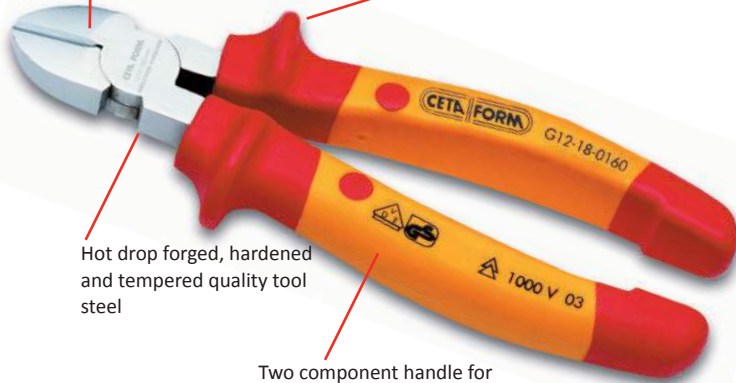
Lets talk Turkey now

Induction hardened,
precision ground cutting
edges- mat chrome plated

Ergonomically designed
handle for comfort with anti-
slip guards

Hot drop forged, hardened
and tempered quality tool
steel

Two component handle for
high power transmission,
dielectric tested for safety



Ceta Form pliers are quality pliers made in Turkey, offering excellent value for money. All pliers are individually tested to 10000V according to IEC900, DIN EN 60900 and VDE 0680/2.

COMBINATION PLIERS



Part No.	mm	⊙	⊙
G10 18 0160	160	3.1	2.0
G10 18 0180	180	3.4	2.2
G10 18 0200	200	3.8	2.5

LONG NOSE PLIERS



Part No.	mm	⊙
G15 18 0160	160	2.5
G15 18 0200	200	2.8

SIDE CUTTERS



Part No.	mm	⊙	⊙
G12 18 0140	140	2.5	1.8
G12 18 0160	160	2.8	2.0
G12 18 0180	180	4.0	2.5

BENT LONG NOSE PLIERS



Part No.	mm	⊙
G16 18 0160	160	2.5
G16 18 0200	200	2.8

WIRE STRIPPERS



Part No.	mm	Capacity
G20 18 0160	160	5.0 OD/10mm2

INSULATED CABLE SHEAR



Part No.	mm	Capacity
G20 18 0160	160	5.0 OD/10mm2

MULTIGRIPS



Part No.	mm	Capacity
G25 58 0250	250	36mm

PLIER SET



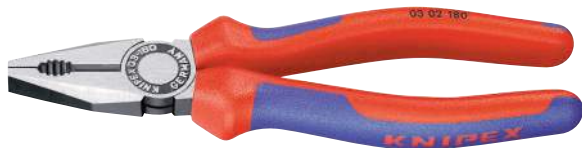
Convenient selection of VDE 1000V insulated pliers in display box. Ultimate safety with comfort

Part No.	Contents
G99 18 0203	C/Plier 180mm, S/cutter 160mm & L/nose 160mm

Knipex Pliers

The Ultimate in German Plier Technology

COMBINATION PLIERS



Part No.	mm	○	●
KPX 0302 160	160	3.1	2.0
KPX 0302 180	180	3.4	2.2
KPX 0302 200	200	3.8	2.5

LONG NOSE PLIERS



Part No.	mm	○	●
KPX 2502 140	140	2.5	1.6
KPX 2502 160	160	2.5	1.6
KPX 2612 200	200	3.2	2.2

SIDE CUTTERS



Part No.	mm	○	●	●	●
KPX 7002 125	125	3.0	2.3	1.5	-
KPX 7002 140	140	4.0	2.5	1.8	-
KPX 7002 160	160	4.0	2.8	2.0	-
KPX 7002 180	180	4.0	3.0	2.5	-
KPX 7402 200	200	-	4.2	3.0	2.5

MULTIGRIPS



Part No.	mm	Grip Range
KPX 8802 250	250	6 - 36mm

PARRALLEL WRENCH



Part No.	mm	Grip Range
KPX 8603 180	180	0 - 35mm
KPX 8603 250	250	0 - 46mm

PRECISION ELECTRONIC CUTTERS

- Knipex introduces their premium electronics cutters made of ball bearing steel precisely machined with locking screw in lap joint.



Part No.	mm	○	○	○
KPX 7902 125	125	1.5	0.8	0.5

PRECISION ELECTRONIC CUTTERS

- Knipex introduces their premium electronics cutters made of ball bearing steel precisely machined with locking screw in lap joint.



Part No.	mm	○	○	○
KPX 7932 125	125	1.3	0.7	0.4

PRECISION ELECTRONIC SNIPE NOSE PLIERS

- Knipex introduces their premium electronics pliers made of ball bearing steel precisely machined with locking screw in lap joint.



Part No.	mm	Description
KPX 3422 130	130	Electronic Snipe Nose Plier

○	Soft wire	Copper, aluminium	220 - 250
○	Medium hard wire	Iron nail	750 - 800
●	Hard wire	Spring wire, steel nails	1.600 - 1.800
●	Piano wire	Hardened spring steel	2.200 - 2.300

Test wires standardised in DIN ISO 5744

Lindstrom Pliers

Swedish Precision

For many people, the brand name Lindstrom, (established in 1856), represents the standard by which advanced electronic cutters are judged. When developments in the electronics industry took off at the end of the 1970s, Lindstrom already had a more than 100 year long history to fall back on. In Silicon Valley, where the world's leading electronic industries gathered, Lindstrom developments included the famous 80 series of classic, yellow electronic cutters.



800 Series Cutters

Part No.		Capacity	Bevel/Jaw	OAL
8140	Diagonal cutter	1.25	Micro	110mm
8141	Diagonal cutter	1.25	Flush	110mm
8150	Diagonal cutter	1.6	Micro	112mm
8151	Diagonal cutter	1.6	Flush	112mm
8160	Diagonal cutter	2.0	Micro	125mm
8161	Diagonal cutter	2.0	Flush	125mm
8163	Diagonal cutter	2.0	Micro	125mm
8247	Oblique cutter	1.0	Flush	118mm



RX Series
The ultimate in ergonomic pliers

Part No.	Style	Capacity	Bevel/Jaw	OAL
RX 7890	Snipe nose plier	-	Smooth	158mm
RX 7891	Snipe nose plier	-	Serrated	158mm
RX 8140	Diagonal cutter	1.25	Micro	110mm
RX 8141	Diagonal cutter	1.25	Flush	110mm
RX 8142	Diagonal cutter	1.0	Ultra Ultra	110mm
RX 8148	Diagonal cutter	0.8	Ultra Flush	110mm
RX 8150	Diagonal cutter	1.6	Micro	112mm
RX 8151	Diagonal cutter	1.6	Flush	112mm
RX 01	Spare springs PK5	-	-	-

Tsunoda Pliers

Japanese Performance

Precision Japanese made pliers offering incredible performance at a really affordable level. Made of top grade steel. Comfortable small handles. Suits high volume production level work. Fitted with leaf springs.



Side Cutter, Micro Bevel Jaw

- offering almost flush cut. Perfect high volume cutter.

Part No.	Description	Capacity	OAL
TM 01	Side cutter	1.2mm	119mm



Long Nose Plier

- With serrated jaws and cutter. Ideal for production work.

Part No.	Description	Capacity	OAL
TM 03	Long nose plier	1.2mm	136mm



Oblique Tip Cutter, Micro Bevel Jaw

- ideal for snipping IC legs.

Part No.	Description	Capacity	OAL
TM 10	Oblique tip cutter	1.2mm	122mm



Long Nose Plier

- With serrated jaws and cutter. Ideal toolkit plier.

Part No.	Description	Capacity	OAL
TM 04	Long nose plier	1.2mm	154mm

Wiha Professional ESD

Precision for electronic professionals



Wiha Safety Notice

Wiha ESD Pliers are non-insulated, therefore are not suitable for working on live parts.



- Drop forged from the best selected, suitable carbon steels for the best technical properties
- Cutting edges are additionally induction hardened up to 64HRC for maximum service life and cutting results
- Finely mirror polished heads provide safety as there are no flaking chrome particles preventing damage to electronic components.
- Precision box joint: close fit prevents distortion, low-wear for clearance and jolt-free movement
- Dual leaf springs and extremely ergonomic multi-component handle provide for comfortable, controlled and sensitive work
- Surface resistance of $10^6 - 10^9$ Ohms is appropriate for electronic work in ESD controlled areas as defined in DIN EN 61340-5-1 / DIN EN 61340-5-2 standards.

SIDE CUTTER MINI, POINTED SHAPE



- Narrow, pointed head
- Cutting edge with semi-flush cutting, individually tested

Part No.	mm	inches	○	○	○
Z401-11504	115	4 1/2	1.0	0.6	0.3

SIDE CUTTER MINI RELIEVED, POINTED SHAPE



- Extra narrow, short head for working in particularly restricted spaces
- Cutting edge almost without bevel for virtually flush cutting

Part No.	mm	inches	○
Z404-11504	115	4 1/2	1.0

FULL-FLUSH CUTTER



- Wide, pointed head
- Cutting edge without bevel for absolute flush cutting

Part No.	mm	inches	○
Z413-11504	115	4 1/2	1.0

Details of cutting results of cutting pliers.

Symbol	Types of wire	Example	Tensile strength ca. N/mm ²
○	Soft wire	Copper, aluminium	220 - 250
○	Medium hard wire	Iron nail	750 - 800
●	Hard wire	Spring wire, steel nails	1.600 - 1.800
●	Piano wire	Hardened spring steel	2.200 - 2.300

Test wires standardised in DIN ISO 5744

SIDE CUTTER WITH SAFETY WIRE CATCHER



- Wide, pointed head
- With safety wire catcher

Part No.	mm	inches	○
Z414-11504	115	4 1/2	1.2

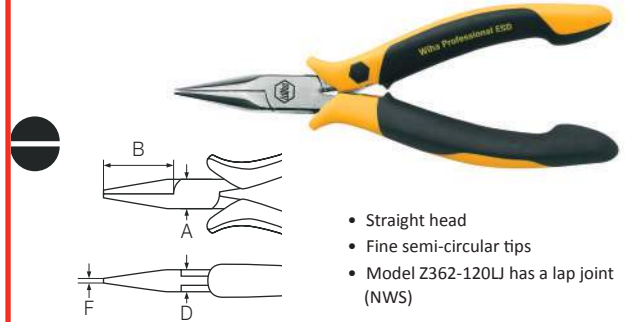
OVAL SHAPE SIDE CUTTER



- Wide, semi-circular head
- Bevelled cutting edges, even appropriate for thin, hard wires

Part No.	mm	inches			
Z441-11504	115	4 1/2	1.4	1.0	0.4

SNIPE NOSE PLIERS



- Straight head
- Fine semi-circular tips
- Model Z362-120LJ has a lap joint (NWS)

Part No.	mm	A	B	D	F	Jaws
Z360-12004	120	9.5	23	6.5	1.4	Serrated
Z362-120LJ	120	9.5	23	6.5	1.4	Smooth
Z360-14504	145	12.0	40	7.5	2.0	Serrated

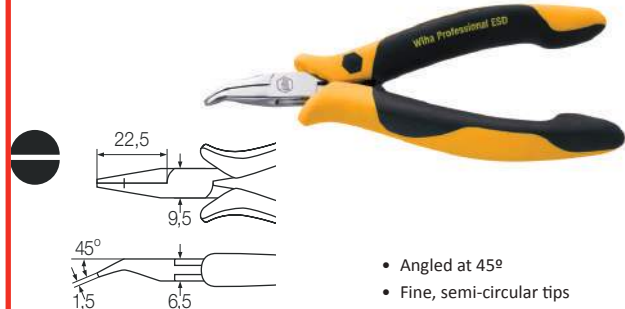
OBLIQUE END CUTTERS



- Wide head, angled at 29°
- Cutting edge with full flush cutter function for virtually flush cutting

Part No.	mm	inches	
Z461-11504	115	4 1/2	1.2

BENT NOSE PLIERS



- Angled at 45°
- Fine, semi-circular tips

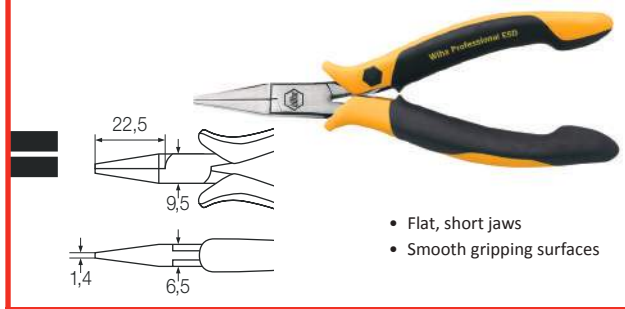
Part No.	mm	inches	Jaws
Z361-12004	120	4 3/4	Serrated



- Cutting edge with full flush cutter function for virtually flush cutting
- Extra small head
- Cutting edges at 40°

Part No.	mm	inches	
Z464-11004	110	4 3/8	0.6

FLAT NOSE PLIERS



- Flat, short jaws
- Smooth gripping surfaces

Part No.	mm	inches	Jaws
Z380-12004	120	4 3/4	Serrated



- Extra narrow, slim shape
- Cutting edge for virtually flush cutting

Part No.	mm	inches	
Z471-11004	110	4 3/8	0.6

ROUND NOSE PLIERS



- Round, short jaws
- Smooth gripping surfaces

Part No.	mm	inches
Z370-12004	120	4 3/4

If you did not find what you were looking for, please call our sales team now!

Keiba Pliers

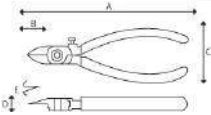
Japanese - popular choice



High quality Japanese made pliers. The brand Keiba started in 1924 and with a long history of plier manufacturing Keiba now offer some of the finest pliers available on the market.

LONG NOSE PLIER WITH SERRATED JAWS

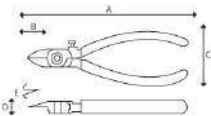
NEW



- High quality grips. They are non-slip even if they are wet. They fit in your hands very well and give you an excellent gripping feel.
- Made of special vanadium alloy steel, and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.
- Tapered nose type.
- Good for picking up and bending in tight spaces.

Part No.	A	B	C	D	Weight
HLC-D24	126	28.5	50	6	75g

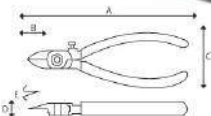
MIDGET SIDE CUTTER



- Specially designed and developed for the electrical and electronics industries.
- Cut copper wires from 0.2-2.0mm dia. and general soft wires up to 1.6mm dia.
- Made of special vanadium alloy steel, and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.
- Proven to last for over 100,000 cuts of 0.8mm dia. enamelled wire.

Part No.	A	B	C	D	E	Weight
TS-A05	128	14	50	6.5	23°	70g

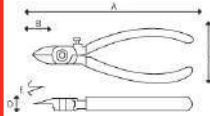
THIN BLADE NIPPER



- High quality grips. They are non-slip even if they are wet. They fit in your hands very well and give you an excellent gripping feel.
- Cut copper wires up to 1.2mm dia and general soft wires up to 1.0mm dia
- For cutting wires and plastic.
- Made of special vanadium alloy steel, and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.

Part No.	A	B	C	D	E	Weight
HTC-D04	109	12.5	50	6	15°	70g

LONG NOSE PLIER

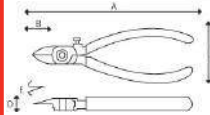


- Precision-machined jaw-tips to the highest-quality finish.
- Designed to emulate the working of the human finger-tips.
- Tough, non-brittle jaw tips.
- Coil-spring for smooth action.
- Made of special vanadium alloy steel, and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.
- Cut general soft wires up to 1.6mm dia.

Part No.	A	B	C	D	Weight
TSC-616	166	50.8	50	8	90g

LONG NOSE PLIER WITH SMOOTH JAWS

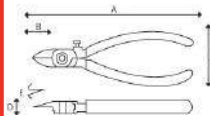
NEW



- High quality grips. They are non-slip even if they are wet. They fit in your hands very well and give you an excellent gripping feel.
- Made of special vanadium alloy steel, and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.
- Tapered nose type.

Part No.	A	B	C	D	Weight
HLC-D14	126	28.5	50	6	75g

MIDGET SIDE CUTTER

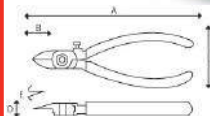


- Specially designed and developed for the electrical and electronics industries.
- Cut copper wires from 0.2-2.0mm dia. and general soft wires up to 1.6mm dia.
- Made of special vanadium alloy steel, and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.
- Proven to last for over 100,000 cuts of 0.8mm dia. enamelled wire.

Part No.	A	B	C	D	E	Weight
TSC-A05	129	14	53	6.5	23°	85g

MIDGET THIN BLADE SIDE CUTTER

NEW



- Specially designed and developed for the electrical and electronics industries.
- Cut copper wires from 0.2-1.6mm dia. and general soft wires up to 1.4mm dia.
- Made of special vanadium alloy steel and the bodies are heat-treated in an advanced process and cutting blades are induction heated which ensures good cutting and longer life.
- Proven to last for over 100,000 cuts of 0.8mm dia. enamelled wire.
- Thin blades for working in tight spaces.

Part No.	A	B	C	D	E	Weight
MN-B05	127	13	50	6.5	25°	70g

Piergiacomini Pliers

Quality Hand Tools

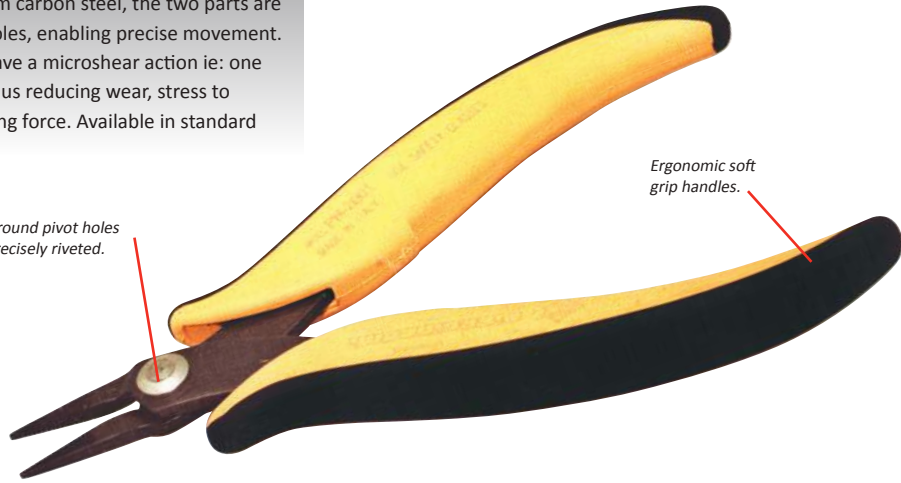
The Piergiacomini plier range covers a wide variety of applications for the electronics industry. Made from carbon steel, the two parts are joined by carefully ground pivot holes, enabling precise movement. The side cutters are designed to have a microshear action ie: one jaw passes just below the other, thus reducing wear, stress to the component and operator cutting force. Available in standard handles or dissipative handles.



To specify a dissipative handle version, simply add 'D' to the part number, eg PN 2001D

Ground pivot holes precisely riveted.

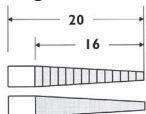
Ergonomic soft grip handles.



FINE LONG NOSE PLIERS

Fine long nose pliers, short series

- With smooth or serrated jaw and **square external edges**



PN 2001
PN 2002

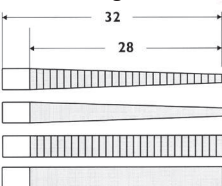


Part No.	Description	OAL
PN 2001	Snipe nose, serrated	146mm
PN 2002	Snipe nose, smooth	146mm

FINE LONG NOSE PLIERS

Fine long nose pliers, long series

- With smooth or serrated jaws and **rounded external edges**



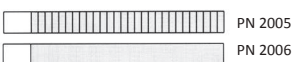
PN 2015
PN 2016
PN 2017
PN 2018



Part No.	Description	OAL
PN 2015	Snipe nose, serrated	160mm
PN 2016	Snipe nose, smooth	160mm
PN 2017	Flat nose, serrated	160mm
PN 2018	Flat nose, smooth	160mm

Fine long nose pliers, long series

- With smooth or serrated jaws and **square external edges** for added strength



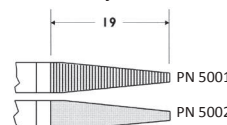
PN 2005
PN 2006

Part No.	Description	OAL
PN 2005	Snipe nose, serrated	160mm
PN 2006	Snipe nose, smooth	160mm

HEAVY DUTY LONG NOSE PLIERS

Heavy duty long nose pliers, short series

- With smooth or serrated jaws



PN 5001
PN 5002

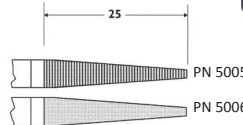


Part No.	Description	OAL
PN 5001	HD Snipe nose, serrated	146mm
PN 5002	HD Snipe nose, smooth	146mm

HEAVY DUTY LONG NOSE PLIERS

Heavy duty long nose pliers, long series

- With smooth or serrated jaws



PN 5005
PN 5006



Part No.	Description	OAL
PN 5005	HD Snipe nose, serrated	154mm
PN 5006	HD Snipe nose, smooth	154mm

ROUND NOSE PLIER

Round nose pliers
• With smooth jaws



PN 5025



Part No.	Description	OAL
PN 5025	Round nose	154mm

SIDE CUTTERS, 2MM JAW



Very fine side cutters
 • For delicate work, flush cutting

Part No.	Description	Capacity	OAL
TR 20SM	Fine Cutter	0.8mm	136mm
TR 25P	Fine Cutter	1.0mm	138mm

SIDE CUTTERS, 3MM JAW (CONT.)



Oblique top cutter
 • 30° angle

Part No.	Description	Capacity	OAL
TR 30V	Oblique top cutter	1.0mm	144mm



Very fine angled side cutter
 • For delicate work, flush cutting

Part No.	Description	Capacity	OAL
TR 2050M	Fine Angle Cutter	0.64mm	134mm



Component lead cutters
 • For cutting component legs to a specific height above the PCB (TR3010 shown with dissipative handles)

Part No.	Description	Capacity	OAL
TR 3010	Cutter, 1mm crop	1.0mm	138mm
TR 3015	Cutter, 1.5mm crop	1.0mm	138mm

SIDE CUTTERS, 2.5MM JAW



Side cutters for general use
 • Flush cutting with minimal shock to component leg

Part No.	Description	Capacity	OAL
TRE 03NB	Cutter, lowcost	1.3mm	138mm
TR 25	Cutter, premium	1.3mm	138mm
TR 25A	Cutter, with safety clip	1.3mm	138mm
TR 25L	Cutter, long handle	1.3mm	160mm



Large side cutter
 • With higher cutting capacity. Oval shape

Part No.	Description	Capacity	OAL
TRR 58G	HD cutter, flush	2.0mm	155mm
TRR 58	HD cutter, bevelled	2.6mm	155mm

SIDE CUTTERS, 3MM JAW



Side cutters for production use
 • Flush cutting with minimal shock to component leg

Part No.	Description	Capacity	OAL
TR 30	Cutter, flush	1.3mm	138mm
TR 30A	Cutter, with safety clip	1.3mm	138mm
TR 3058	Cutter, bevelled	1.6mm	138mm

SIDE CUTTERS, 5MM JAW



General purpose side cutter
 • Excellent general purpose cutter even for toolkit applications or heavy duty PCB work. Pointed shape

Part No.	Description	Capacity	OAL
TR 5000R	Cutter, Heavy duty	2.05	140mm



Reverse cutter
 • Angled for easy snipping or IC legs

Part No.	Description	Capacity	OAL
TR 30T	Reverse cutter	1.0mm	137mm

PNEUMATIC SIDE CUTTERS

Pneumatic side cutter
 • For rapid leg cropping
 • Reduce Hand Fatigue



Part No.	Description	Capacity
TPP TR6000R	Flush cutter	1.6mm
TPP TR6000	Bevelled cutter	1.6mm

SPECIAL FORMING PLIERS



Cut and bend plier
 • End cutting cutter suitable for densely populated PCBs. Cuts and bends legs to 30° and 2.0mm long

Part No.	Description	Capacity	OAL
TR 5000/15	Cut and bend	1.0mm	147mm



Cut and squeeze plier
 • Special cutter which cuts and squeezes component legs to 1.0mm above PCB level

Part No.	Description	Capacity	OAL
TS 30	Cut and squeeze	1.0mm	138mm



Cut and form plier
 • Forms the component wire in a C shape and cuts off the residual part

Part No.	Description	Capacity	OAL
PTR 30C	Cut and form (C)	1.0mm	150mm



Cut and form plier
 • Forms the component wire in a L shape and cuts off the residual part

Part No.	Description	Capacity	OAL
PTR 30L	Cut and form (L)	1.0mm	150mm

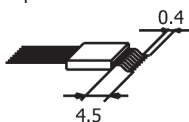


Forming plier
 • Forms the component wire in a C shape

Part No.	Description	Capacity	OAL
PNG 5000	Forming (C)	1.0mm	150mm



IC leg forming plier
 • Preforming and cutting of IC legs in one operation

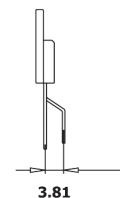


Part No.	Description	Capacity	OAL
PNI 5000	IC leg forming	0.8mm	150mm

SPECIAL FORMING PLIERS (CONT.)



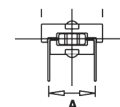
Forming pliers
 • Forming of T0220 package to provide an offset to centre leg



Part No.	Description	Pitch	OAL
PN 5050	Forming plier	3.81	155mm
PN 5050/14	Forming plier	3.0	155mm
PN 5050/15	Forming plier	2.5	155mm



U forming plier
 • Forming into U shape of axial components. 1mm capacity



Part No.	Description	Pitch A	OAL
PPR 5001	U forming	10.16	150mm
PPR 5002	U forming	12.70	150mm
PPR 5003	U forming	15.24	150mm

LEAD BENDING TOOL



Lead bending tool
 • For axial components
 • Pitch adjustment from 10.0-47.0mm

Part No.	Description
PR 2	Lead Forming Plier

DEPANELLING TOOLS



Hand depanelling tool
 • Hand cutting tool for cutting of PCBs. Maximum length of isthmus is 2.5mm

Part No.	Description	Capacity
DP 20N	Hand tool	2.0mm
DP 23N	Hand tool	2.3mm

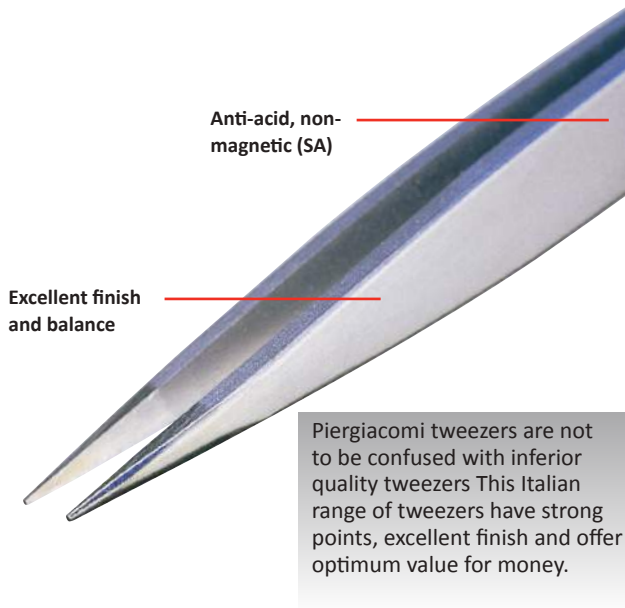


Pneumatic depanelling tool
 • For quick depanelling

Part No.	Description	Capacity
DPP 20N	Pneumatic tool	2.0mm
DPP 23N	Pneumatic tool	3.0mm

Piergiacomini Tweezers

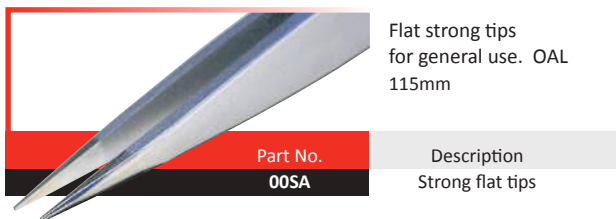
Premium quality, Italian Brand.



GENERAL TWEEZERS



Flat large tips for general use. OAL 125mm

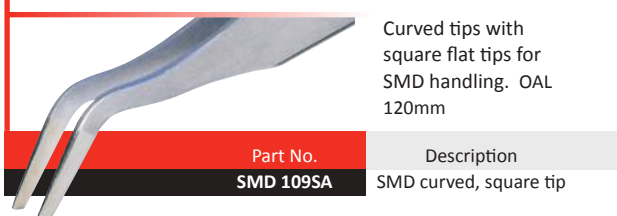


Flat strong tips for general use. OAL 115mm



Same as 00SA version but shorter. OAL 105mm

SURFACE MOUNT TWEEZERS



Curved tips with square flat tips for SMD handling. OAL 120mm



SMD handling tweezers with curved tips. OAL 120mm



Vertical SMD handling. OAL 120mm



Reverse action SMD handling tweezers with angled grips. OAL 120mm



SMD handling tweezers angled grip. OAL 120mm



Fine serrated tips for general use. OAL 120mm



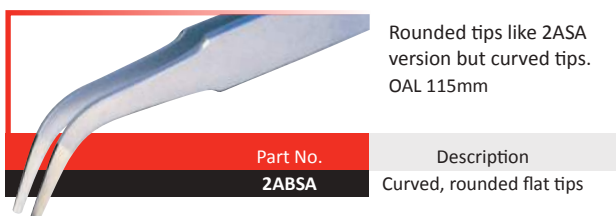
Strong gripping action. Popular production-level choice. OAL 125mm



Fine tweezers with medium handles. OAL 120mm



Rounded flat tips for general purpose use. OAL 120mm



Rounded tips like 2ASA version but curved tips. OAL 115mm



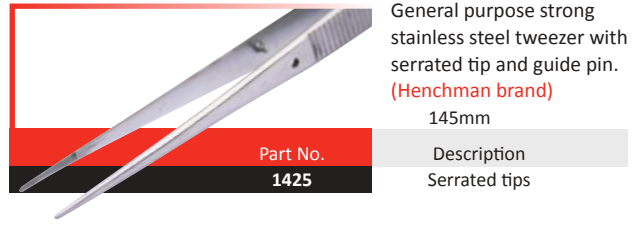
Fine tips for microelectronic use. OAL 120mm



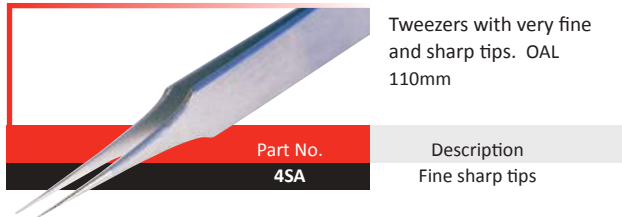
Long, thin tweezers with very fine straight tips. OAL 135mm



Same as 3SA version but shorter. OAL 110mm



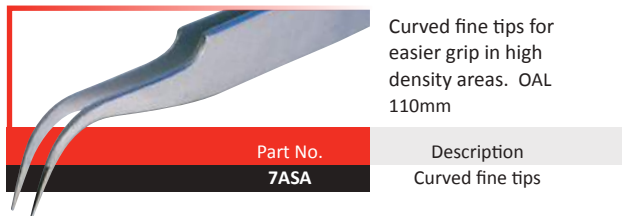
General purpose strong stainless steel tweezers with serrated tip and guide pin. (Henchman brand) 145mm



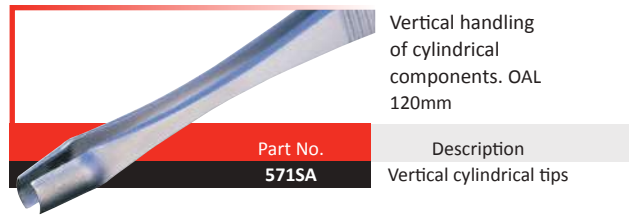
Tweezers with very fine and sharp tips. OAL 110mm



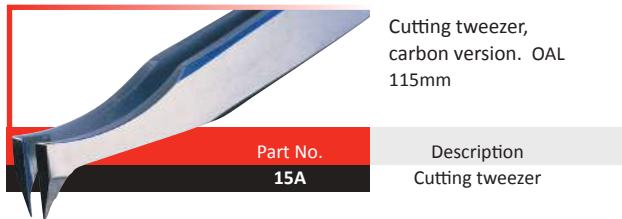
Same as 1425 tweezers above but with bent tips. (Henchman brand) OAL 145mm



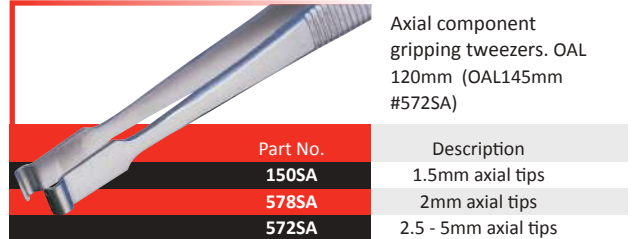
Curved fine tips for easier grip in high density areas. OAL 110mm



Vertical handling of cylindrical components. OAL 120mm



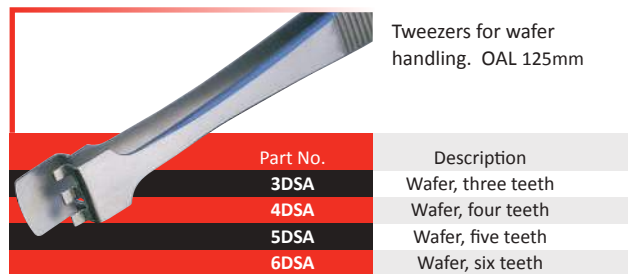
Cutting tweezers, carbon version. OAL 115mm



Axial component gripping tweezers. OAL 120mm (OAL145mm #572SA)



Tweezers with reverse action, ideal for soldering operations. OAL 150mm



Tweezers for wafer handling. OAL 125mm



Tip with 1.0mm OD hole for handling of wires or cylindrical components. OAL 110mm



Long thin tweezers with very fine bent tips for gripping of microchips. OAL 135mm

HEMOSTATS/FORCEPS



- Straight version, locking hemostats of stainless steel.

Part No. AI 11.000.160	Description Forceps	OAL 160mm
----------------------------------	------------------------	--------------

Service Aids

To make your job easier

DENTAL PROBES



Hex handled, stainless steel dental probes, Desco brand

Part No.	Description
51007	Straight probe
51008	Hooked probe
51009	Angled probe
51010	Curved probe
51011	Dental probe 4 piece set



Economical, hex handled, stainless steel dental probes

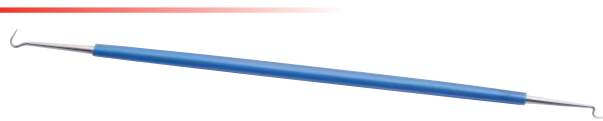
Part No.	Description
51007-E	Straight probe
51008-E	Hooked probe
51009-E	Angled probe
51010-E	Curved probe
51011-E	Dental probe 4 piece set

SPRING HOOKS



Premium Quality, German Made Spring Hook

Part No.	Description	OAL
2-132	Spring hook, Germany	183mm



Part No.	Description	OAL
LPSH01	Spring Hook	208mm



Part No.	Description	OAL
LPSH02	Spring hook	209mm



Part No.	Description	OAL
759-145	Spring Hook, captive	178mm

MILPROBE



Beautech 10 milprobes are made of a hardened stainless steel and can reach between the fine pitch of component leads.

Part No.	Description	OAL
CE 130-620	Straight milprobe	142mm
CE 130-619	Angled milprobe	142mm
CE 170-147	Milprobe 2 piece set	

SPUDGER TOOL



Features pointed tip for holding components whilst soldering, flat end for spudging leads and notch to assist in hooking wires.

Part No.	Description	OAL
CE 151-168	Spudger tool	150mm

TRIMMING TOOLS CERAMIC TIP



Slotted ceramic trimming screwdriver for tuning and adjusting high frequency devices with 15mm shaft.

Part No.	Description	Tip Width
270 09	Ceramic Trimmer	0.9mm
270 13	Ceramic Trimmer	1.3mm
270 18	Ceramic Trimmer	1.8mm
270 26	Ceramic Trimmer	2.6mm

PLCC EXTRACTOR TOOL



Part No.	Description	OAL
HT 103B	PLCC Extractor	100mm

E-CLIP SETTING TOOL



E-Clip Tool

For setting and removal of E and C clips of 1.5mm and larger

Part No.	Description	OAL
849-600	E-Clip Tool	171mm

SMD VACUUM PICK-UP TOOL



SMD vacuum hand type pick-up tool

Part No.	Description	OAL
393-1WLSK	Vacuum pick up	152mm

MAGNETIC PICK-UP



Telescopic magnetic pick-up, extending 400mm

Part No.	Description	OAL
70166	Magnetic pick up	143mm

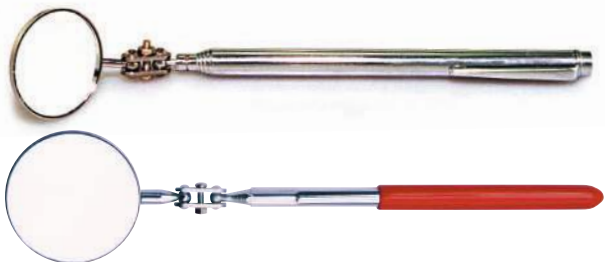
INSPECTION MIRROR NON CONDUCTIVE



- All plastic (except mirror), ideal for use near live power
- 23mm diameter

Part No.	Description	OAL
USG 056	Inspection Mirror	170mm

INSPECTION MIRRORS TELESCOPIC



- Telescopic swivel mirrors in round and oval

Part No.	Description	Extends by
70180	Round Mirror 32mm	350mm
70186	Oval Mirror 25 x 50mm	350mm
70188	Large Mirror 57mm	130mm

PIN EXTRACTOR



- Molex Contact Remover tool for .093" diameter pins

Part No.	Description	OAL
HT 2038	Pin Extractor	113mm

FIBERGLASS SCRATCH PEN



Retractable Scratch Brush Pen

Comes with retractable and refillable fibreglass bristles.

Part No.	Description	Brush Diameter
CE 113-120	Fibreglass pen	4mm
CE 113-121	Fibreglass refill	4mm

DUST BRUSH



Dust Brush

Ideal for toolkit applications.

Part No.	Description	Brush Face
7-425	Dust brush	6 x 25mm

ROCKET AIR BLOWER



- Powerful rubber blower to get rid of dust and foreign material that collect in photocopiers and other equipment.

Part No.	Description
RA1900	Rocket Air Blower

BLOWER BRUSH



Blower Brush

Handy blower brush for toolkit applications.

Part No.	Description	OAL
BBM-1716	Blower brush	121mm

HURRICANE BLOWER

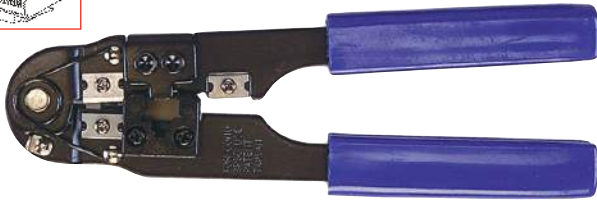


Hurricane Blower

High volume air dusting blower, no brush

Part No.	Description	OAL
BBH-1727	Hurricane blower	130mm

TELECOMS CRIMPING TOOLS



Cut, strip and crimp all on one tool.

Part No.	Description	Application
HT 2094	Telecoms Crimp Tool	RJ9 (4 x 4)
HT 2096	Telecoms Crimp Tool	RJ11/12 (4 x 6 / 6 x 6)
HT 210N	Telecoms Crimp Tool	RJ45 (8 x 8)

TELECOMS COMBINATION CRIMPING TOOLS



Combination Crimp Tools for Modular Telecoms

Part No.	Description	Application
HT 268	Telecoms Combination Crimp Tool	RJ11/12/45
HT 246	Telecoms Combination Crimp Tool	RJ9/11/12

BOOTLACE FERRULE CRIMPERS



Crimp Tool for Bootlace Ferrules

Part No.	Description	Range
97 61 145	Bootlace Fine Crimp Tool	0.5 - 2.5mm ²



Crimp Tool for Bootlace Ferrules

Part No.	Description	Range
97 71 180	Bootlace Crimp Tool	0.5 - 16mm ²

BOOTLACE FERRULE RATCHET CRIMPERS



Ratcheting Crimp Tool for Bootlace Ferrules

Part No.	Description	Range
HT 236E	Bootlace Ratchet Crimp Tool	0.5 - 4mm ²

ROLL CRIMP TERMINAL CRIMPING TOOLS



Roll-Crimp Tools

Part No.	Description	Range
HT 236C	Roll-Crimp Tool	1.5 - 6mm ²
HT 236U	D-Sub Roll Crimp Tool	10 - 22 AWG

PRE-INSULATED TERMINAL CRIMP TOOLS



Crimp Tool for Pre-Insulated Terminals

Part No.	Description	Application
HT 236H	Pre-Insulated Ratchet Crimper	Red/Blue/Yellow

INDENT TERMINAL CRIMPING TOOLS



Indent Crimp Tool

Part No.	Description	Range
HT 236N	Indent Crimp Tool	1.5 - 10mm ²

INDENT TERMINAL CRIMPING TOOLS LARGE



Indent crimp tool for crimping of bare copper lug type terminals

Part No.	Description	Range
HT 504	Indent Crimp Tool	1.5 - 16mm ²

COAXIAL CRIMPING TOOLS



Crimp Tools for Coaxial Connectors

Part No.		Application, RG cable
HT 336A	- 6.5 5.41 - 1.72 -	58, 59, 62, 141, 142, 223
HT 336G	6.48 5.41 3.50 2.54 1.75 1.1	58, 59, 62, 141, 142, 174, 223
HT 336K	10.9 - 3.25 2.5 - -	8, 9, 11, 213, 214, 174, 179
HT 236I	- 7.9 6.3 5.2 2.3 1.6	58, 59, 6, 174

PRESSMASTER CRIMP TOOLS, KOMFORT-LINE

Komfort-line crimping tools have been designed to achieve maximum ergonomics, reliability and durability for a wide range of crimping applications. Optimised linkage reduces grip-force by approximately 40% compared to the average crimping tool. Komfort-line crimping tools have ergonomically shaped, cushion gripped handles and are made in two frame sizes. The "K Frame" allows for two-handed operation for larger crimping applications, whereas the "M Frame" size has been designed for single handed operation when crimping small contacts or terminals.

Part No.	Connector	Frame	Die Profile	Size	Crimp Form
PRS KSA 0760	Insulated Red, Blue, Yellow terminals	K		0.75 - 5.0mm ²	
PRS MRB 0115	Uninsulated roll-crimp terminals	M		0.1 - 1.5mm ²	
PRS KRB 0560	Uninsulated roll-crimp terminals	K		0.5 - 6.0mm ²	
PRS MCC 0908	Coaxial RG 174/316	M		4.25/ 3.25/1.69	
PRS MCC 1113	Coaxial RG 58 + RG 59	M		6.48/ 5.41/1.69	
PRS KCC 2511	Coaxial RG 58 + RG 214	K		0.90/5.41/ 2.54/1.69	



K-Frame (255mm long)



M-Frame (212mm long)

D-TYPE CONTACT CRIMP TOOL



A low cost 4-way indent tool for crimping solid D-subminiature contacts for RS232 interface connectors.

Part No.	Description	Range
1440-2	D-Subminiature Contact Crimp Tool	16-22WG

SOFT JAW CONNECTOR WRENCH



Part No.	Description
AT 508K	Soft Jaw Wrench

ASTRO MIL-SPEC CRIMP FRAME LARGE



- Milspec Approved
- Fully interchangeable with DMC tooling

Part No.	Description	Astro ref	DMC ref
M22520/1-01	Frame 12-26AWG	615708	AF8

ASTRO MIL-SPEC CRIMP FRAME SMALL



- Milspec Approved
- Fully interchangeable with DMC tooling

Part No.	Description	Astro ref	DMC ref
M22520/2-01	Frame 20-32AWG	615717	AFM8

TURRETS

Astro Connector Tooling covers a wide range of applications where high performance crimping is required: space programmes, defence systems and avionics. Fully interchangeable with DMC tools - according to same Mil Specs.



Part No.	Description	Astro ref	DMC ref
M22520/1-02	Turret Locator	615709	TH1A
M22520/1-03	Turret Locator	615710	TH4
M22520/1-04	Turret Locator	615711	TH163
M22520/1-05	Universal Positioner	615712	UH2-5

POSITIONERS

Astro Connector Tooling covers a wide range of applications where high performance crimping is required: space programmes, defence systems and avionics. Fully interchangeable with DMC tools - according to same Mil Specs.



Part No.	Description	Astro ref	DMC ref
M22520/2-02	Positioner	615718	K1S
M22520/2-03	Positioner	615719	K60S
M22520/2-04	Positioner	615720	K151
M22520/2-06	Positioner	615722	K41
M22520/2-07	Positioner	615723	K40
M22520/2-08	Positioner	615724	K13-1
M22520/2-09	Positioner	615725	K42
M22520/2-10	Positioner	615726	K43
M22520/2-11	Positioner	615727	K287
M22520/2-12	Positioner	615729	K286

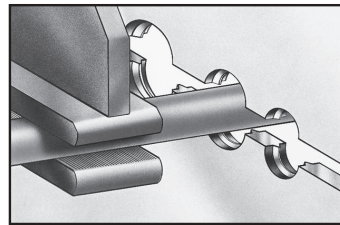
Ideal Wirestrippers

Cannot be out-stripped

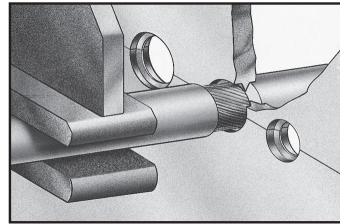
CUSTOM STRIPMASTER® WIRE STRIPPERS - MILSPEC APPLICATIONS



Custom Stripmaster® Wire Strippers and Die-Type Blades



Gripper pads hold the wire securely in a centerline relationship with the blade



Die-type blades incorporate a counter-bored hole sized to the conductor. This varies depending on insulation type and thickness.

- Mil-spec die type blades allow precision stripping
- Strips 30 through 10 AWG solid or stranded wire
- Inner cutting hole sized to conductor and counter-bored holes sized to insulation
- Replaceable grippers
- Optional short stop latch and transparent wire stop
- Cushioned, comfort grip handles
- Custom Stripmaster® Lite is 75% of the size of Custom Stripmaster® Wire Stripper and strips 16 through 30 AWG solid or stranded wire
- Custom Stripmaster® Lite requires one-third less hand pressure for each strip actuation

Wire Size AWG	30	28	26	24	22	20	18	16	14	12	10	Blade Part No.
MM2 Nominal	0.05	0.08	0.13	0.2	0.22	.05	1.0	1.5	2.5	4.0	6.0	

For type E Teflon® (600V)

45-176									.076/.0935	.096/.113	.119/.136	L-5559
45-177			.023/.039	.028/.043	.034/.052	.042/.0595	.052/.070	.061/.081				L-5560
45-178	.016/.032	.019/.035	.023/.039									L-5561

For type EE Teflon® (600V)

45-173									.076/.104	.096/.125	.119/.144	L-5562
45-174			.023/.0465	.028/.055	.034/.0595	.042/.067	.052/.0785	.061/.089				L-5563
45-175	.016/.042	.019/.043	.023/.0465									L-5564

For other misc. insulations

45-170									.076/.113	.0937/.138	.116/.154	L-5210
45-171			.022/.052	.0292/.0595	.035/.0635	.042/.073	.052/.086	.062/.096				L-5211
45-172	.016/.037	.020/.040	.024/.043									L-5436

For wire wrap and other thin insulated wire

45-179	.012/.020								----- Three identical holes -----			L-7625
45-169	.012/.019	.014/.02	.018/.025	.024/.033					----- Solid wires -----			L-9300

The 45-170 Series is a Custom Stripmaster Wire Stripper frame without the short stop latch and wire stop. 45-169 through 45-188 include grit-type pads (standard). 45-369 through 45-388 include file-type pads. 45-469 through 45-488 include parallel-type pads.

CUSTOM STRIPMASTER® LITE WIRE STRIPPERS - MILSPEC APPLICATIONS



Custom Stripmaster® Lite Wire Strippers and Die-Type Blades

Wire Size AWG	30	28	26	24	22	20	18	16	Blade Part No.
MM2 Nominal	0.05	0.08	0.13	0.2	0.22	0.5	1.0	1.5	

MIL-W-16878 type E 600V Teflon® wire

45-638					.034/.052	.042/.0595	.052/.070	.061/.081	LB-918
45-639			.023/.039	.028/.043	.034/.052	.042/.0595			LB-919
45-640	.016/.032	.019/.035	.023/.039	.028/.043					LB-920

MIL-W-16878 type EE 1000V Teflon® wire

45-635					.034/.0595	.042/.067	.052/.0785	.061/.089	LB-915
45-636			.023/.0465	.028/.055	.034/.0595	.042/.067			LB-916
45-637	.016/.042	.019/.043	.023/.0465	.028/.055					LB-917

General purpose

45-632					.035/.0635	.042/.073	.052/.086	.062/.096	LB-912
45-633			.022/.052	.0292/.0595	.035/.0635	.042/.073			LB-913
45-634	.016/.037	.020/.040	.024/.043	.0292/.0595					LB-914

Wire wrapping (thin insulation solid wire)

45-641	.012/.020								----- Three identical holes -----	LB-921
45-631	.012/.019	.014/.023	.018/.025	.024/.033					----- Solid wires -----	LB-911

Specifications: Cutting Hole Diameter/Counterbore Diameter (in inches)

Tolerances: Cutter Diameter: ±0.001; Counterbore Diameter: ±0.002

Teflon and Kapton are registered trademarks of E.I. du Pont de Nemours and Company.

REPLACEMENT FRAME ASSEMBLIES



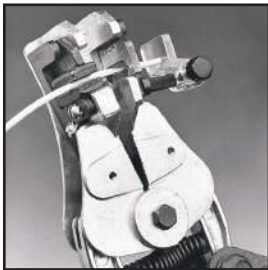
For Custom Stripmaster® Wire Strippers

Part No.	Description
L-5616	Frame only, 10-14 AWG
L-5617	Frame only, 16-30 AWG
L-5618	Frame only, 10-14 AWG, Wire stop and latch
L-5619	Frame only, 16-30 AWG, Wire stop and latch

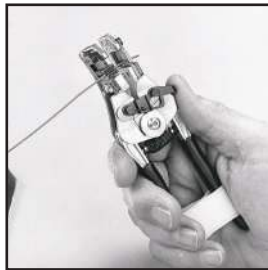
For Custom Stripmaster® Lite Wire Strippers

Part No.	Description
LB-895	Frame only
LB-896	Frame only, Wire stop and latch

STOP LATCHES



Transparent wire stop provides uniform stripping strength



Short-stop latch protects wire strands by limiting the stripping stroke to 5/32" and retains the slug until the wire is ready for terminating

For Custom Stripmaster® Wire Strippers

Part No.	Description
L-5269	Short
L-5270	Transparent

For Custom Stripmaster® Lite Wire Strippers

Part No.	Description
LB-1194	Short
LB-1195	Transparent

STRIPMASTER WIRE STRIPPERS - ELECTRICAL/INDUSTRIAL APPLICATIONS



Stripmaster® Wire Strippers and Knife-Type Blades

REPLACEMENT GRIPPER PADS



Gripper Pads are available in your choice of either parallel, file or grit-type. File-type pads may be used on hard-to-grip insulators such as Kapton® and some Teflon®

Moveable Grippers for Custom Stripmaster® Wire Strippers

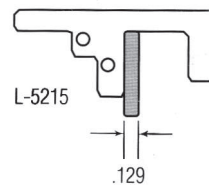
Part No.	Surface Type
L-5212	Grit
LB-718	File
LB-727	Parallel

Moveable Grippers for Custom Stripmaster® Lite Wire Strippers

Part No.	Surface Type
LB-882	Grit
LB-1184	File
LB-1186	Parallel

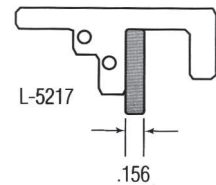
Stationary Gripper for Red Handle Units

For 10, 12 & 14 AWG Wire



Stationary Gripper for Black Handle Units

For 16 thru 30 AWG wire.



Stationary Grippers Custom Stripmaster® Wire Strippers

Part No.	Description
L-5215	.129" thick, 10-14 AWG
L-5217	.156" thick, 16-30 AWG

- One-step stripping enhances productivity
- Spring-action motion increases leverage and reduces operator fatigue
- Precision-ground, knife-type blades provide clean, accurate stripping
- Sturdy die cast frame provides long-term durability
- Wire gripper holds wire securely in position

Wire Size AWG	30	28	26	24	22	20	18	16	14	12	10	8	Blade Part No.
MM2 Nominal	0.05	0.08	0.13	0.2	0.22	0.5	1.0	1.5	2.5	4.0	6.0	8.0	
45-090										.106	.141	.159	L-4419
45-091							.073	.073	.085	.105	.144		L-4420
45-092					.048	.048	.061	.072	.090	.113	.144		L-4421
45-097			.026	.032	.039	.048	.061	.072					L-4994
45-098	.016	.021	.026	.032	.039	.048							L-5361

MINI WIRE STRIPPER

A small wire stripper ideal for stripping fine wires like wire-wrap wire.

*Part SF 30 has one spring jaw to prevent damage to conductor.



Part No.	Description	Wire Range
SF 30*	Mini Wire Stripper	22-32AWG
SFF 30	Mini Wire Stripper	24-28AWG

WIRE WRAP STRIPPER



Part No.	Description	Wire Range
CK 3757-2	Mini Wire Stripper	20-30AWG

V BLADE STRIPPER



Basic wire stripper with V shape jaws and adjustment screw control for repetitive stripping.

Part No.	Description	Wire Range
HT 108	V Blade Stripper	0.5 - 4.0m ²

MULTITOOL WIRE STRIPPER

Two models of wire stripper available with plier function at tip and cutting section near pivot point.



Part No.	Description	Wire Range Ø
CSP 30/1	Wire Stripper	0.25 - 0.81 mm
CSP 30/2	Wire Stripper	0.81 - 2.59 mm

T⁺ - STRIPPER WIRE STRIPPERS

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



Part No.	Description	Wire Range
45-120	T ⁺ -5 T ⁺ Stripper	10-18 AWG solid
45-121	T ⁺ -6 T ⁺ Stripper	16-26 AWG stranded
45-125	T ⁺ -7 T ⁺ Stripper	22-30 AWG solid
45-124	T ⁺ -8 T ⁺ Stripper	8-16 AWG stranded

GRIP-N-STRIP™ END STRIPPER

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



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

STRIPAX WIRE STRIPPER

- Uses 33 blades within each jaw to self-adjust and conform to the profile of different wire sizes and insulation densities
- Self-adjusting blades strip solid or stranded wire
- Built-in wire cutter
- Strip length adjusts from 1/8" to 3/4"
- Reinforced fibreglass construction



Part No.	Description	Wire Range
9005	Stripax Wire Stripper	10-26 AWG

OUTER SHEATH REMOVAL TOOLS



Cable stripper for removal of outer PVC sheaths. With removable swivel blade.

Part No.	Description	Range
SC-2S	Sheath Stripper	8 - 28mm



Cable stripper with finger action swivel blade.

Part No.	Description	Range
HT 325B	Sheath Stripper	4.5 - 25mm

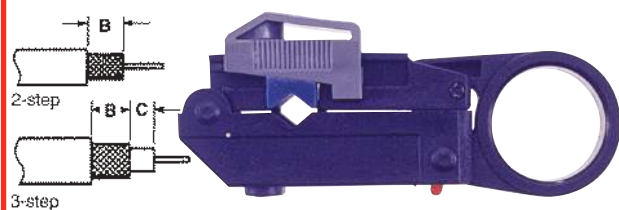
MULTI-PAIR RINGER



Low cost, disposable pair stripper for 2, 3 and 4 pair cable

Part No.	Description
118-681	Multi-pair Ringer

COAXIAL WIRE STRIPPERS



The Swedish Corex wire stripper is available in two or three step versions for various strip lengths to suit a wide variety of cables. The standard CX strippers to be selected for cables from 2.5-7.6mm diameter and the Maxicorex is for cables of 7-15.0mm diameter.

Part No.	Dimension C	Dimension B
CX-202	-	6.0mm
CX-203	-	9.2mm
CX-204	-	12.0mm
CX-207	-	6.8mm
CX-300	5.5mm	5.5mm
CX-305	6.0mm	6.0mm
CX-309	6.8mm	2.5mm
CX-399	7.5mm	3.5mm
MAXI COREX 2	-	12.7mm
MAXI COREX 3	9.5mm	3.2mm



Three low cost versions of coaxial strippers in 2 step and 3 step models

Part No.	Description	Cable
HT 312B	Coaxial stripper	RG58/59 (3 step)
HT 332D	Coaxial stripper	RG58/59/62/2/174 (2 step)
HT 322S	Coaxial stripper	RG8/11/213 (2 step)

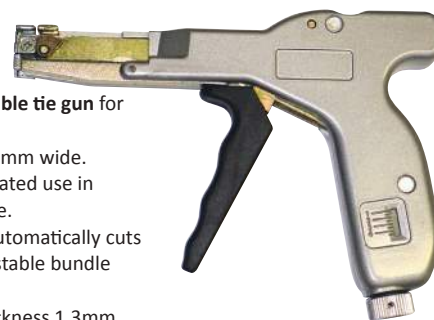
BASIC CABLE TIE GUN



A low cost cable tie gun for cable ties from 2.2 - 4.8mm wide. Fastens and automatically cuts ties with adjustable bundling pressure. Maximum thickness 1.6mm

Part No.	Description	OAL
HT 218	Cable Tie Gun	160mm

HEAVY DUTY CABLE TIE GUN



Heavy duty cable tie gun for cable ties up to 4.66mm wide. Suited to repeated use in production use. Fastens and automatically cuts ties with adjustable bundle pressure. Maximum thickness 1.3mm.

Part No.	Description	OAL
HT 328	Cable Tie Gun	168mm

STAINLESS TIE GUN



Stainless steel plate tie gun for tie Width up to 7.9mm. Fastens and automatically cuts ties with adjustable bundling pressure. Maximum thickness 0.3mm

Part No.	Description	OAL
HT 338	Stainless Tie Gun	180mm

CABLE TIES



Quality cable ties in black and natural . Contract pricing available for high quantity users

Part No.	Size	Colour	Box
FCT 10201	2.5 x 100mm	Black	100
FCT 10202	3.2 x 150mm	Black	100
FCT 10203	4.8 x 200mm	Black	100
FCT 10204	4.8 x 300mm	Black	100
FCT 10205	4.8 x 370mm	Black	100
FCT 10225	2.5 x 100mm	Natural	100
FCT 10226	3.2 x 150mm	Natural	100
FCT 10227	4.8 x 200mm	Natural	100

CABLE SHEARS FOR COPPER & ALUMINIUM



Universal Cable Shear

Part No.	Description	Capacity Diameter	OAL
95 05 165	Universal Cable Shear	10mm ²	165mm



1000V VDE Cable Shear

Part No.	Description	Capacity Diameter	OAL
95 06 230	VDE Cable Shear	16mm ²	230mm

TWO STAGE CABLE SHEAR



Two Stage Cable Shear

Part No.	Description	Capacity Diameter	OAL
95 11 200	Cable Shear	20mm ²	200mm

RATCHET CABLE SHEAR



Part No.	Description	Capacity Diameter	OAL
95 31 250	Ratchet Cable Shear	32mm ²	250mm
95 31 280	Ratchet Cable Shear	52mm ²	280mm

MINI BOLT CUTTER



Part No.	Description	Capacity Diameter	OAL
71 01 200	Bolt Cutter	6.0 Copper/3.6 Piano	200mm

STAINLESS SCISSORS



Stainless Steel Scissors with optional two sharp points, or one sharp and one rounded point, so that in the closed position the scissors are safer.. Suited to general purpose and toolkit use.

Part No.	Description	OAL
RCT1005	Sharp/Sharp Scissors	145mm
RCT1005BS	Blunt/Sharp Scissors	145mm

STATIONERY SCISSORS



Stationery Scissors

Super deluxe scissors with finely serrated stainless steel blades.

Part No.	Description	OAL
SB 29-501	Stationery Scissors	170mm
SB 29-603	Stationery Scissors	230mm

INDUSTRIAL SCISSORS



Industrial Scissors

Ambidextrous, comfort grip, industrial grade scissors. One blade finely serrated and one knife edge.

Part No.	Description	OAL
SB 29-800	Industrial Scissors	210mm
SB 29-900	Industrial Scissors	235mm
SB 29-915	Industrial Scissors	280mm
SB 29-916	Industrial Scissors	300mm

ELECTRICAL SCISSORS



Electrical Scissors

Manufactured with hi-tensile, finely serrated stainless steel blades and cushion grip handles. Ideal for cutting fine electrical wires and Kevlar® strands.

Part No.	Description	OAL
SB 29-503	Electrical Scissors	140mm

GENERAL PURPOSE SHEARS



General purpose shears with finely serrated blades of high quality, for industrial applications.

Part No.	Description	OAL
SB 29-701	Shear, standard (black)	185mm
SB 29-702	Shear, hi-tensile (red)	185mm
SB 29-700	Shear, long blades (black)	200mm

UTILITY KNIVES



Rubber Grip Autoloading Utility Knife

Autoloading knife - blades can be reloaded without opening knife body. Supplied with 5 blades.

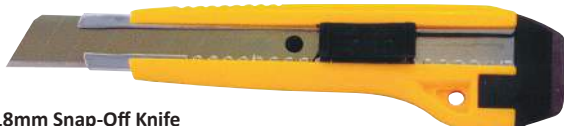
Part No.	Description
SB 112-1	Autoloading Knife



Ultra Grip Utility Knife

Part No.	Description
SB 115-2G	Ultra-Grip Grey Knife
SB 115-2Y	Ultra Grip Yellow Hi-Viz Knife
SB 115-2YRS	Ultra-Grip Retracting Safety Knife
SB 921-4D	Replacement blades (10)

SNAP-OFF KNIVES -18MM



18mm Snap-Off Knife

With metal sleeve and strong auto-lock mechanism.

Part No.	Description
SB 902	Snap-Off Knife, 18mm
SB 201-4	Replacement blades (10)



18mm Heavy duty large cutter

Magazine holds eight blades
Auto-feeder, locking mechanism for heavy duty work

Part No.	Description
L-17RE	Snap-Off Knife, 18mm
SB 201-4	Replacement blades (10)

SNAP-OFF KNIFE -9MM



9mm Snap-Off Knife

With enamelled, all-steel body in the original shape.

Part No.	Description
SB 220	Snap-Off Knife, 9mm
SB 1403-S	Replacement blades (10)

SAFETY KNIFE



Side-Slide Knife

Safety, self-retracting knife

Part No.	Description
SB 412-1	Safety Side-Slide Knife
SB 412B	Replacement blades (10)

ART KNIVES



Art Knife

The most popular light duty graphic art knife for precision cutting.

Part No.	Description		
SB 50001	Art Knife		1
SB 01-111-2	No. 11 Blade, Pointed		100
SB 01-101-2	No. 10 Blade, Rounded		100

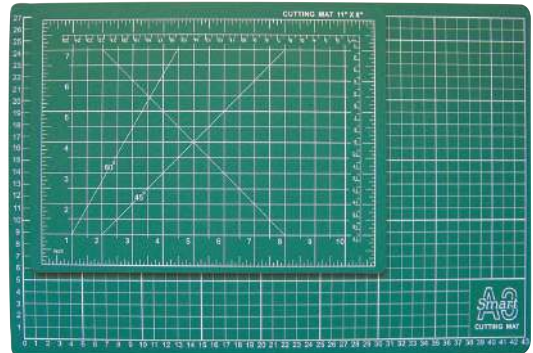
SCALPELS



Standard scalpel handles and a retractable handle is available for safety purposes. The standard type comes in either nickel alloy, or in the economy version - stainless steel.

Part No.	Description		
SB SH 3NA	Nickel alloy scalpel handle		1
SB SH 3SS	Stainless steel scalpel handle		1
SB 2800	Retractable handle		1
SM11	No. 11 blade, pointed		100
SM10	No. 10 blade, rounded		100

CUTTING MATS



Self Healing Cutting Mats

Green cutting mat with metric grid marking.

Part No.	Description	Size
SB A4G3	A4 Cutting Mat	300 x 220
SB A3G3	A3 Cutting Mat	450 x 300

LEATHERMAN WAVE



Leatherman's most popular multi-tool, the Wave stands alone above its imitators. A service tool that can be relied on for years of serious work. Supplied in a durable leather belt holster.

Part No.	Description
WAVE	Leatherman tool

Measuring & Marking

TAPE MEASURES - COMPACT SERIES

Compact tape with 16mm wide double nylon coated matte finish for blade abrasion resistance.



Part No.	Description	Length
TMT 3516	Tru-grip tape	3.5m
TMT 35161	Tru-grip tape	3.5m / 12ft

TAPE MEASURES - PROFESSIONAL SERIES

This series of tape has a 19mm blade in the case of the 5m tape and a 25mm blade for the 8m and 10m tapes. The blade is double coated matte finish for abrasion resistance.



Part No.	Description	Length
TBC 5019	Professional tape	5m
TBC 50191	Professional tape	5m / 16ft
TBC 8025	Professional tape	8m
TBC 80251	Professional tape	8m / 27ft
TBCM 8025	Professional magnetic tape	8m
TBCM 80251	Professional magnetic tape	8m / 27ft
TBCM 1025	Professional magnetic tape	10m
TBCM 10251	Professional magnetic tape	10m / 33ft

TAPE MEASURE 30M

Closed Reel Tape

Impact resistant, rubber grip, steel tape measure with 10mm abrasion resistant blade.



Part No.	Description	Length
TLR 3095	Closed reel tape	30m
TLR 30951	Closed reel tape	30m / 100ft

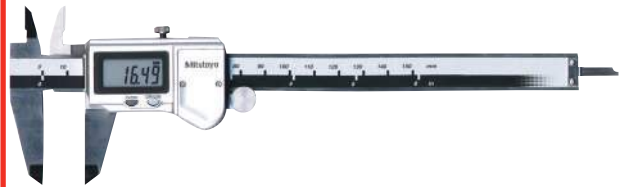
FEELER GAUGE

20 leaf feeler gauge:
0.05mm - 1.00mm



Part No.	Description
P54-20S	Feeler gauge

VERNIER CALIPERS



Mitutoyo offers a wide range of precision measuring instruments. The range is far more extensive than shown below, please enquire for more details.

Part No.	Description
530 312	150mm scale vernier, 0.02mm
505 671	150mm dial vernier, 0.02mm
500 196	150mm digital vernier, 0.01mm
500 197	200mm digital vernier, 0.01mm

STERLING ECONOMY VERNIER CALIPERS



Part No.	Description
EDC150	Electronic Digital Vernier Calipers 0-150mm

STEEL RULES

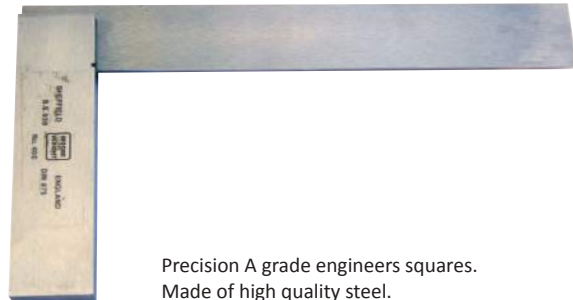


Hardened stainless steel rules with etched markings for durability.

Part No.	Description	Length
SB 1521	Steel rule Metric/Imperial	150mm
SB 1866	Steel rule Imperial*	150mm
SB 3021	Steel rule Metric/Imperial	300mm
SB 4521	Steel rule Metric/Imperial	450mm
SB 6021	Steel rule Metric/Imperial	600mm
SB 10021	Steel rule Metric/Imperial	1000mm
SB 15021	Steel rule Metric/Imperial	1500mm
SB 20021	Steel rule Metric/Imperial	2000mm

* Graduations 32nds, 64ths, 10ths and 100ths

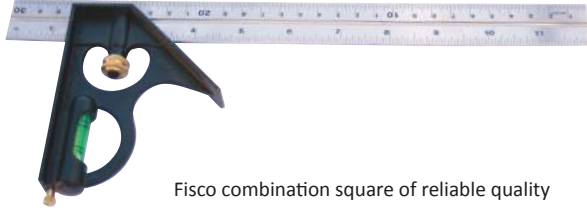
ENGINEERS SQUARE



Precision A grade engineers squares. Made of high quality steel.

Part No.	Description
G2SS A100	Engineers Square
G2SS A150	Engineers Square
G2SS A200	Engineers Square
G2SS A250	Engineers Square

COMBINATION SQUARE



Fisco combination square of reliable quality

Part No.	Description	OAL
RFF 485 ME	Combination Square	300mm

DIVIDERS AND CALIPERS



Part No.	Description	OAL
01452	Inside Caliper	150mm
01442	Outside Caliper	150mm
01432	Spring Divider	150mm

LINE LEVEL



- 3" line/Pocket level for both general and line leveling
- Sure-grip hooks hang on to line/string for long span leveling

Part No.	Description
N058	3" Pocket line level

TORPEDO LEVEL



Magnetic Torpedo Level with a detachable line level, handy magnetic base, 3 large full 360° reading acrylic vials with an impact resistant plastic frame

Part No.	Description
EG9902	Magnetic Torpedo Level

DIGITAL LEVEL

NEW



- Measuring accuracy: $\pm 0.1^\circ$
- Measuring unit: Switch-able between angle and grade
- Measuring range: $0^\circ \sim 360^\circ$ continuous measuring
- Power: 3 x AA alkaline batteries

Part No.	Description
LS160-2	600mm Digital Level

SCRIBER



Part No.	Description	OAL
433ASB	Scriber	218mm

FILES



- Ergonomic files available in many shapes and lengths
- Stocked in 2nd cut as a standard. Others available to order

Part No.	Shape	Length
1100 0623	flat	150mm
1100 1023	flat	250mm
1230 0623	round	150mm
1210 0623	half round	150mm

FILE SET

- 5 x 200mm files
- 1 x flat 2nd cut
- 1 x 3 square 2nd cut
- 1 x half round 2nd cut
- 1 x round cut
- 1 x half round rasp



Part No.	Description
1477 0822	5 Piece File Set

NEEDLE FILE SET



10 x needle files

Part No.	Description
NF10	10 Piece Needle File Set

HACKSAW



Part No.	Description
HF-40T	Professional Quality Hacksaw

POP RIVETER



Part No.	Description
EG 2060	Pop Riveter

RACODON PIN-PUNCH



- Quality French made pin punches

Part No.	Description	Size
408-2	Pin Punch	2mm
408-2.5	Pin Punch	2.5mm
408-3	Pin Punch	3mm
408-4	Pin Punch	4mm
408-5	Pin Punch	5mm
408-6	Pin Punch	6mm
408-7	Pin Punch	7mm
408-8	Pin Punch	8mm
408-10	Pin Punch	10mm

LONG RACODON PIN-PUNCH



- Quality French made long series pin punches

Part No.	Description	Size
408L-2	Long Pin Punch	2mm
408L-2.5	Long Pin Punch	2.5mm
408L-3	Long Pin Punch	3mm
408L-4	Long Pin Punch	4mm
408L-5	Long Pin Punch	5mm
408L-6	Long Pin Punch	6mm
408L-7	Long Pin Punch	7mm
408L-8	Long Pin Punch	8mm
408L-10	Long Pin Punch	10mm

RACODON PIN PUNCH SET - 5 PCS

- Quality French made pin punch set - 5pcs in wallet

Consists of:
2, 3, 4, 5, 6mm



Part No.	Description
408-P1	5pc Pin Punch Set

RACODON LONG PIN PUNCH SET - 8 PCS

- Quality French made long pin punch set - 8pcs in wallet

Consists of:
2, 3, 4, 5, 6, 8, 9, 10mm



Part No.	Description
408-LP8	8pc Long Pin Punch Set

RACODON CENTRE PUNCH



- Quality French made centre punches

Part No.	Description	Size
406-2.5	Centre Punch	2.5mm
406-3	Centre Punch	3mm
406-4	Centre Punch	4mm
406-6	Centre Punch	6mm

RACODON AUTOMATIC CENTRE PUNCH



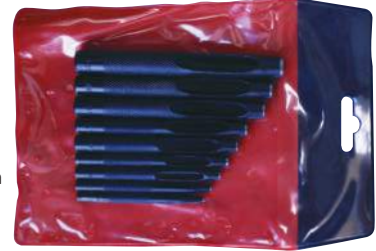
- 12mm Body Diameter

Part No.	Description	OAL
306	Automatic Centre Punch	125mm

RACODON HOLLOW PUNCH SET - 9PCS

- Quality French made hollow punch set - 8pcs in wallet

Consists of:
2, 3, 4, 5, 6, 7, 8, 9, 10mm



Part No.	Description
621	Hollow Punch Set

HAMMER - BALL PEIN



*More sizes available to order

Part No.	Description	Size
P0369	Ball Pein Hammer	100g
P0371	Ball Pein Hammer	200g

ADJUSTABLE WRENCHES



Part No.	Length	Jaw Opening
PXM 9004	100mm	15mm
PXM 9006	150mm	21mm
PXM 9008	200mm	24mm
PXM 9010	250mm	31mm
PXM 9012	300mm	36mm

ADJUSTABLE WRENCHES WITH GRIPS



GearWrench Adjustable Wrenches

Part No.	Description
KD 81990	3 pce imperial adjustable set, 6", 8" and 10"
KD 81890	6" adjustable wrench
KD 81891	8" adjustable wrench
KD 81892	10" adjustable wrench

WISEGRIPS



Part No.	Description	OAL
4WR	ViseGrip	110mm
5WR	ViseGrip	125mm
7WR	ViseGrip	175mm
10WR	ViseGrip	250mm

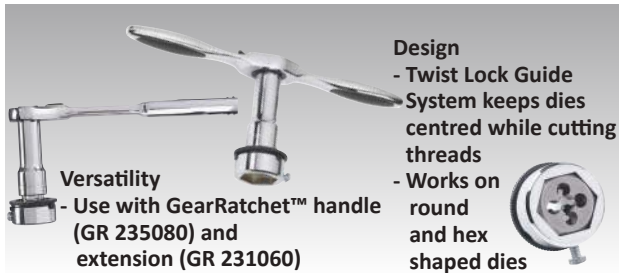
GearWrench Tap & Die



Comfort
- Well shaped grips

Productivity
- Reversible lever with 5° ratcheting arc provides a quick change from forward to reverse action eliminating hand over hand turning

Access
- Ratcheting "T" Wrench provides a 5° ratcheting arc in tight confined areas



Versatility
- Use with GearRatchet™ handle (GR 235080) and extension (GR 231060)

Design
- Twist Lock Guide System keeps dies centred while cutting threads
- Works on round and hex shaped dies

TAP & DIE SETS



40 piece Tap and Die Drive Tool Set

Includes: small tap adaptor, medium tap adaptor, die adaptor, sliding "T" for adaptors, Tap and Die Ratcheting "T" Wrench, 17 taps, 17 dies, thread gauge, #5 screwdriver

Part No.	Description
GW 3885	SAE 40 piece set
GW 3886	Metric 40 piece set

TAP AND DIE RATCHETING T WRENCH



Part No.	Description
GW 3881	Tap and Die Ratcheting T Wrench

DIE ADAPTOR



Part No.	Description
GW 3884	Die Adaptor

SMALL TAP ADAPTOR



Fits tap ranges from #4 to 3/8" (3 to 10mm).
Includes: small tap adaptor and sliding "T" for adaptors.

Part No.	Description
GW 3882	Small Tap Adaptor

MEDIUM TAP ADAPTOR



Fits tap ranges from 3/8" to 1/2" (10 to 12mm).
Includes: medium tap adaptor and sliding "T" for adaptors.

Part No.	Description
GW 3883	Medium Tap Adaptor

ALPHA CARBON TAPS



Standard Metric Carbon Taps

Part No.	Description	Size	Pitch
MCCS020	Set of 3	M2.0	0.40
MCCT020	Taper Lead	M2.0	0.40
MCCI020	Intermediate Lead	M2.0	0.40
MCCB020	Bottom Lead	M2.0	0.40
MCCS030	Set of 3	M3.0	0.50
MCCT030	Taper Lead	M3.0	0.50
MCCI030	Intermediate Lead	M3.0	0.50
MCCB030	Bottom Lead	M3.0	0.50
MCCS040	Set of 3	M4.0	0.70
MCCT040	Taper Lead	M4.0	0.70
MCCI040	Intermediate Lead	M4.0	0.70
MCCB040	Bottom Lead	M4.0	0.70
MCCS050	Set of 3	M5.0	0.80
MCCT050	Taper Lead	M5.0	0.80
MCCI050	Intermediate Lead	M5.0	0.80
MCCB050	Bottom Lead	M5.0	0.80
MCCS060	Set of 3	M6.0	1.00
MCCT060	Taper Lead	M6.0	1.00
MCCI060	Intermediate Lead	M6.0	1.00
MCCB060	Bottom Lead	M6.0	1.00

Wiha Torque Screwdrivers



Wide range of interchangeable blades available

SoftFinish Ergonomic handles with superior gripping & slip resistance

Clear window scale

A Convincing Concept

The exact torque!

- Made to EN ISO 6798, BS EN 26789, ASME B107.14M standards for repeated fastening of sensitive and expensive components in assembly, or in final inspections and quality assurance applications.
- The **TorqueFix**® model and low cost **EasyTorque**® model with a fixed torque value
- the **TorqueVario**®-S with an integrated window scale that displays the torque value numerically. The **TorqueVario**®-S torque screwdriver is also available in an ESD safe version and VDE 1000V Electric safe version

TORQUEFIX® FACTORY PRESET



- TorqueFix® Torque Screwdriver with a Fixed Torque Value pre-set by Wiha.
- ±6%, Traceable to national standards

Part No.	Nm	⊙	↔	↕
28501050	0.5	4	112	23
28501060	0.6	4	112	23
28501080	0.8	4	112	23
28501090	0.9	4	112	23
28501110	1.1	4	119	30
28501120	1.2	4	119	30
28501200	2.0	4	119	30
28501250	2.5	4	119	30
28501300	3.0	4	126	36
28501380	3.8	4	126	36
28501500	5.0	4	132	41
28501550	5.5	4	132	41
28501600	6.0	4	132	41
28501720	7.2	4	132	41

NOTE- Special requirement torque settings on request.

TORQUEVARIO®-S: ADJUSTABLE WITH SCALE



- TorqueVario®-S Torque Screwdriver with Torque Value can be set via Window Scale
- Supplied with torque setter
- ±6%, traceable to national standards (*model 0.1-0.6 Nm = ±10%)

Part No.	Nm	⊙	↔	↕
28521060	0.1-0.6*	4	127	23
28521100	0.4-1.0	4	127	23
28521200	0.8-2.0	4	131	30
28521500	1.0-5.0	4	138	36
28521800	2.0-8.0	4	142	41



NOTE: Wiha Torque Screwdrivers also available in ESD safe and 1000v insulated versions, please enquire

WIHA TORQUE VARIO SET



- Set of 13 pieces, with universal bit holder, 10 bits (PH1, PH2, PZ1, PZ2, T10, T15, T20, T25, 2.5 flat, 3.0 flat), Torque Vario 1.0 - 5.0Nm and torque setter

Part No.	Description
268 930	Torque Vario Set 1.0 - 5.0Nm

WIHA TORQUE VARIO SET



- Set of 13 pieces, with universal bit holder, 10 bits (T7, T8, T9, T10, T15, 7IP, 8IP, 9IP, 10IP, 15IP) Torque Vario 1.0 - 5.0Nm and torque setter

Part No.	Description
346 140	Torque Vario Set 1.0 - 5.0Nm

EASYTORQUE PRESET TORQUE SCREWDRIVER



- Uses the same interchangeable blade system as the TorqueFix series.
- Comfortable handle for good power transfer. Lightweight design, torque value printed on tool.
- Internal mechanism slips when torque value has been attained. Opening torque not mechanically limited in anti-clockwise direction. Release accuracy ± 10%
- Ideal for screw-fastening indexable inserts to a prescribed torque.

Part No.	Nm	⊙	↔	↕
30342-6	0.5	4	103	32
30343-3	0.6	4	103	32
30344-0	0.9	4	103	32
30345-7	1.1	4	103	32
30346-4	1.2	4	103	32
30347-1	1.4	4	103	32
30348-8	2.0	4	103	32
30349-5	2.5	4	103	32
30350-1	3.0	4	103	32
30351-8	3.8	4	103	32

Digital Torque Screwdrivers

NOTE: Many more interchangeable blades available to order, please enquire.

Ergonomic plastic/metal compound handle of quality, robust materials. Handle sizes proportioned to optimise torque setting.

Distinctly audible and perceptible click signal when set torque is reached

Torque can be conveniently set directly via push button integrated in handle.

iTorque mechatronic torque screwdriver

Torque value can be set via a digital scale. Automatic release with calibration alert.

- Torque can be conveniently set directly via push button integrated in handle. Ergonomic plastic/metal compound handle of quality, robust materials. Handle sizes proportioned to optimise torque setting. Distinctly audible and perceptible click signal when set torque is reached. [%s]
- According to EN ISO 6798, BS EN 26789, ASME B107.14M standards
- ±6% accuracy, traceable to national standards.
- Torque bit universal holder exchange blade for accommodating (1/4") bits (included in delivery).
- For applications where recommended torque settings are important. Use in combination with a Wiha torque interchangeable blade.
- Click Control - integrated counter records all applications. Calibration alert following 5,000 applications (normative reference value/resettable) Large digital display for simple stepless setting of torque value. Units can be simply switched - Nm ↔ in.lbs / Ncm ↔ in.oz. A high service life: Can be recalibrated by Wiha Services Can be individualised in the order process – information available at mytorque.wiha.com.
- Products can be designed individually using the configurator at mytorque.wiha.com. (Can be chosen freely: two text fields, graphics field, calibration alarm, torque unit)

I-TORQUE DIGITAL TORQUE SCREWDRIVER

NEW



Digital Wiha iTorque variable Torque Screwdriver. Supplied with universal bit holder (Suits 1/4 insert bits)



Part No.	Torque Range	Torque Range	⊙	↔	↔
28354015	40-150Ncm	60-210 in.oz	4	134	34
28350830	0.8-3.0Nm	7-26 in.lbs	4	134	34
28351060	1.0-6.0Nm	9-50 in.ilbs	4	134	40

INTERCHANGEABLE BLADES



- Torque 1/4" Universal Bits Holder for Torque Screwdrivers

Part No.	⊙	⬆	↔	↔
27526-6	1/4"	4		155



- Torque Adaptor Blade suitable for 1/4" square drive sockets

Part No.	⊙	⬆	↔	↔
26229-7	1/4"	4		155



- Torque slotted Interchangeable Blade for Torque Screwdrivers

Part No.	⊙	⬆	↔	↔	max. Nm
26227-3	1.5	4	175	42	0.15
26228-0	2.0	4	175	42	0.4
26151-1	2.5	4	175	42	0.4
26277-8	3.0	4	175	42	0.6
26278-5	3.5	4	175	42	1.1
26279-2	4.0	4	175	42	2.5



- Torque hex Interchangeable Blade for Torque Screwdrivers

Part No.	⊙	⬆	↔	↔	max. Nm
26544-1	1.3	4	175	42	0.4
26200-6	1.5	4	175	42	0.9
26060-6	2.0	4	175	42	1.8
26061-3	2.5	4	175	42	3.8
26062-0	3.0	4	175	42	5.5
26063-7	4.0	4	175	42	8.0



- Torque Phillips Interchangeable Blade for Torque Screwdrivers

Part No.	⊕	⬆	↔	↔	max. Nm
26197-9	PH0	4	175	42	0.4
26058-3	PH1	4	175	42	3.8
27079-7	PH2	4	175	42	5.5



- Torque TORX® Interchangeable Blade for Torque Screwdrivers

Part No.	⊕	⬆	↔	↔	max. Nm
28595006	T6	4	175	42	0.6
28595007	T7	4	175	42	0.9
28595008	T8	4	175	42	1.3
28695010	T10	4	175	42	3.8

Torque Drivers -other



- Soft-grip T-handle for extreme comfort and optimal torque transmission. Audible and perceptible click when the pre-set torque has been attained. {%s}
- According to EN ISO 6798, BS EN 26789, ASME B107.14M standards
- $\pm 6\%$, traceable to national standards.
- For applications where recommended torque settings are important. Use in combination with an interchangeable 6 mm blade for Wiha T-handle torque tools.
- Delivered in plastic case, incl. factory calibration certificate.

T-HANDLE TORQUEFIX FACTORY PRESET

NEW



Part No.	Nm	Ø	↕	↕
2891060	6	6	120	56
2891080	8	6	120	56
2891100	10	6	120	56
2891120	12	6	120	56
2891125	12.5	6	120	56
2891140	14	6	120	56

T-HANDLE TORQUEVARIO ADJUSTABLE WITH SCALE

NEW



Part No.	Nm	Ø	↕	↕
2893514	5-14	6	120	56

UNIVERSAL BIT HOLDER FOR T-HANDLE TORQUE TOOLS



- Torque 1/4" Universal Bits Holder for Torque Screwdrivers

Part No.	Ø	↕	↕
28758-0	1/4"	6	125

WIHA TORQUE VARIO SET

- Set of 11 pieces. Torque Vario 5-14Nm, torque setter, 1/4 adapter and 3/8 adapter

4.0, 5.0, 6.0

T25, T30, T40

NEW



Part No.	Description
292 348	Torque Vario Set 5-14Nm

TORQUELEADER QUICKSET SCREWDRIVERS



These versatile precision torque screwdrivers have micrometer adjustment of torque and are available in three sizes. Adaptors to convert from male to female hex or female to male hex are also available.

Part No.	Torque Range	Length	Colour	T-Bar	Fitting
NOR 016000	20-120 cN.m	160mm	black	-	Male
NOR 016040	20-120 cN.m	69mm	black	-	F/Hex
NOR 016100	1-6 N.m	222mm	red	✓	Male
NOR 016500	1-6 N.m	184mm	red	✓	F/Hex
NOR 016300	4-9 N.m	222mm	green	✓	Male
NOR 016700	4-9 N.m	184mm	green	✓	F/Hex

TORQUELEADER PRESET SCREWDRIVERS



Ideal for production applications, these torque limiting screwdrivers are designed to be set with the use of Torque Leader Calibration Analyser. Other models available in different colours to assist with identification in multiple tool applications, please enquire.

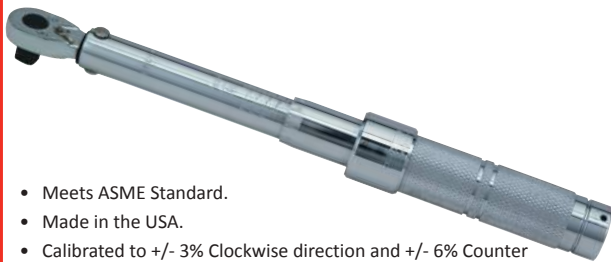
Part No.	Torque Range	Length	Colour	Fitting
NOR 015140	2-135 cN.m	143mm	red	Male
NOR 015240	2-135 cN.m	111mm	red	F/Hex
NOR 015540	6-406 cN.m	159mm	red	Male
NOR 015640	6-406 cN.m	127mm	red	F/Hex
NOR 015900	1-13.60 N.m	168mm	black	Male
NOR 015920	1-13.60 N.m	137mm	black	F/Hex

Torque Wrenches

If You Find Yourself Second Guessing Your Torque Wrench, Find a New Torque Wrench

You simple can't hope that a bolt holding a rotor blade on a helicopter is properly tightened, or that a nut keeping a conveyor running smoothly is secured, you have to know they are. Proto wrench parts are manufactured from high - grade steel. Key working components are heat- treated to resist wear. Springs are manufactured to keep their shape for thousands of cycles. And assembly is done on a work bench, by hand!! All this ensures durable, dependable accuracy. **Anything less is intolerable**

PROTO RATCHETING HEAD TORQUE WRENCH - NM



- Meets ASME Standard.
- Made in the USA.
- Calibrated to +/- 3% Clockwise direction and +/- 6% Counter Clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by manually loading the torque wrench.

Part No.	Drive Size	Torque Range	Increments	OAL
J6006NMC	3/8"	16-80Nm	0.5Nm	394mm
J6016NMC	1/2"	40-200Nm	1Nm	546mm
J6014NMC	1/2"	70-350Nm	1Nm	689mm
J6020NM	3/4"	160-800Nm	4Nm	1056mm

PROTO RATCHETING HEAD TORQUE WRENCH - IN-LBS



- Meets ASME Standard.
- Made in the USA.
- Calibrated to +/- 3% Clockwise direction (For J6060A).
- Calibrated to +/- 4% Clockwise direction and +/- 6% Counter Clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by manually loading the torque wrench.

Part No.	Drive Size	Torque Range	Increments	OAL
J6060A	1/4"	10-50 in-lbs	1 in-lbs	241mm
J6062C	1/4"	40-200 in-lbs	1 in-lbs	302mm
J6064C	3/8"	40-200 in-lbs	1 in-lbs	302mm
J6066C	3/8"	200-1000 in-lbs	5 in-lbs	394mm
J6068C	1/2"	360-1800 in-lbs	10 in-lbs	546mm
J6072C	1/2"	600-3000 in-lbs	10 in-lbs	689mm

COAXIAL TORQUE SPANNER



Torque spanner for 8mm AF nuts preset to 1N.m, specifically for use with coaxial connectors.

Part No.	Description	OAL
CHD 0801	Coax Torque Spanner	131mm

GEARWRENCH TORQUE WRENCH



Part No.	Description
85050	Torque Wrench 1/4" Drive - 30 - 200in/lbs
85051	Torque Wrench 3/8" Drive - 25 - 250in/lbs
85052	Torque Wrench 3/8" Drive - 10 - 100ft/lbs
85053	Torque Wrench 1/2" Drive - 10 - 150ft/lbs
85054	Torque Wrench 1/2" Drive - 20 - 250ft/lbs
85055	Torque Wrench 3/4" Drive - 100 - 600ft/lbs



Electronic torque wrenches with buzzer and indication for target torque settings and LCD screen with backlight.

Part No.	Description
KD 85071	Torque Wrench 1/2" Dr - 34-399 N.m / 25-250 lbf.ft
KD 85070	Torque Wrench 3/8" Dr - 15-134 N.m / 10-110 lbf.ft

NORBAR TORQUE WRENCHES



Part No.	Torque Range	Length	Sq. Dr.
13001	1-5 N.m	170mm	1/4"
13002	10-50 lbf.in	170mm	1/4"



Part No.	Torque Range	Length	Sq. Dr.
11034	1-20 N.m / 10-180 lbf.in	215mm	3/8"
11037	1-20 N.m / 10-180 lbf.in	215mm	1/4"
11087	4-20 N.m / 40-180 lbf.in	220mm	3/8"
11123	4-20 N.m / 40-180 lbf.in	220mm	1/4"
11125	4-20 N.m / 40-180 lbf.in	215mm	3/8"



Part No.	Torque Range	Length	Sq. Dr.
13042	8-60 N.m / 5-45 lbf.in	321mm	3/8"
13043	8-60 N.m / 5-45 lbf.in	320mm	1/2"
13044	20-100 N.m / 15-180 lbf.in	353mm	3/8"
13045	20-100 N.m / 15-180 lbf.in	359mm	1/2"
13046	40-200 N.m / 30-150 lbf.in	442mm	1/2"
13047	60-300 N.m / 45-220 lbf.in	570mm	1/2"
13049	60-330 N.m / 45-220 lbf.in	683mm	1/2"
13050	80-400 N.m / 60-300 lbf.in	683mm	3/4"

GearWrench Socketry



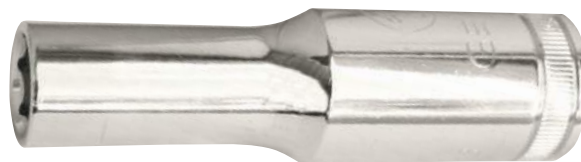
- Entry angle guides fastener
- Serration depth as deep as the fastener
- Large hard stamped identification
- Double Line (imperial) and Knurled Line (metric) for identification

1/4" DRIVE STANDARD 6 POINT SOCKETS



Part No.	Description	Size
KD 80105	1/4" Drive 6pt. Standard SAE Socket	3/16"
KD 80106	1/4" Drive 6pt. Standard SAE Socket	7/32"
KD 80107	1/4" Drive 6pt. Standard SAE Socket	1/4"
KD 80108	1/4" Drive 6pt. Standard SAE Socket	9/32"
KD 80109	1/4" Drive 6pt. Standard SAE Socket	5/16"
KD 80110	1/4" Drive 6pt. Standard SAE Socket	11/32"
KD 80111	1/4" Drive 6pt. Standard SAE Socket	3/8"
KD 80112	1/4" Drive 6pt. Standard SAE Socket	7/16"
KD 80113	1/4" Drive 6pt. Standard SAE Socket	1/2"
KD 80114	1/4" Drive 6pt. Standard SAE Socket	9/16"
KD 80125	1/4" Drive 6pt. Standard Metric Socket	4mm
KD 80126	1/4" Drive 6pt. Standard Metric Socket	5mm
KD 80127	1/4" Drive 6pt. Standard Metric Socket	5.5mm
KD 80128	1/4" Drive 6pt. Standard Metric Socket	6mm
KD 80129	1/4" Drive 6pt. Standard Metric Socket	7mm
KD 80130	1/4" Drive 6pt. Standard Metric Socket	8mm
KD 80131	1/4" Drive 6pt. Standard Metric Socket	9mm
KD 80132	1/4" Drive 6pt. Standard Metric Socket	10mm
KD 80133	1/4" Drive 6pt. Standard Metric Socket	11mm
KD 80134	1/4" Drive 6pt. Standard Metric Socket	12mm
KD 80135	1/4" Drive 6pt. Standard Metric Socket	13mm
KD 80136	1/4" Drive 6pt. Standard Metric Socket	14mm
KD 80137	1/4" Drive 6pt. Standard Metric Socket	15mm

1/4" DRIVE DEEP 6 POINT SOCKETS



Part No.	Description	Size
KD 80115	1/4" Drive 6pt. Deep SAE Socket	9/16"
KD 80116	1/4" Drive 6pt. Deep SAE Socket	7/32"
KD 80117	1/4" Drive 6pt. Deep SAE Socket	1/4"
KD 80118	1/4" Drive 6pt. Deep SAE Socket	9/32"
KD 80119	1/4" Drive 6pt. Deep SAE Socket	5/16"
KD 80120	1/4" Drive 6pt. Deep SAE Socket	11/32"
KD 80121	1/4" Drive 6pt. Deep SAE Socket	3/8"
KD 80122	1/4" Drive 6pt. Deep SAE Socket	7/16"
KD 80123	1/4" Drive 6pt. Deep SAE Socket	1/2"
KD 80124	1/4" Drive 6pt. Deep SAE Socket	9/16"
KD 80138	1/4" Drive 6pt. Deep Metric Socket	4mm
KD 80139	1/4" Drive 6pt. Deep Metric Socket	5mm
KD 80140	1/4" Drive 6pt. Deep Metric Socket	5.5mm
KD 80141	1/4" Drive 6pt. Deep Metric Socket	6mm
KD 80142	1/4" Drive 6pt. Deep Metric Socket	7mm
KD 80143	1/4" Drive 6pt. Deep Metric Socket	8mm
KD 80144	1/4" Drive 6pt. Deep Metric Socket	9mm
KD 80145	1/4" Drive 6pt. Deep Metric Socket	10mm
KD 80146	1/4" Drive 6pt. Deep Metric Socket	11mm
KD 80147	1/4" Drive 6pt. Deep Metric Socket	12mm
KD 80148	1/4" Drive 6pt. Deep Metric Socket	13mm
KD 80149	1/4" Drive 6pt. Deep Metric Socket	14mm
KD 80150	1/4" Drive 6pt. Deep Metric Socket	15mm

1/4" DRIVE SOCKET RAIL SETS



Part No.	Description
KD 80302	13 pce 6 pt metric set (4, 5.5, 6-15mm std. sockets)
KD 80303	10 pce 6 pt imperial set (3/16" - 9/16" std. sockets)
KD 80304	13 pce 6 pt deep metric set (4, 5.5, 6-15mm sockets)
KD 80305	10 pce 6 pt deep imperial set (3/16" - 9/16" sockets)

1/4" DRIVE EXTENSION SETS



Part No.	Description
KD 81002	5 pce 1/4" drive extension set (2", 3", 6", 10", 14")
KD 81004	4 pce 1/4" drive wobble extension set (2", 4", 6", 14")

1/4" DRIVE INHEX SOCKETS



80323 contains: 1/16" - 1/4" bit sockets
80321 contains: 2, 2.5, 3, 4, 5, 6mm bit sockets

Part No.	Description
KD 80323	10 pce SAE Hex Bit Socket Set (1/4" drive)
KD 80321	6 pce Metric Hex Bit Socket Set (1/4" drive)

1/4" DRIVE INHEX SOCKETS

Part No.	Description	Size
KD 80151	1/4" Drive Hex Bit Socket	1/16"
KD 80152	1/4" Drive Hex Bit Socket	5/64"
KD 80153	1/4" Drive Hex Bit Socket	3/32"
KD 80154	1/4" Drive Hex Bit Socket	7/64"
KD 80155	1/4" Drive Hex Bit Socket	1/8"
KD 80156	1/4" Drive Hex Bit Socket	9/64"
KD 80157	1/4" Drive Hex Bit Socket	5/32"
KD 80158	1/4" Drive Hex Bit Socket	3/16"
KD 80159	1/4" Drive Hex Bit Socket	7/32"
KD 80160	1/4" Drive Hex Bit Socket	1/4"
KD 80161	1/4" Drive Hex Bit Socket	2mm
KD 80162	1/4" Drive Hex Bit Socket	2.5mm
KD 80163	1/4" Drive Hex Bit Socket	3mm
KD 80164	1/4" Drive Hex Bit Socket	4mm
KD 80165	1/4" Drive Hex Bit Socket	5mm
KD 80166	1/4" Drive Hex Bit Socket	6mm
KD 80167	1/4" Drive 12pt. Bit Socket	4mm
KD 80168	1/4" Drive 12pt. Bit Socket	5mm
KD 80169	1/4" Drive 12pt. Bit Socket	6mm
KD 80170	1/4" Drive 12pt. Bit Socket	8mm

1/4" DRIVE TORX TAMPER SOCKETS

Part No.	Description	Size
KD 80178	1/4" Drive 2pc. Torx Tamper Sockets	T-7
KD 80179	1/4" Drive 2pc. Torx Tamper Sockets	T-8
KD 80180	1/4" Drive 2pc. Torx Tamper Sockets	T-10
KD 80181	1/4" Drive 2pc. Torx Tamper Sockets	T-15
KD 80182	1/4" Drive 2pc. Torx Tamper Sockets	T-20
KD 80183	1/4" Drive 2pc. Torx Tamper Sockets	T-25
KD 80184	1/4" Drive 2pc. Torx Tamper Sockets	T-27
KD 80185	1/4" Drive 2pc. Torx Tamper Sockets	T-30

1/4" DRIVE MASTER SOCKET SET



6 Point Imperial/Metric Socket Set in Blow Moulded Case

Contains: 3/16" - 9/16" standard & deep sockets, 4, 5.5, 6-15mm standard & deep sockets, 1/4" drive full polish teardrop ratchet, 1/4" thumbwheel ratchet, 2" & 6" extension, universal joint.

Part No.	Description
KD 80300	51 pce 1/4" drive imperial/metric socket set

TENG 23 PC SOCKET SET - 1/4" DRIVE

TengTools 6 Point Metric

Socket Set in Blow Moulded Case
Contains: 4-13mm standard sockets, TX15 & TX20, 5mm & 6mm INHEX, PH1 & PH2, 4mm & 5.5mm flat (to fit adaptor socket), 1 x extension, universal joint and ratchet.



Part No.	Description
MR-1423	23 pce metric socket set

3/8" DRIVE SOCKET RAIL SETS



Part No.	Description
KD 80552	14 pce 6 pt metric set (6 - 19mm standard sockets)
KD 80553	13 pce 6 pt imperial set (1/4" - 1" standard sockets)
KD 80554	14 pce 6 pt deep metric set (6 - 19mm deep sockets)
KD 80555	11 pce 6 pt deep imperial set (1/4" - 7/8" deep sockets)

3/8" DRIVE STANDARD 6 POINT SOCKETS

Part No.	Description	Size
KD 80350	3/8" Drive 6pt. Standard SAE Socket	1/4"
KD 80351	3/8" Drive 6pt. Standard SAE Socket	5/16"
KD 80352	3/8" Drive 6pt. Standard SAE Socket	3/8"
KD 80353	3/8" Drive 6pt. Standard SAE Socket	7/16"
KD 80354	3/8" Drive 6pt. Standard SAE Socket	1/2"
KD 80355	3/8" Drive 6pt. Standard SAE Socket	9/16"
KD 80356	3/8" Drive 6pt. Standard SAE Socket	5/8"
KD 80357	3/8" Drive 6pt. Standard SAE Socket	11/16"
KD 80358	3/8" Drive 6pt. Standard SAE Socket	3/4"
KD 80359	3/8" Drive 6pt. Standard SAE Socket	13/16"
KD 80360	3/8" Drive 6pt. Standard SAE Socket	7/8"
KD 80361	3/8" Drive 6pt. Standard SAE Socket	15/16"
KD 80362	3/8" Drive 6pt. Standard SAE Socket	1"
KD 80374	3/8" Drive 6pt. Standard Metric Socket	6mm
KD 80375	3/8" Drive 6pt. Standard Metric Socket	7mm
KD 80376	3/8" Drive 6pt. Standard Metric Socket	8mm
KD 80377	3/8" Drive 6pt. Standard Metric Socket	9mm
KD 80378	3/8" Drive 6pt. Standard Metric Socket	10mm
KD 80379	3/8" Drive 6pt. Standard Metric Socket	11mm
KD 80380	3/8" Drive 6pt. Standard Metric Socket	12mm
KD 80381	3/8" Drive 6pt. Standard Metric Socket	13mm
KD 80382	3/8" Drive 6pt. Standard Metric Socket	14mm
KD 80383	3/8" Drive 6pt. Standard Metric Socket	15mm
KD 80384	3/8" Drive 6pt. Standard Metric Socket	16mm
KD 80385	3/8" Drive 6pt. Standard Metric Socket	17mm
KD 80386	3/8" Drive 6pt. Standard Metric Socket	18mm
KD 80387	3/8" Drive 6pt. Standard Metric Socket	19mm

3/8" DRIVE DEEP 6 POINT SOCKETS

Part No.	Description	Size
KD 80363	3/8" Drive 6pt. Deep SAE Socket	1/4"
KD 80364	3/8" Drive 6pt. Deep SAE Socket	5/16"
KD 80365	3/8" Drive 6pt. Deep SAE Socket	3/8"
KD 80366	3/8" Drive 6pt. Deep SAE Socket	7/16"
KD 80367	3/8" Drive 6pt. Deep SAE Socket	1/2"
KD 80368	3/8" Drive 6pt. Deep SAE Socket	9/16"
KD 80369	3/8" Drive 6pt. Deep SAE Socket	5/8"
KD 80370	3/8" Drive 6pt. Deep SAE Socket	11/16"
KD 80371	3/8" Drive 6pt. Deep SAE Socket	3/4"
KD 80372	3/8" Drive 6pt. Deep SAE Socket	13/16"
KD 80373	3/8" Drive 6pt. Deep SAE Socket	7/8"
KD 80388	3/8" Drive 6pt. Deep Metric Socket	6mm
KD 80389	3/8" Drive 6pt. Deep Metric Socket	7mm
KD 80390	3/8" Drive 6pt. Deep Metric Socket	8mm
KD 80391	3/8" Drive 6pt. Deep Metric Socket	9mm
KD 80392	3/8" Drive 6pt. Deep Metric Socket	10mm
KD 80393	3/8" Drive 6pt. Deep Metric Socket	11mm
KD 80394	3/8" Drive 6pt. Deep Metric Socket	12mm
KD 80395	3/8" Drive 6pt. Deep Metric Socket	13mm
KD 80396	3/8" Drive 6pt. Deep Metric Socket	14mm
KD 80397	3/8" Drive 6pt. Deep Metric Socket	15mm
KD 80398	3/8" Drive 6pt. Deep Metric Socket	16mm
KD 80399	3/8" Drive 6pt. Deep Metric Socket	17mm
KD 80400	3/8" Drive 6pt. Deep Metric Socket	18mm
KD 80401	3/8" Drive 6pt. Deep Metric Socket	19mm

3/8" DRIVE INHEX SOCKETS - SET



80580 contains: 2, 2.5, 3-12mm bit sockets.
80581 contains: 1/16" - 3/8" bit sockets.

Part No.	Description
KD 80580	12 pce metric hex bit socket set (3/8" drive)
KD 80581	12 pce imperial hex bit socket set (3/8" drive)

3/8" DRIVE INHEX SOCKETS

Part No.	Description	Size
KD 80410	3/8" Drive Hex Bit Socket	1/16"
KD 80411	3/8" Drive Hex Bit Socket	5/64"
KD 80412	3/8" Drive Hex Bit Socket	3/32"
KD 80413	3/8" Drive Hex Bit Socket	7/64"
KD 80414	3/8" Drive Hex Bit Socket	1/8"
KD 80415	3/8" Drive Hex Bit Socket	9/64"
KD 80416	3/8" Drive Hex Bit Socket	5/32"
KD 80417	3/8" Drive Hex Bit Socket	3/16"
KD 80418	3/8" Drive Hex Bit Socket	7/32"
KD 80419	3/8" Drive Hex Bit Socket	1/4"
KD 80420	3/8" Drive Hex Bit Socket	5/16"
KD 80421	3/8" Drive Hex Bit Socket	3/8"
KD 80422	3/8" Drive Hex Bit Socket	2mm
KD 80423	3/8" Drive Hex Bit Socket	2.5mm
KD 80424	3/8" Drive Hex Bit Socket	3mm
KD 80425	3/8" Drive Hex Bit Socket	4mm
KD 80426	3/8" Drive Hex Bit Socket	5mm
KD 80427	3/8" Drive Hex Bit Socket	6mm
KD 80428	3/8" Drive Hex Bit Socket	7mm
KD 80429	3/8" Drive Hex Bit Socket	8mm
KD 80430	3/8" Drive Hex Bit Socket	9mm
KD 80431	3/8" Drive Hex Bit Socket	10mm
KD 80432	3/8" Drive Hex Bit Socket	11mm
KD 80433	3/8" Drive Hex Bit Socket	12mm

3/8" DRIVE LONG INHEX BALL-END SOCKETS

Part No.	Description	Size
KD 80434	3/8" Drive Long Ball Hex Bit Socket	1/8"
KD 80435	3/8" Drive Long Ball Hex Bit Socket	5/32"
KD 80436	3/8" Drive Long Ball Hex Bit Socket	3/16"
KD 80437	3/8" Drive Long Ball Hex Bit Socket	7/32"
KD 80438	3/8" Drive Long Ball Hex Bit Socket	1/4"
KD 80439	3/8" Drive Long Ball Hex Bit Socket	5/16"
KD 80440	3/8" Drive Long Ball Hex Bit Socket	3/8"
KD 80441	3/8" Drive Long Ball Hex Bit Socket	3mm
KD 80442	3/8" Drive Long Ball Hex Bit Socket	4mm
KD 80443	3/8" Drive Long Ball Hex Bit Socket	5mm
KD 80444	3/8" Drive Long Ball Hex Bit Socket	6mm
KD 80445	3/8" Drive Long Ball Hex Bit Socket	7mm
KD 80446	3/8" Drive Long Ball Hex Bit Socket	8mm
KD 80447	3/8" Drive Long Ball Hex Bit Socket	9mm
KD 80448	3/8" Drive Long Ball Hex Bit Socket	10mm

3/8" DRIVE EXTENSION SETS



Part No.	Description
KD 81200	4 pce 3/8" drive extension set (1-1/2", 3", 6", 12")
KD 81201	4 pce 3/8" drive wobble extension set (3", 6", 10", 12")

TORX BIT SETS



Tamper-Proof Torx Bit Socket Sets

80725 contains: T7, T8, T10, T15, T20, T25, T27, T30, T40, T45, T50, T55 & T60
80724 contains: T10, T15, T20, T25, T27, T30, T40, T45, T50, 1/4" bit adapter & 5/16" bit adapter.

Part No.	Description
KD 80725	12 pce tamper-proof Torx set (1/4", 3/8", 1/2" Drive)
KD 80724	12 pce tamper-proof Torx set (3/8" Drive)

3/8" DRIVE TORX TAMPER SOCKETS

Part No.	Description	Size
KD 80471	Tamper Proof Torx Bits	T-10
KD 80472	Tamper Proof Torx Bits	T-15
KD 80473	Tamper Proof Torx Bits	T-20
KD 80474	Tamper Proof Torx Bits	T-25
KD 80475	Tamper Proof Torx Bits	T-27
KD 80476	Tamper Proof Torx Bits	T-30
KD 80477	Tamper Proof Torx Bits	T-40
KD 80478	Tamper Proof Torx Bits	T-45
KD 80479	Tamper Proof Torx Bits	T-50

3/8" DRIVE CROWFOOT SPANNERS



Imperial Crowfoot Wrench Set

3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"

Metric Crowfoot Wrench Set

10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm

Part No.	Description
KD 81908	11Piece Imperial Crowfoot Set
KD 81909	10 Piece Metric Crowfoot Set

3/8" DRIVE MASTER SOCKET SET



6 Pt. Imperial/Metric Socket Set in Blow Moulded Case

1/4" - 1" standard & 1/4" - 7/8" deep sockets, 6 - 19mm standard & deep sockets, 3/8" drive full polish teardrop ratchet, 3/8" drive stubby full polish ratchet, 3" & 6" extension, universal joint

Part No.	Description
KD 80550	57 pce 3/8" drive imperial/metric socket set

1/2" DRIVE SOCKET RAIL SETS



Part No.	Description
KD 80702	13 pce 6 pt metric set (12 - 24mm standard sockets)
KD 80703	11 pce 6 pt imperial set (1/2" - 1-1/8" standard sockets)
KD 80704	10 pce 6 pt deep metric set (10 - 19mm deep sockets)
KD 80705	8 pce 6 pt deep imperial set (1/2" - 15/16" deep sockets)

1/2" DRIVE STANDARD 6 POINT SOCKETS

Part No.	Description	Size
KD 80602	1/2" Drive 6pt. Standard SAE Socket	7/16"
KD 80603	1/2" Drive 6pt. Standard SAE Socket	1/2"
KD 80604	1/2" Drive 6pt. Standard SAE Socket	9/16"
KD 80605	1/2" Drive 6pt. Standard SAE Socket	5/8"
KD 80606	1/2" Drive 6pt. Standard SAE Socket	11/16"
KD 80607	1/2" Drive 6pt. Standard SAE Socket	3/4"
KD 80608	1/2" Drive 6pt. Standard SAE Socket	13/16"
KD 80609	1/2" Drive 6pt. Standard SAE Socket	7/8"
KD 80610	1/2" Drive 6pt. Standard SAE Socket	15/16"
KD 80611	1/2" Drive 6pt. Standard SAE Socket	1"
KD 80612	1/2" Drive 6pt. Standard SAE Socket	1-1/16"
KD 80613	1/2" Drive 6pt. Standard SAE Socket	1-1/8"
KD 80622	1/2" Drive 6pt. Standard Metric Socket	10mm
KD 80623	1/2" Drive 6pt. Standard Metric Socket	11mm
KD 80624	1/2" Drive 6pt. Standard Metric Socket	12mm
KD 80625	1/2" Drive 6pt. Standard Metric Socket	13mm
KD 80626	1/2" Drive 6pt. Standard Metric Socket	14mm
KD 80627	1/2" Drive 6pt. Standard Metric Socket	15mm
KD 80628	1/2" Drive 6pt. Standard Metric Socket	16mm
KD 80629	1/2" Drive 6pt. Standard Metric Socket	17mm
KD 80630	1/2" Drive 6pt. Standard Metric Socket	18mm
KD 80631	1/2" Drive 6pt. Standard Metric Socket	19mm
KD 80632	1/2" Drive 6pt. Standard Metric Socket	20mm
KD 80633	1/2" Drive 6pt. Standard Metric Socket	21mm
KD 80634	1/2" Drive 6pt. Standard Metric Socket	22mm
KD 80635	1/2" Drive 6pt. Standard Metric Socket	23mm
KD 80636	1/2" Drive 6pt. Standard Metric Socket	24mm

1/2" DRIVE DEEP 6 POINT SOCKETS

Part No.	Description	Size
KD 80614	1/2" Drive 6pt. Deep SAE Socket	1/2"
KD 80615	1/2" Drive 6pt. Deep SAE Socket	9/16"
KD 80616	1/2" Drive 6pt. Deep SAE Socket	5/8"
KD 80617	1/2" Drive 6pt. Deep SAE Socket	11/16"
KD 80618	1/2" Drive 6pt. Deep SAE Socket	3/4"
KD 80619	1/2" Drive 6pt. Deep SAE Socket	13/16"
KD 80620	1/2" Drive 6pt. Deep SAE Socket	7/8"
KD 80621	1/2" Drive 6pt. Deep Metric Socket	15/16"
KD 80637	1/2" Drive 6pt. Deep Metric Socket	10mm
KD 80638	1/2" Drive 6pt. Deep Metric Socket	11mm
KD 80639	1/2" Drive 6pt. Deep Metric Socket	12mm
KD 80640	1/2" Drive 6pt. Deep Metric Socket	13mm
KD 80641	1/2" Drive 6pt. Deep Metric Socket	14mm
KD 80642	1/2" Drive 6pt. Deep Metric Socket	15mm
KD 80643	1/2" Drive 6pt. Deep Metric Socket	16mm
KD 80644	1/2" Drive 6pt. Deep Metric Socket	17mm
KD 80645	1/2" Drive 6pt. Deep Metric Socket	18mm
KD 80646	1/2" Drive 6pt. Deep Metric Socket	19mm

**MOST GEARWRENCH
HAS A LIFETIME WARRANTY
(FEW EXCEPTIONS)**

1/2" DRIVE EXTENSION SETS



Part No.	Description
KD 81300	3 pce 1/2" drive extension set (5", 10", 15")
KD 81301	3 pce 1/2" drive wobble extension set (5", 10", 15")

1/2" DRIVE MASTER SOCKET SET



6 Pt. Imperial/Metric Socket Set in Blow Moulded Case
7/16" - 1-1/8" standard sockets, 1/2" - 15/16" deep sockets, 10 - 24mm standard sockets, 10 - 19mm deep sockets, 1/2" full polish teardrop ratchet, 3" & 5" extension, universal joint

Part No.	Description
KD 80700	49 pce 1/2" drive imperial/metric socket set

RATCHET SETS



Flex Ratchet Set

Part No.	Description
KD 81204	2 pce flex ratchet set (1/4" & 3/8")



Full Polish Ratchet Set

Part No.	Description
KD 81206	3 pce full polish ratchet set (1/4", 3/8", 1/2")



Cushion Grip Ratchet Set

Part No.	Description
KD 81207	3 pce cushion grip ratchet set (1/4", 3/8", 1/2")

GearWrench Spanners

High Quality Standard Series Spanners



GEARWRENCH COMBINATION SPANNERS



Long Pattern
Combination Non-Ratcheting Wrench Sets

Part No.	Description
KD 81900	24 pce imperial/metric set, 1/2" - 1" and 8mm - 22mm
KD 81901	15 pce imperial set, 1/4" - 1"
KD 81902	15 pce metric set, 8mm - 22mm

GearWrench Individual Long Pattern Combination Spanners

Part No.	Size	Description
KD 81650	1/4"	Combination spanner imperial
KD 81651	9/32"	Combination spanner imperial
KD 81652	5/16"	Combination spanner imperial
KD 81653	11/32"	Combination spanner imperial
KD 81654	3/8"	Combination spanner imperial
KD 81655	7/16"	Combination spanner imperial
KD 81656	1/2"	Combination spanner imperial
KD 81657	9/16"	Combination spanner imperial
KD 81658	5/8"	Combination spanner imperial
KD 81659	11/16"	Combination spanner imperial
KD 81660	3/4"	Combination spanner imperial
KD 81661	13/16"	Combination spanner imperial
KD 81662	7/8"	Combination spanner imperial
KD 81663	15/16"	Combination spanner imperial
KD 81664	1"	Combination spanner imperial
KD 81665	8mm	Combination spanner metric
KD 81666	9mm	Combination spanner metric
KD 81667	10mm	Combination spanner metric
KD 81668	11mm	Combination spanner metric
KD 81669	12mm	Combination spanner metric
KD 81670	13mm	Combination spanner metric
KD 81671	14mm	Combination spanner metric
KD 81672	15mm	Combination spanner metric
KD 81673	16mm	Combination spanner metric
KD 81674	17mm	Combination spanner metric
KD 81675	18mm	Combination spanner metric
KD 81676	19mm	Combination spanner metric
KD 81677	20mm	Combination spanner metric
KD 81678	21mm	Combination spanner metric
KD 81679	22mm	Combination spanner metric

Spanners, non-Ratcheting series

- Surface Drive Plus
 - Provides stronger grip on fasteners
 - Reduces fastener rounding
 - Delivers up to 25% more torque
- Long pattern length or stubby pattern length
- Offset box end
- Stamped on both sides and head

GEARWRENCH STUBBY COMBINATION SPANNER SETS



Stubby Combination
Wrench Sets

Part No.	Description
KD 81903	20 pce imperial/metric set, 3/8" - 15/16" & 10mm - 19mm
KD 81904	10 pce metric set, 10mm - 19mm
KD 81905	10 pce imperial set, 3/8" - 15/16"

GEARWRENCH INDIVIDUAL STUBBY COMBINATION SPANNERS

Part No.	Size	Description
KD 81624	3/8"	Combination Stubby Wrench (Non-Ratcheting)
KD 81625	7/16"	Combination Stubby Wrench (Non-Ratcheting)
KD 81626	1/2"	Combination Stubby Wrench (Non-Ratcheting)
KD 81627	9/16"	Combination Stubby Wrench (Non-Ratcheting)
KD 81628	5/8"	Combination Stubby Wrench (Non-Ratcheting)
KD 81629	11/16"	Combination Stubby Wrench (Non-Ratcheting)
KD 81630	3/4"	Combination Stubby Wrench (Non-Ratcheting)
KD 81631	13/16"	Combination Stubby Wrench (Non-Ratcheting)
KD 81632	7/8"	Combination Stubby Wrench (Non-Ratcheting)
KD 81633	15/16"	Combination Stubby Wrench (Non-Ratcheting)
KD 81634	10mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81635	11mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81636	12mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81637	13mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81638	14mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81639	15mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81640	16mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81641	17mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81642	18mm	Combination Stubby Wrench (Non-Ratcheting)
KD 81643	19mm	Combination Stubby Wrench (Non-Ratcheting)

FLARE NUT SPANNERS SETS

SAE Flare Nut Wrench Set

6 Piece Set
1/4" x 5/16", 3/8" x 7/16",
1/2" x 9/16",
5/8" x 11/16", 5/8" x 3/4",
3/4" x 7/8"

Metric Flare Nut Wrench Set

6 Piece Set
9 x 11, 10 x 12, 13 x 14,
15 x 17, 16 x 18,
19 x 21mm



Part No.	Description
KD 81906	Metric Flare Nut Wrench Set
KD 81907	SAE Flare Nut Wrench Set

GearWrench Ratcheting Spanners

Strength

- Surface Drive Plus™ provides stronger grip on fasteners, reduces fastener rounding and delivers up to 25% more torque

Productivity

- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

Strength

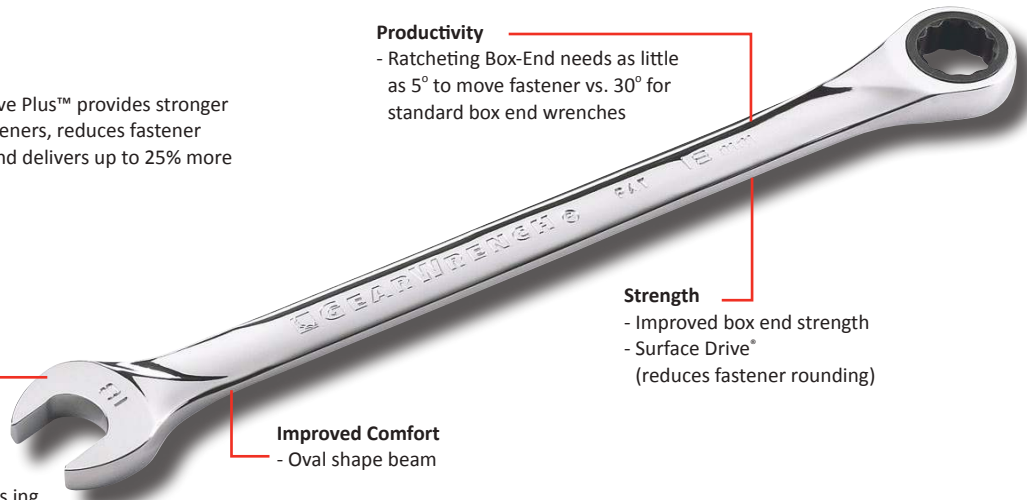
- Improved box end strength
- Surface Drive* (reduces fastener rounding)

Improved Comfort

- Oval shape beam

Access

- Up to 25% longer for access into those hard to reach fasteners



XL SAE RATCHETING COMBI SPANNERS



XL SAE Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 85108	1/4"	5.315	0.571	0.181	0.610	0.256
GW 85110	5/16"	5.906	0.709	0.197	0.650	0.256
GW 85112	3/8"	7.087	0.906	0.227	0.778	0.287
GW 85114	7/16"	7.677	0.984	0.248	0.854	0.303
GW 85116	1/2"	8.661	1.102	0.276	0.984	0.339
GW 85118	9/16"	9.252	1.260	0.295	1.035	0.370
GW 85120	5/8"	10.236	1.378	0.315	1.201	0.406
GW 85122	11/16"	10.827	1.496	0.354	1.240	0.421
GW 85124	3/4"	12.008	1.654	0.374	1.339	0.441
GW 85126	13/16"	12.508	1.772	0.402	1.536	0.512
GW 85128	7/8"	13.000	1.870	0.417	1.536	0.512
GW 85130	15/16"	14.000	2.008	0.441	1.754	0.571
GW 85132	1"	14.500	2.087	0.457	1.754	0.571

XL METRIC RATCHETING COMBI SPANNERS



XL Metric Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 85008	8mm	5.906	0.709	0.197	0.650	0.256
GW 85009	9mm	6.496	0.787	0.205	0.170	0.272
GW 85010	10mm	7.087	0.906	0.224	0.778	0.287
GW 85011	11mm	7.677	0.984	0.248	0.854	0.303
GW 85012	12mm	8.150	1.063	0.264	0.906	0.323
GW 85013	13mm	4.661	1.102	0.276	0.984	0.339
GW 85014	14mm	9.252	1.260	0.295	1.035	0.370
GW 85015	15mm	9.843	1.299	0.315	1.130	0.390
GW 85016	16mm	10.263	1.378	0.315	1.201	0.406
GW 85017	17mm	10.827	1.496	0.354	1.240	0.421
GW 85018	18mm	11.417	1.516	0.354	1.280	0.441
GW 85019	19mm	12.008	1.654	0.374	1.339	0.441
GW 85020	20mm	12.508	1.693	0.389	1.536	0.512
GW 85021	21mm	12.508	1.772	0.402	1.536	0.512
GW 85022	22mm	13.000	1.870	0.417	1.536	0.512
GW 85024	24mm	14.000	2.008	0.441	1.754	0.571

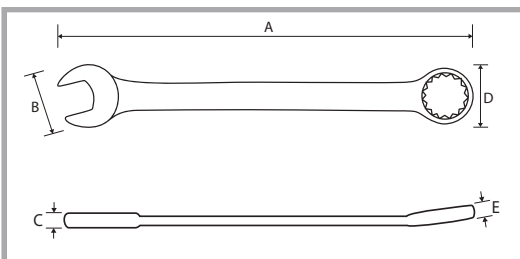
XL SAE COMBI SPANNER SET

SAE XL Combination 8 Piece Set

5/16", 3/8", 7/16", 1/2",
9/16", 5/8", 11/16", 3/4"



Part No.	Description
GW 85198	SAE XL Combi Set



XL METRIC COMBI SPANNER SET

Metric Combination 12 Piece Set

8mm, 9mm, 10mm, 11mm,
12mm, 13mm, 14mm, 15mm,
16mm, 17mm, 18mm, 19mm



Part No.	Description
GW 85098	Metric XL Combi Set

NOTE- All measurements in this section of the catalogue are in inches, unless stated otherwise.

GEARRATCHET™ RATCHETING COMBINATION SPANNERS



Productivity
- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

Access
- Sleek head design enables access to tight spots where a ratchet will not fit

Strength
- Surface Drive® (reduces fastener rounding)

METRIC RATCHETING COMBI SPANNERS



Std SAE Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9008	1/4"	4.921	0.494	0.181	0.610	0.256
GW 9010	5/16"	5.508	0.658	0.193	0.625	0.256
GW 9011	11/32"	5.882	0.741	0.205	0.689	0.272
GW 9012	3/8"	6.256	0.882	0.220	0.750	0.287
GW 9014	7/16"	6.508	0.905	0.236	0.811	0.303
GW 9016	1/2"	7.008	1.069	0.264	0.930	0.339
GW 9018	9/16"	7.504	1.152	0.280	1.020	0.354
GW 9020	5/8"	8.201	1.316	0.303	1.130	0.390
GW 9022	11/16"	8.878	1.399	0.319	1.201	0.406
GW 9024	3/4"	9.764	1.563	0.358	1.278	0.441
GW 9026	13/16"	11.476	1.810	0.378	1.536	0.512
GW 9028	7/8"	11.476	1.810	0.378	1.536	0.512
GW 9030	15/16"	13.116	2.057	0.417	1.791	0.571
GW 9032	1"	13.116	2.057	0.417	1.791	0.571
GW 9034	1-1/16"	14.142	2.221	0.441	1.929	0.610
GW 9036	1-1/8"	15.846	2.468	0.480	2.152	0.669
GW 9038	1-1/4"	16.764	2.583	0.496	2.283	0.689



Std Metric Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9105	5.5mm	4.921	0.450	0.181	0.610	0.235
GW 9106	6mm	4.921	0.494	0.181	0.610	0.256
GW 9107	7mm	5.236	0.575	0.181	0.610	0.256
GW 9108	8mm	5.508	0.658	0.193	0.625	0.256
GW 9109	9mm	5.882	0.741	0.205	0.689	0.272
GW 9110	10mm	6.256	0.882	0.220	0.750	0.287
GW 9111	11mm	6.508	0.905	0.236	0.811	0.303
GW 9112	12mm	6.756	0.988	0.240	0.855	0.323
GW 9113	13mm	7.008	1.069	0.264	0.930	0.339
GW 9114	14mm	7.504	1.152	0.280	1.020	0.354
GW 9115	15mm	7.854	1.233	0.291	1.070	0.370
GW 9116	16mm	8.201	1.316	0.303	1.130	0.390
GW 9117	17mm	8.878	1.399	0.319	1.201	0.406
GW 9118	18mm	9.315	1.480	0.335	1.239	0.421
GW 9119	19mm	9.764	1.563	0.358	1.278	0.441
GW 9120	20mm	11.476	1.810	0.378	1.536	0.512
GW 9121	21mm	11.476	1.810	0.378	1.536	0.512
GW 9122	22mm	11.476	1.810	0.378	1.536	0.512
GW 9124	24mm	13.116	2.057	0.417	1.791	0.571
GW 9125	25mm	13.116	2.057	0.417	1.791	0.571
GW 9127	27mm	14.142	2.221	0.441	1.929	0.610
GW 9130	30mm	15.846	2.468	0.480	2.152	0.669
GW 9132	32mm	16.764	2.583	0.496	2.283	0.689
GW 9134	34mm	18.110	2.743	0.528	2.362	0.689



SAE Combination 4 Piece Set
3/8", 7/16", 1/2", 9/16"

Part No.	Description
GW 9304	SAE Combination Set



SAE Combination 8 Piece Set
5/16", 3/8", 7/16", 1/2",
9/16", 5/8", 11/16", 3/4"

Part No.	Description
GW 9308	SAE Combination Set



Metric Combination 4 Piece Set
10mm, 12mm, 13mm, 14mm

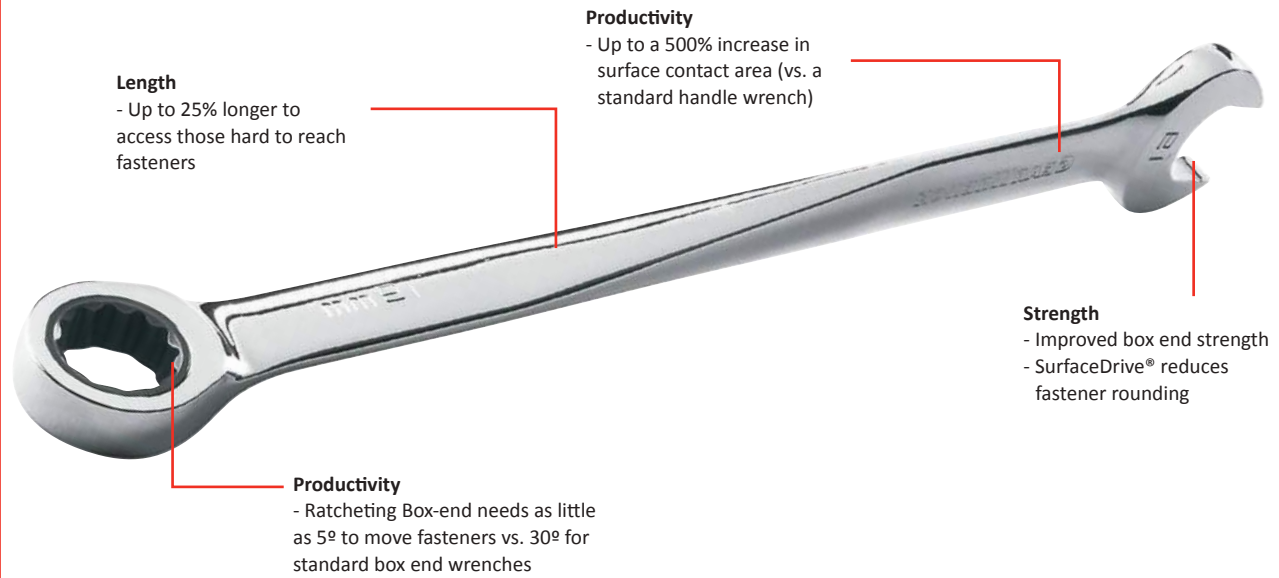
Part No.	Description
GW 9404	Metric Combination Set



Metric Combination 12 Piece Set
8mm, 9mm, 10mm, 11mm,
12mm, 13mm, 14mm, 15mm,
16mm, 17mm, 18mm, 19mm

Part No.	Description
GW 9412	Metric Combination Set

XL X-BEAM™ RATCHETING WRENCHES



XL X-BEAM SAE COMBI SPANNER



XL X-BEAM™ Ratcheting Wrenches - Individual SAE

Part No.	Size	A	B	C	D	E
GW 85850	5/16"	5.933	.782	.209	.669	.317
GW 85851	11/32"	6.524	.807	.217	.72	.333
GW 85852	3/8"	7.106	.925	.236	.798	.354
GW 85854	7/16"	7.697	1.004	.26	.874	.37
GW 85856	1/2"	8.681	1.122	.287	1.004	.406
GW 85858	9/16"	9.272	1.28	.307	1.055	.421
GW 85860	5/8"	10.256	1.398	.327	1.22	.469
GW 85862	11/16"	10.846	1.516	.366	1.26	.484
GW 85864	3/4"	12.035	1.673	.386	1.358	.52

XL X-BEAM METRIC COMBI SPANNER



XL X-BEAM™ Ratcheting Wrenches - Individual Metric

Part No.	Size (mm)	A	B	C	D	E
GW 85808	8	5.933	.782	.209	.669	.317
GW 85809	9	6.524	.807	.217	.72	.333
GW 85810	10	7.106	.925	.236	.798	.354
GW 85811	11	7.697	1.004	.26	.874	.37
GW 85812	12	8.169	1.083	.276	.925	.39
GW 85813	13	8.681	1.122	.287	1.004	.406
GW 85814	14	9.272	1.28	.307	1.055	.421
GW 85815	15	9.862	1.319	.327	1.15	.449
GW 85816	16	10.256	1.398	.327	1.22	.469
GW 85817	17	10.846	1.516	.366	1.26	.484
GW 85818	18	11.437	1.535	.366	1.299	.5
GW 85819	19	12.035	1.673	.386	1.358	.52

XL X-BEAM SAE COMBI SPANNER SET



SAE X-BEAM™ XL Ratcheting Wrench Sets

9 Piece Set

5/16", 11/32", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

Part No.	Description
GW 85898	Metric X-Beam™ XL Ratcheting Combination Wrench Set

XL X-BEAM METRIC COMBI SPANNER SET



XL Ratcheting Wrench Sets - X-BEAM™

12 Piece Set

8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

Part No.	Description
GW 85888	Metric X-Beam™ XL Ratcheting Combination Wrench Set

GEARRATCHET™ STUBBY RATCHETING COMBINATION SPANNERS



Strength
- Surface Drive®
(reduces fastener rounding)

Productivity
- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

Access
- Stubby wrench beam allows you access into tight areas that a standard Combination will not

GEARRATCHET™ STUBBY SAE SPANNERS

Stubby SAE Ratcheting Combination Spanner



GEARRATCHET™ STUBBY METRIC SPANNERS



Stubby Metric Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9500	3/8"	3.701	0.822	0.220	0.750	0.287
GW 9501	7/16"	4.016	0.905	0.236	0.811	0.303
GW 9502	1/2"	4.213	1.069	0.264	0.930	0.339
GW 9503	9/16"	4.488	1.152	0.280	1.020	0.354
GW 9504	5/8"	4.803	1.316	0.303	1.130	0.390
GW 9505	11/16"	4.961	1.399	0.319	1.201	0.406
GW 9506	3/4"	5.433	1.563	0.358	1.278	0.441

Part No.	Size	A	B	C	D	E
GW 9510	10mm	3.701	0.822	0.220	0.750	0.287
GW 9511	11mm	4.016	0.905	0.236	0.811	0.303
GW 9512	12mm	4.134	0.988	0.240	0.855	0.323
GW 9513	13mm	4.213	1.069	0.264	0.930	0.339
GW 9514	14mm	4.488	1.152	0.280	1.020	0.354
GW 9515	15mm	4.646	1.233	0.291	1.070	0.370
GW 9516	16mm	4.803	1.316	0.303	1.130	0.390
GW 9517	17mm	4.961	1.399	0.319	1.201	0.406
GW 9518	18mm	5.118	1.480	0.335	1.239	0.421
GW 9519	19mm	5.433	1.563	0.358	1.278	0.441

GEARRATCHET™ STUBBY SPANNER SETS



SAE Stubby Combination 7 Piece Set
3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

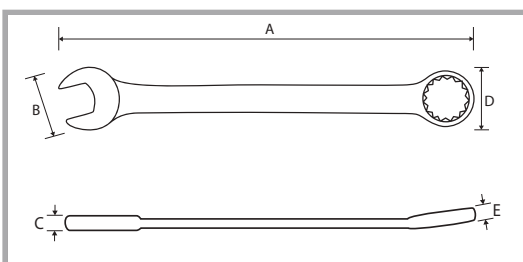
Part No.	Description
GW 9507	SAE Stubby Set

GEARRATCHET™ STUBBY SPANNER SETS



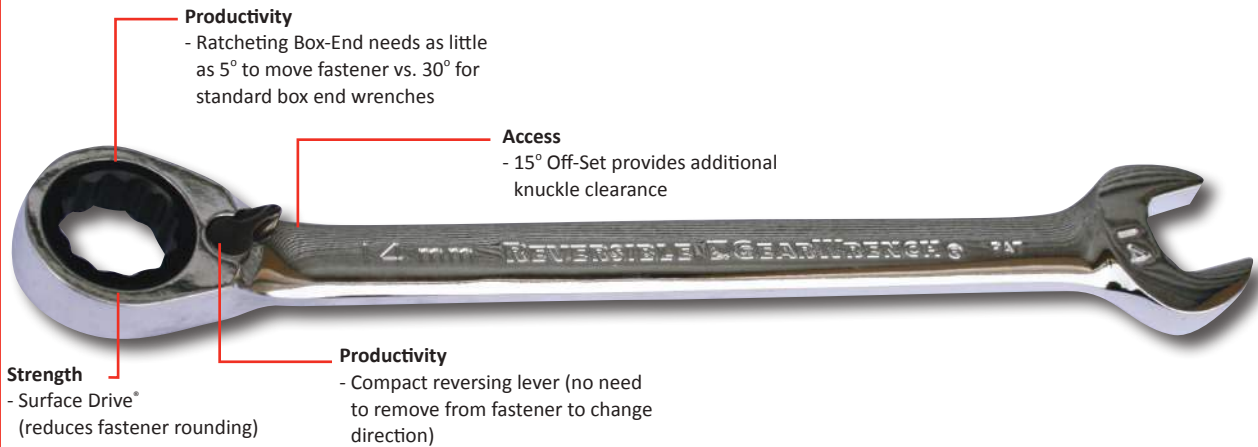
Metric Stubby Combination 10 Piece Set
10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm

Part No.	Description
GW 9520	Metric Stubby Set



If you did not find what you were looking for, please call our sales team now!

GEARWRENCH™ REVERSIBLE COMBINATION SPANNERS



STANDARD REVERSIBLE SAE COMBI SPANNERS



Std SAE Reversible Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9525	5/16"	5.508	0.709	0.197	0.667	0.256
GW 9521	11/32"	5.882	0.787	0.205	0.689	0.283
GW 9526	3/8"	6.256	0.906	0.224	0.778	0.303
GW 9527	7/16"	6.508	0.984	0.248	0.850	0.323
GW 9528	1/2"	7.008	1.102	0.276	0.970	0.339
GW 9529	9/16"	7.504	1.260	0.295	1.035	0.370
GW 9530	5/8"	8.201	1.387	0.315	1.183	0.406
GW 9531	11/16"	8.878	1.496	0.354	1.252	0.421
GW 9532	3/4"	9.764	1.654	0.374	1.341	0.441
GW 9534	13/16"	11.476	1.810	0.378	1.536	0.512
GW 9538	7/8"	11.476	1.810	0.378	1.536	0.512
GW 9539	15/16"	13.116	2.057	0.417	1.791	0.571
GW 9540	1"	13.116	2.057	0.417	1.791	0.571

STANDARD METRIC REVERSIBLE COMBI SPANNERS



Std Metric Reversible Ratcheting Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9608	8mm	5.508	0.709	0.197	0.667	0.256
GW 9609	9mm	5.882	0.787	0.205	0.689	0.283
GW 9610	10mm	6.256	0.906	0.224	0.778	0.303
GW 9611	11mm	6.508	0.984	0.248	0.850	0.323
GW 9612	12mm	6.756	1.063	0.264	0.906	0.339
GW 9613	13mm	7.008	1.102	0.276	0.970	0.339
GW 9614	14mm	7.504	1.260	0.295	1.035	0.370
GW 9615	15mm	7.854	1.299	0.315	1.118	0.390
GW 9616	16mm	8.201	1.378	0.315	1.183	0.406
GW 9617	17mm	8.878	1.496	0.354	1.252	0.421
GW 9618	18mm	9.315	1.535	0.354	1.307	0.441
GW 9619	19mm	9.764	1.654	0.374	1.341	0.441
GW 9621	21mm	11.476	1.810	0.378	1.536	0.512
GW 9622	22mm	11.476	1.810	0.378	1.536	0.512
GW 9624	24mm	13.116	2.057	0.417	1.791	0.571
GW 9625	25mm	13.116	2.057	0.417	1.791	0.571

SAE REVERSIBLE COMBI SPANNER SETS



SAE Reversible 8 Piece Set
5/16", 3/8", 7/16", 1/2",
9/16", 5/8", 11/16", 3/4"

Part No.	Description
GW 9533	SAE Reversible Set

METRIC REVERSIBLE COMBI SPANNER SETS



Metric Reversible 12 Piece Set
8mm, 9mm, 10mm, 11mm,
12mm, 13mm, 14mm, 15mm,
16mm, 17mm, 18mm, 19mm

Part No.	Description
GW 9620	Metric Reversible Set



SAE Reversible 13 Piece Set
5/16", 11/32", 3/8", 7/16", 1/2",
9/16", 11/16", 5/8", 13/16", 3/4",
7/8", 15/16", 1"

Part No.	Description
GW 9509	SAE Reversible Set



Metric Reversible 16 Piece Set
8mm, 9mm, 10mm, 11mm,
12mm, 13mm, 14mm, 15mm,
16mm, 17mm, 18mm, 19mm,
21mm, 22mm, 24mm, 25mm

Part No.	Description
GW 9602	Metric Reversible Set

GEARRATCHET™ HALF MOON REVERSIBLE RING/RING

Productivity

- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

Access

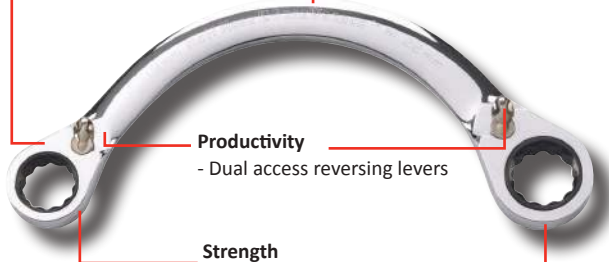
- Half Moon shape provides ease in getting around obstacles

Productivity

- Dual access reversing levers

Strength

- Surface Drive® design reduces fastener rounding



HALF MOON COMBI SPANNERS



Half Moon SAE Reversible Ring/Ring

Part No.	Size	A	B	C	D	E
GW 9841	3/8" x 7/16"	5.118	0.854	0.299	0.752	0.335
GW 9842	1/2" x 9/16"	6.181	1.201	0.350	0.929	0.366
GW 9843	5/8" x 11/16"	7.874	1.240	0.402	1.130	0.433
GW 9844	3/4" x 7/8"	9.055	1.535	0.453	1.280	0.512

Half Moon Metric Reversible Ring/Ring

Part No.	Size	A	B	C	D	E
GW 9851	10 x 12mm	5.118	0.854	0.299	0.752	0.335
GW 9852	11 x 13mm	5.748	0.929	0.315	0.811	0.350
GW 9853	14 x 16mm	6.575	1.130	0.366	1.024	0.409
GW 9854	15 x 17mm	7.874	1.240	0.402	1.130	0.433
GW 9855	19 x 22mm	9.055	1.535	0.453	1.280	0.512

HALF MOON COMBI SPANNER SETS



SAE Half Moon Reversible 4 Piece Set

3/8" x 7/16", 1/2" x 9/16",
5/8" x 11/16", 3/4" x 7/8"

Part No.

Description

GW 9840

SAE Half Moon Set



Metric Half Moon Reversible 5 Piece Set

10 x 12mm, 11 x 13mm, 14 x 16mm,
15 x 17mm, 19 x 22mm

Part No.

Description

GW 9850

Metric Half Moon Set

GEARWRENCH™ S-SHAPE REVERSIBLE RING/RING

Access

- S-shape provides ease in getting around obstacles

Productivity

- Dual access reversing levers

Strength

- Surface Drive® (reduces fastener rounding)

Productivity

- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches



S SHAPE COMBI SPANNERS



S-Shape SAE Reversible Ring/Ring

Part No.	Size	A	B	C	D	E
GW 85326	3/8" x 7/16"	5.157	0.752	0.299	0.854	0.335
GW 85334	1/2" x 9/16"	6.220	0.929	0.350	1.024	0.366
GW 85342	5/8" x 11/16"	8.032	1.130	0.402	1.240	0.433
GW 85352	3/4" x 7/8"	8.740	1.280	0.453	1.535	0.512

S-Shape Metric Reversible Ring/Ring

Part No.	Size	A	B	C	D	E
GW 85222	10mm x 12mm	5.157	0.752	0.299	0.854	0.335
GW 85224	11mm x 13mm	5.591	0.811	0.315	0.929	0.350
GW 85230	14mm x 16mm	6.850	1.024	0.366	1.201	0.417
GW 85232	15mm x 17mm	8.032	1.130	0.402	1.240	0.433
GW 85241	19mm x 22mm	8.740	1.280	0.453	1.535	0.512

S SHAPE COMBI SPANNER SETS



SAE S-Shape Reversible 4 Piece Set

3/8" x 7/16", 1/2" x 9/16",
5/8" x 11/16", 3/4" x 7/8"

Part No.

Description

GW 85399

SAE S-Shape Set



Metric S-Shape Reversible 5 Piece Set

10mm x 12mm, 11mm x 13mm,
14mm x 16mm, 15mm x 17mm,
19mm x 22mm

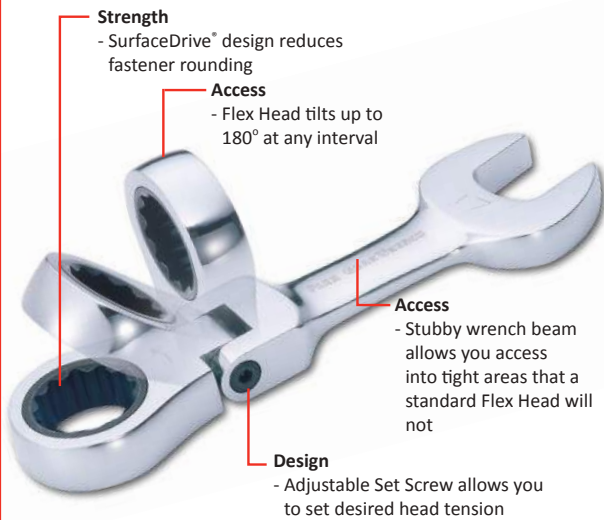
Part No.

Description

GW 85299

Metric S-Shape Set

GEARRATCHET™ FLEX HEAD STUBBY COMBINATION SPANNERS



FLEX HEAD STUBBY SPANNERS



Flex Head SAE Stubby Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9571	3/8"	3.701	0.822	0.220	0.748	0.287
GW 9572	7/16"	4.016	0.905	0.236	0.811	0.303
GW 9573	1/2"	4.213	1.069	0.264	0.929	0.339
GW 9574	9/16"	4.488	1.152	0.280	1.020	0.354
GW 9575	5/8"	4.803	1.316	0.303	1.130	0.390
GW 9576	11/16"	4.961	1.399	0.319	1.201	0.406
GW 9577	3/4"	5.433	1.563	0.358	1.280	0.441

Flex Head Metric Stubby Combination Spanner

Part No.	Size	A	B	C	D	E
GW 9551	10mm	3.701	0.822	0.220	0.748	0.287
GW 9552	11mm	4.016	0.905	0.236	0.811	0.303
GW 9553	12mm	4.134	0.988	0.252	0.854	0.323
GW 9554	13mm	4.213	1.069	0.264	0.929	0.339
GW 9555	14mm	4.488	1.152	0.280	1.020	0.354
GW 9556	15mm	4.656	1.233	0.291	1.071	0.370
GW 9557	16mm	4.803	1.316	0.303	1.130	0.390
GW 9558	17mm	4.961	1.399	0.319	1.201	0.406
GW 9559	18mm	5.118	1.480	0.335	1.240	0.421
GW 9560	19mm	5.433	1.563	0.358	1.280	0.441

GEARRATCHET™ FLEX HEAD STUBBY SPANNER SETS

SAE Stubby Flex Head 7 Piece Set
3/8", 7/16", 1/2", 9/16",
5/8", 11/16", 3/4"



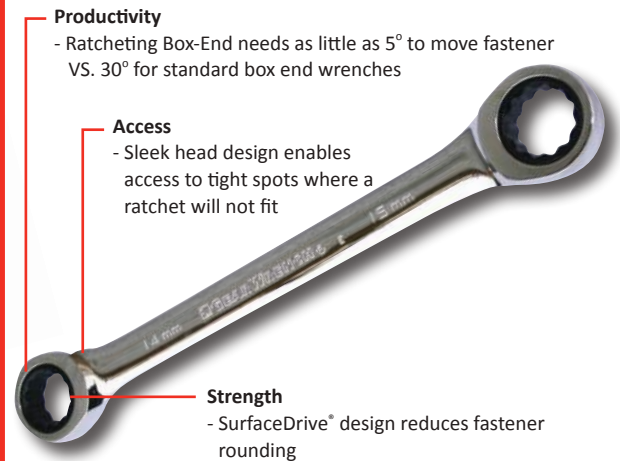
Part No.	Description
GW 9570	SAE Stubby Flex Set

Metric Stubby Flex Head 10 Piece Set
10mm, 11mm, 12mm, 13mm,
14mm, 15mm, 16mm, 17mm,
18mm, 19mm



Part No.	Description
GW 9550	Metric Stubby Flex Set

GEARRATCHET™ RING/RING RATCHETING SPANNERS



RING/RING RATCHETING SPANNERS



Ring/Ring SAE Ratcheting Spanners

Part No.	Size	A	B	C	D	E
GW 9201	5/16" x 3/8"	5.039	0.625	0.256	0.750	0.287
GW 9202	7/16" x 1/2"	6.299	0.811	0.303	0.930	0.339
GW 9203	9/16" x 5/8"	7.480	1.020	0.354	1.130	0.390
GW 9204	11/16" x 3/4"	9.055	1.201	0.406	1.278	0.422

Ring/Ring Metric Ratcheting Spanners

Part No.	Size	A	B	C	D	E
GW 9210	8x9mm	5.118	0.625	0.256	0.689	0.272
GW 9211	10x11mm	5.906	0.750	0.287	0.811	0.303
GW 9212	12x13mm	6.693	0.885	0.323	0.930	0.339
GW 9213	14x15mm	7.480	1.020	0.354	1.070	0.370
GW 9214	16x18mm	8.268	1.130	0.390	1.239	0.421
GW 9215	17x19mm	9.055	1.201	0.406	1.278	0.441

RING/RING RATCHETING COMBI SPANNER SETS

SAE Double Box 4 Piece Set
(5/16" x 3/8"), (7/16" x 1/2"),
(9/16" x 5/8"), (11/16" x 3/4")



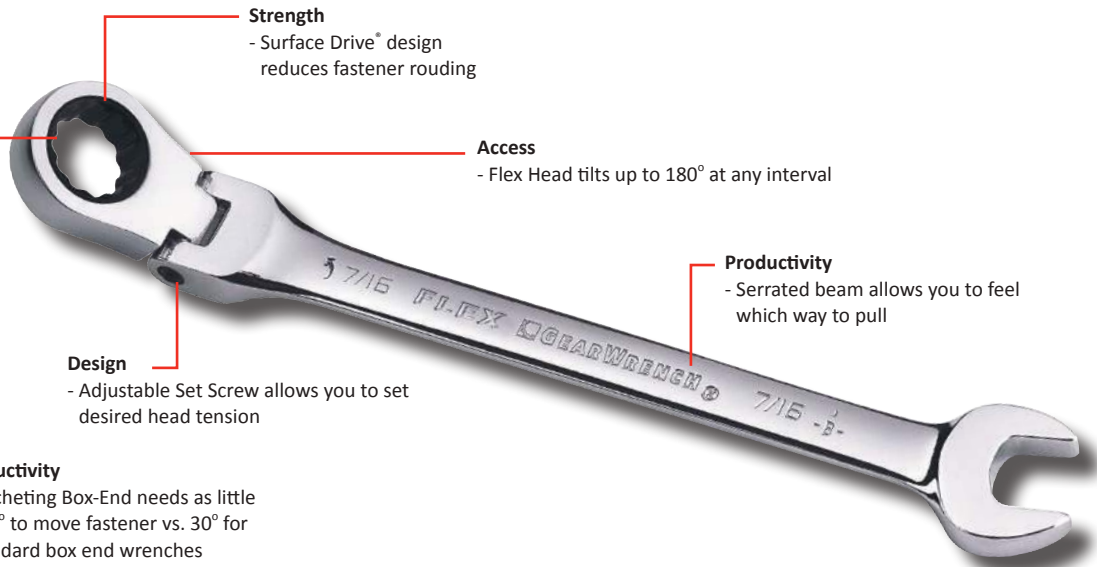
Part No.	Description
GW 9240	SAE Ring/Ring Set

Metric Double Box 6 Piece Set
(8 x 9mm), (10 x 11mm), (12 x 13mm),
(14 x 15mm), (16 x 18mm), (17 x 19mm)



Part No.	Description
GW 9260	Metric Ring/Ring Set

GEARRATCHET™ FLEX HEAD STANDARD COMBINATION SPANNERS



Strength
- Surface Drive® design reduces fastener rounding

Access
- Flex Head tilts up to 180° at any interval

Productivity
- Serrated beam allows you to feel which way to pull

Design
- Adjustable Set Screw allows you to set desired head tension

Productivity
- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

FLEX HEAD RATCHETING SPANNERS



Part No.	Size	A	B	C	D	E
GW 9705	5/16"	5.512	0.658	0.193	0.630	0.256
GW 9704	11/32"	5.866	0.741	0.205	0.689	0.272
GW 9706	3/8"	6.220	0.822	0.220	0.748	0.287
GW 9707	7/16"	6.496	0.905	0.236	0.807	0.303
GW 9708	1/2"	7.008	1.069	0.264	0.854	0.339
GW 9709	9/16"	7.480	1.152	0.280	0.929	0.354
GW 9710	5/8"	8.189	1.316	0.303	1.118	0.390
GW 9711	11/16"	8.858	1.480	0.335	1.201	0.421
GW 9712	3/4"	9.764	1.563	0.358	1.280	0.441
GW 9713	13/16"	11.457	1.810	0.378	1.535	0.512
GW 9714	7/8"	11.457	1.810	0.378	1.535	0.512
GW 9715	15/16"	13.110	2.057	0.417	1.791	0.571
GW 9716	1"	13.110	2.057	0.417	1.791	0.571

FLEX HEAD RATCHETING SPANNERS



Part No.	Size	A	B	C	D	E
GW 9908	8mm	5.512	0.658	0.193	0.630	0.256
GW 9909	9mm	5.866	0.741	0.205	0.689	0.272
GW 9910	10mm	6.220	0.822	0.220	0.748	0.287
GW 9911	11mm	6.496	0.905	0.236	0.807	0.303
GW 9912	12mm	6.732	0.988	0.252	0.854	0.323
GW 9913	13mm	7.008	1.069	0.264	0.929	0.339
GW 9914	14mm	7.480	1.152	0.280	1.020	0.354
GW 9915	15mm	7.835	1.233	0.291	1.051	0.370
GW 9916	16mm	8.189	1.316	0.303	1.118	0.390
GW 9917	17mm	8.858	1.480	0.335	1.201	0.421
GW 9918	18mm	9.764	1.563	0.358	1.280	0.441
GW 9919	19mm	11.457	1.810	0.378	1.535	0.512
GW 9921	21mm	11.457	1.810	0.378	1.535	0.512
GW 9924	24mm	13.110	2.057	0.417	1.791	0.571
GW 9925	25mm	13.110	2.057	0.417	1.791	0.571

FLEX HEAD SAE SPANNER SETS



SAE Flex Head 7 Piece Set
3/8", 7/16", 1/2", 9/16",
5/8", 11/16", 3/4"

Part No.	Description
GW 9700	SAE Flex Head Set

FLEX HEAD METRIC SPANNER SETS



Metric Flex Head 7 Piece Set
10mm, 12mm, 13mm, 14mm,
15mm, 17mm, 19mm

Part No.	Description
GW 9900	Metric Flex Head Set



SAE Flex Head 8 Piece Set
5/16", 3/8", 7/16", 1/2",
9/16", 5/8", 11/16", 3/4"

Part No.	Description
GW 9701	SAE Flex Head Set



Metric Flex Head 12 Piece Set
8mm, 9mm, 10mm, 11mm,
12mm, 13mm, 14mm, 15mm,
16mm, 17mm, 18mm, 19mm

Part No.	Description
GW 9901	Metric Flex Head Set

GEARRATCHET™ XL LOCKING FLEX HEAD COMBINATION SPANNERS

Productivity

- Ratcheting Box-End needs as little as 5° to move fastener vs. 30° for standard box end wrenches

Productivity

- One finger operated lever with options of "locking" or "not locking" positions



Stronger

- Surface Drive Plus™ provides stronger grip on fasteners, reduces fastener rounding and delivers up to 25% more torque

Access

- 13 locking positions with flexible head

Access

- 15% longer than current Flex Head Ratcheting Wrench, to access hard to reach fasteners

XL LOCKING FLEX HEAD SPANNERS



Flex Head SAE XL Combination Spanner

Part No.	Size	A	B	C	D	E
GW 85710	5/16"	5.75	0.65	0.20	0.62	0.26
GW 85712	3/8"	6.73	0.81	0.24	0.75	0.29
GW 85714	7/16"	7.20	0.89	0.26	0.81	0.30
GW 85716	1/2"	8.15	1.05	0.28	0.93	0.34
GW 85718	9/16"	8.62	1.14	0.30	1.02	0.35
GW 85720	5/8"	9.53	1.29	0.33	1.13	0.39
GW 85722	11/16"	9.99	1.38	0.34	1.20	0.41
GW 85724	3/4"	11.02	1.55	0.38	1.28	0.44

XL LOCKING FLEX HEAD SPANNERS



Flex Head Metric XL Combination Spanner

Part No.	Size	A	B	C	D	E
GW 85608	8mm	5.75	0.65	0.20	0.62	0.26
GW 85609	9mm	6.26	0.73	0.21	0.70	0.27
GW 85610	10mm	6.73	0.81	0.24	0.75	0.29
GW 85611	11mm	7.20	0.89	0.26	0.81	0.30
GW 85612	12mm	7.68	0.97	0.27	0.86	0.32
GW 85613	13mm	8.15	1.05	0.28	0.93	0.34
GW 85614	14mm	8.62	1.14	0.30	1.02	0.35
GW 85615	15mm	9.09	1.21	0.31	1.07	0.37
GW 85616	16mm	9.53	1.29	0.33	1.13	0.39
GW 85617	17mm	9.99	1.38	0.34	1.20	0.41
GW 85618	18mm	10.51	1.46	0.36	1.24	0.42
GW 85619	19mm	11.02	1.55	0.38	1.28	0.44

XL LOCKING FLEX HEAD SPANNER SETS



SAE XL Locking Flex 8 Piece Set

5/16", 3/8", 7/16", 1/2",
9/16", 5/8", 11/16", 3/4"

Part No.

Description

GW 85798

SAE XL Flex Head Set

XL LOCKING FLEX HEAD SPANNER SETS



Metric XL Locking Flex 12 Piece Set

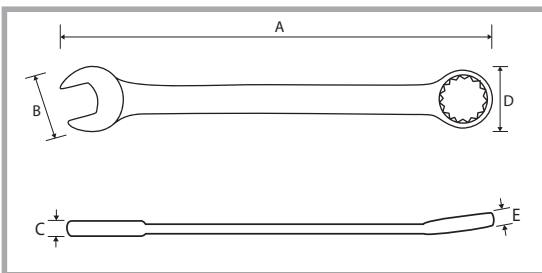
8mm, 9mm, 10mm, 11mm,
12mm, 13mm, 14mm, 15mm,
16mm, 17mm, 18mm, 19mm

Part No.

Description

GW 85698

Metric XL Flex Head Set



**MOST GEARWRENCH PRODUCTS
HAVE A LIFETIME WARRANTY**

GEARRATCHET™ E-TORX SPANNER SETS



E-Torx Ratcheting Wrench Set

E6 x E8
E10 x E12
E14 x E18
E20 x E24

Part No.

Description

GW 9224

E-Torx Ratcheting Wrench Set

Lighting

Life depends on light

LED floodlighting is now widely available, however none can offer the specifications and light output of our Solaris range and this version (A1) has been redesigned to make it our most powerful compact unit. The base has been upgraded to make it more user friendly with an ergonomic shape that houses the charger, telescopic pole and a wider shoulder strap, for greater portability and reduced stress when carried long distance.

The new case also means the light can be set up in less than 30 seconds for rapid deployment in emergency situations, and is made from a very tough ABS plastic to ensure long operating life and reliability for all situations.

The most important aspect of LED floodlighting is the light output and in this regard the Solaris head now has 3500 lumens as standard. The combination of 18 high powered Cree® LEDs and intelligent optics offer a unique floodlight that completely eliminates glare and covers huge areas with shadow free white light

All our area lights produce no heat and operate silently, making them ideal light weight alternatives to 300W halogens running off a generator. Another major benefit is the saving achieved in reducing carbon emissions as our area lights are up to 99% more efficient than generator powered lighting.

SOLARIS REMOTE AREA FLOODLIGHT

NEW

Head

- 18 Cree LED
- IP65 rated - robust and weatherproof
- 360° swivel and 180° tilting head
- Low heat emission, environmentally friendly and safe operation
- Can operate on power sources between 10V-30V

Case

- Robust ABS plastic with lock, handles and an air compensation valve
- Able to withstand temperatures ranging from -40°C to +80°C
- Storage compartment for chargers and filters
- Weatherproof

Extension Pole

- Extends from 500mm - 1300mm
- Quick lock/release system

Power Pack

- Push button LED battery status indicator
- Able to withstand temperatures ranging from -20°C to +60°C



Part No.	Description	Battery
A1-35	Remote Area Light	Lead Acid
A1-Li35	Li-Ion Remote Area Light	Li-Ion

INTRINSICALLY SAFE FLASHLIGHTS



- IECEx Approved
- Flashlight Floodlight Dual-light
- CREE LED 50,000 + hours LED life
- Intrinsically safe for Class I, II, III, Div I, Groups A-G hazardous environments
- Sharp focused flashlight beam for distance illumination
- Unfocused wide-beam floodlight for close-up illumination
- Dual-light (flashlight & floodlight at same time)
- Waterproof
- Impact & chemical resistant
- Requires 3 AA batteries

NEW

Part No.	Description	Colour	Flash Light	Flood Light
X2-1Y	IEC Ex Flash Light	Yellow	√	-
X2-1B	IEC Ex Flash Light	Black	√	-
X2-2Y	IEC Ex Dual Light	Yellow	√	√
X2-2B	IEC Ex Dual Light	Black	√	√

LED MULTI-FUNCTION FLASHLIGHT - SMALL

NEW

- Flashlight Lumens: 60
- Floodlight Lumens: 25
- Beam Distance: 50 m
- Drop Rating: 2 m
- Water Resistance: IP-X4
- Flashlight Run-time: 4
- Floodlight Run-time: 4
- 121L x 28W x 20 mmD)
- Weight: 2.2 oz (62 g)
- Warranty: Limited Lifetime
- Powered by 2 AAA batteries (included)



Part No.	Description
NSP-4618B	LED Flash / Flood Light

LED MULTI-FUNCTION FLASHLIGHT - MEDIUM

NEW

- Flashlight Lumens: 100
- Floodlight Lumens: 80/50
- Dual-Light Lumens: 160
- Beam Distance: 140 m
- Drop Rating: 2 m
- Water Resistance: IP-X6
- Flashlight Run-time: 7.5
- Floodlight Run-time: 8 / 15.5
- Dual-Light Run-time: 4
- 229L x 38W x 28D mm
- Weight: 7.8 oz (221 g)
- 4 AA Batteries & protective bumpers included
- Warranty: Limited Lifetime



Part No.	Description
NSP-4620B	LED Flash / Flood Light

LED MULTI-FUNCTION FLASHLIGHT - LARGE

NEW

- Flashlight Lumens: 150
- Floodlight Lumens: 150 / 100
- Dual-Light Lumens: 260
- Beam Distance: 160 m
- Drop Rating: 2 m
- Water Resistance: IP-X6
- Flashlight Run-time: 5.5
- Floodlight Run-time: 4 / 7
- Dual-Light Run-time: 3
- 267L x 38W x 28D mm
- Weight: 8.5 oz (240 g)
- 4 AA Batteries & protective bumpers included
- Warranty: Limited Lifetime



Part No.	Description
NSP-4622B	LED Flash / Flood Light

MAGLITE TORCHES



- Water Resistant, Maglite D Cell torches.
- Aircraft grade aluminium.

Part No.	Description	OAL
ML-2D	2 cell Maglite	250mm
ML-3D	3 cell Maglite	310mm

MINI MAGLITE TORCHES



Part No.	Description
ML 2AAH	AA Mini Maglite in Nylon Belt Holster
ML 2AABOX	AA Mini Maglite in Presentation Box
ML 2AAABOX	AAA Mini Maglite in Presentation Box
ML 1AAABOX	AAA Solitaire in Presentation Box

P7 LED LENSER

Due to its excellent luminance and various functions, the LED LENSER® P7 is an all-purpose flashlight. Its patented*** Advanced Focus System® facilitates an extremely homogeneous distribution of brightness within the light cone. This focusing system is now considered one of the best systems in the world. Adjusting the light cone is particularly easy: Thanks to Speed Focus, you simply move the lamp head with one hand in order to control focus position. Circular spotlight or sharply focused beam with a range of up to 210 m



- LED High End Power LED
- Length 133 mm
- Weight 192 g
- Luminous flux 200 lm*
- Batteries 4 x AAA
- Energy tank 7,2 Wh
- Burning life 64 h**
- Beam range 210 m*

Part No.	Description
Z18407	LED Lenser

VERSALITE WORK-LIGHT



- Fluorescent 11 Watt work light with 6.4m lead
- High quality and impact resistant
- Dust, moisture, oil and petrol resistant

Part No.	Description	Wattage
BBL-VL-240E	Versalite	11W

ECONOMY LED TORCH



Part No.	Description	Batteries
HH14 LED	Economy Torch 14 LED's	3 x AAA

MULTI-FUNCTION LED HEADLAMP

NEW



- Spotlight Lumens: 9
- Floodlight Lumens: 30
- Dual-Light Lumens: 30
- Drop Rating: 2 m
- Water Resistance: IP-X7
- Spotlight Run-time: 40h
- Floodlight Run-time: 11h
- Dual-Light Run-time: 16h
- 48L x 62W x 44.5D mm
- Weight: 3.7 oz (104 g)
- Warranty: Limited Lifetime
- Package Contents: Headlamp, Elastic Strap and 3 AAA Batteries

Part No.	Description
NSP-4602B	Multi-Function LED Headlamp

LED DUAL-LIGHT HEADLAMP

NEW



- Spotlight Lumens: 55
- Floodlight Lumens: 40
- Dual-Light Lumens: 80
- Beam Distance: 50 m
- Drop Rating: 2 m
- Water Resistance: IP-X7
- Spotlight Run-time: 6h
- Floodlight Run-time: 8h
- Dual-Light Run-time: 5h
- 48L x 62W x 44.5D mm
- Weight: 3.7 oz (104 g)
- Warranty: Limited Lifetime
- Package Contents: Headlamp, Elastic Strap and 3 AAA Batteries

Part No.	Description
NSP-4604B	LED Dual-Light Headlamp

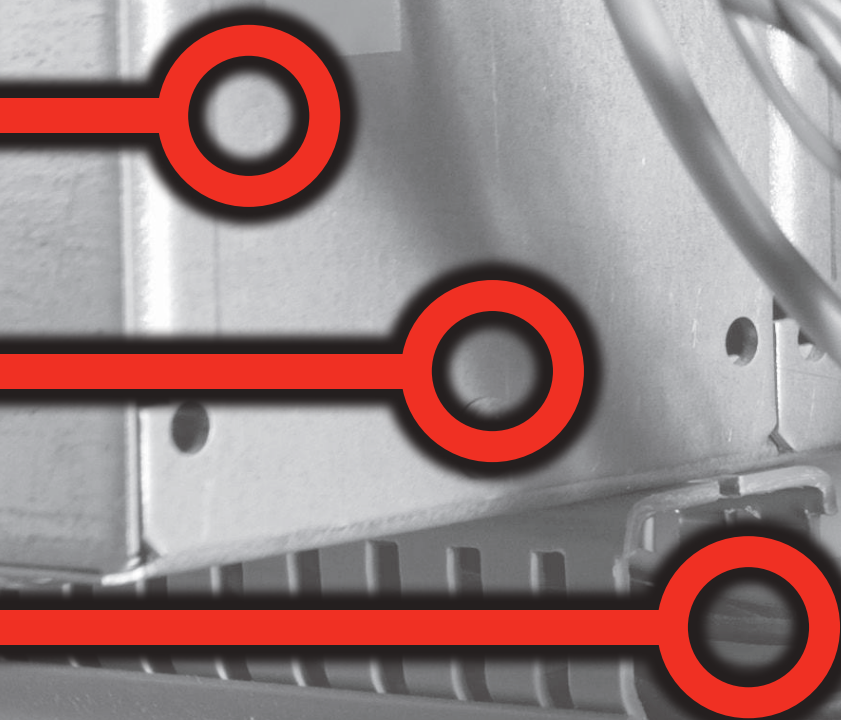
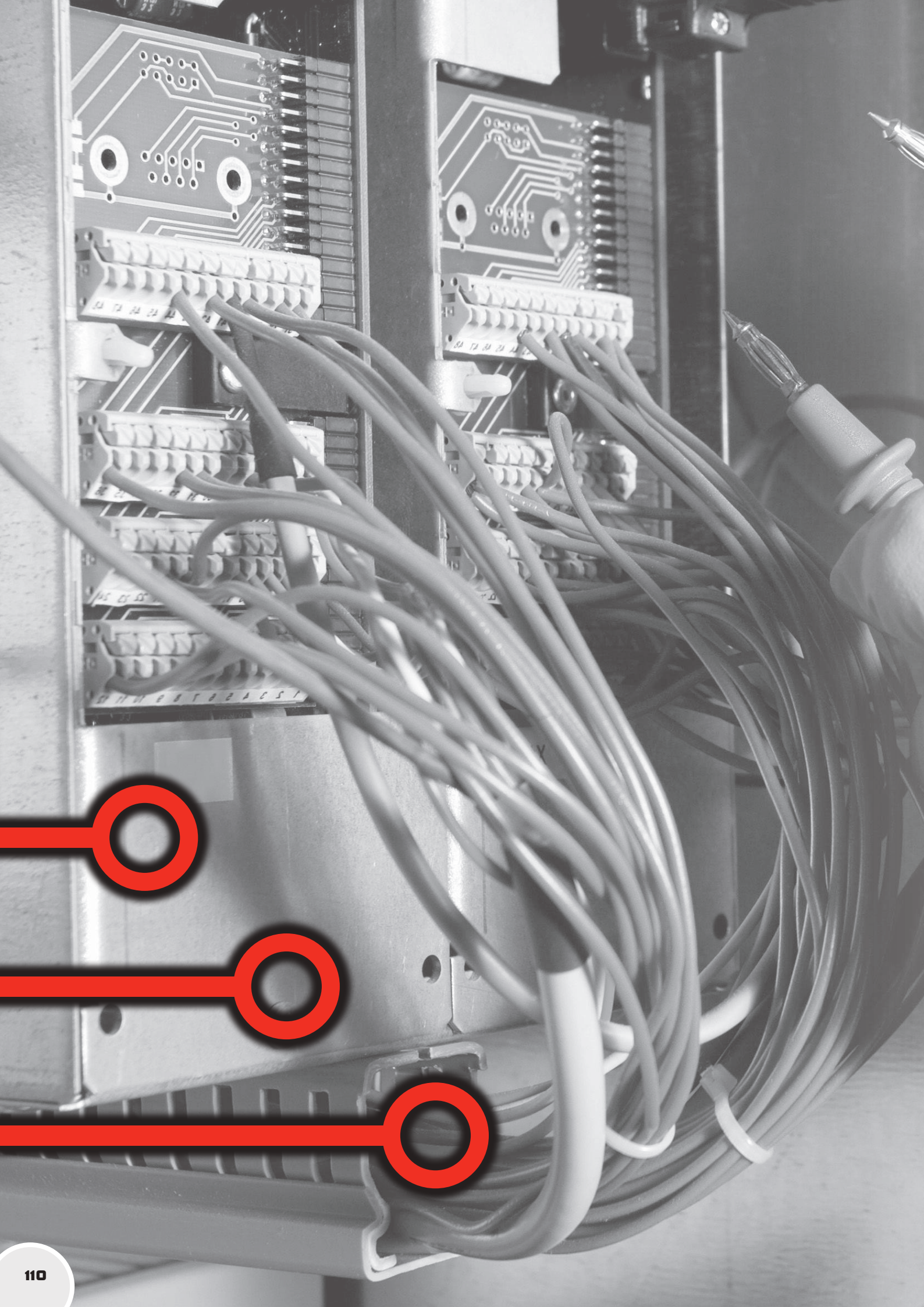
NIGHTSTICK LED HEADLAMP

NEW



- Weight: 3.3 oz (94 g)
- 53L x 66W x 46D mm
- Spotlight Lumens: 100 / 60
- Floodlight Lumens: 90 / 50
- Dual-Light Lumens: 115
- Beam Distance: 77m / 55m
- Drop Rating: 2 m
- Water Resistance: IP-X7
- Spotlight Run-time: 5 / 13.5
- Floodlight Run-time: 4.25 / 13.75
- Dual-Light Run-time: 3.5
- Warranty: Limited Lifetime
- Package Contents: Headlamp, Elastic Strap and 3 AAA Batteries

Part No.	Description
NSP-4608B	Multi-Function LED Headlamp



Test Equipment

Scopemeters.....	112-115
Multimeters.....	116-125
CNX Wireless	126-127
Electrical Testers	128-129
Current Clamps	130-135
Current Adapters	136-137
Insulation/Ground Testers	138-145
Portable Appliance Tester.....	147, 185
Phase Rotation Meters	148
Power Quality	149-155
Laser Distance Meter.....	156
Process Tools	157-166
Thermal Imagers.....	167-171
Thermometers.....	172-177
Air Measurement.....	178-179
Instrument Accessories.....	180-184
Specialist Instruments.....	185
Owon Oscilloscopes	186-187

FLUKE Scope Meters

FLUKE SCOPEMETER® TEST TOOLS

Handheld oscilloscopes for industrial, instrumentation and electronic applications

ScopeMeter test tools are the rugged, safe choice for a wide variety of field service installation and maintenance applications. These handheld battery-powered oscilloscopes are easy to use, with a built-in multimeter, paperless recording and analysis capabilities. They are rugged and IP 51 dust- and drip-proof rated to IEC529 standards to withstand harsh environments.

The new 190 Series II, with two and four isolated input channels

is ideal for industrial electronics, automation, process control, and industrial machinery applications measuring three-phase power electronic circuits, or three-axis control systems

comparing and contrasting multiple signals simultaneously. These tools are safety rated at CAT III 1000 V/CAT IV 600 V with longer battery life and up-to-date USB interface technology.

The 120 series with 20 MHz or 40 MHz bandwidth, dual DMMs and paperless recording is the optimal choice for electrical and electro-mechanical applications, safety rated to IEC EN61010-1 CAT III 600 V.

For industrial network applications, the Fluke 125 adds industrial network physical layer analogue measurement algorithms to validate the network bus health.



SCOPEMETER® SELECTION GUIDE

	120 Series			190 Series II					
	123	124	125	190-062	190-102	190-202	190-104	190-204	190-502
BandWidth									
20 MHz	•	—	—	—	—	—	—	—	—
40 MHz	—	•	•	—	—	—	—	—	—
60 MHz	—	—	—	•	—	—	—	—	—
100 MHz	—	—	—	—	•	—	•	—	—
200 MHz	—	—	—	—	—	•	—	•	—
500 MHz	—	—	—	—	—	—	422	—	•
Input channels									
2Ch + 2 DMM	•	•	•	—	—	—	—	—	—
2Ch + DMM	—	—	—	•	•	•	—	—	•
4Ch	—	—	—	—	—	—	•	•	—
Isolated inputs	—	—	—	•	•	•	•	•	•
Triggering									
Connect-and-View	•	•	•	•	•	•	•	•	•
Advanced triggering	—	—	—	•	•	•	•	•	•
Advanced measurement function									
Cursors	—	•	•	•	•	•	•	•	•
TrendPlot	•	•	•	•	•	•	•	•	•
ScopeRecord	—	—	—	•	•	•	•	•	•
100 screen replay	—	—	—	•	•	•	•	•	•
Industrial BusHealth	—	—	•	—	—	—	—	—	—
Harmonics	—	—	•	—	—	—	—	—	—
FFT	—	—	—	•	•	•	•	•	•
Power measurements	—	—	•	•	•	•	•	•	•
Waveform mathematics	—	—	—	•	•	•	•	•	•
EN61010-1 safety									
CAT II 1000 V	—	—	—	•	•	•	•	•	•
CAT III 600 V	•	•	•	•	•	•	•	•	•
CAT III 1000 V	—	—	—	•	•	•	•	•	•
CAT IV 600 V	—	—	—	•	•	•	•	•	•
Interface									
Optical RS-232	•	•	•	—	—	—	—	—	—
USB PC interface	Opt	Opt	Opt	•	•	•	•	•	•
USB memory port	—	—	—	•	•	•	•	•	•
Power									
Ni-MH	•	•	•	—	—	—	—	—	—
Li-Ion	—	—	—	•	•	•	•	•	•
Battery (hours)	7	7	7	4 (opt 8)	4 (opt 8)	4 (opt 8)	7	7	7
General specifications									
Size (HxWxD)	232 mm x 115 mm x 50 mm (9.2 in x 4.5 in x 2 in)			270 mm x 190 mm x 70 mm (10.5 in x 7.5 in x 2.8 in)					
Weight	1.2 kg (2.6 lb)			2.2 kg (4.8 lb)					

FLUKE 120 SERIES SCOPEMETER® TEST TOOLS



Fluke 123

Fluke 125

Fluke 124



- Two 5,000-count true-rms digital multimeters
- A dual-input TrendPlot™ recorder
- Connect-and-View™ trigger simplicity for hands-off operation
- Shielded test leads for oscilloscope, resistance and continuity measurements
- Bus Health mode gives a clear “Good/Weak/Bad” indication for the electrical signals on industrial buses and networks (Fluke 125)
- CAT III 600 V safety certified
- Optically isolated RS-232 interface
- IP51 rated, rugged compact case

Connect-and-View™ triggering for an instant, stable display
Scope users know how difficult triggering can be. Incorrect settings show unstable and sometimes incorrect results. Fluke’s unique Connect-and-View recognises signal patterns and automatically and continuously sets up correct triggering. It provides a stable, reliable and repeatable display of virtually any signal.

Use TrendPlot™ to help find intermittents

The toughest faults to find are those that happen only once in a while—intermittents. They can be caused by bad connections, dust, dirt, corrosion or simply broken wiring or connectors. Other factors, like line outages and sags, can also cause a machine to stop. You may not be around to see it—your Fluke ScopeMeter will. In this “paperless recorder” mode, you can plot the minimum and maximum peak values and average over time—up to 16 days.

Battery powered mobility

Up to seven hours of battery operation frees you from mains outlets for true on-the-move working. The rugged and drip proof case assures long life and reliable operation in the harshest industrial environments.

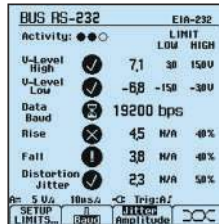
Safety rated

The ScopeMeter 123 and 124 are safety rated for measurements on CAT III 600 V rms industrial power systems with the included test leads.

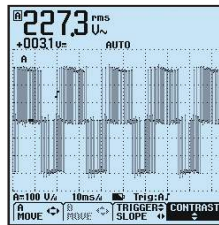
Three-in-one simplicity

The compact ScopeMeter® Series 123 are the rugged solution for industrial troubleshooting and installation applications. Each is a truly integrated test tool, with oscilloscope, multimeter and “paperless” recorder in one affordable, easy-to-use instrument. Find fast answers to problems in machinery, instrumentation, control and power systems.

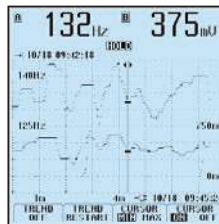
- Dual-input 40 MHz or 20 MHz digital oscilloscope



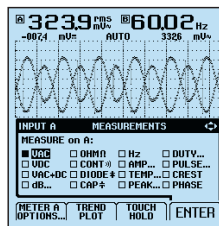
125 quickly tests critical bus physical layer characteristics.



Connect-and-View captures even the most complex motor drive signals.



Use TrendPlot to help find intermittents, fast.



Dual input oscilloscope, meter and paperless recorder.

Recommended Accessories



AC120 Alligator Clip Set



i30s AC/DC Current Clamp



DP120 Differential Probe Kit



i410 AC/DC Current Clamp



C125 Soft Carrying Case



i5s AC Current Clamp



BHT190 Bus Health Test Adapter, DB-9 and M-12

Recommended Kit



- SCC 120 Kit
- Software
 - Cable
 - Hard carrying case

ORDERING INFORMATION

Included accessories	Part No	
Test lead set, alligator clips, hook clips, battery pack, battery charger/line voltage adapter, BNC adapter, getting started guide, users manual on CD.	FLUKE-124S	Industrial ScopeMeter, 40 MHz, with SCC120 kit
	FLUKE-124	Industrial ScopeMeter, 40 MHz
	FLUKE-123S	Industrial ScopeMeter, 20 MHz, with SCC120 kit
	FLUKE-123	Industrial ScopeMeter, 20 MHz
Test lead set, battery charger/line voltage adapter, battery pack (installed), getting started guide, multi-lingual users manual on CD.	FLUKE-125	Industrial ScopeMeter, Bus Health, Power and Harmonics
	FLUKE-125S	Industrial ScopeMeter, Bus Health, Power and Harmonics with SCC-Kit
	SCC120	Kit containing FlukeView software for Windows, USB interface adapter/cable and hard case

See more, fix more, in harsh industrial environments



- CAT III 1000 V/CAT IV 600 V safety rated for high voltage environments
- 5,000 count multimeter 2 channel models or 999 count volt meter 4 channel models
- Li-Ion battery and easy-access battery door for extended usage
- Isolated USB host port for direct data storage to a USB memory
- USB-B-device port for PC Connectivity
- Sealed compact case weighing only 2.2 kg (4.8 lb)

Automatic capture and replay of 100 screens

ScopeMeter users know how frustrating it is to see a one-time anomaly flash by—never to be seen again. Now with the Fluke 190 Series II ScopeMeter you can look back in time with a touch of the replay button. In normal use, the instrument continuously memorises the last 100 screens, on a first in-first out basis. At any moment you can “freeze” the last 100 screens and scroll through picture-by-picture or replay as a “live” animation. Cursors can be used for further analysis.

ScopeRecord™ mode for high-resolution waveform recording up to 48 hours

ScopeRecord memory stores up to 27,000 data points per channel, capturing fast intermittents and glitches as short as 8ns.

- Stores events like motion profiles, UPS, power supply and motor start-ups
- In Stop On Trigger mode, ScopeMeter automatically recognises a power failure and stores the waveform data

Goes where ordinary scopes can't go
Safety rated for industrial applications, the 190 Series ScopeMeter® Portable Oscilloscopes combine rugged portability with high performance to take you all the way from troubleshooting microelectronics to power electronic applications.

The first high-performance four-channel scopes built for harsh industrial environments
For the first time, plant maintenance engineers and technicians can take a high-performance four-channel scope into the harsh world of industrial electronics. The new Fluke 190 Series II is the only portable oscilloscope with two or four independent isolated input channels, a CAT III 1000 V/CAT IV 600 V safety rating, and sealed case IP 51 dust-proof and drip-proof rated.

- 60 MHz, 100 MHz or 200 MHz bandwidth
- 2 or 4 independent isolated inputs, up to 1000 V
- High-speed sampling: Up to 2.5 GS/sec
- Deep memory: 10,000 points per trace waveform capture

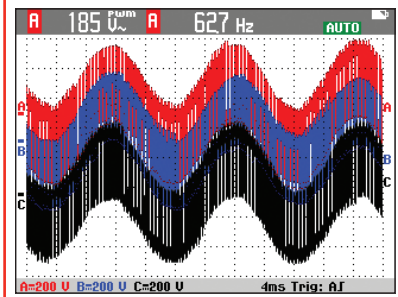
- With the waveform zoom (up to 100x) you can look at the smallest details, like individual power cycles

TrendPlot™ Paperless Recorder

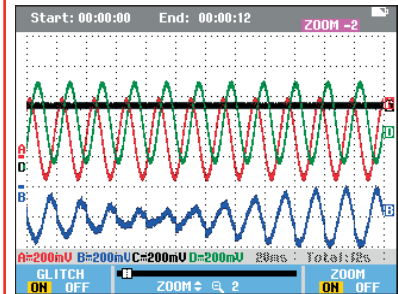
The toughest faults to find are those that happen once in a while. These intermittents can be caused by bad connections, dust, dirt, corrosion, or simple broken wiring or connectors. Line outages, sags or starting and stopping of a motor can also cause a machine to stop. You may not be around when it happens, but the Fluke ScopeMeter will.

- Plot minimum and maximum plot values and average over time up to 16 days
- Plot any combination of voltages, amps, temperature, frequency and phase for all four inputs, all with time and date stamp to pinpoint faults

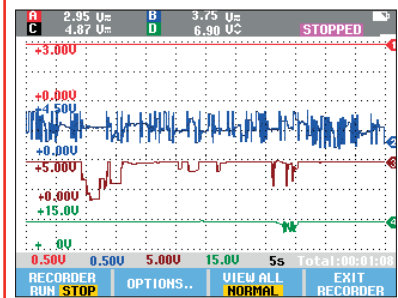
Sample screens



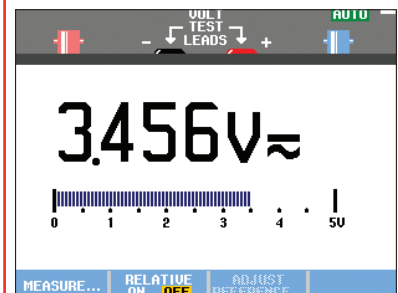
Connect-and-View™ captures even the most complex motor drive signals.



Use the 27,000 points memory of ScopeRecord and zoom in for maximum detail.



Cursors and zoom features of the Fluke 190 Series II help you to analyse the captured TrendPlot.



5,000 count dedicated digital multimeter on 2 channel models.

ORDERING INFORMATION

Included accessories	Part No	
Battery charger/mains adapter, Li-Ion battery pack, voltage probe sets, test leads, handstrap affixed to instrument, hangstrap (user selectable for left- or righthand use), multi-language users manuals on CD-ROM, FlukeView™ demo package (with restricted functionality), USB interface cable for PC connectivity.	FLUKE-190-204	Colour ScopeMeter, 200 MHz, 4 channels
	FLUKE-190-204/S	Colour ScopeMeter, 200 MHz, 4 channels, with SCC-290 kit included
	FLUKE-190-104	Colour ScopeMeter, 100 MHz, 4 channels
	FLUKE-190-104/S	Colour ScopeMeter, 100 MHz, 4 channels, with SCC-290 kit included
	FLUKE-190-202	Colour ScopeMeter, 200 MHz, 2 channels plus DMM/Ext. input
	FLUKE-190-202/S	Colour ScopeMeter, 200 MHz, 2 channels plus DMM/Ext. input, with SCC-290 kit included
	FLUKE-190-102	Colour ScopeMeter, 100 MHz, 2 channels plus DMM/Ext. input
	FLUKE-190-102/S	Colour ScopeMeter, 100 MHz, 2 channels plus DMM/Ext. input, with SCC-290 kit included
	FLUKE-190-062	Colour ScopeMeter, 60 MHz, 2 channels plus DMM/Ext. input
	FLUKE-190-062/S	Colour ScopeMeter, 60 MHz, 2 channels plus DMM/Ext. input, with SCC-290 kit included
	SCC290	Kit containing FlukeView software for Windows, USB interface adapter/cable and hard case



Fluke 190-502



500 MHz, 5 GS/sec—the legacy of leadership continues

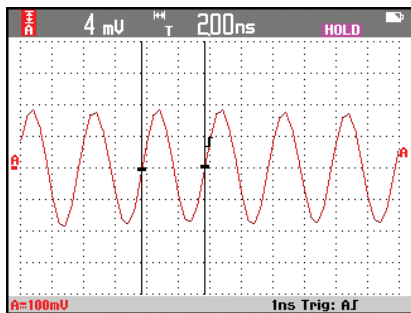
After 20 years, Fluke ScopeMeter® industrial scopes still lead, now with 500 MHz bandWidth and 5 GS/s sampling speed.

The Fluke 190 Series II extends your troubleshooting arsenal, showing you waveform shape, timing, distortion and disturbance in greater detail than ever before. Two- and four-channel models fit any application, measuring signals from 60 MHz to 500 MHz. ScopeMeter® test tools are number one in ruggedness, the only completely sealed, drip-proof, dust-proof IP51 rated handheld scopes.

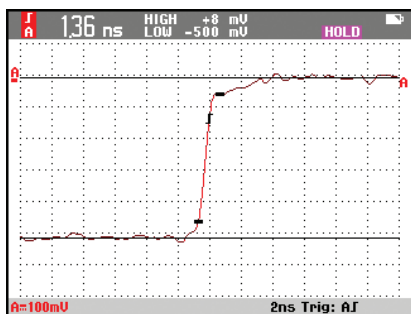
- 500 MHz bandWidth
- Two independent isolated inputs, up to 1000 V
- High-speed sampling: Up to 5.0 GS/sec
- Deep memory: 10,000 points per trace waveform capture
- CAT III 1000 V/CAT IV 600 V safety rated for high voltage environments
- 5000 count multimeter
- Li-ion battery and easy-access battery door for extended usage
- Isolated USB host port for direct data storage to a USB memory
- USB-B-device port for PC connectivity
- Sealed compact case weighing only 2.2 kg (4.8 lb)

New 500 MHz two-channel ScopeMeter test tool advantages in today's applications

A faster sample rate and higher bandWidth means greater accuracy and clarity. The scope will capture and display unknown waveform shapes, amplitudes and any disturbances. In order to display at least the fifth harmonic component of a signal, a good rule of thumb is to select a scope with a bandWidth of at least five times the maximum clock rate of the device under test. The faster the sample interval, the more accurate and detailed the scope will display a signal edge (dV/dt) and peaks of any reflections or transients.



Accurately capture noise, distortion and other signal characteristics with 500 MHz bandWidth and 5 GS/sec sampling rate.

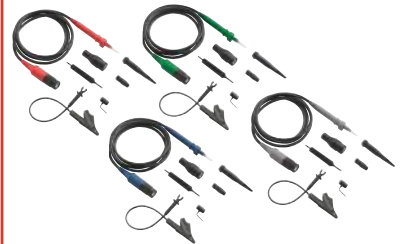


1.7 ns rise time response accurately captures signals with fast edges with signs of reflections.

Recommended Accessories



"S" version kit includes mainframe and carry case and software



VPS510-x Red, Green, Blue and Grey Voltage Probes

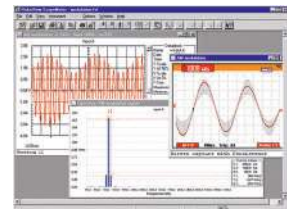


TRM50 50 Ohm Termination

FlukeView ScopeMeter Software for documenting, archiving and analysis

Get more out of your ScopeMeter with FlukeView® ScopeMeter® SW90W Software for Windows.

- Documentation—transfer waveforms, screens and data to your PC for printing or importing data into a report
- Add text to ScopeMeter settings—give operators guidance when recalling settings
- Archive—create a library of waveforms for easy reference, waveform comparison, or pass/fail testing
- Analysis—use cursors, perform spectrum analysis or export data to another analysis program



ORDERING INFORMATION

Included accessories

Battery charger/mains adapter, li-ion battery pack, voltage probe sets, 50 Ohm terminator, test leads, and strap affixed to instrument, hangstrap (user selectable for left- or righthand use), multilingual users manuals on CD-ROM, FlukeView® demo package (with restricted functionality), USB interface cable for PC connectivity.

Part No

FLUKE-190-502

FLUKE-190-502S

Colour ScopeMeter, 500 MHz, 2 channels plus DMM/Ext. input

Colour ScopeMeter, 500 MHz, 2 channels plus DMM/Ext. input, with SCC-290 kit included

DMM SELECTION GUIDE

	Highest accuracy	Remote display	High-end industrial	Industrial maintenance and field service	Electrical	HVAC/R	Field Service	Basic Electrical	Heavy duty (Ip67)	General Purpose	Auto-motive	Loop calibration	Insulation test	CNX Multimeter
Basic features	289	233	87V	179	117	116	115	114	271	77V	88V	789	1587	CXV 3000
Counts	50000	6000	20000	6000	6000	6000	6000	6000	6000	20000	20000	4000	6000	6000
True RMS readings	AC+DC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC
Basic DC accuracy	0.03%	0.25%	0.05%	0.09%	0.5%	0.5%	0.5%	0.5%	0.1%	0.05%	0.1%	0.1%	0.09%	0.2%
Wide bandwidth	100 kHz	100 kHz	20 kHz	5 kHz					20 kHz	50 kHz				
Auto/manual ranging	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•
Measurements														
Voltage AC/DC	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Current AC/DC	10 A	10 A	10 A	10 A	10 A	200 µA	10 A		10 A	10 A	1 A	1 A	400 mA	400 mA
Resistance	500 MΩ	500 MΩ	50 MΩ	50 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ
Frequency	1 MHz	50 kHz	200 kHz	100 kHz	50 kHz	50 kHz	50 kHz		200 kHz	200 kHz	20 kHz	20 kHz	100 kHz	100 kHz
Capacitance	100 nF	100 nF	10 nF	10 nF	10 nF	10 nF	10 nF		10 nF	10 nF	10 nF	10 nF	10 nF	10 nF
Temperature	+1350°C	+400°C	+1090°C	+400°C		+400°C			+1090°C		+1090°C		+500°C	
dB	60 dB													
Conductance	50 nS		60 nS						60 nS					
Duty cycle/pulse Width	•/•		•/•						•/•					
Continuity with beeper/Diode test	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•
4-20mA loop current as % readout														
Motor drive measurement														
RPM/Dwell														
VoltAlert™, Non-contact voltage detection														
LoZ, low input impedance														
VGHEK™ HiLoZ														
Microamps														
Insulation test														
Number of insulation test ranges													5	2
Display														
Dual display	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Analog bargraph	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Backlight	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Remote display	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Data storage and exchange														
Min-Max recording/with time stamp	•/•	•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•
Fast Min-Max	250 µs		250 µs						250 µs		250 µs			
Display Hold/Auto (Touch) Hold	•/•	•	•	•	•	•	•	•	•	•	•	•	•	•
Relative	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Stand alone logging/TrendCapture	•/•													
USB interface/RS232 interface	•/•													
Readings memories	10000													
Other features														
Source 4-20mA loop current/24V loop supply														
Automatic selection, AC/DC volts														
Real time clock	•													
Smoothing														
Integrated holster	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Removable holster														
Closed case calibration	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Separate battery/fuse access	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•
Completely sealed/watertight														
Automatic power off	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Low battery indication	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Warranty and safety														
Lifetime warranty/warranty (years)	•	3	•	•	3	3	3	3	•	•	3	3	3	3
Input alert	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Dangerous voltage indication	•	•	•	•	•	•	•	•	•	•	•	•	•	•
EN61010-1 CAT III	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
EN61010-1 CAT IV	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V	600 V

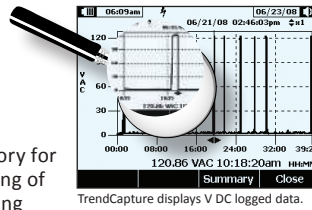
FLUKE 280 SERIES TRUE-RMS LOGGING MULTIMETERS



Fluke 353

Find little problems before they become big ones. The Fluke 289 and 287 are the next generation in high performance industrial logging multimeters.

- Large 50,000 count, 1/4 VGA dot matrix display with white backlight
- Logging function with expanded memory for unattended monitoring of signals over time. Using on-board TrendCapture, users can graphically review logged readings without needing a PC. Store up to 10,000 recorded events
- Save, name, and recall multiple logging sessions before PC download is necessary
- Zoom on trend, provides unprecedented ability to view and analyse TrendCapture data; zoom in up to 14 times
- Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance (289)
- Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289)



TrendCapture displays V DC logged data.



FEATURES

	287	289
Multiple on screen displays	•	•
True-rms AC bandWidth	100 kHz	100 kHz
dBV/dBm	•	•
DC mV resolution	1 μ V	1 μ V
Megohm range up to	500 M Ω	500 M Ω
Conductance	50.00 nS	50.00 nS
Continuity beeper	•	•
Elapse time clock/time of day clock	•	•
Min/Max/Avg/duty cycle/pulse Width	•	•
Isolated optical DMM interface with USB PC connection	•	•
Auto/touch hold	•	•
Over 200 hours logging capacity with new power saving function	•	•
Lo Ohm capability	—	•
Lo Z volts	—	•
Lo Pass Filter	—	•
Limited lifetime warranty	•	•

SPECIFICATIONS

Functions	Range and resolution	Basic Accuracy
AC volts or DC volts	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0 V	0.025 % 0.4 % (true-rms) (AC)
AC current DC current	500.00 μ A, 5000.0 μ A, 50.000 mA, 400.0 mA, 5.0000 A, 10.000 A	0.15 % 0.7 % (true-rms)
Temperature (excluding probe)	-200.0 $^{\circ}$ C to 1350.0 $^{\circ}$ C (-328.0 $^{\circ}$ F to 2462.0 $^{\circ}$ F)	1.0 %
Resistance	50.000 Ω , 500.00 Ω , 5.0000 k Ω , 50.000 k Ω , 500.00 k Ω , 5.0000 M Ω , 50.00 M Ω , 500.0 M Ω	0.05 %
Capacitance	1.000 nF, 10.00 nF, 100.0 nF, 1.000 μ F, 10.00 μ F, 100.0 μ F, 1000 μ F, 10.00 mF, 100 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005 %

ORDERING INFORMATION

Included accessories	Part No	
Test leads, alligator clips, holster, 9 V battery (installed), manual information pack.	FLUKE-289	True-rms Industrial Logging Multimeter with TrendCapture
	FLUKE-287	True-rms Electronics Logging Multimeter with TrendCapture
	FLUKE-289/FVF	True-rms Industrial Logging Multimeter Combo Kit with TrendCapture
	FLUKE-287/FVF	True-rms Electronics Logging Multimeter Combo Kit with TrendCapture

Recommended Accessories



TLK289 Industrial Test Lead Set

TLK287 Electronic Test Lead Set



TPAK Magnetic Meter Hanger



i410 AC/DC Current Clamp



TL175 TwistGuard Test Leads



C280 Soft Case

Recommended Kits



Buy a Combo Pack and Save

- 289/FVF kit includes:**
- True-rms industrial logging multimeter with TrendCapture
 - FlukeView Forms Software and cable
 - Temperature probe
 - Silicone test lead set
 - Alligator clips
 - Meter hanging accessory
 - Soft case



Buy a Combo Pack and Save

- 287/FVF kit includes:**
- True-rms electronic logging multimeter with TrendCapture
 - FlukeView Forms Software and cable
 - Temperature probe
 - Modular test leads (red, black)
 - Modular test probes (red, black)
 - Alligator clips (red, black)
 - Soft case

FLUKE 80 SERIES V DIGITAL MULTIMETERS



Fluke 87V

Fluke 83V



Performance and accuracy for maximum industrial productivity

The Fluke 80 Series V have improved measurement functions, troubleshooting features, resolution and accuracy to solve more problems on motor drives, in plant automation, power distribution, and electro-mechanical equipment.

The Fluke 87V has a unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment. A built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument.

Electrical safety

All inputs are protected to CAT III 1000 V and CAT IV 600 V. They can withstand impulses in excess of 8,000 V to help protect you from arc blast resulting from surges and spikes.

FEATURES

Features	87V	83V
Peak capture to record transients as fast as 250 μ s	•	
Measure up to 1000 V AC and DC	•	•
Auto and manual ranging for maximum flexibility	•	•
Analogue bargraph	•	•
Frequency to 200 kHz and % duty cycle	•	•
Min/Max and average recording to capture variations automatically	•	•
Relative mode to remove test lead resistance from low ohms measurements	•	•
Access door for fast battery changes without breaking the calibration seal	•	•
Limited lifetime warranty	•	•

SPECIFICATIONS

Functions	Range and resolution	Basic accuracy	
		87V	83V
DC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.05 %	0.1 %
AC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.7 % (true-rms)	0.5 %
DC current	600.0 μ A, 6000 μ A, 60.00 μ A, 600.0 mA, 6.000 A, 10.00 A	0.2 %	0.4 %
AC current	600.0 μ A, 6000 μ A, 60.00 μ A, 600.0 mA, 6.000 A, 10.00 A	1.0 % (true-rms)	1.2 %
Temperature (excl. probe)	-200 °C to 1090 °C (-328 °F to 1994 °F)	1.0 %	—
Temperature Probe	-40 °C to 260 °C (-40 °F to 500 °F)	2.2 °C or 2 %	—
Resistance	600.0 W, 6.000 kW, 60.00 kW, 600.0 kW, 6.000 MW, 50.00 MW	0.2 %	0.4 %
Capacitance	10.00 nF, 100.0 nF, 1.000 μ F, 10.00 μ F, 100.0 μ F, 9.999 μ F	1.0 %	1.0 %
Frequency	199.99 Hz, 1.9999 kHz, 19.999 kHz, 199.99 kHz	0.005 %	0.005 %

Battery life: 400 hours typical with backlight off. Size (LxWxD): 201 mm x 98 mm x 52 mm (7.9 in x 3.8 in x 2 in). Weight: 355 g (22 oz).

ORDERING INFORMATION

Included accessories	Part No
Test leads, alligator clips, holster, batteries (installed), temperature probe (87V only), manual information pack.	FLUKE-87-5 Industrial True-rms Multimeter with Temperature
	FLUKE-83-5 Industrial Multimeter
	FLUKE-87-5/E2 Industrial Electrician's Combo Kit

Recommended Accessories



Recommended Kits



Fluke 87V/E2 Industrial Electrician's Combo Kit

- Industrial multimeter
- 1.5 m silicone test leads
- Removable probes with 4 mm of exposed metal for use on industrial circuits
- Retractable long reach alligator clips
- Meter hanging accessory
- Type K temperature probe
- Soft case

FLUKE 280 SERIES TRUE-RMS LOGGING MULTIMETERS



Fluke 27 II

Fluke 28 II

The 27 II, 28 II and 28 II Ex Digital Multimeters are designed for tough work environments. All three meters have IP 67 waterproof and dustproof rating. They both have an extended operating temperature range of -15 °C to +55 °C (5 °F to 131 °F) and 95 % humidity.

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (28 II, 28 II Ex)
- Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II, 28 II Ex)
- Hi-resolution 20,000 count display mode (28 II, 28 II Ex)
- Resistance and continuity. Relative mode to remove test lead resistance from low ohms measurements
- Large digit display with bright, two-level backlight
- Backlit keypad buttons allow for easy visibility in low-lit areas
- Optional magnetic hanger for easy setup and viewing freeing your hands for other tasks
- Intrinsically safe certifications from the world's leading certification bodies (28 II Ex)



FEATURES

	27 II	28 II	28 II Ex
Tested to withstand a 3 m (10 ft) drop	•	•	•
Wide 1000 V measurement range	•	•	•
True-rms AC voltage and current for accurate measurements on non-linear signals	—	•	•
Low pass filter	—	•	•
Temperature	—	•	•
Average responding voltage and current measurements	•	—	—
10 A continuous (20 A for 30 seconds)	•	•	•
Frequency and capacitance	•	•	•
Record signal fluctuations using the Min/Max function	•	•	•

SPECIFICATIONS

	27 II	28 II	28 II Ex
DC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.05 % +1	0.05 % +1
AC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.5 % +3	0.7 % +4
DC current	Range	0.1 µA to 10 A	
	Accuracy	0.2 % +4	0.2 % +4
AC current	Range	0.1 µA to 10 A	
	Accuracy	1.5 % +2	1.0 % +2
Resistance	Range 0.1 Ω to 50 MΩ		
Display counts	6000	6000/19,999	6000/19,999
Capacitance	1 nF to 9999 µF		
Frequency	0.5 Hz to 199.99 kHz		
Temperature		-200 °C to +1090 °C	-200 °C to +1090 °C
Low pass filter (measurement on VSD's)		Yes	Yes
Compliance	CAT IV 600 V, CAT III 1000 V		
Measurement method	Avg. responding	True-rms	True-rms
Power	Three AA batteries		
Battery life	800 hours		400 hours
Dimensions (DxWxH)	6.35 cm x 10.0 cm x 19.81 cm (2.5 in x 3.93 in x 7.8 in)		
Weight with holster	698.5 g (1.54 lb)		

ORDERING INFORMATION

Included accessories	Part No
Test leads, temperature probe, alligator clips, batteries, holster, manual information pack.	FLUKE-27-II Industrial Multimeter
	FLUKE-28-II Industrial Multimeter
	FLUKE-28-II Ex Intrinsically Safe Industrial Multimeter

Specialty Models

Fluke 28 II Ex
Intrinsically Safe
True-rms Multimeter



ANZEx



Recommended Accessories



TPAK
Magnetic
Meter Hanger



TLK-225
SureGrip™ Master
Accessory Set



PV350
Pressure-Vacuum Module



i410
AC/DC Current Clamp



CXT80
Extreme Hard Case



C550
Tool Bag



TL175
TwistGuard™
Test Leads



TL225
Stray Voltage Adapter
Test Lead Kit



i2000 FLEX
AC Current Clamp



C25
Meter Case

FLUKE 170 SERIES DIGITAL MULTIMETERS

Versatile meters for field service or bench repair



Fluke 179

The three models of the Fluke 170 Series True RMS digital multimeters (179,177,175) have the features needed to find most electrical, electro-mechanical and heating and ventilation problems. They are simple to use and have significant improvements over Fluke's standards, and a much larger display that's easier to view.

- True RMS voltage and current measurements
- 0.09% basic accuracy (177, 179)
- 6000 count resolution
- Digital display with analog bargraph and backlight (177, 179)
- Manual and automatic ranging
- Display Hold and Auto Hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- Min-max-average recording
- Smoothing mode allows filtering of rapidly changing inputs
- Easy battery exchange without opening the case
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster
- EN61010-1 CAT III 1000V / CAT IV 600V
- Measures twice as fast as other multimeters

Electrical safety

All inputs are protected to measurement CAT III 1000 V and CAT IV 600 V. This meter can withstand transient impulses in excess of 8000 V to help protect you from arc blasts resulting from surges and spikes.



FEATURES

Features	179	177	175
Max voltage	1000	1000	1000
True-rms	•	•	•
Temperature	•	—	—
Basic DC accuracy	0.09 %	0.09 %	0.15 %
Backlight	•	•	—
Min/Max/Avg	•	•	•
ToolPak meter hanging kit with magnet	Opt	Opt	Opt
Limited lifetime warranty	•	•	•

SPECIFICATIONS

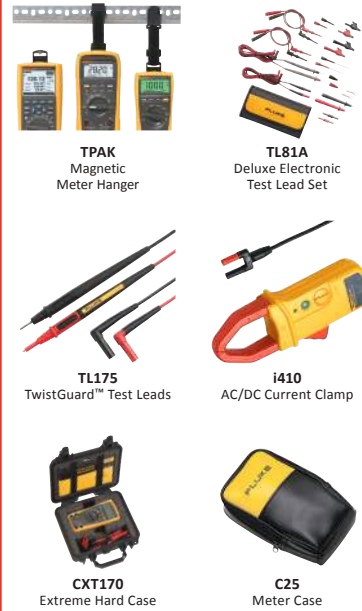
Functions	Range and resolution	Best accuracy
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 0.09 % (Models 177 and 179) ± 0.15 % (Model 175)
AC voltage ¹	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 1.0 % of reading
DC current	60.00 mA, 400.0 mA, 6.000 A, 10.00 A ²	± 1.0 % of reading
AC current ²	60.00 mA, 400.0 mA, 6.000 A, 10.00 A ²	± 1.5 % of reading
Resistance	600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 6.000 MΩ, 50.00 MΩ	± 0.9 % of reading
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF	± 1.2 % of reading
Frequency ³	99.99 Hz, 999.9 Hz, 9.999 kHz, 99.99 kHz	± 0.1 % of reading
Temperature (Model 179)	-40 °C to +400 °C (-40 °F to +752 °F)	1.0 % of reading

¹ All AC voltage and AC current ranges are specified from 5 % of range to 100 % of range.
² 10 A continuous, 20 A for up to 30 seconds.
³ Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz.
 Battery life: 200 hours typical for alkaline.
 Size (HxWxL): 4.3 cm x 9.0 cm x 18.5 cm (1.7 in x 3.5 in x 7.3 in).

ORDERING INFORMATION

Included accessories	Part No
Test leads, 9 V battery (installed) and manual. The Fluke 179 also includes a temperature probe.	FLUKE-179
	FLUKE-175
	FLUKE-177
	FLUKE-179/1AC-II
	FLUKE-179/EDA2
	True RMS Digital Multimeter
	True RMS Digital Multimeter
	True RMS Digital Multimeter
	Electricians Combo Kit
	Electronics Combo Kit

Recommended Accessories



Recommended Kits



- 179/EDA2 Electronics Multimeter and Deluxe Accessory Combo Kit**
- True-rms digital multimeter
 - Electronic test probes
 - SureGrip™ silicone test leads
 - SureGrip™ heavy duty hook clips
 - Type K temperature probe
 - Meter hanging accessory
 - Soft case



- 179/1AC-II Electrician's Multimeter and Voltage Tester Combo Kit**
- True-rms digital multimeter
 - Non-contact voltage detector
 - Alligator clips
 - SureGrip™ test probes
 - Silicone test leads, 1.5 m
 - Type K temperature probe
 - Meter hanging accessory
 - Soft case

FLUKE 233 REMOTE DISPLAY DIGITAL MULTIMETER



Fluke 233

The Fluke 233 Remote Display Digital Multimeter allows you to be in two places at once. The removable display solves several problems. First, you no longer have to hold both the meter and the test leads to make a measurement. It also allows you to measure where the measurement point is separated from controls or where the operator can't stay close to the meter during measurements due to various hazards or moving machinery.

- Wireless technology allows the display to be carried up to 9.1 metres (30 feet) away from the point of measurement for added flexibility
- The removable magnetic display can be conveniently mounted where it is easily seen
- Low-power 802.15.4 wireless technology does not interfere with measurement accuracy
- Use as a conventional multimeter when the display is connected
- True-rms AC voltage and current
- Built-in thermometer
- Auto power off maximises battery life (400 hours)
- Radio transmitter automatically turns off when the display is connected to the meter
- Record signal fluctuations using the Min/Max function



FEATURES

Features	233
Removable magnetic display	•
True-RMS measurement	•
Digital display counts	6000
Display backlight	•
Built in thermometer	•
Resistance, continuity and diode test	•
Min/Max and average recording	•
Auto power off maximises battery life	•
Radio transmitter automatically turns off when the display is connected to the meter	•
Use as conventional multimeter when the display is connected	•
Safety rating	CAT IV 600V/CAT III 1000 V
Auto and manual ranging	•
Display Hold and AutoHold®	•
Unsafe voltage alert warns for voltages above 30V	•
2 Low batteries indication	•
Ergonomic case with integrated holster	•
Selectable sleep mode preserves battery life	•

SPECIFICATIONS

Functions	Specifications
DC voltage	Range 0.1 mV to 1000 V
	Accuracy 0.25 % + 2
AC voltage	Range 0.1 mV to 1000 V
	Accuracy 1.0 % + 3
DC current	Range 0.001 A to 10 A
	Accuracy 1.0 % + 3
AC current	Range 0.001 A to 10 A
	Accuracy 1.5 % + 3
Resistance	Range 0.1 Ω to 40 MΩ
Capacitance	1000 nF to 9999 μF
Frequency	0.1 Hz to 50.00 kHz
Temperature	-40 °C to +400 °C (-40 °F to 752 °F)
Power	Three AA batteries main body, two AA batteries display module
Battery life	400 hours
Compliance	CAT IV 600 V, CAT III 1000 V
Size (HxWxL)	5.3 cm x 5.3 cm x 19.3 cm (2.08 in x 2.08 in x 7.6 in)
Weight	604 g (1.3 lb)

ORDERING INFORMATION

Included accessories	Part No
Test leads, temperature probe, alligator clips, batteries, manual information pack.	FLUKE-233 Remote Display Multimeter

Recommended Accessories



TPAK
Magnetic
Meter Hanger



TL220
SureGrip Industrial
Test Lead Set



80PK-22
SureGrip™ Immersion
Temperature Probe



i400s
AC Current
Clamp



80AK-A
Thermocouple Adapter



AC285
SureGrip™ Alligator Clips



TL175
TwistGuard™ Test Leads
Meter Hanger



TLK289
SureGrip Industrial
Test Lead Set



TP175
TwistGuard™
Test Probes



FTP-1
SureGrip™ Fused
Test Probe Set



TL224
SureGrip™ Silicone
Insulated Test Leads



C35
Soft Carrying Case



C101
Hard Case



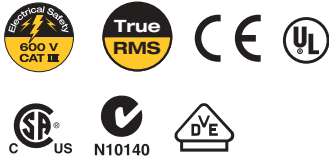
C781
Meter Case

FLUKE 117 AND 115 TRUE-RMS DIGITAL MULTIMETERS



Fluke 117

Fluke 115



Fluke 117 Electrician's Multimeter with Non-Contact Voltage

The 117 is for electricians working in commercial and non-commercial premises (like hospitals and schools). It includes extras like non-contact voltage detection for faster and safer operation.

Fluke 115 Field Service Testing Multimeter

An everyday multimeter for technicians, the 115 is for electrical and electronic testing in field service, industrial, and applications where more than the basic functions simplify work.

- VoltAlert™ technology for integrated non-contact voltage detection (117)
- AutoVolt feature for automatic AC/DC voltage selection (117)
- LoZ: Low input impedance prevents false readings due to "ghost voltage" (117)
- Large display and white LED backlight to work in poorly lit areas more effectively
- Compact ergonomic design for one-handed operation
- Min/Max/Avg to record signal fluctuations
- Compatible with optional magnetic hanger (TPAK) for hands free operation
- Current measurement 20 A (30 seconds momentary; 10 A continuous)
- Resistance, continuity, frequency and capacitance

Specialty Model

Fluke 113

- Basic electrical and utility multimeter
- VCHEK™ LoZ low impedance measurement function to simultaneously test for voltage or continuity
- True-rms for accurate AC measurements on non-linear loads
- Record signal fluctuations using the Min/Max function
- Diode and capacitance measurements
- Integral holster with probe holders for easy storage
- Auto and manual ranging for added user functionality
- Meets CAT IV 600 V standards for a higher level of safety



FEATURES

Features	117	115	113
VoltAlert™ detector	•	—	—
AutoVolt/LoZ	•	—	LoZ
Analogue bargraph	•	•	•
Large backlit digital display	•	•	•
True-rms for accurate measurements on non-linear loads	•	•	•
Min/Max recording	•	•	•
Display hold	•	•	•
3-1/2 digits	•	•	•
6000 counts	•	•	•
CAT III 600 V safety rated	•	•	•
Three-year warranty	•	•	•

SPECIFICATIONS

Functions	117	115	113	Accuracy
Volts AC/DC	600 V	600 V	600 V	0.5 % + 2
Current AC/DC	10 A	10 A	—	1.0 % + 3
Resistance	40 MW	40 MW	60 kW	0.9 % + 2
Capacitance	1 nF to 9,999 µF	1 nF to 9,999 µF	—	1.9 % + 2
Diode test	Yes	Yes	Yes	—
Frequency	5 Hz to 50 kHz	5 Hz to 50 kHz	—	0.1 % + 2

ORDERING INFORMATION

Included accessories	Part No
Test leads, holster, users manual and 9 V battery (installed).	FLUKE-117
	FLUKE-115
	FLUKE-113
	FLUKE-117/323
	Multimeter with Non-Contact Voltage
	Multimeter
	Utility Meter
	Electrician's Combo Kit

Recommended Accessories



TPAK
Magnetic
Meter Hanger

TL220
SureGrip Industrial
Test Lead Set



TL175
TwistGuard™ Test Leads



C115
Soft Carrying Case

Recommended Kits



117/323 Electrician's Combo Kit

- True-rms digital multimeter with non-contact voltage detection
- Compact clamp meter
- Test lead set
- Magnetic meter hanging strap
- Deluxe carrying case with shoulder strap

FLUKE 116 AND 114 DIGITAL MULTIMETERS

HVAC/R and electrical troubleshooting



Fluke 116

Fluke 114



Fluke 116 Multimeter with Temperature and Microamps

The 116 is for heating, ventilation and air conditioning (HVAC) engineers. It includes temperature measurement and microamp current ranges to quickly troubleshoot HVAC problems.

Fluke 114 Electrical Multimeter

The 114 is for electrical troubleshooting and straightforward 'go/no-go' in residential/commercial testing. It has all the basic functions plus a special feature to prevent false readings caused by ghost voltage.

- Built in thermometer for HVAC applications (116)
- Microamps to test flame sensors (116)
- AutoVolt: Automatic AC/DC voltage selection (114)
- LoZ: Helps prevent false readings due to ghost voltage
- Min/Max/Avg to record signal fluctuations
- Resistance, continuity, frequency and capacitance
- Large white LED backlight to work in poorly lit areas
- Compact ergonomic design for one-handed operation
- Compatible with optional magnetic hanger (TPAK)

Recommended Accessories

Fluke 116



80AK-A
DMM Adapter



80PK-22
SureGrip™ Immersion
Temperature Probe



80PK-8
Pipe Clamp
Temperature Probe



80PK-27
SureGrip™ Industrial
Surface Probe

Recommended Kits



Buy a
Combo Pack
and Save

116/323 HVAC Combo Kit

- HVAC multimeter with temperature and microamps
- Compact clamp meter
- Test lead set
- Pipe wrap thermocouple
- Thermocouple adapter
- Thermocouple bead probe
- Meter hanging accessory
- Deluxe carrying case with shoulder strap



Buy a
Combo Pack
and Save

116/62 MAX+ HVAC Combo Kit

- HVAC multimeter with temperature and microamps
- Infrared thermometer
- Test lead set
- Pipe wrap thermocouple
- Thermocouple adapter
- Type K integrated temperature probe
- Magnetic meter hanging strap
- Deluxe carrying case with shoulder strap

FEATURES

Features	116	114
Temperature	•	—
Microamps	•	—
Frequency	•	—
Capacitance	•	—
Diode test	•	—
AutoVolt/LoZ	•	•
Analogue bargraph	•	•
Large backlit digital display	•	•
True-rms for accurate measurements on non-linear loads	•	•
Min/Max recording	•	•
Display hold	•	•
3-1/2 digits	•	•
6000 counts	•	•
CAT III 600 V safety rated	•	•
Three-year warranty	•	•

SPECIFICATIONS

Functions	Range and resolution	Best accuracy
Volts AC/DC	600 V	0.5 % + 2
Current AC/DC (116 only)	600.0 μ A	1.0 % + 2
Temperature (116 only)	+400 °C	1.0 % + 18
Resistance	40 MW	0.9 % + 2
Capacitance (116 only)	1 nF to 9,999 μ F	1.9 % + 2
Frequency (116 only)	5 Hz to 50 kHz	0.1 % + 2

ORDERING INFORMATION

Included accessories	Part No	
Test leads, integrated temperature probe (116 only), holster, users manual and 9 V battery (installed).	FLUKE-116	HVAC Multimeter with Temperature and Microamps
	FLUKE-114	Electrical Multimeter
	FLUKE-116/62 Max+	HVAC Combo Kit
	FLUKE-116/323	HVAC Combo Kit

FLUKE 88V AND 77IV DIGITAL MULTIMETERS

For automotive, field service or bench repair



Fluke 88V

Fluke 88V Automotive Multimeter

The Fluke 88V Automotive Multimeter is designed to help automotive professionals solve problems faster. This DMM has the measurement functions, troubleshooting features and accuracy to solve virtually any problem with conventional and hybrid vehicles.

- Automotive test functions include DC and AC voltage, resistance and current
- Min/Max recording for logging the highest and lowest readings over time
- Frequency measurements for magnetic sensors and AC/DC frequency signals
- Duty cycle for variable duty cycle signals with selectable trigger, slope and level
- Pulse Width for fuel injector on-time measurements
- Conductance testing for secondary ignition coils
- RPM measurements for DIS and conventional ignition systems
- Built-in thermometer



Fluke 77IV

Fluke 77IV Digital Multimeter

The Fluke 77IV Digital Multimeter has the features needed to repair most electrical and electronic problems. This meter is simple to use and has significant improvements over Fluke's original 70 Series with more measurement functions, conformance to the latest safety standards, and a much larger display that is easier to view.

- Wide 1000 V measurement range
- Average responding AC measurements
- 0.3 % accuracy
- 10 amps continuous
- Frequency and capacitance
- Resistance and continuity
- Large display
- Backlight for work in dim areas
- Min/Max to record signal fluctuations
- Integral holster with probe holders
- Free your hands with the optional TPAK magnetic hanger
- Auto and manual ranging



SPECIFICATIONS

	88V	77IV
V DC	1000 V	1000 V
V AC	100 V	100 V
A DC	10 A	10 A
A AC	10 A	10 A
Resistance	50 MΩ	50 MΩ
Capacitance	9,999 μF	9,999 μF
Frequency	200.00 kHz	99.99 kHz
Duty Cycle	99.9 %	—
Temperature	1994.0 °F (1090 °C)	—
Conductance	60.00 nS	—

ORDERING INFORMATION

Included accessories

Test leads, manual information pack and 9 V battery (installed).

Part No

FLUKE-88-5	Automotive Multimeter
FLUKE-77-4	Digital Multimeter
FLUKE-88-5/A KIT	Automotive Multimeter Combo Kit

Recommended Accessories

Fluke 88V



TLK281
Automotive
Test Lead Kit



TLK282
Deluxe Automotive
Test Lead Kit

Fluke 77IV



TPAK
Magnetic Meter Hanger



i400
AC Current Clamp



TL175
TwistGuard™
Test Leads



TLK-225
SureGrip™ Master
Accessory Kit



i2000 Flex
AC Current Clamp



C35
Soft Carrying Case

Recommended Kits



88V/A Combo Kit

- Automotive multimeter
- Heat resistant silicone test leads
- Removable sharp point test probes
- Large jaw alligator clips
- Temperature probe
- Inductive pick-up
- Automotive backprobe pins
- Insulation piercing probe
- Meter hanging accessory
- Durable carrying case

Precision Bench Multimeters



Fluke 8846A



Fluke 8845A



Fluke 8808A



Fluke 8846A/8845A 6.5 Digit Precision Multimeters

These digital multimeters perform the functions you would expect to see in a multifunction DMM, including measuring volts, ohms and amps. Basic V DC accuracy of up to 0.0024 %, 10 A current range, and a wide ohms range give you an unbeatable combination of measurement capability.

Extend the meters' utility even more with their graphical display modes, including Trendplot™ paperless recorder mode, statistics and histograms—features you won't find on other multimeters

- 6.5 digit resolution
- Up to 0.0024 % accuracy
- Graphical analysis modes: TrendPlot, Histogram, and Statistics
- Dual measurement inputs: front/rear
- Dual measurement display
- Wide measurement ranges
- IEEE, LAN, RS-232 interfaces
- USB memory device port (8846A)
- TL2X4 wire measurement technique
- Three-year warranty
- 17025 accredited report of calibration included

Fluke 8808A 5.5 Digit Multimeter

The Fluke 8808A multimeter has a broad range of functions, measuring volts, ohms and amps with a basic V DC accuracy of 0.015 %. The meter is easy to use and include innovative functions to simplify routine testing and precision 4 wire resistance measurements.

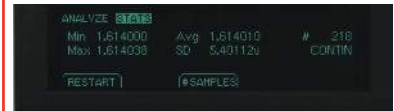
- 5.5 digit resolution
- Up to 0.015 % accuracy
- Dual measurement display
- Sensitive DC leakage current ranges
- Front panel setup keys
- TL2X4 wire measurement technique
- Three-year warranty

Sample Screens

Fluke 8846A/8845A



Built-in TrendPlot graphically plots extent of drift and intermittent events.



Critical measurement statistics are



conveniently displayed together. Histogram mode can reveal stability or noise problems.

Recommended kits



Perform two interrelated measurements like volts and amps, or volts AC and frequency (and 8808A).



Measure sensitive DC currents accurately using unique design that minimises measurement error due to shunt burden voltages (8808A only).

SPECIFICATIONS

	Fluke 8808A	Fluke 8845A	8846A
Display	Dual	Dual, graphical	
Resolution (digits)	5.5	6.5	
Measurements	V AC, V DC, I DC, I AC, W, Cont, Diode	V AC, V DC, I DC, I AC, W, Cont, Diode	
Basic V DC accuracy (% Reading + % Range)	0.015 + 0.003	0.0035 + 0.0005	0.0024 + 0.0005
Advanced measurements/functions	2x4 wire ohms, freq, i-Leakage dedicated setup keys	2x4 wire ohms, freq, period	2x4 wire ohms, freq, period, capacitance, temp (RTD)
Math	Null, dBm, dB, Min, Max	Null, dBm, dB, Min, Max, Ave, Std Deviation, MX+B	
Analysis	Limit Compare	Limit Compare, TrendPlot, Histogram, Statistics	
USB memory device port	No	No	Yes
Interfaces	RS-232, USB via optional adapter	RS-232, IEEE-488.2, LAN, USB via optional adapter	
Safety rating	CAT I 1000 V, CAT II 600 V	CAT I 1000 V, CAT II 600 V	

ORDERING INFORMATION

Included accessories	Part No
Power cord, test lead set, programmers manual/users manual on CD, FVF-BASIC, FlukeView Forms Software Basic Version.	FLUKE-8846A
	FLUKE-8845A
Test leads, line cord, getting started guide, users manual on CD.	FLUKE-8808A
	FLUKE-8808A

Recommended Accessories



TL2X4W-TWZ
2x4-Wire Ohms Tweezers Test Leads



TL2X4W-PTII
2x4-Wire Ohms Test Lead



Y8846D
Rack Mount Kit, Dual

CNX™ Your tools - connected



Fluke CNX 3000 Series

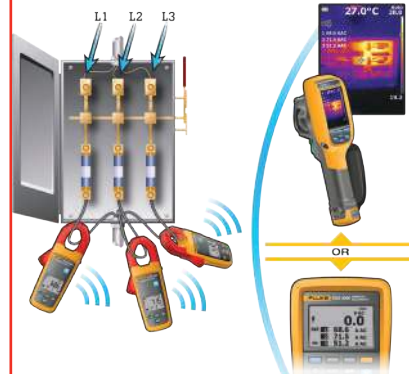
Take readings quicker and solve problems faster with Fluke's CNX Wireless System. Fluke's CNX system offer a suite of wireless test tools working together to help you solve problems faster. With the CNX team, measurements are remote, simultaneous, and recordable.

The new Fluke Wireless Troubleshooting Team lets you see live measurements from multiple modules simultaneously and remotely on a single screen. This customisable tool set, built with the durability, reliability and quality you've come to expect from Fluke tools, will change the way you work.

Wireless multimeter displays readings from up to three wireless modules, infrared cameras up to five—all from up to 20 metres away.

Possible Applications

Measuring current load



Troubleshooting systems



Recommended Accessories



CNX C3000
Premium Modular Tool Bag



CNX C3001
Small Modular Case



CNX C3002
Modular DMM Two-Compartment Soft Case



CNX C3003
Modular DMM Three-Compartment Soft Case

MEET THE TEAM



Fluke CNX Wireless Multimeter

The CNX 3000 Wireless Multimeter has all the essentials for convenient troubleshooting. Plus, the CNX 3000 Multimeter can wirelessly display the measurements from up to three CNX modules at the same time—from up to 20m away!

- AC and DC voltage measurements to 1000 V
- AC and DC current to 400 mA with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- MIN/MAX recording
- CAT III 1000 V, CAT IV 600 V; IP54



Fluke CNX i3000 Wireless iFlex™ AC Current Module

- True-rms AC flexible current probe
- Measure up to 2500 A
- Log MIN/MAX/AVG readings



Fluke CNX v3000 Wireless AC Voltage Module

- Measure up to 1000 V true-rms AC
- Log MIN/MAX/AVG readings



Fluke CNX a3000 Wireless AC Current Clamp Module

- True-rms AC current clamp
- Measure up to 400 A
- Log MIN/MAX/AVG readings



Fluke CNX t3000 Wireless Temperature Module

- K-type thermocouple thermometer
- Measure up to 1372 °C
- Log MIN/MAX/AVG readings



Fluke CNX pc3000 Wireless PC Adapter

- Communicate real-time readings from CNX tools to your computer
- Download logged data from CNX Wireless Modules to your computer



Fluke CNX Infrared Cameras

- Capture additional measurements from up to five wireless modules at once using your Fluke infrared camera and CNX™ wireless modules.

- See www.fluke.com/au/infrared_cameras for a complete list of wireless infrared camera models.

If you did not find what you were looking for, please call our sales team now!

FLUKE CNX 3000 WIRELESS KITS

Kits tailored for your specific application

Industrial



CNX 3000 Industrial System

- CNX 3000 Wireless Multimeter
- CNX v3000 AC Wireless Voltage Module
- Three CNX i3000 iFlex AC Wireless Current Modules
- Three iFlex i2500-10 Flexible Current Probes
- CNX pc3000 Wireless PC Adapter and Software
- TL224 Test Leads
- TL175 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- Four magnetic hanging straps

HVAC



CNX 3000 HVAC System

- CNX 3000 Wireless Multimeter
- CNX a3000 AC Wireless Current Clamp Module
- CNX t3000 K-Type Wireless Temperature Module
- CNX pc3000 Wireless PC Adapter and Software
- TL175 Test Leads
- AC175 Alligator Clips
- 80PK-1 K-Type Bead Thermocouple
- Magnetic hanging strap
- Soft carrying case

General Maintenance



CNX 3000 General Maintenance System

- CNX 3000 Wireless Multimeter
- CNX v3000 AC Wireless Voltage Module
- CNX i3000 iFlex AC Wireless Current Module
- iFlex i2500-10 Flexible Current Probe
- CNX pc3000 Wireless PC Adapter and Software
- TL224 Test Leads
- TL175 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- Two magnetic hanging straps
- Soft carrying case

CNX a3000 AC Current Clamp Kit

- CNX 3000 Wireless Multimeter
- CNX a3000 AC Wireless Current

Additional Kits



CNX a3000 AC Current Clamp Kit

- CNX 3000 Wireless Multimeter
- CNX i3000 iFlex AC Wireless Clamp Module
- TL175 Test Leads
- AC175 Alligator Clips
- Magnetic hanging strap
- Soft carrying case



CNX i3000 iFlex AC Current Kit

- CNX 3000 Wireless Multimeter
- CNX i3000 iFlex AC Wireless Current Module
- iFlex i2500-10 Flexible Current Probe
- TL175 Test Leads
- AC175 Alligator Clips
- Magnetic hanging strap
- Soft carrying case



CNX t3000 Temperature Kit

- CNX 3000 Wireless Multimeter
- CNX t3000 K-Type Wireless Temperature Module
- TL175 Test Leads
- AC175 Alligator Clips
- 80PK-1 K-Type Bead Thermocouple
- Magnetic hanging strap
- Soft carrying case



CNX v3000 AC Voltage Kit

- CNX 3000 Wireless Multimeter
- CNX v3000 AC Wireless Voltage Module
- TL224 Test Leads
- TL175 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- Magnetic hanging strap
- Soft carrying case

ORDERING INFORMATION

Included accessories

Test leads, alligator clips, info pack
Flexible current probe, magnetic hanging strap, info pack

Test leads, alligator clips, magnetic hanging strap, info pack
K-type bead thermocouple, magnetic hanging strap, info pack

Industrial kit: all accessories included with individual items
All other kits: all accessories included with individual items, plus C3003

Part No

FLK-CN3000	Wireless Multimeter
FLK-CN3000i	iFlex™ AC Current Clamp Module
FLK-CN3000a	AC Current Clamp Module
FLK-CN3000v	AC Voltage Module
FLK-CN3000t	K-Type Temperature Module
FLK-CN3000pc	PC Adapter and Software
FLK-CN3000IND	Industrial System
FLK-CN3000GM	General Maintenance System
FLK-CN3000HVAC	HVAC System
FLK-CN3000tKit	Temperature Measurement Kit
FLK-CN3000iKit	iFlex AC Current Measurement Kit
FLK-CN3000aKit	AC Current Clamp Kit
FLK-CN3000vKit	AC Voltage Kit

FLUKE Electrical Testers



Fluke T5-600

Fluke T5-1000



Fluke LVD2



Fluke 1AC-II



Fluke T5 Series Electrical Testers

The Fluke T5 Electrical Testers let you check voltage, continuity and current with one compact tool. With the T5, all you have to do is select volts, ohms, or current and the tester does the rest. OpenJaw™ current lets you check current up to 100A - without breaking the circuit. Its tough test leads stow neatly in the back of the tester, making it easy to tote the T5 in your tool pouch. Detachable SlimReach™ test probes are customised for national electrical standards. The test leads accept optional accessories such as clips and specialty probes. The optional H5 holster lets you clip the T5 onto your belt. Available in 600V and 1000V models.

Fluke T5 Voltage, Continuity and Current Testers

- Excellent front-line troubleshooting and measurement tool
- Available in 600 V and 1000 V models
- Digital display
- OpenJaw™ current measurement
- Rotary switch selects volts, amps and ohms functions
- Heavy-duty test leads

Fluke VoltAlert™ Family

The next generation VoltAlert™ AC non-contact voltage testers from Fluke are easy to use. Electricians, maintenance, service and safety personnel, and homeowners can quickly test for energised circuits in the workplace or at home. Certified up to CAT IV 1000 V.

SPECIFICATIONS

Functions	T5-1000	T5-600
Measure AC/DC voltage	1000 V	600 V
Measure AC current (average)	100 A	100 A
Measure continuity	< 25 W	< 25 W
Measure resistance	1000 W	1000 W
DC polarity indicator	Yes	Yes
Detachable probe tips with optional probe tips styles	Yes	Yes
Digital display	Yes	Yes
Safety rating	1000 V Overvoltage CAT III	600 V Overvoltage CAT III
Warranty	Two-year	Two-year

*Voltage levels will vary depending on country of intended use.

Functions	1AC-II	LVD2
Voltage range	90 V AC to 1000 V AC	90 V AC to 600 V AC
Audible alert	•	•
Flashlight	—	•
On/Off	•	•
Safety rating	CAT IV 1000 V	CAT IV 600 V

ORDERING INFORMATION

Included accessories	Part No	
The T5-1000 and T5-600 come with detachable probes and instruction sheet.	T5-1000	1000 V Voltage, Continuity and Current Tester
	T5-600	600 V Voltage, Continuity and Current Tester
	T5-H5-1AC KIT	Voltage, Continuity and Current Tester Kit
	1AC-II	VoltAlert™ Voltage Detector
	LVD2	Volt Light

Recommended Accessories



H5 Electrical Tester Holster Test Leads



T5-RLS T5 Replacement



T5 Kit Starter Kit



C520A Premium Leather Holster

Recommended Kits

T5-1000 Tester Kit

- T5-1000 Voltage Electrical Tester
- 2AC VoltAlert™ Voltage Detector
- H5 Holster



Fluke 2042 Cable Locator



Receiver Transmitter

The Fluke 2042 is a professional general purpose cable locator. It is ideal for tracing cables in walls and underground, locating fuses/breakers on final circuits and locating interruptions and short circuits in cables and electrical floor heating systems.

- For all applications (live or dead cables) without additional instruments
- Set includes a transmitter and a receiver
- Proven digitally coded sender signal guarantees clear signal identification
- Transmitter with LCD-display for transmitting level, transmitting code and external voltage
- Receiver with a backlight LCD-display for level of receiving signal, code of receiving signal and live voltage indication
- Switchable acoustic receiving signal

FLUKE T SERIES VOLTAGE AND CONTINUITY TESTERS

NEW



Fluke T150

Fluke T130



Fluke T110

Fluke T90

Rugged, high-quality testers for fast test results the way you need them

Our new family of Two-Pole Voltage Testers are built with state-of-the-art measurement and safety technology. These testers offer everything you expect from Fluke, and a little bit more.

- Rugged, high-quality construction is built to last. This includes a heavy duty molded case, a thicker cord with wear indicator, sturdy battery case, and well fitting and durable probe protector.
- Fast test results the way you need them, with large, easy-to-use buttons, bright backlights, and clear audible and physical indicators designed for any work situation.
- Enhanced ergonomic design feels good in your hand, is easy to use (even with gloves on) and quick, secure probe docking.
- Compliant with regulation HSE GS 38 (tip caps) and IEC EN 61243-3: 2010



Fluke T90



Fluke T110, T130, T150



N10140

Recommended Accessories



Fluke C150



Fluke H15

FEATURES

	T90	T110	T130	T150
Backlit LED indicator	•	•	•	•
Backlit LCD Digital Display			LCD	LCD
Continuity test - visual results	•	•	•	•
Continuity test - audible results	•	•	•	•
Vibratory indicator under load		with on/off	with on/off	with on/off
Display Hold			•	•
Voltage Test	•	•	•	•
Indication of polarity	•	•	•	•
Resistance measurement				•
Switchable Load		•	•	•
Single pole test for phase detection	•	•	•	•
Rotary field indicator		•	•	•
Probe tip protection	•	•	•	•
Voltage display with discharged batteries	•	•	•	•
Electrical torch function		•	•	•
Wear indicator test lead wire	•	•	•	•

*Voltage levels will vary depending on country of intended use.

SPECIFICATIONS

	T90	T110	T130	T150
Voltage AC/DC	12V - 690V	12V - 690V	6V - 690V	6 V - 690 V
Continuity	0 - 400 kΩ			
Frequency	0 - 60 Hz	0 - 400 Hz		
Phase rotation	-	100 V - 690 V		
Resistance measurement	-	-	-	Up to 1999 Ω
Response time (LED ladders)	< 0.1 s			
200 kΩ input impedance	Current draw 3,5 mA @ 690 V Current draw 1,15 mA @ 230 V			
7k Ω input impedance (with load buttons pressed)	current draw 30 mA @ 230 V			
Safety rating	CAT II 690V CAT III 600V	CAT III 690V CAT IV 600V		
IP rating	IP54	IP64	IP64	IP64

*Voltage levels will vary depending on country of intended use.

Battery type: Alkaline supplied. usable with 1.2 V NiCD or NiMH rechargeable batteries
Size (HxWxD): 100 mm x 250 mm x 125 mm

Weight: 1.3 kg
Three Year Warranty

Included accessories	Part No	
Two 2-AA batteries and instruction sheet	FLUKE-T90	Voltage/Continuity Tester
	FLUKE-T110	Voltage/Continuity Tester with Switchable Load
	FLUKE-T130	Voltage/Continuity Tester with LCD, Switchable Load
	FLUKE-T150	Voltage/Continuity Tester with LCD, Ohms, Switchable Load

TEST EQUIPMENT

CURRENT CLAMP SELECTION GUIDE

	Residential/commercial electrical				General purpose				Industrial Electrical	HVAC/R	High end industrial, utility		iFlex accessory	CNX		Leakage
	323	324	325	365	373	374	375	376/381			902	353		355	i2500-10/ i2500-18	
Measurements																
AC current	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC volts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DC Volts	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DC current	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
True-rms	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Frequency	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC + DC voltage																
AC + DC current																
Min/Max/Avg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Temperature	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Capacitance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Special features																
Inrush current mode																
Low Pass filter																
Harmonics, power, data logging																
18-inch iFlex Flexible Current Probe																
10-inch iFlex Flexible Current Probe																
Remote display																
Flashlight/torch																
Display																
Display hold	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Backlight	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Specifications																
Jaw opening	30 mm	30 mm	30 mm	18 mm	32 mm	34 mm	34 mm	34 mm	34 mm	30.5 mm	58 mm	58 mm	7.5 mm coil	34 mm	254 mm	40 mm
Current range AC rms	0 to 400.0 A	0 to 400.0 A	0 to 400.0 A	0 to 200.0 A	0 to 600.0 A	0 to 600.0 A	0 to 600.0 A	0 to 600.0 A	0 to 600.0 A	0 to 600.0 A	0 to 1400 A	0 to 1400 A	0 to 2500 A	0.5 to 400.0 A	0.5 to 2500 A	0 to 60 A
Accuracy AC Current (50/60 Hz)	2.00% ± 5 counts	1.50% ± 5 counts	2.00% ± 5 counts	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	2% ± 5 counts	1.5% ± 5 counts	1.5% ± 5 counts	3% ± 5 counts	2% ± 5 counts	3% ± 5 counts	1% ± 5 counts
AC Response	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	Averaging
Current range DC	0 to 400 A	0 to 400 A	0 to 200 A	0 to 200 A	0 to 200 A	0 to 200 A	0 to 200 A	0 to 200 A	0 to 200 A	0 to 200 A	0 to 2000 A	0 to 2000 A	0 to 2000 A	0 to 2000 A	0 to 2000 A	0 to 2000 A
Accuracy DC current	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
Voltage range AC	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V
Accuracy AC voltage	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
Voltage range DC	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 1000 V
Accuracy DC Voltage	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts	± 5 counts
Resistance range	0 to 400 Ω	0 to 400 Ω	0 to 400 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	0 to 60 kΩ	0 to 60 kΩ	0 to 9999 Ω	0 to 400 kΩ	0 to 400 kΩ	0 to 400 kΩ	0 to 400 kΩ	0 to 400 kΩ	0 to 400 kΩ
Frequency measurement range				500 Hz	500 Hz	500 Hz	500 Hz	500 Hz	500 Hz	500 Hz	5 to 1000 Hz	5 to 1000 Hz	500 Hz	500 Hz	500 Hz	500 Hz
Unit power																
Auto off	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Warranty and safety																
Warranty (years)	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	1
Category ratings (EN61010-1)	CAT III 600V, CAT IV 300V	CAT III 600V, CAT IV 300V	CAT III 600V, CAT IV 300V	CAT III 600V, CAT IV 300V	CAT III 1000V, 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 IV 600V	CAT III 1000V, CAT IV 600V	CAT III 1000V, CAT IV 600V	CAT III 1000V, CAT IV 600V	CAT III 1000V, CAT IV 600V	CAT III 600V, CAT IV 600V	CAT III 600V, CAT IV 600V	CAT III 300V

FLUKE 381 REMOTE DISPLAY TRUE RMS AC/DC CLAMP METER WITH IFLEX™



Fluke 381 with iFlex

Fluke 381 Remote Display True-rms AC/DC Clamp Meter with iFlex™

The world's most advanced clamp meter

The Fluke 381 Clamp Meter combines iFlex flexibility with remote reading capability for the ultimate in innovation and safety.

- Remote display reads measurements up to 9.1 metres away
- iFlex Flexible Current Probe included, 18 inch circumference
- 2500 A AC current measurement with iFlex
- 1000 A AC and DC current measurement with fixed jaw
- 1000 V AC and DC voltage measurement
- Frequency measurement to 500 Hz
- 60 kΩ resistance measurement
- Min/Max/Avg and inrush recording CAT IV 600 V, CAT III 1000 V
- Three-year warranty



Recommended Accessories

Fluke 381



TL175 TwistGuard™ Test Leads



TLK289 Industrial Master Test Lead Set



C345 Large Soft Case



FTP-1 SureGrip™ Fused Test Probe Set



I2500-10 10 inch iFlex™ Flexible Current Probe



AC87 Heavy Duty Bus Bar Clip Set

FLUKE 365 REMOTE DISPLAY TRUE RMS AC/DC CLAMP METER WITH IFLEX™



Fluke 365

Fluke 365 Detachable Jaw True-rms AC/DC Clamp Meter

Where rugged meets reliable

The Fluke 365 Clamp Meter offers a small, detachable jaw—with 1.2 metres of coil—that makes it easy to take and read measurements in tight or hard-to-reach places.

- 200 A AC and DC current measurement
- 600 V AC and DC voltage measurement
- 6000 Ω resistance measurement
- Built-in flashlight
- Large, easy-to-read backlight display
- Three-year warranty



Recommended Accessories

Fluke 365



FTP-1 SureGrip™ Fused Test Probe and Lead Set



TL71 Premium Test Lead Set

Recommended kits



C43 Small Soft Case



TL220 SureGrip™ Industrial Test Lead Set



AC285 SureGrip™ Alligator Clips



TL224 SureGrip™ Silicone Insulated Test Leads

ORDERING INFORMATION

Included accessories	Part No
18-inch iFlex™ Flexible Current Probe, test leads, soft carrying case, instruction card, safety information sheet, five AA alkaline batteries.	FLUKE-381
Test leads, soft carrying case, instruction card, safety information sheet, five AA alkaline batteries.	FLUKE-365

FLUKE 370 SERIES CLAMP METERS

Fluke 370 Series Clamp Meters

Be ready for anything

Our family of true-rms clamp meters provides a range of state-of-the-art features to meet even the most demanding job requirements.

All four of the clamp meters have improved base features such as a large, backlit display, true-rms standard, CAT IV safety rating and a durably constructed body. Additionally, the 376, 375 and 374 are compatible with the iFlex® Flexible Current Probe (included with the 376, sold separately for the 375 and 374), and provide increased measurement readings to 1000 A and 1000 V AC and DC.



Fluke 376 with iFlex



Fluke 375

Fluke 374

Fluke 373



iFlex® Flexible Current Probe



Unprecedented measurement flexibility

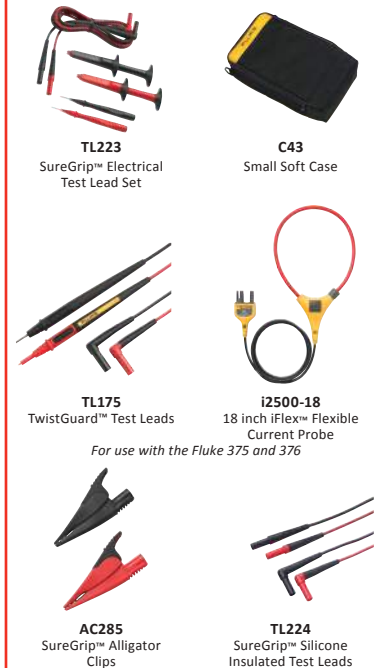
The iFlex Flexible Current Probe expands the measurement range of select Fluke clamp meters to 2500 A AC while providing increased display flexibility, improved wire access and the ability to measure awkward-sized conductors. Available in 18 inch and 10 inch coil sizes.

Visit www.fluke.com/au/clamps for additional specifications.

QUICK REFERENCE GUIDE CONVERSION TABLE

Old model	New model	Feature changes
Fluke 337	Fluke 381	Includes all 337 features plus: • Detachable display • CAT IV 600 V, CAT III 1000 V • iFlex 2500 A AC • 60 kΩ • Min/Max/Avg
Fluke 337	Fluke 376	Includes all 337 features plus: • CAT IV 600 V, CAT III 1000 V • iFlex 2500 A ac • 1000 V AC/DC • mV DC • 60 kΩ • 1000 μF
Fluke 336	Fluke 375	Includes all 336 features plus: • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • mV DC • 60 kΩ • 1000 μF • Min/Max/Avg
	Fluke 374	Includes all 336 features (except low pass filter) plus: • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • 1000 μF • Min/Max/Avg
Fluke 335	Fluke 374	Includes all 335 features plus: • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • 600 A AC/DC • 1000 μF • Min/Max/Avg
	Fluke 373	Includes all 335 features (except inrush) plus: • CAT IV 300 V, CAT III 600 V • 1000 μF
Fluke 334	Fluke 374	Includes all 334 features plus: • CAT IV 600 V, CAT III 1000 V • Optional iFlex 2500 A ac • True-rms • 600 A AC/DC • 1000 μF • Min/Max/Avg
	Fluke 373	Includes all 334 features (except inrush) plus: • CAT IV 300 V, CAT III 600 V • True-rms • 1000 μF
Fluke 333	Fluke 373	Includes all 333 features plus: • CAT IV 300 V, CAT III 600 V • True-rms • 600 A AC • 6000 Ω • 1000 μF

Recommended Accessories



ORDERING INFORMATION

Included accessories	Part No
18 inch iFlex™ flexible current probe, test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-376 True-rms AC/DC Clamp Meter with iFlex™
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-375 True-rms AC/DC Clamp Meter
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-374 True-rms AC/DC Clamp Meter
Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.	FLUKE-373 True-rms AC Clamp Meter

FLUKE 902 TRUE-RMS HVAC CLAMP METER



Fluke 902

Just for our HVAC pros

HVAC (heating, ventilation, air conditioning) technicians require a service tool that can consistently keep up with their demands. The Fluke 902 expands the existing line of quality Fluke clamp meters by delivering the features necessary to diagnose and repair HVAC systems. Combined with true-rms technology and a CAT III 600 V rating, the Fluke 902 helps technicians do their jobs safely and accurately.

- Designed for HVAC applications with capacitance, DC current (μ A) and temperature measurements
- Small body and jaws fit perfectly in your hand and into tight places
- Handy "Display Hold" button keeps measurements on the display
- Meter controls are positioned so current measurements can be done with one hand (index finger on clamp opening lever and thumb on rotary switch)
- Three-year warranty



Recommended Accessories

Fluke 902



C781
Meter Case



80PK-8
Pipe Clamp

ORDERING INFORMATION

Included accessories	Part No
Test leads, temperature probe, soft carrying case, users manual, two AA alkaline batteries.	FLUKE-902
	True-rms HVAC Clamp Meter

FLUKE 360 AC LEAKAGE CURRENT CLAMP METER

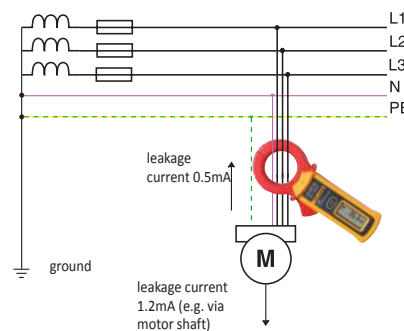


Fluke 360

The unique jaw design of the Fluke 360 eliminates the influence of adjacent current conductors and measures leakage current down to 1μ A for monitoring of insulation. The ergonomic design of the Fluke 360 ensures easy measuring. The measuring clamp fits into tight spaces and the wide display angle clearly shows the measurement result. The Data Hold button keeps the measured value on the display after removing the clamp for the measured conductor.

Current measurement

- Automatic ranging within the manually selected mA or range
- Ranges 3/30 mA and 30/60 A
- Current resolution 1μ A/0.01 mA and 0.01 A/0.1 A
- Measurement of leakage protectives
- Advanced shielding to ensure accurate results when measuring near other conductors
- Frequency range 50 and 60 Hz
- Jaw size: 40 mm (1.55 in) maximum conductor diameter
- Auto power off with audible warning buzzer



ORDERING INFORMATION

Included accessories	Part No
Soft carrying case, users manual.	FLUKE-360
	AC Leakage Current Clamp Meter

FLUKE 320 SERIES TRUE-RMS CLAMP METERS

FLUKE 320 SERIES TRUE-RMS CLAMP METERS

Go to work with the best

True-rms measurements and optimised ergonomics make the 320 Series True-rms Clamp Meters the best general troubleshooting tools for commercial and residential electricians. The 323, 324 and 325 are designed to verify the presence of load current, AC voltage and continuity of circuits, switches, fuses and contacts. These small and rugged clamp meters are ideally suited for current measurements up to 400 A in tight cable compartments. The Fluke 325 also offers DC current and frequency measurements.

- 400 A AC current measurement (AC and DC current; 325 only)
- 600 V AC and DC voltage measurement
- True-rms AC voltage and current for accurate measurements on non-linear signals
- Resistance measurement to up to 40 kΩ with continuity detection
- Temperature and capacitance measurement (324 and 325 only)
- Frequency measurement (325 only)
- Slim, ergonomic design
- Large, easy to read backlight display (324 and 325 only)
- CAT IV 300 V/CAT III 600 V safety rating
- Hold button
- Two-year warranty
- Soft carrying case



Fluke 325



Fluke 324

Fluke 323



SPECIFICATIONS

	Residential/commercial electrical		Light industrial
	323	324	325
Measurements			
AC current	•	•	•
AC voltage	•	•	•
Resistance	•	•	•
Continuity	•	•	•
DC volts	•	•	•
DC current			•
True-rms	•	•	•
Frequency			•
Min/Max/Avg			•
Temperature		•	•
Capacitance		•	•
Display			
Display hold	•	•	•
Backlight			•
Specifications			
Jaw opening	30 mm (1.18 in)		
Max wire size	600 MCM		
Current range AC rms	0 to 400.0 A		
Accuracy AC current (50/60 Hz)	2.0 % ± 5 digits	1.5 % ± 5 digits	2.0 % ± 5 digits
AC response	True-rms		
Current range DC			0 to 400 A
Accuracy DC current			2.0 % ± 5 digits
Voltage range AC	0 to 600.0 V		
Accuracy AC voltage	1.5 % ± 5 digits		
Voltage range DC	0 to 600.0 V		
Accuracy DC voltage	1 % ± 5 digits		
Resistance range	0 to 4000 Ω		0 to 40 kΩ
Frequency measurement range	500 Hz		

Recommended Accessories



C43
Small Soft Case



TL175
TwistGuard™ Test Leads



TL223
SureGrip™ Electrical Test Lead Set



L210
Probe Light and Extender

ORDERING INFORMATION

Included accessories	Part No
Test leads, soft case and users manual. Temperature probe included with 324 and 325 only.	FLUKE-325
	FLUKE-324
	FLUKE-323

FLUKE 350 SERIES AC/DC TRUE-RMS CLAMP METERS

FLUKE 350 SERIES AC/DC TRUE-RMS CLAMP METERS

Versatile, professional, accurate

Confidently take reliable readings with the true-rms Fluke 355 and 353 Clamp Meters—the tools of choice for high current clamp-on amp meter measurements up to 2000 A.

- Reliably handle a wide range of high-current applications with 2000 A AC+DC true-rms, 1400 A AC, and 2000 A DC
- Large 58 mm (2.3 in) jaw
- Inrush current measurement
- High voltage measurement of 1000 V AC + DC true-rms, 600 V AC, and 1000 V DC (355 only)
- Resistance to 400 K Ω (355 only)
- Continuity beeper (355 only)
- Frequency measurement to 1 KHz
- Selectable low-pass filter mode
- Min/Max/Avg
- Large display with backlight



Fluke 355



Fluke 353



Recommended Accessories

Fluke 355



TL175
TwistGuard™
Test Leads



80TK
Thermocouple Module



C345
Large Soft Case



C1600
Gear Tool Box

FEATURES

Features	353	355
True-RMS measurements	•	•
Display backlight	•	•
Motor start-up current	•	•
Min/Max/Average	•	•
Voltage AC/DC		•
Resistance measurement		•
Continuity measurement with beeper		•

SPECIFICATIONS

Functions	Range	353	355
Current AC/DC	0-40.00 A	1.5% \pm 15 counts	1.5% \pm 15 counts
	0-400.0 A	1.5% \pm 5 counts	1.5% \pm 5 counts
	0-2000 A; 1400 AC rms		
Crest Factor		2.4	2.4
Voltage AC/DC	0-4.000 V		1% \pm 10 counts
	0-40.00 V		1% \pm 5 counts
	0-400.0 V		
	0-600 V AC rms		
Resistance	0-1000 V DC		
	0-400.0 Ω		1.5% \pm 5 counts
	0-4.000 k Ω		
	0-40.00 k Ω		
Continuity beeper	Appr. \leq 30 Ω		
Frequency	5.0Hz to 100.0Hz		0.2% \pm 2 counts
	100.1Hz to 999Hz		0.5% \pm 5 counts

Power Supply: 6 x 1.5V AA NEDA 15A or 1EC LR6
 Battery life: 100 hours (with typical usage, backlight off)
 Size (HxWxD): 300 mm x 98 mm x 52 mm
 Jaw opening: 58 mm
 Weight: 0.814 kg
 Three year warranty

ORDERING INFORMATION

Included accessories	Part No
C43 Soft Meter Case, 6 AA batteries, users manual	FLUKE-353 AC/DC True-rms Clamp Meter, 2000A, amps only
C43 Soft Meter Case, 6 AA batteries, TL224 SureGrip® Silicone Test Lead Set, TP2 Slim Reach Test Probe Set (2 mm), AC285 SureGrip® Alligator Clip Set, users manual	FLUKE-355 AC/DC True-rms Clamp Meter, 2000A

FLUKE Clamp Adapters

For use with Multimeters, Portable Oscilloscopes and Power Quality Analysers

AC only models



i3000s Flex-24 (24 in dia), i3000s Flex-36 (36 in dia), i6000s Flex-24 (24 in dia) i6000s Flex-36 (36 in dia)

AC Current Clamp Specifications

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex	i3000s Flex	i6000s
AC current range	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A	1 A to 800 A	0.2 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	60 A to 6000 A
Accuracy	≤ 3% + 0.5 A 48 to 65 Hz	≤ 1% + 0.5 A 48 Hz to 65 Hz	2% + 0.06 A 45 Hz to 400 Hz	.5 A to 40 A, 2% + .015 A, 5 A to 400 A, 2% + .04 A, 45 to 400 Hz	0.1 A to 10 A ± 3% + .01 A, 10 A to 200 A ± 2%, 200 A to 800 A ± 1%	0.2 to 10 A: 3% + 0.1 A, 10 A to 100 A: 2% + 0.5 A, 100 A to 1000 A: 1% + 1 A 48 to 65 Hz	1 to 30 A: 2% + 0.1 A, 1 to 300 A: 2% + 0.5 A, 1 to 3000 A: 2% + 2 A 48 to 65 Hz	± 1% of range 45 to 65 Hz Ranges: 20 A, 200 A, 2000 A	± 1% of range, 45 Hz to 65 Hz Ranges: 30 A, 300 A, 3000 A	± 1% of range 45 to 65 Hz
Bandwidth (-3 dB)	40 Hz to 40 kHz	40 Hz to 40 kHz	5 kHz to 20 kHz	5 Hz to 10 kHz	30 Hz to 10 kHz (typical)	5 Hz to 100 kHz	10 Hz to 100 kHz	10 Hz to 20 kHz	10 Hz to 50 kHz	10 Hz to 50 kHz, (-3 dB)
Maximum conductor diameter	20 mm (0.8 in)	20 mm (0.8 in)	32 mm (1.25 in)	32 mm (1.25 in)	54 mm (2.13 in)	54 mm (2.13 in)	64 x 100 mm (2.52 x 3.94 in)	177 mm (7 in)	177 mm (7 in) or 265 mm (10.4 in)	193 mm (7.6 in) or 289 mm (11.4 in)
Maximum conductor size	300 MCM	300 MCM	750 MCM	750 MCM	2-500 MCM or 1-1000 MCM	2-500 MCM or 1-1000 MCM	64 mm (2.52 in)	610 mm (24 in) circumference	610 mm or 915 mm circumference	610 mm (24 in) or 915mm (36 in)
Output levels	1 mA/A	10 mV/A, 100 mV/A	1 mA/A	10 mV/A, 1 mV/A	1 mA/A	1 mV/A, 10 mV/A, 100 mV/A	10 mV/A, 1 mV/A, 0.1 mV/A	100 mV/A, 10 mV/A, 1 mV/A	100 mV/A, 5 mV/A, 1 mV/A	50 mV/A, 5 mV/A, 0.5 mV/A
Output cable	1.5 m shrouded banana plugs	2 m to BNC termination	1.5 m shrouded banana plugs	2.5 m to BNC termination	1.6 m shrouded banana plugs	1.6 m to BNC termination	2.1 m to BNC termination	2 m with double shrouded banana plugs	2.1 m to BNC termination	2 m to BNC, 4 mm plug adapter supplied
Warranty	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

AC Current Clamp Selection Guide

Meter	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex ¹	i3000s Flex	i6000s
114/116		1 A to 200 A		0.6 A to 400 A*		0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
115/117	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
233	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
27II	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
28II	1.8 A to 200 A	1 A to 200 A	1.8 A to 400 A	1.8 A to 400 A	1.8 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
77 IV		1 A to 200 A		1 A to 400 A*		0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
175/177/179	3 A to 200 A	1 A to 200 A	3 A to 400 A	1 A to 400 A*	3 A to 800 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
1577/1587 Insulation Meter	3 A to 200 A	1 A to 200 A	3 A to 400 A	3 A to 400 A*	3 A to 400 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
83V/88V	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
87V	2 A to 200 A	1 A to 200 A	2 A to 400 A	2 A to 400 A*	2 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
287/289	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
43B Power Quality Analyzer		1 A to 200 A		0.35 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
434/435 Power Quality Analyzer		1 A to 200 A		1.2 A to 400 A		0.3 A to 1000 A	1.2 A to 3000 A	Best to use i430Flex	Best to use i430Flex-TF	
120 Series ScopeMeters		1 A to 200 A		2.5 A to 400 A		0.25 A to 1000 A	2.5 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
190 Series Scopemeters		1 A to 200 A		1 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
8808A	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
8845A/8846A	1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF
787/789 Process Meters	50 A to 200 A	1 A to 200 A	50 A to 400 A	2 A to 400 A*	50 A to 440 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A	Best to use i430Flex-TF

* Requires PM9081/001 Adapters.

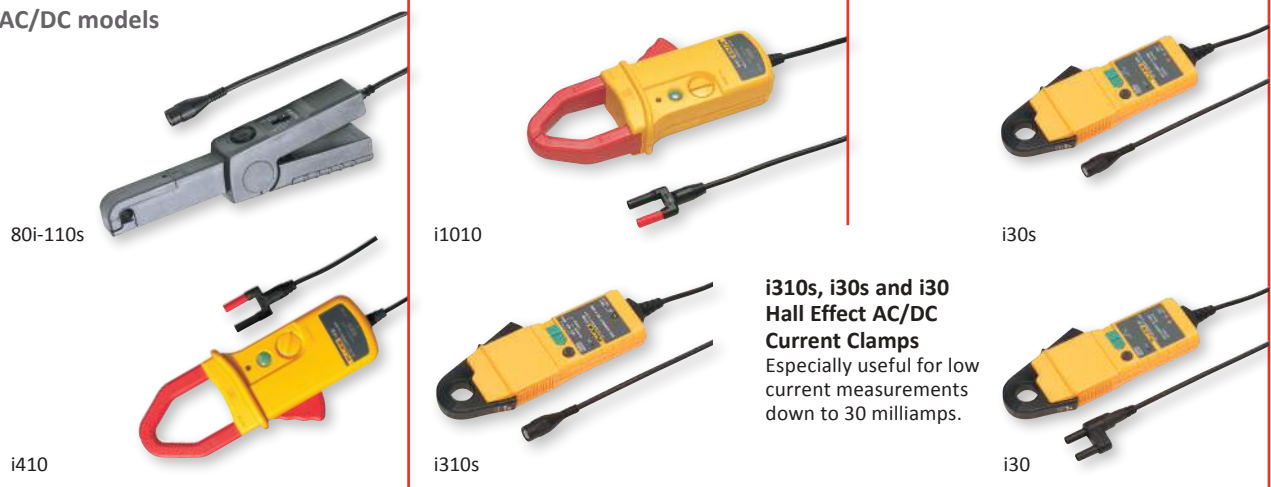
¹ Three range version.

² Current and watt readings will be multiples of 10 higher or lower than actual on some ranges.

FLUKE CURRENT CLAMP ADAPTERS

For use with Multimeters, Portable Oscilloscopes and Power Quality Analyzers

AC/DC models



i310s, i30s and i30 Hall Effect AC/DC Current Clamps
Especially useful for low current measurements down to 30 milliamps.

AC/DC Current Clamp Specifications

	80i-110s	i410	i1010	i30	i30s	i310s
DC range	0.1 A to 100 A	1 A to 400 A	1 A to 1000 A	30 mA to 30 A	30 mA to 30 A	0.1 A to 450 A
AC range	0.1 A to 70 A	1 A to 400 A	1 A to 600 A	30 mA to 20 A rms	30 mA to 20 A rms	0.1 A to 300 A
Accuracy	0.1 A to 10 A; DC to 1 kHz: $\pm 3\%$ + 50 mA; up to 100 A add 15%; up to 20 kHz add 12%	3.5% + 0.5 A for DC or AC (45 to 400 Hz)	2% + 0.5 A for DC or AC (45 to 400 Hz)	$\pm 1\%$ of reading, ± 2 mA	$\pm 1\%$ of reading, ± 2 mA	30 A range: 1% + 50 mA 300 A range: 1% + 300 mA
Bandwidth (-3 dB)	100 kHz	3 kHz	10 kHz	DC to 20 kHz (-0.5 dB)	DC to 100 kHz (-0.5 dB)	DC to 20 kHz
Zero error adjustment	Yes	Yes	Yes	Yes	Yes	Yes
Maximum conductor diameter	11.8 mm (0.46 in)	30 mm (1.18 in)	30 mm (1.18 in)	19 mm (0.75 in)	19 mm (0.75 in)	19 mm (0.75 in)
Maximum conductor size	1 AWG	750 MCM or 2-500 MCM	750 MCM or 2-500 MCM	250 MCM	250 MCM	250 MCM
Output levels	10 mV/A, 100 mV/A	1 mV/A	1 mV/A	100 mV/A	100 mV/A	1 mV/A, 10 mV/A
Output cable	1.6 meter with BNC termination	1.2 meter with shrouded banana plugs	1.2 meter with shrouded banana plugs	1.5 meter with shrouded dual banana plug	2 meter with BNC termination	2 meters with BNC termination and a BNC to safety shrouded banana adapter
Battery life	40 hours	60 hours	60 hours	30 hours	30 hours	30 hours
Warranty	One-year	One-year	One-year	One-year	One-year	One-year
Safety	CAT II 600 V; CAT III 300 V	CAT III 600 V	CAT III 600 V	CAT III 300 V	CAT III 300 V	CAT III 300 V

AC/DC Current Clamp Selection Guide

Meter	80i-110s	i410	i1010	i30	i30s	i310s
114/115/116/117	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1.4 A to 400 A dc/ 6 A to 400 A ac	1.4 A to 1000 A dc/ 6 A to 600 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	0.1 A to 450 A dc/ 0.6 A to 300 A ac
233	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1.4 A to 400 A dc/ 6 A to 400 A ac	1.4 A to 1000 A dc/ 6 A to 600 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	0.1 A to 450 A dc/ 0.6 A to 300 A ac
27II	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
28II	0.1 A to 100 A dc/ 0.2 A to 70 A ac*	1 A to 400 A dc/ 6 A to 400 A ac	1 A to 1000 A dc/ 6 A to 600 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	0.1 A to 450 A dc/ 2 A to 300 A ac
77-IV	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 5 A to 400 A ac	1 A to 1000 A dc/ 5 A to 600 A ac	30 mA to 30 A dc/ 40 mA to 20 A ac	30 mA to 30 A dc/ 40 mA to 20 A ac	0.1 A to 450 A dc/ 0.4 A to 300 A ac
175/177/179	0.11 A to 100 A dc/ 0.3 A to 70 A ac*	1.6 A to 400 A dc/ 30 A to 400 A ac	1.6 A to 1000 A dc/ 30 A to 600 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	0.1 A to 450 A dc/ 3 A to 300 A ac
1577/1587 Insulation Meter	0.1 A to 100 A dc/ 0.3 A to 70 A ac*	1.2 A to 400 A dc/ 30 A to 400 A ac	1.2 A to 1000 A dc/ 30 A to 600 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	0.1 A to 450 A dc/ 3 A to 300 A ac
83V/88V	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
87V	0.1 A to 100 A dc/ 0.2 A to 70 A ac*	1 A to 400 A dc/ 20 A to 400 A ac	1 A to 1000 A dc/ 20 A to 600 A ac	30 mA to 30 A dc/ 200 mA to 20 A ac	30 mA to 30 A dc/ 200 mA to 20 A ac	0.1 A to 450 A dc/ 2 A to 300 A ac
287/289	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
123/124 ScopeMeters	0.1 A to 100 A dc/ 0.25 A to 70 A ac*	1 A to 400 A dc/ 25 A to 400 A ac**	1 A to 1000 A dc/ 25 A to 600 A ac**	30 mA to 30 A dc/ 250 mA to 20 A ac**	30 mA to 30 A dc/ 250 mA to 20 A ac	0.1 A to 450 A dc/ 2.5 A to 300 A ac
190 Series Scopemeters	0.1 A to 100 A dc/ 0.1 A to 70 A ac	1 A to 400 A dc/ 5 A to 400 A ac**	1 A to 1000 A dc/ 5 A to 600 A ac**	30 mA to 30 A dc/ 50 mA to 20 A ac**	30 mA to 30 A dc/ 50 mA to 20 A ac	0.1 A to 450 A dc/ 0.5 A to 300 A ac
8808A	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 2 A to 400 A ac	1 A to 1000 A dc/ 2 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 3 A to 300 A ac
8845A/8846A	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
705/707	0.1 A to 100 A dc, No ac*	4 A to 400 A dc, No ac	4 A to 1000 A dc, No ac	40 mA to 30 A dc, No ac	40 mA to 30 A dc, No ac	0.4 A to 450 A dc, No ac
715	0.1 A to 100 A dc, No ac*	4 A to 400 A dc, No ac	4 A to 1000 A dc, No ac	40 mA to 30 A dc, No ac	40 mA to 30 A dc, No ac	0.1 A to 450 A dc, No ac
787/789 Process Meters	0.1 A to 100 A dc/ 0.2 A to 70 A ac*	1 A to 400 A dc/ 20 A to 400 A ac	1 A to 1000 A dc/ 20 A to 600 A ac	30 mA to 30 A dc/ 200 mA to 20 A ac	3 mA to 30 A dc/ 200 mA to 20 A ac	0.1 A to 450 A dc/ 2 A to 300 A ac

* Requires PM9081 Adapter

** Requires PM9082/001 Adapter

***Only for use with the 430 Series Power Quality Analyzers

FLUKE Insulation/Ground Testers



	1577	1587	1503	1507	1550C	1555
Installation Test Functionality						
Test voltages	500V, 1000V	50V, 100V, 250V, 500V, 1000V	500V, 1000V	50V, 100V, 250V, 500V, 1000V	250V, 500V, 1000V, 2500V, 5000V	250V, 500V, 1000V, 2500V, 5000V, 10000V
Insulation Resistance Test Range	0.1MΩ - 600MΩ	0.01 MΩ - 2GΩ	0.1MΩ - 2GΩ	0.01MΩ - 10GΩ	200KΩ - 1TΩ	200KΩ - 2TΩ
Polarization Index/Dielectric Absorption Ratio				•	•	•
Auto Discharge	•	•	•	•	•	•
Time Ramp test (Breakdown)				•	•	•
Pass/Fail Comparison				•		
Estimated Number of Insulation resistance Tests	1000	1000	1000	1000	1000 @ 5000 V	1000 @ 10000 V
Voltage > 30V Warning	•	•	•	•	•	•
Memory					(99 locations)	(99 locations)
Remote Test Probe	•	•	•	•		
Lo Ohms			•	•		
Display	Digital LCD	Digital LCD	Digital LCD	Digital LCD	Digital LCD / Analog Bar Graph	Digital LCD / Analog Bar Graph
Continuity	•	•	(200mA)	(200mA)		
Multimeter Functionality						
AC/DC Volts	•	•	•	•		
Current	•	•				
Resistance	•	•	•	•		
Temperature (contact)		•				
Lo-Pass Filter		•				
Capacitance		•			•	•
Diode Test		•				
Frequency		•				
MIN/MAX		•				
Other						
Hold/Lock	•	•	•	•	•	•
Backlight	•	•	•	•		
Software					(Fluke View [®] Forms Basic)	(Fluke View [®] Forms Basic)
Warranty (in years)	3	3	1	1	3	3
Battery	4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	4 AA (NEDA 15A or IEC LR6)	Rechargeable	Rechargeable

TEST EQUIPMENT



Fluke 1587/ET



Fluke 1587/MDT

Buy a Fluke 1587 Combo Kit and Save

Fluke 1587/ET Advanced Electrical Troubleshooting Kit

This kit contains:

- Fluke 1587 Insulation Multimeter
- Fluke 62 Max+ Infrared Thermometer
- i400 Current Clamp

Perform insulation tests with the Fluke 1587 wide-range of DMM tasks with confidence and ease. Use the i400 with your Fluke 1587 to accurately measure AC current without breaking the circuit. Check for hot spots and measure temperature with the Fluke 62 Max+ Infrared Thermometer.

Fluke 1587 Kit order details on following page

Fluke 1587/MDT Advanced Motor & Drive Troubleshooting Kit

This kit contains:

- Fluke 1587 Insulation Multimeter
- Fluke 9040 Phase Rotation Indicator
- i400 Current Clamp

Perform insulation tests with the Fluke 1587 plus a wide-range of DMM tasks with confidence and ease. Use the i400 with your Fluke 1587 to accurately measure AC current without breaking the circuit. Check the phase-rotation of three-phase motors easily and safely with the Fluke 9040.

FLUKE 1587 AND 1577 INSULATION MULTIMETERS



Fluke 1587

Two powerful tools in one

The Fluke 1587 and 1577 Insulation Multimeters combine a digital 1 kV insulation tester with a full-featured, true-rms digital multimeter in a single compact, handheld unit, which provides maximum versatility for both troubleshooting and preventive maintenance.

- Insulation test (1587: 0.01 MΩ to 2 GΩ) (1577: 0.1 MΩ to 600 MΩ)
- Insulation test voltages (1587: 50 V, 100 V, 250 V, 500 V, 1000 V), (1577: 500 V, 1000 V) for many applications
- Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection
- Auto-discharge of capacitive voltage for added user protection
- Filter for motor drive measurements (1587 only)
- AC/DC voltage, DC millivolts, AC/DC milliamps, resistance (Ω), and continuity
- Capacitance, diode test, temperature, Min/Max, and frequency (Hz) (1587 only)
- Auto power off to save battery power
- Large display with backlight and large digits
- Included accessories: Remote probe, test leads and probes, alligator clips, (Type K thermocouple, 1587 only)
- Accepts optional Fluke TPAK magnetic hanging system to free your hands for other work
- Rugged, utility hard case allows you to bring everything you need for the job



Fluke 1577



SPECIFICATIONS

Features	1587	1577	1507	1503
Insulation test voltages 50 V, 100 V, 250 V, 500 V, 1000 V	•	—	•	—
Insulation test voltages 500 V, 1000 V	—	•	—	•
Insulation resistance	0.01 MW to 2.0 GW	0.1 MW to 600 MW	0.01 MW to 10 GW	0.1 MW to 2 GW
Auto-discharge of capacitive voltage	•	•	•	•
Insulation test smoothing reading	•	—	—	—
Frequency	•	—	—	—
Capacitance	•	—	—	—
Diode test	•	—	—	—
Temperature	•	—	—	—
Min/Max	•	—	—	—
Low-pass filter (for work on VSDs)	•	—	—	—
AC/DC voltage	•	•	•	•
DC millivolts	•	•	•	•
AC/DC milliamps	•	•	•	•
Resistance	0.1 W to 50 MW	0.1 W to 50 MW	0.1 W to 20.00 KW	0.1 W to 20.00 KW
Continuity	•	•	•	•
Warranty	Three-year	Three-year	One-year	One-year
Remote probe, test leads, alligator clips	•	•	•	•
Type K thermocouple	•	—	—	—
Rugged, utility hard case	•	•	•	•
Auto power off	•	•	•	•

ORDERING INFORMATION

Included accessories	Part No	
Remote probe, test leads, alligator clips, Type K thermocouple (1587 only), hard case and users manual.	FLUKE-1577	Insulation Multimeter
	FLUKE-1587	Insulation Multimeter
	FLUKE-1587/ET	Advanced Electrical Troubleshooting Kit
	FLUKE-1587/MDT	Advanced Motor and Drive Troubleshooting Kit

Recommended Accessories



TPAK
Magnetic Meter Hanger



i400
AC Current Clamp



C100
Universal Carrying Case



TL27
Heavy Duty
Test Leads

Recommended Kits

Get more value and productivity

Establishing a preventive maintenance program is becoming critical to maintaining the uptime of electrical equipment and can significantly reduce both planned and unplanned downtime. Unplanned downtime costs are difficult to calculate, but are often significant. For some industries, it can represent 1% to 3% of revenue (potentially 30% to 40% of profits) annually.

These kits can help you be proactive and efficient with your maintenance and can save you money off the individual price of the tools. **Fluke 1587/ET Advanced Electrical Troubleshooting Kit includes:**



- Fluke 1587 Insulation Multimeter
- Fluke i400 Current Clamp
- Fluke 62 MAX⁺ Infrared Thermometer



Fluke 1587/MDT Advanced Motor and Drive Troubleshooting Kit includes:

- Fluke 1587 Insulation Multimeter
- Fluke i400 Current Clamp
- Fluke 9040 Phase Rotation Indicator

FLUKE 1507/1503 INSULATION RESISTANCE TESTERS



Fluke 1507

These lightweight, affordable insulation testers are perfect for troubleshooting, commissioning and preventive maintenance applications.

Features

- Automatic calculation of polarisation index and dielectric absorption ratio (1507 only)
- Multiple test voltages: 50 V, 100 V, 250 V, 500 V, 1000 V (1507 only)
- Remote test probe for rapid testing
- Insulation test range 0.01 MΩ to 10 GΩ (1507), 0.1 MΩ to 2000 MΩ (1503)
- Compare (Pass/Fail) function for repetitive tests (1507 only)
- Live circuit detection prevents insulation test if voltage > 30 V is detected
- Auto-discharge of capacitive voltage
- AC/DC voltage: 0.1 V to 600 V
- Lo ohms/Earth-bond continuity (200 mA) for checking connections and motor windings
- Resistance: 0.01 Ω to 20.00 Ω
- One-year warranty



Fluke 1503



Recommended Accessories



TPAK
Magnetic Meter Hanger



TL27
Heavy Duty Test Lead Set



C116
Soft Carrying Case



C101
Hard Case



360
AC Leakage Current
Clamp Meter

FEATURES

Features	1503	1507
User selectable test voltages for many applications	•	•
Additional test voltages 50V, 100V, 250V	•	•
Special remote control probe for easy and safe measurements	•	•
Auto-discharge of capacitive voltage for added user protection	•	•
Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection	•	•
Save both time and money with Automatic calculation of Polarisation Index and Dielectric Absorption Ratio		•
Auto Power off to save batteries	•	•
Large display with backlight	•	•
Continuity function (200 mA)	•	•
Compare function (pass/fail) for fast repetitive tests		•

SPECIFICATIONS

Insulation specifications	1503	1507
Insulation test range	0.1 MΩ to 2 GΩ	0.01 MΩ to 10 GΩ
Test voltages	500 V, 1000 V	50 V, 100 V, 250 V, 500 V, 1000 V
Test voltage accuracy	+ 20 %, - 0 %	+ 20 %, - 0 %
Insulation test current	1mA nominal	1mA nominal
AC/DC Voltage measurement	600 V (0.1 V resolution)	600 V (0.1 V resolution)
Resistance measurement range	0.01 Ω to 20 kΩ	0.01 Ω to 20 kΩ
Auto discharge	Discharge time < 0.5 second for C = 1 μF or less	Discharge time < 0.5 second for C = 1 μF or less
Maximum capacitive load	Up to 1 μF	Up to 1 μF
Open circuit test voltage	> 4 V, < 8 V	> 4 V, < 8 V
Short circuit current	> 200 mA	> 200 mA

Battery life: Insulation Test: > 1000 tests
Size (HxWxD):
203 mm x 100 mm x 50 mm

Weight: 0.55 kg
One Year Warranty

ORDERING INFORMATION

Included accessories	Part No
Remote probe, silicone test leads, test probes, large alligator clips, holster, users manual.	FLUKE-1507 FLUKE-1503
Soft carrying pouch, users manual.	FLUKE-360

Insulation Tester
Insulation Tester
AC Leakage Current Clamp Meter

Applications



Insulation test at a distribution panel



Wiring test in a small distribution box – all in one spot

1555 AND 1550C INSULATION RESISTANCE TESTERS



Fluke 1555

Fluke 1550C



Powerful troubleshooting and predictive maintenance tools

The Fluke 1555 and redesigned Fluke 1550C insulation resistance testers offer digital insulation testing up to 10 kV, making them ideal for testing a wide range of high voltage equipment including switchgear, motors, generators and cables.

- Test voltages up to 5 kV (1550C) and 10 kV (1555) provide solutions for all applications
- Warning function alerts the user that line voltage is present and gives a voltage reading up to 600 V AC or DC for increased user safety
- Measurements can be stored in up to 99 memory locations, and each location is assigned a unique, user-defined label for easy recall
- Long battery life gives the user over 750 tests between changes
- Automatic calculation of Dielectric Absorption (DAR) and Polarisation Index (PI) with no additional setup
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Large digital/analogue LCD for easy viewing
- Capacitance and leakage current measurement
- Ramp function for breakdown testing
- Three-year warranty

SPECIFICATIONS

Insulation resistance measurement

Test voltage (dc)	Range	Accuracy (± reading)
250 V	< 200 kΩ	unspecified
	200 kΩ to 5 GΩ	5 %
	5 GΩ to 50 GΩ	20 %
	> 50 GΩ	unspecified
500 V	< 200 kΩ	unspecified
	200 kΩ to 10 GΩ	5 %
	10 GΩ to 100 GΩ	20 %
	> 100 GΩ	unspecified
1000 V	< 200 kΩ	unspecified
	200 kΩ to 20 GΩ	5 %
	20 GΩ to 200 GΩ	20 %
	> 200 GΩ	unspecified
2500 V	< 200 kΩ	unspecified
	200 kΩ to 50 GΩ	5 %
	50 GΩ to 500 GΩ	20 %
	> 500 GΩ	unspecified
5000 V	< 200 kΩ	unspecified
	200 kΩ to 100 GΩ	5 %
	100 GΩ to 1 TΩ	20 %
	> 1 TΩ	unspecified
10000 V (1555 only)	< 200 kΩ	unspecified
	200 kΩ to 200 GΩ	5 %
	200 GΩ to 2 TΩ	20 %
	> 2 TΩ	unspecified

The tester's accuracy is specified for one year after calibration at operating temperatures of 0 °C to 35 °C. For operating temperatures outside the range (-20 °C to 0 °C and 35 °C to 50 °C), add ± .25 % per °C, except on the 20 % bands add ± 1 % per °C.

Functions	Range	Accuracy (± reading)
Leakage current	1 nA to 2 mA	± (5 % + 2 nA)
Capacitance measurement	0.01 uF to 15.00 μF	± (15 % rdg + 0.03 μF)
Live circuit indicator	30 V to 600 V ac/dc, 50/60 Hz	± (5 % + 2 V)

ORDERING INFORMATION

Included accessories	Part No	
Test leads with alligator clips, ruggedised alligator clips (kits and 1555 only), infrared adapter with interface cable, FlukeView Forms software, AC power cord, soft carrying case, quick reference guide, users manual.	FLUKE-1550C	5 kV Insulation Tester
	FLUKE-1550C/Kit	5 kV Insulation Tester Kit
	FLUKE-1555	10 kV Insulation Tester
	FLUKE-1555/Kit	10 kV Insulation Tester Kit

Recommended Accessories

Fluke 1550C



TLK1550-RTLTC
Integral Test Lead
and 10 kV Clamp



FVF-Basic
FlukeView Forms Software



IR189USB
USB-IR Cable



CXT1555
Pelican Carrying Case

Recommended Kits

1550C/Kit includes:

- 5 kV insulation resistance tester
- Ruggedised 10 kV alligator clips with integral silicone, dual extruded leads
- Test leads with large alligator clips
- IP67 hard carrying case
- USB-IR cable
- NIST traceable certificate of calibration

1555/Kit includes:

- 10 kV insulation resistance tester
- Ruggedised 10 kV alligator clips with integral silicone, dual extruded leads
- Test leads with large alligator clips
- IP67 hard carrying case
- Logging software
- USB-IR cable
- NIST traceable certificate of calibration



FLUKE 1620 SERIES GEO EARTH GROUND TESTERS



Fluke 1625



Fluke 1623



The Fluke 1620 Series Earth Ground Testers not only measure ground resistance using the classic “fall of potential test,” but also enable time saving testing using “selective” and “stakeless” methods. “Selective” testing does not require the electrode under test to be disconnected during the measurement, thus increasing safety. The simple “stakeless” method quickly checks ground connections using two current transformers (probes) clamped around the ground conductor under test. Offering “one-button” simplicity, the 1623 is an all-in-one earth ground tester, while the 1625 has extra versatility for more demanding applications.

The 1623 is perfect for performing predictive maintenance checks of commercial and industrial applications.

The 1625 is intended for electrical utility or other electrically noisy environments.

Earth ground resistance and soil resistivity should be measured when:

- Designing earth ground systems
- Installing new ground system and electrical equipment
- Periodically testing ground and lightning protection systems
- Installing large electrical equipment such as transformers, switchgears, machines, etc.

Recommended Accessories



EI-1623
Selective/stakeless clamp set for 1623



EI-1625
Selective/stakeless clamp set for 1625



ES-162P3
Stake/reel set for 3-pole measurements



ES-162P4
Stake/reel set for 4-pole measurements



EI-162BN 320mm
Split Core Transformer for use with Fluke 1625

Recommended Kits



Fluke 1625 Kit

- Fluke 1625 tester
- Two test leads
- Four earth ground stakes
- Three cable reels with wire (2-25 m, 1-50 m)
- Two clamps (one inducing, one sensing)
- Rugged carrying case



Fluke 1623 Kit

- Fluke 1623 tester
- Two test leads
- Four earth ground stakes (2 m to 25 m)
- Three cable reels with wire (2 m to 25 m, 1 m to 50 m)
- Two clamps (one inducing, one sensing)
- Rugged carrying case

SPECIFICATIONS

Features	1625	1623	1621
One-button measurement concept	—	•	•
3-pole earth ground measurement	•	•	•
4-pole earth ground measurement	•	•	—
4-pole soil resistivity testing	•	•	—
2-pole resistance measurement AC	•	•	•
2-and 4-pole resistance measurement DC	•	—	—
Selective testing, no disconnection of ground conductor (1 clamp)	•	•	—
Stakeless testing, quick ground loop testing (2 clamps)	•	•	•
Measuring frequency 128 Hz	—	•	•
Earth impedance measurement at 55 Hz	•	—	—
Automatic frequency control (AFC), 94 Hz to 128 Hz	•	—	—
Measuring voltage switchable 20 V/48 V	•	•	•
Programmable limits, settings	•	—	•
Continuity with buzzer	•	—	—
Dust/water resistance	IP 56	IP 56	IP 40
Safety rating	CAT II 300 V	CAT II 300 V	CAT II 600 V
Two-year warranty	•	•	•

* In favourable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavourable conditions, such as intensive sunshine, very weak reflecting target surface, or large temperature fluctuations, measuring accuracy may deteriorate to approx. ± 0.25 mm/m (± 0.003 in/ft) for distances above 10 m (33 ft).

** In favourable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavourable conditions, such as intensive sunshine, very weak reflecting target surface, or large temperature fluctuations, the deviation over distances 10 m (33 ft) can increase by approx. ± 0.15 mm/m (± 0.0018 in/ft).

ORDERING INFORMATION

Included accessories	Part No	
Test leads, alligator clips, users manual.	FLUKE-1625	Advanced GEO Earth Ground Tester
	FLUKE-1623	Basic GEO Earth Ground Tester
Test leads, alligator clips, stake/reel set 4-pole, selective/stakeless clamp set, rugged carrying case, users manual.	FLUKE-1625 KIT	Advanced GEO Earth Ground Tester Kit
	FLUKE-1623 KIT	Basic GEO Earth Ground Tester Kit

These products are for unpowered installations measuring grounding connections.

FLUKE 1621 BASIC EARTH GROUND TESTER

Earth ground tester for resistance measurement



N10140

The Fluke 1621 Earth Ground Tester is a rugged, easy-to-use tester for three-pole ground resistance measurements and two-pole AC resistance measurements.

Earth ground resistance is measured by installing earth ground test electrodes, and testing with the Fluke 1621. Earth ground resistance measurements are used to ensure safe operation and reduce power quality problems. With a simple user interface and intuitive functionality, the large, clear LCD display provides high visibility results in daylight or poor lighting conditions. The 1621 is lightweight making it ideal to test for lightning protection levels and periodic check-ups during routine maintenance.

- Three-pole earth resistance measurements
- Two-pole AC resistance measurements
- AC/DC voltage measurement
- Large dual backlit display
- Limit settings for automatic measurement evaluation
- CAT II 600 V
- Two-year warranty

Feature comparison on page 30.

Recommended Accessories



Cable Reel 50 m
Ground/earth wire
(162.5 feet)



Cable Reel 25 m
Ground/earth wire
(81.25 feet)



ES-162P3
Stake/reel set for
3-pole measurements



Earth Stake
Ground/earth
stake

Recommended Kits



Fluke 1621 Kit

- Two cable reels with wire (1-50 m, 1-25 m)
- Three earth ground stakes
- One test lead (red and black 2 m)
- Two alligator clips
- Hard carrying case

FLUKE 1630 EARTH GROUND CLAMP METER



N10140

The Fluke 1630 Earth Ground Clamp Meter is able to measure ground loop resistances—using the stakeless testing method. This test technique eliminates the dangerous, and time consuming activity, of disconnecting parallel grounds, as well as the process of finding suitable locations for auxiliary ground stakes. You can also perform earth ground tests in places you have not considered before: inside buildings, on power pylons or anywhere you don't have access to soil.

With the stakeless testing method, the Fluke 1630 Earth Ground Clamp Meter is placed around the earth ground rod or the connecting cable. No earth ground stakes are used at all. A known voltage is induced by one half of the clamp and the current is measured by the other half. The tester automatically determines the ground loop resistance at this grounding connection. Gone are the days of spending time placing and connecting stakes for each earth ground rod on your system—a major time saver.

- Quick and easy use—no earth ground stakes are necessary
- Large, 35 mm (1.35 in) jaw opening
- Measures ground resistance from 0.025 Ω to 1500 Ω
- Measures ground leakage current from 0.2 mA to 30 A
- High and low alarming
- Automatic self calibration
- Rugged carrying case and resistance check loop included
- Two-year warranty

ORDERING INFORMATION

These products are for unpowered installations measuring grounding connections.

Included accessories	Part No	
Two measuring leads with alligator clips, 2 m (6 ft), yellow protective holster, 9 V alkaline battery (LR61), users manual, CD.	FLUKE-1621	Basic Earth Ground Tester
1-50 m cable reel, 1-25 m cable reel, 3 earth stakes, 2 test leads, 2 alligator clips, carrying case, yellow protective holster, 9 V alkaline battery (LR61), users manual, CD.	FLUKE-1621 KIT	Basic Earth Ground Tester Kit
Rugged carrying case with belt, resistance test loop, 9 V battery, users manual.	FLUKE-1630	Earth Ground Clamp Meter

FLUKE 1650 SERIES MULTIFUNCTION INSTALLATION TESTERS



Fluke 1654B



Fluke 1653B



Fluke 1652C

Extra functionality, faster testing, and as rugged as ever

Safer, easier installation testing. The new Fluke 1650 Series builds on the rugged reputation of the earlier 1650 Series, only it's re-designed to meet your need for more productive test tools. With new features like the fast, high current loop test (including a non-trip test) and a variable RCD trip current setting, accuracy is even better and the test cycle even faster. With the addition of a unique Zero Adapter accessory for accurate mains test lead compensation, the 1650 Series continues to set the standard in installation testers.

The 1650 Series testers verify the safety of electrical installations in domestic, commercial and industrial applications. They can ensure that fixed wiring is safe and correctly installed to meet the requirements of IEC 60364, HD 384 and BS 7671 17th Edition wiring regulations.

1654B - The complete tester for advanced users

This is the instrument that has it all, in a word: it's complete. From all the test functions you need to in-built memory for documenting results. This makes it the complete solution for professionals, especially contractors, everyone who would want to have the best tool available and always understands (or know) how to use.



1653B - The ideal tester for professional trouble-shooters

This is the instrument that is indeed ideal for professional users due to its additional functionality. It is also ideal since even though it has high-end features, it is still easy to use – even after longer periods of non-use; because operating it is intuitive and not forgotten easily.

1652C - The everyday tester, for every electrical installer

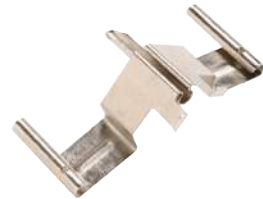
This is the instrument that can be used every single day (day in, day out), and covers all the basic needs. It is the preferred tester for every front-line electrician/installer.

Slim Probe Design



Thanks to its slim probe with integral test button, you can safely make one-handed measurements on hard to reach points, while keeping your eyes on the panel. This remote probe is powered by the tester so always operable (does not require additional batteries).

Zero Adapter



For easy, always reliable and accurate compensation for test leads and mains cords. This adapter can be used for all different kind of mains plugs as well as test accessories like probes, alligator clips etc.

FEATURES

Measurement Function	1652C	1653B	1654B
Voltage & Frequency	•	•	•
Insulation Resistance	•	•	•
Continuity & Resistance	•	•	•
Loop & Line Resistance	•	•	•
Loop & Line Resistance - mΩ resolution			•
Prospective Earth Fault Current (PEFC/IK)	•	•	•
Prospective Short-Circuit current (PSC/IK)			•
RCD switching time	•	•	•
RCD tripping level	Ramp test	Ramp test	Ramp test
RCD variable current	•	•	•
Automatic RCD test sequence	•	•	•
Test pulse current sensitive RCDs (Type A)	•	•	•
Test smooth DC sensitive RCDs (Type B)			•
Earth Resistance		•	•
Phase Sequence Indicator	•	•	•
Other Features			
Self-test	•	•	•
Illuminated Display	•	•	•
Memory, Interface			
Memory		•	•
Extended Memory			•
Computer Interface		•	•
Time and date (When used with FlukeView software)		•	•
Software (optional)		•	•
Included Accessories			
Hard case	•	•	•
Remote control probe	•	•	•
Zero Adapter	•	•	•

Complete Kit



All 1650 models are equipped with detachable leads that can be replaced in case of damage or loss. A durable hard case will protect your instrument in tough field conditions.

If you did not find what you were looking for, please call our sales team now!

FLUKE 1650 SERIES MULTIFUNCTION INSTALLATION TESTERS - CONTINUED...

SPECIFICATIONS

AC Voltage Measurement

Range	Resolution	Accuracy 50 Hz - 60 Hz	Input Impedance	Overload Protection
500 V	0.1 V	± (0.8% + 3 digits)	3.3 MΩ	660 Vrms

Continuity Testing

Range (autoranging)	Resolution	Test Current	Open Circuit Voltage	Accuracy
20 Ω	00.1 Ω	> 200 mA	> 4 V	± (1.5%+3 digits)
200 Ω	0.1 Ω			
2000 Ω	1 Ω			

Insulation Resistance Measurement

Model	Test Voltage	Insulation Resistance Range	Resolution	Test Current	Accuracy
1653B / 1654B	50 V	10 kΩ to 50 MΩ	0.01 MΩ	1 mA @ 50 kΩ	± (3%+ 3 digits)
1653B / 1654B	100 V	20 kΩ to 100 MΩ	0.01 MΩ 0.1 MΩ	1 mA @ 100 kΩ	± (3%+ 3 digits)
1653B / 1654B	250 V	20 kΩ to 200 MΩ	0.01 MΩ 0.1 MΩ	1 mA @ 250 kΩ	± (1.5%+ 3 digits)
1653B / 1654B 1652C	500 V	20 MΩ 200 MΩ 500 MΩ	0.01 MΩ 0.1 MΩ 1 MΩ	1 mA @ 500 kΩ	± (1.5%+ 3 digits) + 10%
1653B / 1654B 1652C	1000 V	20 MΩ 200 MΩ 1000 MΩ	0.1 MΩ 1 MΩ	1 mA @ 1 MΩ	± (1.5%+ 3 digits) + 10%

Loop Impedance Measurement

Range	Resolution	Accuracy ^[1]
10 Ω	0.001 Ω (1654B)	Hi Current mΩ mode: ± (2% + 15 digits) No Trip mode: ± (3% + 6 digits)
20 Ω	0.01 Ω	Hi Current mode: ± (2% + 4 digits) No Trip mode: ± (3%)
200 Ω	0.1 Ω	Hi Current mode: ± (2%)
2000 Ω	1 Ω	±6% ^[2]

Notes

[1] Valid for resistance of neutral circuit <20 Ω and up to a system phase angle of 30°. Test leads must be zeroed before testing.
[2] Valid for mains voltage >200 V.

PFC. PSC Test

Range	Resolution and Units	Accuracy
	1000A / 10kA(50kA)	
	1A / 0.1kA	
	Determined by accuracy of loop resistance and mains voltage measurements	

Computation

Prospective Earth Fault Current (PEFC) or Prospective Short Circuit Current (PSC) determined by dividing measured mains voltage by measured loop (L-PE) resistance or line (L-N) resistance, respectively.

RCD Testing

RCD Type ^[6]		Model 1652C	Model 1653B	Model 1654B
AC ^[1]	G ^[2]	●	●	●
AC	S ^[3]	●	●	●
A ^[4]	G	●	●	●
A	S	●	●	●
B ^[5]	G	●	●	●
B	S	●	●	●

Notes

[1] AC - Responds to AC
[2] G - General, no delay
[3] S - Time delay
[4] A - Responds to pulsed signal
[5] B - Responds to smooth DC
[6] RCD test inhibited for V >265 AC
RCD tests permitted only if the selected current, multiplied by earthing resistance, is <50 V.

Tripping Time Test (ΔT)

Current Settings	Multiplier	Test Current Accuracy	Trip Time Accuracy
10, 30, 100, 300, 500, 1000 mA, VAR	x 1/2	+ 0% - 10%	± (1% Reading + 1 digit)
10, 30, 100 mA	x 5	+ 10% - 0%	± (1% Reading + 1 digit)

Tripping Current (Ramp) Test

Current Range	Step Size	Dwell Time		Measurement Accuracy
		Type G	Type S	
30 % to 110 % of RCD rated current ^[1]	10 % of I Δ N ^[2]	300 ms/step	0 ms/step	±5 %

Notes

[1] 30 % to 150 % for Type A Δ N >10 mA
30 % to 210 % for Type A Δ N <=10 mA
20 % to 210 % for Type B
Specified trip current ranges (EN 61008-1):
50 % to 100 % for Type AC
35 % to 140 % for Type A (>10 mA)
35 % to 200 % for Type A (<=10 mA)
50 % to 200 % for Type B
[2] 5% for Type B

Earth Resistance Test (RE) – Fluke 1654B and 1653B only

Range	Resolution	Accuracy
200 Ω	0.1 Ω	± (2% + 5 digits)
2000 Ω	1 Ω	± (3.5% + 10 digits)

Battery type: Alkaline supplied, usable with 1.2 V NiCD or NiMH rechargeable batteries
Size (HxWxD): 100 mm x 250 mm x 125 mm

Weight: 1.3 kg
Three Year Warranty

ORDERING INFORMATION

Included accessories

6 AA Cell batteries, C1600 Hard carrying case
Zero Adapter, Mains test cord, TL165X STD,
Standard Test Lead Set, Padded carrying strap
Quick reference guide, TP165X Remote control
probe and lead and Users manual on CD-ROM

Part No

FLUKE 1652C	Multifunction Installation Tester
FLUKE 1653B	Multifunction Installation Tester
FLUKE 1654B	Multifunction Installation Tester

Recommended Accessories



ES165X

Earth Spike Test Kit

(For Fluke 1653B and 1654B only)

Earth Spike Test Kit contents:

- Auxiliary earth probes
- Test connection leads and crocodile clips
- Purpose-made carry case



FVF-SC2

Fluke ViewForms Software (Fluke 1653B)

To address the increasing demands for reporting and documentation, Fluke presents FlukeView Forms documenting software. Download the data from the Fluke 1653B and create an easy report. The Fluke ViewForms Software also supports other Fluke tools.



TLK 290

Test Probe Kit

Test Probe Kit contents:

- Three flexible socket probes and a large alligator clip to be used on three phase sockets. Probes have flexible Width test points that fit securely in 4 to 8 mm sockets
- CAT III 1000 V, 8 A



TP165X

Remote Control Probe

Slim probe with test button keeps your eyes on the panel while probing hard to reach points.

FLUKE 1650 SERIES MULTIFUNCTION INSTALLATION TESTERS - CONTINUED...

SPECIFICATIONS

The accuracy specification for the display range is defined as \pm (%reading + digit counts) at 23 °C \pm 5 °C, \leq 75 % RH. Between 0 °C and 18 °C and between 28 °C and 40 °C, accuracy specifications may degrade by 0.1 x (accuracy specification) per °C. The measurement range meets the service operating errors specified in EN61557-1: 1997, EN61557-2: 1997, EN61557-4: 1997, EN61557-6: 1997, DIN VDE404-2.

Power-on Test	
The test indicates reversed L-N, missing PE, and measures the mains voltage and frequency.	
Display Range	90 V to 264 V
Accuracy at 50 Hz	\pm (2% + 3 counts)
Resolution	0.1V (1V - model 6200)
Input Impedance	> 1 M Ω // 2.2 μ F
Maximum Input Mains Voltage	300 V

Earth Bond Test	
Display Range	0 to 19.99 Ω
Accuracy (after Bond Test zeroing)	\pm (2.5% + 4 counts)
Resolution	0.01 Ω
Test Current	200 mA AC - 0% + 40% into 1.99 Ω 25 A AC \pm 20% into 25 m Ω at 230 V
Open Circuit Voltage	> 4 V AC, < 24 Vac
Bond Test zeroing	can subtract up to 1.99 Ω

Insulation Test (Riso)	
Display Range	0 to 299 M Ω
Accuracy	\pm (5% + 2 counts) from 0.1 to 50 M Ω \pm (10% + 2 counts) from 50 to 299 M Ω
Resolution	0.01 M Ω (0 to 19.99 M Ω) 0.1 M Ω (20 to 199.9 M Ω) 1 M Ω (200 to 299 M Ω)
Test Voltage	500 V DC - 0% + 10% at 500 k Ω load 250 V DC - 0% + 10% at 250 k Ω load (6500-2)
Test Current	> 1 mA at 500 k Ω load, < 15 mA at 0 Ω
Auto discharge time	< 0.5 s for 1 μ F
Max. Capacitive Load	Operational up to 1 μ F

RCD Test: Trip Current (6500-2 only)	
Operational Error	\pm 10%
Nominal	30 mA
Accuracy	\pm 5%

RCD Test: Trip Time (6500-2 only)	
Standard Requirement	61557 Part 6: Tolerance of rated test current 0% to +10%
Operational Error	\pm 10%
RCD Type	AC General-Purpose 30 mA
Display range	310 ms
Resolution	0.1 ms
Accuracy	3 ms
Trip time limit at 100% (30 mA)	300 ms
Trip time limit at 500% (150 mA)	40 ms

Touch Current Test	
Display Range	0 to 1.99 mA ac
Accuracy	\pm (4% + 2 counts)
Resolution	0.01 mA
Internal Resistance (via probe)	2 k Ω
Measuring method	Probe
The appliance under test is energised at mains potential.	

Substitute Leakage Current Test	
Display Range	0 to 19.99 mA ac
Accuracy	\pm (2.5% + 3 counts)
Resolution	0.01 mA
Test Voltage	100V AC \pm 20%
Operational Error	10%

Load/Leakage Test: Load Current	
Display Range	0 to 13 A
Accuracy	\pm (4% + 2 counts)
Resolution	0.1 A
The appliance under test is energised at mains potential	

Load/Leakage Test: Load Power	
Display Range 230V mains UK:	0.0 VA to 3.2 kVA
Austria:	0.0 VA to 2.4 kVA
Germany/The Netherlands:	0.0 VA to 3.7 kVA
Accuracy	\pm (5% + 3 counts)
Resolution	1 VA (0 to 999 VA), 0.1 kVA (>1.0 kVA)
The appliance under test is energised at mains potential	

Load/Leakage Test: Leakage Current	
Display Range	0.25 to 19.99 mA
Accuracy	\pm (4% + 4 counts)
Resolution	0.01 mA
The appliance under test is energised at mains potential	

PELV Test	
Accuracy at 50 Hz	\pm (2% + 3 counts)
Overload protection	300 Vrms
Warning threshold	25 Vrms

Recommended Accessories



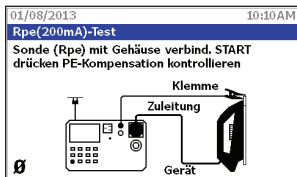
SPScan6000 Barcode Scanner

Easy to use, low current, intelligent barcode reader. SPScan6000 can be used to scan barcodes attached to curved surfaces or where actual contact with the barcode surface is difficult.

Fluke DMS Software for 1650/6000 Series



The Fluke DMS (Data Management Software) is an efficient program for administration and reporting of installation tests in compliance with EN 60364, DIN VDE 0100/0105, BS7671 17th edition wiring resulation and appliance tests in compliance with DIN VDE 0701/0702, ÖVE E 8701.



Fast professional testing mode

The professional testing mode enables you to conduct more tests faster and more efficiently than ever before.



Rapid data entry (6500-2)

With a full QWERTY keyboard, alphanumeric data entry is faster, easier and more convenient. The integral site, location and codes further speed up data entry on site, and contribute to more efficient testing and results management.



One-touch testing

Tests are selected on the 6200-2 and 6500-2 with just one button. This greatly simplifies testing.



Built-in handle and separate hard case

The strong, lightweight enclosure features an integral carrying handle and fits neatly into the separate hard case (supplied as standard). Unlike typical PAT testers with large cumbersome integral cases, the Fluke 6200-2 and 6500-2 are easier to carry around in the field.

ORDERING INFORMATION

Included accessories	Part No
Test lead, Test probe, Crocodile clip, Mains cord, Hard carrying case, USB stick, USB cable and user manual	FLUKE 6200-2
	FLUKE 6500-2
	PAT Tester
	PAT Tester



Fluke 6200-2



Fluke 6500-2



Perform more tests each day

The low weight, small size, one-touch solutions

The new Fluke 6200-2 and 6500-2 PAT testers have redesigned auto-test capabilities to help you increase the number of portable appliance tests completed each day. It is designed to enable you to work faster without compromising safety – yours or your customer’s.

Fluke simplifies portable appliance testing

The Fluke 6200-2 offers:

- Dedicated key for each test for ‘one-touch’ testing
- Pre-set pass/fail levels to save time
- Large display for easy reading
- Single mains socket for appliance connection
- Separate IEC socket for easy mains/extension lead testing
- Detachable test leads for quick field replacement
- Integral carrying handle

The Fluke 6500-2 delivers all of this capability, plus:

- Integral QWERTY keyboard for rapid data entry
- Additional Compact Flash memory card capability for back-up data storage and USB port for transfer to PC
- Large backlit graphics display
- Pre-set, auto-test sequences for user convenience
- Integral site, location and Description codes for faster data processing
- Memory review facility for more on-site control

Special PAT Kit

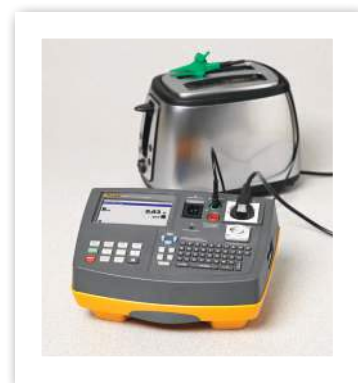


If you need a complete PAT tester solution, a purpose made kit is available.

Separate Hard Case



The compact Fluke PAT testers are supplied with a hard carrying case that not only offers protection during transit but also includes extra storage space for accessories and other tools. They’re extremely light, weighing approximately 3 kg (without case) and have integral carrying handles for extra convenience.



FEATURES

Measurement functions	6200-2	6500-2
LN Mains Volts	•	•
Outside Limits Indicators	•	•
Null out facility for earth bond lead	•	•
Protective Earth Resistance PE (200mA)	•	•
Protective Earth Resistance PE (25 A)	•	•
Insulation 500V DC	•	•
Insulation 250V DC	•	•
Protective Earth Conductor Current	•	•
Touch Current	•	•
RCD Test	•	•
Substitute leakage current	•	•
Appliance Power kVA	•	•
Appliance Load Current	•	•
Seven Segment Custom LCD	•	•
Colour dot matrix display	•	•
Back Light	•	•
USB Flash drive port	•	•
USB Port-Printing/downloading	•	•
External printer output	•	•
Front Panel QWERTY Key pad	•	•
IEC Lead Test	•	•
Auto-testing	•	•
Pass / Fail Level Programmable Indicators	•	•
Data Storage	•	•
Limited Data Storage	•	•
Polarity Checks	•	•
Graphical Help Menu On Line	•	•
Programme Mode	•	•
Real time clock	•	•
Front panel results management	•	•
230V BS1363 Test socket / 230V Mains BS1363 input power plug	•	•
110V appliance test compatible with adapter	•	•

FLUKE Phase Rotation Indicators

FLUKE PHASE ROTATION INDICATORS

Take the guesswork out of phase/motor rotation measurements



Fluke 9040

Fluke 9040

Fluke 9062



Fluke 9040 Phase Rotation Indicator

The Fluke 9040 is effective for measuring phase rotation in all areas where three-phase supplies are used to feed motors, drives and electrical systems. The Fluke 9040 is a rotary field indicator and can provide clear indication of the 3 phase via an LCD display and the phase rotation direction to determine correct connections. It allows rapid determination of phase sequence and has a voltage (up to 700 V) and frequency range suitable for commercial and industrial applications. Test probes supplied with the instrument have a variable clamping range for safe contact, especially in industrial sockets.

Fluke 9062 Phase Rotation Indicator

The unique Fluke 9062 provides rotary field and motor rotation indication with the benefits of contact-less detection. Purpose made for commercial and industrial environments, the Fluke 9062 provides rapid indication of 3 phase rotation using test leads supplied or can be used to determine motor rotation on synchronous and asynchronous 3 phase motors. The contact-less detection is ideal for use on motors where the shaft is not visible. Test probes supplied with the instrument have a variable clamping range for safe contact, especially in industrial sockets.

Fluke 9062 Applications



Determine the presence of phase sequence of multiphase electrical supplies.



Determine the rotation of running motors simply by placing the instrument on the motor casing.



Check the correct rotation of motors prior to connection.

FEATURES

	9040	9062
3 phase indication	Via LCD	Via LED
Indication of phase rotation	•	•
Indication of motor rotation direction		•
Contact free determination of the rotation direction of running motors		•
Clear LCD display	•	
No battery required	•	

SPECIFICATIONS

	9040	9062
Voltage range	40 - 700 V	Up to 400 V
Phase display	-	120 - 400 V AC
Frequency range	15 - 400 Hz	2-400 Hz
Operating time	Continuous	Continuous

ORDERING INFORMATION

Included accessories	Part No	
Fluke 9040: Alligator clips - black (3) Standard test probes - black (3) Flexible test probes - black (3)	FLUKE 9040	Phase Rotation Indicator
Fluke 9062: Alligator clips - black (3) Flexible test probes - black (3) Test leads - black (3)	FLUKE 9062	Motor and Phase Rotation Indicator

Recommended Accessories



TLK290

TLK291



C25

FLUKE Power Quality Clamps & Analysers

POWER QUALITY CLAMP SELECTION GUIDE

Fluke model number	i3000 Flex 4PK	i400s	i430-FLEXI-TF-4K	i5sPQ3	1000A 3210 PR TF Iflex	Fluke-1730 iFlexi 1500A 12 IN	Fluke-1730 iFlexi 3000A 24 IN	Fluke-1730 iFlexi 6000A 36 IN	Fluke-1730 i40s-EL Clamp-on Current Transformer
Description	4 ... phase 3000A Flexible current clamp set	Single phase 400A current clamp (4 required)	4 ... phase 3000A Flexible current clamp set	3 ... phase 5A Current clamp set	1000A Single phase flexible current clamp	1500 A Single phase flexible current clamp (3 required) IP 50	3000 A Single phase flexible current clamp (3 required) IP 50	6000 A Single phase flexible current clamp (3 required) IP 50	4/40A Current clamp (3 required)
Old Fluke model #					3210-PR	n/a	n/a	n/a	n/a
Fluke 1750					•				
Fluke 43X	•	•	•	•					
Fluke 1730						•	•	•	•
Nominal current range(s)	30 A 300 A 3000 A	40 A 400 A	3000A	5:00 am		1A to 150A, 10A to 1500A	3A to 300A, 30A to 3000A	6A to 600A, 60A to 6000A	40mA to 4A, 0.4A to 40A
Cont. AC current range	1 A ... 30 A 1 A ... 300 A 1 A ... 2400 M	0.5 A ... 40 A 5 A ... 400 A	30 A ... 3000 A	0.01 A ... 6 A	0.5 A ... 1000 A	1 A ... 150 A 10 A to 1500 A	1A ... 300 A 10 A ... 3000A	1 A ... 600 A 10 A ... 6000 A	1 A ... 150 A 10 A ... 1500 A
Highest current	4000 A	1000 A	100 kA	70 A	1000 A	1500 A	3000 A	6000 A	200 A
Lowest measurable current	1:00 AM	0.5 A	30 A	10 mA	0.5 A	1 A	3 A	6 A	0.04 A
Basic accuracy (48 ... 65 Hz) ¹⁾	2% + 2 A	2% + 0.15 A	1%	1%	± 1% of reading	0,70%	0,70%	0,70%	0,50%
Usable frequency	10 Hz ... 100 kHz	45 Hz ... 3 kHz	10 Hz ... 7 kHz	40 Hz ... 5 kHz	40 Hz ... 5 kHz	40 Hz ... 5 kHz	40 Hz ... 5 kHz	40Hz ... 5kHz	40Hz ... 5kHz
Requires battery	•								
Flex head length		Clamp opening: 32mm	61 cm	Clamp opening: 15mm	61cm	30.5cm	61cm	122cm	n/a
Output level(s)	10 mV/A 1 mV/A 0.1 mV/A	10 mV/A 1 mV/A	0.085 mV/A @50 Hz	400 mV/A	2 mV/A	n/a	n/a	n/a	n/a
Output cable (m)	2,1	2,5	2,5	2,5	3	2	2	2	2
Safety rating	CAT III 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V
Connection	4 x BNC	4 x BNC	4 x BNC	3 x BNC	One connector	One connector	One connector	One connector	One connector
BNC to banana adapters included	•	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Basic accuracy: % reading plus floorspec.
n/a = not applicable

Fluke model number	i1A/10A CLAMP PQ3	i1A/10A CLAMP PQ4	i5A/50A CLAMP PQ3	i5A/50A CLAMP PQ4	i20A/200A CLAMP PQ3	i20A/200A CLAMP PQ4	3000/6000A-TF-4	FS17XS-TF	FS17xx IP65-TF
Description	3 ... phase 1A/10A Mini current clamp set	4 ... phase 1A/10A Mini current clamp set	3 ... phase 5A/50A Mini current clamp set	4 ... phase 5A/50A Mini current clamp set	3 ... phase 20A/200A Mini current clamp set	4 ... phase 20A/2000A Mini current clamp set	4 Phase flexiset	4 Phase flexiset, IP41	4 Phase flexiset, IP65
Old Fluke model #	CURRENT CLAMPS 1A (EPO450A)	MBX CLAMP 1A/10A+N (EPO451A)	MBX CLAMP 5A/50A (EPO452A)	MBX CLAMP 5A/50A+N (EPO453A)	MBX CLAMP 20A/200A (EPO455A)	MBX CLAMP 20/2000A+N (EPO456A)		MBX Lem Flex (15/150/3000) (EPO404A)	MBX Lem Flex (15/150/3000) (EPO404A)
Fluke 1735	•	•	•	•	•	•	•	•	•
Fluke 174X	•	•	•	•	•	•	•	•	•
Nominal current range(s)	1 A 10 A AC	1 A 10 A AC	5 A 50 A AC	5 A 50 A AC	20 A 200 A AC	20 A 200 A AC	30A 300A 3000A 6000A AC	15A 150A 1500A 3000A AC	15A 150A 1500A 3000A AC
Cont. AC current range	10 mA ... 1 A 100 mA ... 10 A	10 mA ... 1 A 100 mA ... 10 A	50 mA ... 5 A 500 mA ... 50 A	50 mA ... 5 A 500 mA ... 50 A	200 mA ... 20 A 2 A ... 200 A	200 mA ... 20 A 2 A ... 200 A	0.8 ... 6.000 A AC	450mA ... 15A 600mA... 150A 6A... 1500A 12A... 3000A	450mA ... 15A 600mA... 150A 6A... 1500A 12A... 3000A
Highest current	20 A	20 A	100 A	100 A	300 A	300 A	0.8 A	3300 A	3300 A
Lowest measurable current	10 mA	10 mA	50 mA	50 mA	200 mA	200 mA		450 mA	450 mA
Basic accuracy (48 ... 65 Hz) ¹⁾	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%		2%+2% position influence	2%+2% position influence
Usable frequency	40 Hz ... 10 kHz	40 Hz ... 10 kHz	40 Hz ... 10 kHz	40 Hz ... 10 kHz	40 Hz ... 10 kHz	40 Hz ... 10 kHz		40Hz ...5kHz	40Hz ...5kHz
Flex head length							92 cm	61 cm	61 cm
Output level(s)	75 mV/A	75 mV/A	15 mV/A	15 mV/A	3.75 mV/A	3.75 mV/A		0.1 mV/A	0.1 mV/A
Output cable (m)	2	2	2	2	2	2	4	2	2
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 1000 V CAT IV 600V	CAT III 1000 V CAT IV 600V	CAT III 1000 V CAT IV 600V
Connection	One connector	One connector	One connector	One connector	One connector	One connector	One connector	One connector	One connector
BNC to banana adapters included	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Basic accuracy: % reading plus floorspec.
n/a = not applicable

FLUKE 345 POWER QUALITY CLAMP METER

POWER QUALITY TOOLS

For industrial and commercial applications



Basic measurements	Application use	Single phase			Three phase					
		VR1710	345	43B	430 II	1730	1735	1740	1750	1760
RMS Voltage	Detailed RMS trending shows how connected loads behave.	•	•	•	•	•	•	•	•	•
RMS Current		•	•	•	•	•	•	•	•	•
Energy studies										
Measure V, I, kW, Cos/DPF, kWh	Get detailed power and energy consumption profiles during energy audits and pinpoint savings opportunities.	•	•	•	•	•	•	•	•	•
Measure MIN/MAX and AVG values		•	•	•	•	•	•	•	•	•
10 day logging		•	•	•	•	•	•	•	•	•
Energy aggregation		•	•	•	•	•	•	•	•	•
Utility meter pulse input		•	•	•	•	•	•	•	•	•
Energy Loss (Eff. kW, Reactive kVAR, Unbalance kVAR, Distortion kVAR, Neutral kVAR)		•	•	•	•	•	•	•	•	•
Energy loss calculator		•	•	•	•	•	•	•	•	•
Basic harmonics study										
THD measurement (V & I)	Discover the source of distortion in your installation, so that you can filter those loads or move them to separate circuits.	•	•	•	•	•	•	•	•	•
Harmonics 1 to 25 for V & I		•	•	•	•	•	• (not 1743)	•	•	•
Tabular values		•	•	•	•	•	•	•	•	•
Neutral current measurement		•	•	•	•	•	•	•	•	•
Crest factor		•	•	•	•	•	•	•	•	•
Advanced harmonics study										
Full harmonic spectrum	If distorting loads are causing problems in your installation, you need comprehensive data to identify the source and create a solution.	•	•	•	•	•	•	•	•	•
Power harmonics		•	•	•	•	•	•	•	•	•
Harmonics 1 to 50 and DC		•	•	•	•	•	• (no DC) (not 1743)	•	•	•
k-factor		•	•	•	•	•	•	•	•	•
%Fundamental and %RMS		•	•	•	•	•	•	•	•	•
Basic Industrial PQ Troubleshooting										
Oscilloscope function	When troubleshooting in the field, graphical data enables you to trace the source of the problem at hand.	•	•	•	•	•	•	•	•	•
Voltage dips and swells		•	•	•	•	•	•	•	•	•
Phasor diagram		•	•	•	•	•	•	•	•	•
Trend recording		•	•	•	•	•	•	•	•	•
Inrush current		•	•	•	•	•	•	•	•	•
Advanced industrial PQ troubleshooting										
Comprehensive logging capability	Complex installations often require a deeper dive into measurement data. Multiple loads may be interacting randomly to cause a single problem.	•	•	•	•	•	•	•	•	•
Transient capture		•	•	•	•	•	•	•	•	•
Flicker		•	•	•	•	•	•	•	•	•
EN50160 analysis		•	•	•	•	•	•	•	•	•
Complex System interaction event capture (manual threshold setting)		•	•	•	•	•	•	•	•	•
Random/variable system event capture (Adaptive threshold setting)		•	•	•	•	•	•	•	•	•
400 Hz		•	•	•	• (only 437-II)	•	•	•	•	•
Utility PQ benchmarking										
Phase sequence components	Before you install sensitive loads, make sure you understand the existing quality of power delivered by your utility. Comparing benchmarks over time can help pinpoint potential areas of concern.	•	•	•	•	•	•	•	•	
Interharmonics		•	•	•	•	•	•	•	•	
Mains signaling		•	•	•	•	•	•	•	•	
IEC61000-4-30 Class A		•	•	•	•	•	•	•	•	
Software										
Power Log	To make use of the power data you collect, you need software that can help analyse your findings and share them with equipment providers and plant management.	•	•	•	•	•	•	•	•	
PQ Log		•	•	•	•	•	•	•	•	
Power Analyse		•	•	•	•	•	•	•	•	
PQ Analyse		•	•	•	•	•	•	•	•	
FlukeView Forms		•	•	•	•	•	•	•	•	
FSD card (max 32 GB)		•	•	•	• (8 GB)	•	•	• (8 GB)	•	
Fluke Energy Analysis	•	•	•	•	•	•	•	•		

If you did not find what you were looking for, please call our sales team now!

FLUKE 345 POWER QUALITY CLAMP METER

The ideal meter to troubleshoot modern electrical loads



Fluke 345



The Fluke 345 is more than a Power Meter. Combining the functions of a clamp meter, oscilloscope, data logger and digital power meter into one handy device. The Fluke 345 is ideal for working with variable frequency motor drives, high efficiency lighting and other loads using switching electronics.

- AC/DC current: Clamp-on measurement of AC current up to 1400 A rms and DC current up to 2000 A without breaking the circuit
- Highest safety rating: CAT IV 600 V power analyser is rated for use at the service entrance
- Accurate in noisy environments: Clamp meter performs even with distorted waveforms present on electronic loads with low-pass filter
- Data logging: Identify intermittent faults by logging any power quality parameter for minutes, or over a month, including harmonics
- Troubleshoot harmonics: Analyse and log harmonics digitally or graphically
- Inrush current: Capture and analyse nuisance tripping from 3 seconds to 300 seconds
- View graphs and generate reports: Use power analyser with included Power Log software

Recommended Accessories

Fluke 345



TP220
Industrial Test Probes



AC220
Alligator Clips



TLK291
Fused Test Probe Set



C550
Tool Bag

ORDERING INFORMATION

Included accessories

Test leads, alligator clips, test probes, Power Log software, USB cable, international AC adapter/battery eliminator, soft carrying case, users manual, multi-language manual on CD.

Part No

FLUKE-345

Clamp-On Power Meter

FLUKE 43B POWER QUALITY ANALYSER



Fluke 43B

The Fluke 43B Power Quality Analyser performs the measurements you need to maintain power systems, troubleshoot power problems, and diagnose equipment failures. The 43B has 20 storage locations and can store data as well as screens.

- Basic measurements: Voltage, current and power harmonics up to 51st, THD
- Oscilloscope function: View voltage and current waveforms
- Transients: Capture up to 40 voltage transients and waveform events
- Detailed event capture: Cursors give time and date of sags and swells
- FlukeView® software: Analysis and reporting, supplied with USB connection lead
- Warranty: Three-years for analyser, one-year for accessories



Fluke VR1710 Power Quality Recorder

- Fast and easy recording of voltage trends, dropouts and power quality: Easily pinpoint the root cause of single phase voltage problems
- Extremely easy to use: Plugs directly into the mains power socket and capture data
- Quickly see what happened and when: Min, Max, and Average RMS values (1/4 cycle) with time stamp, transient display (>100 µs) with time stamp
- Easily identify problems: Power quality or equipment related Flicker recording to EN 61000-4-15, individual harmonic and THD values with trends
- Includes PowerLog software: For quick download, analysis and automatic reporting
- Save time: Generate power quality reports automatically with pre-set templates



ORDERING INFORMATION

Included accessories

Voltage and current probes, FlukeView® software, power quality instructional CD, USB interface cable, line voltage adapter/battery charger, hard case, users manual.

USB cable, Power Log software CD, universal power cord adapters.

Part No

FLUKE-43B

Power Quality Analyser

FLUKE-VR1710

Voltage Quality Recorder

FLUKE 430-II SERIES THREE-PHASE POWER QUALITY ANALYSERS



Fluke 437-II



Fluke 435-II

Fluke 434-II



On all inputs



The new Fluke 434-II, 435-II and 437-II Power Quality Analysers help locate, predict, prevent and troubleshoot power quality problems in three and single-phase power distribution systems. Additionally, the Fluke-patented energy loss algorithm, Unified Power Measurement, measures, quantifies and monetises energy losses due to harmonics and unbalance issues, allowing the user to pinpoint the origin of energy waste within a system.

- Patented energy loss management: Classic active and reactive power measurements unbalance and harmonic power and energy are quantified to pinpoint true system energy losses
- Realtime PowerWave data capture: Capture fast rms data, show single cycle rms value to characterise electrical system dynamics (generator start-ups, UPS switching etc.)
- Highest safety rating in the industry: CAT IV 600 V/ CAT III 1000 V rated for use at the service entrance
- Automatic transient mode: Capture 200 kHz waveform data on all phases simultaneously up to 6 kV
- Fully Class-A compliant: Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard intervals for 435-II and 437-II
- Troubleshoot real-time: Analyse the trends using the cursors and zoom tools—even while background recording continues
- Measure all three phases and neutral: With included four iFlex flexible current probes
- Monetise energy loss caused by power quality issues

Energy loss calculator

Useful kilowatts (power available) – Effective kW
 Reactive (unusable) power – Reactive kvar
 Kilowatts made unusable by unbalance issues – Unbalance kVA
 Kilowatts made unusable by harmonics – Distortion kVA
 Neutral Current – Neutral
 Total cost of wasted kilowatt hours

Energy Loss Calculator

	Total	Loss	Cost
Effective kW	35.9	W 488	\$ 48.83 /hr
Reactive kvar	21.5	W 175	\$ 17.49 /hr
Unbalance kVA	2.52	W 1.5	\$ 0.15 /hr
Distortion kVA	7.17	W 57.2	\$ 5.72 /hr
Neutral A	29.3	W 57.7	\$ 5.77 /hr
Total			k \$ 683 /y

11/10/11 10:49:38 230V 50Hz 3Ø WVE EN50160
 LENGTH 100 m DIAMETER 25 mm² METER RATE 0.10 /kWh HOLD RUN

FEATURES

Features	434-II	435-II	437-II
Measures voltage, current, dips, swells, interruptions, harmonics, power, energy loss monetisation, frequency, inrush and power inverter efficiency	•	•	•
Flicker	–	•	•
Transients	–	•	•
Mains signaling	–	•	•
Power wave	–	•	•
Event waveform capture	–	•	•
400 Hz	–	–	•
C1740 Soft Case	•	•	–
C437-II Hard Case with rollers	–	–	•
SD card (Max 32 GB)	8 GB	8 GB	8 GB

Battery life: 7 hours operating time per charge on Li-ion battery pack
Safety: EN61010-1 (2nd edition) pollution degree 2; 1000 V CAT III / 600 V CAT IV
Case: Rugged, shock proof with integrated protective holster, IP51 (drip and dust proof)
Shock: 30 g; Vibration: 3g according to MIL-PRF-28800F Class 2
Operating temperature: 0°C to +50°C
Size (HxWxD): 265 mm x 190 mm x 70 mm;
Weight: 2.1 kg
Three Years Warranty

ORDERING INFORMATION

Included accessories	Part No	
Four thin flexible current probes (i430-TF), five test leads and clips, battery charger, Power Log software, USB cable, colour localisation set, soft carrying case, 8 GB SD memory card, users manual on CD.	FLUKE-434-II	Three-Phase Energy Analyzer
	FLUKE-435-II	Three-Phase Power Quality and Energy Analyzer
Four thin flexible current probes (i430-TF), five test leads and clips, battery charger, Power Log software, USB cable, colour localisation set, hard carrying case with wheels, 8GB SD memory card, users manual on CD.	FLUKE-437-II	400 Hz Three-Phase Power Quality and Energy Analyzer

Recommended Accessories



ISsPQ3
3 pack of 5 A precision current clamps



16000s FLEX
AC Current Clamp

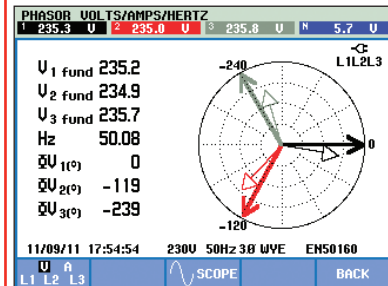


C437-II
Water-tight hard case with rollers

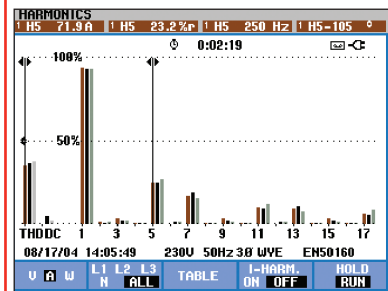


GPS430
GPS time synchronisation module

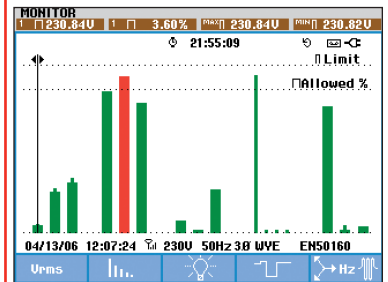
Recommended kits



Phasor diagram.



Track harmonics up to the 50th, and measure and record THD in accordance with IEC61000-4-7 requirements.



The System-Monitor overview gives instant insight into whether the voltage, harmonics, flicker, frequency and the number of dips and swells fall outside the set limits. A detailed list is given of all events falling outside the set limits.



Fluke 1730



The new Fluke 1730 Three-Phase Electrical Energy logger introduces a new simplicity to discovering sources of electrical energy waste. Discover when and where energy in your facility is being consumed; from the service entrance to individual circuits.

Profiling energy usage across your facility helps you identify opportunities for energy savings, and provides you with the data you need to act on them.

- **Comprehensive logging:** all measured values are automatically logged and can be reviewed during logging and before downloading for on-the-go analysis. More than 20 separate logging sessions can be stored on the instrument.

- **Complete 'in-the-field' setup through the front panel:** no need to return to the workshop for download and setup or to take a computer to the electrical panel.
- Highest safety rating in the industry: 600 V CAT IV/1000 V CAT III rated for use at the service entrance and downstream.

SPECIFICATIONS

General specifications

Colour LCD display	4.3-inch active matrix TFT, 480 pixels x 272 pixels, resistive touch panel
Warranty	1730 and power supply: Two years (battery not included) Accessories: One year Calibration cycle: Two years
Dimensions	1730: 19.8cm x 16.7cm x 5.5cm (7.8in x 6.6in x 2.2in) Power supply: 13.0cm x 13.0cm x 4.5cm (5.1in x 5.1in x 1.8in) 1730 with power supply attached: 19.8cm x 16.7cm x 9cm (7.8in x 6.6in x 3.5in)
Weight	1730: 1.1kg (2.5lb) Power supply: 400g (0.9lb)
External protection	Holster, Kensington lock slot



Fluke 1735



The Fluke 1735 Three-Phase Power Logger is the ideal electrician or technician's tool for conducting energy studies and basic power quality logging. Set up the 1735 in seconds, with the included flexible current probes and colour display. The 1735 logs most electrical power parameters and harmonics and captures voltage events.

- **Ideal for field operation:** Compact, rugged instrument; easy to use, quickly confirm instrument setup with colour display of waveforms and trends
- **Full system electrical measurement capability:** Three phases and neutral with included four flexible current probes

- **Prove the benefit of efficiency improvements:** Record power and associated parameters for up to 45 days. Monitor maximum power demand over user-defined averaging periods
- **Check the power quality effects energy saving devices:** Measure harmonics and distortion caused by loads and improve reliability by capturing voltage dips and swells from load switching
- **Easy PC connectivity and operation:** USB interface for plug and play operation; download, view graphs and automatically generate reports with included Power Log software

ORDERING INFORMATION

Included accessories	Part No	
3 x i1730-flex 1500 (iFlex flexible current probe 1500A 12 inch), 2 x 1730TL0.1M (Test lead; straight plug; 0.1 m; silicon; red), 3PHVL-1730 (Cable Assembly, Voltage test lead 3-Phase+N), 1730-TL2M (Test lead, straight plug; 2 m; PVC red), C1730 Soft case, WC100 Color localisation set, 4 x Dolphin clamps, Basic model: excl. current probes	FLUKE-1730/BASIC	Three-Phase Electrical Energy Logger
	FLUKE-1730	Three-Phase Electrical Energy Logger
Four flexible current probes (15 A/150 A/3000 A), Power Log software, voltage leads and clips, colour localisation set, PC interface cable, international AC adapter (115 V/230 V, 50 Hz/60 Hz), soft carrying case, users manual and multi-language manual on CD.	FLUKE-1735	Three-Phase Power Logger

Recommended Accessories

Fluke 1730



i1730-flex 3000/3pk
3000A 24 inch, 3 pack



i1730-flex 6000/3pk
6000A 36 inch, 3 pack



1730-Hanger
Hanging strap



i40s-EL/3pk
40A Clamp-on Current Transformer 3 pack



C1730
Soft case

Recommended Accessories

Fluke 1735



1 1A/10A
Mini Current Clamp, PQ4



1 5A/50A
Mini Current Clamp, PQ4



1 20A/200A
Mini Current Clamp, PQ4



FS3000A/6000A TF-4
36 in, 4 phase Thin Flex

FLUKE 1740 SERIES THREE-PHASE POWER QUALITY



Fluke 1743

Fluke 1744



Fluke 1745



The Fluke 1740 Series Three-Phase Power Quality Loggers are instruments for technicians who troubleshoot and analyse power distribution systems. The included Power Quality Log software quickly assesses the quality of power at the service entrance, substation, or at the load, according to the latest EN50160 standard.

- Plug and play: Setup in minutes with automatic current probe detection and powering
- Installs inside the cabinet: Compact, fully-insulated housing and accessories fit easily in tight spaces, next to live power
- Determines the root cause: Included PQ Log software quickly analyses trends, creates statistical summaries, and generates detailed graphs and tables
- Measure voltage with premium accuracy: IEC61000-4-30 Class-A compliant voltage accuracy (0.1 %)

Fluke 1740 Series Models

Fluke 1743: IP65 waterproof monitor for logging the most common power parameters including V, A, W, VA, VAR, PF, energy, flicker, voltage events and THD.

Fluke 1744: Same features as the 1743, in addition to common power parameters, the Fluke 1744 also measures voltage and current harmonics, interharmonics, mains signaling, unbalance, and frequency.

Fluke 1745: Advanced IP50 power quality logger with the same measurement capability as the 1744, plus real-time LCD, five hour UPS.



Fluke 1750



- Power quality that meets the standard: All measurements comply with IEC61000-4-30 standards for correct evaluation of all measured values including voltage, current, power, harmonics, flicker etc.
- Quick and reliable configuration: PDA wireless “front panel interface” provides a window into what the instrument is recording, enabling quick and reliable configuration even in awkward test locations
- Threshold-free set up: Apply thresholds after data is collected with Fluke Power Analyze Software—no need to worry about missed information due to incorrect setups
- Captures everything: Cross-channel and current triggering capture every measurement, on every channel, every time
- Measure every parameter: Voltage and current on three phases, neutral and ground

SPECIFICATIONS

Features	1743/1744	1745	1750
Measures common power parameters: V, A, W, VA, VAR, PF, energy, flicker, voltage events, and THD	•	•	•
Measures voltage and current harmonics to the 50 th , unbalance, and mains signaling	•	•	•
Transient capture	—	—	•
PDA support	—	—	•
GPS clock synchronization	—	—	—
UPS ride through	3s	>5 hours	5 min per interruption, 60 min total
Dimensions	170 mm x 125 mm x 55 mm (6.9 in x 5.1 in x 2.2 in)	282 mm x 216 mm x 74 mm (11.5 in x 8.8 in x 3 in)	215 mm x 310 mm x 35 mm (8.5 in x 12.2 in x 3.5 in)
Weight (approx.)	0.9 kg (2 lb)	1.4 kg (3 lb)	6.3 kg (14 lb)

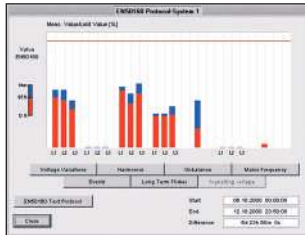
ORDERING INFORMATION

Included accessories	Part No
Four flexible probes 15/150/1500/3000 A with 2 m cable, PQ Log software, RS-232 interface cable and USB adapter, four dolphin clips, test leads for voltages and power supply, colour localisation kit, carrying bag, test certificate with measurement values, users manual, multi-language manual CD.	FLUKE-1745 Power Quality Logger – Memobox FLUKE-1744 Power Quality Logger – Memobox FLUKE-1743 Power Quality Logger – Memobox FLUKE-1750 Three-Phase Power Recorder
Acquisition unit, PDA and charger, power plug adapters, four 400 A current probes, five test leads and clips, SD memory card, Fluke Power View and Fluke Power Analyze software, power cord with international plug set, ethernet cable, colour localisation set, users manual and CD.	

FLUKE 1760 THREE-PHASE POWER QUALITY RECORDER



Fluke 1760



The included PQ Analyze software provides a detailed overview of several power quality parameters on one dashboard according to the EN50160 power quality standard.



Class-A compliance for the most demanding power quality tests

The Fluke 1760 Three-Phase Power Quality Recorder is fully compliant to IEC 61000-4-30 Class-A, for advanced power quality analysis and consistent compliance testing. Designed for analysis of utility and industrial power distribution systems, in medium and low-voltage networks, the Fluke 1760 provides the flexibility to customise thresholds, algorithms, and measurement selections. It has 8 input channels (4 currents/4 voltages or 8 voltages), and captures the most comprehensive details on user selectable parameters.

- Fully Class-A compliant: Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard
- GPS time synchronisation: Correlate data with events or datasets from other instruments with precision
- Flexible and fully configurable thresholds and scale factors: Allows user to pinpoint specific issues by defining the detailed criteria for detection and recording of disturbances.
- 10 MHz, 6000 Vpk waveform capture: Get a detailed picture of even the shortest event
- 2 GB data memory: Enables detailed, simultaneous recording of numerous power parameters for long periods of time
- Comprehensive software (included): Provides trend diagrams for root cause analysis, statistical summaries, report writing and real-time data monitoring in the online mode
- Plug and play: Allows quick setup with automatic sensor detection; sensors are instrument powered, eliminating the need for batteries

Recommended Accessories

1750/1760



3210-PR-TF
1000 A Thin Flexi Clamp



3310-PR-TF
5000 A Thin Flexi Clamp

1760 only



TPS Flex 24-TF



TPS Clamp 10 A/1 A



TPS VoltProbe 600 V

SPECIFICATIONS

Features	1760TR	1760
Online mode (oscilloscope, transients and events)	•	•
Fast transient analysis up to 10 MHz	•	—
Four 600 V voltage probes	•	•
Four dual-range flexible current probes (1000 A/200 A AC)	•	•
GPS time sync receiver	•	•

ORDERING INFORMATION

Included Accessories	Part No	
Acquisition unit, voltage and current probes (depending on model orders) Fluke PQ Analyze software, power cord with international plug set, ethernet cable, colour localisation set, users manual and CD.	FLUKE-1760	Three-Phase Power Recorder
	FLUKE-1760TR	Three-Phase Power Recorder
	FLUKE-1760 BASIC	Three-Phase Power Recorder
	FLUKE-1760TR BASIC	Three-Phase Power Recorder

FLUKE LASER DISTANCE METERS



Fluke 424D

Introducing the next generation of Fluke Laser Distance Meters

Measure farther, with greater accuracy, in more situations.

- Instant measurements up to 100 m (330 ft): Just point, click and done
- Measure with greater accuracy: Up to ± 1 mm, no scales to interpret or misread
- Do the work of two: Instead of holding the tape, your helper can do other jobs
- Speed up the job: Easily measure hard-to-access areas, like high ceilings, without climbing a ladder
- Keep it on the level: New inclination sensor on the Fluke 424D helps with leveling, height tracking, measuring around obstacles
- Reduce estimating errors let the meters do the math: Find area and volume. Easily add and subtract distances. Use Pythagoras calculations for height
- Three-year warranty



Fluke 419D



Fluke 414D



Complies with FDA 21 CFR 1040.10,11 except for deviations pursuant to Laser Notice No 50.



Recommended Kits



- 414D/62 Max+ Kit**
- Fluke 414D Laser Distance Meter
 - Fluke 62 Max+ Infrared Thermometer
 - Soft pouch for 414D

Other Products

Fluke 62 Max and 62 Max+ Infrared Thermometers



Designed with your on-the-job needs in mind, the Fluke 62 MAX and 62 MAX+ infrared thermometers are everything you'd expect from the experts in measurement tools. Small in size, extremely accurate and very easy to use. IP54 rated for dust and water resistance. Precise yet rugged enough to take a 3-metre drop. In fact, the 62 MAX and 62 MAX+ are so tough, they're the only IR thermometers around you can handle without care.

SPECIFICATIONS

Features	Fluke 424D	Fluke 419D	Fluke 414D
Maximum measurement distance	100 m (330 ft)	80 m (260 ft)	50m (165ft)
Accuracy	± 1 mm (± 0.04 in)	± 1 mm (± 0.04 in)	± 2 mm (± 0.08 in)
Battery life (number of measurements)	5000	5000	3000
Area measurement	Yes	Yes	Yes
Volume measurement	Yes	Yes	Yes
Pythagoras calculations	Full	Full	1+2
Plus and minus calculations	Yes	Yes	Yes
Measurement storage	20 complete displays	20 complete displays	5 results
Backlight	Yes	Yes	No
Minimum/Maximum	Yes	Yes	Yes(Pyth)
Audible keypad feedback	Yes	Yes	-
Tripod mount	Yes	Yes	-
Corner angle measurement	Yes	-	-
Stake out	Yes	Yes	-
Dust and splash proof	IP54	IP54	IP40
Compass	Yes	-	-
Inclination sensor	Yes	-	-
Display	4 line	3 line	2 line
Automated end-piece correction	Yes	-	-

ORDERING INFORMATION

Included accessories	Part No
Two AAA batteries, users manual on CD, quick start guide, nylon carrying case.	FLUKE-424D Laser Distance Meter 100m (330 ft)
	FLUKE-419D Laser Distance Meter 80m (260 ft)
	FLUKE-414D Laser Distance Meter 50m (165 ft)
	FLUKE-414D/62 Max+ Laser Distance Meter/Infrared Thermometer Combo Kit
	FLUKE-62 MAX+ Dual laser infrared thermometer, 12:1 spot
	FLUKE-62 MAX Single laser infrared thermometer, 10:1 spot

FLUKE Process Tools

PROCESS TOOLS SELECTION GUIDE

	Documenting Process Calibrators	Multifunction Process Calibrator	Temperature Calibrators				Pressure Calibrators						Loop Calibrators					Process Meters	
			754/753	725/725Ex	726	724	714	712	718/718Ex	717	719	719Pro	721	715	707/707Ex	709/709H	771		772
Model	754/753	725/725Ex	726	724	714	712	718/718Ex	717	719	719Pro	721	715	707/707Ex	709/709H	771	772	773	705	789/787
Measure																			
Voltage DC	300 V	30 V	30 V	30 V	75 mV													28 V	1000 V
Voltage AC (true RMS)	300 V																	30 V	1000 V
Resistance	10 kΩ	3200 Ω	4000 Ω	3200 Ω		3200 Ω													40 MΩ
Current DC	110 mA	24 mA	24 mA	24 mA			24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	100 mA	100 mA	100 mA	24 mA	30 mA, 1 A
Current AC																			
Frequency	50 kHz	10 kHz	15 kHz																20 kHz
Pressure	• ¹	• ¹	• ¹				-0.85 bar to 20 bar (4 ranges)/ up to 700	-0.85 bar to 700 bar (10 ranges)/	-0.85 bar to 7 bar (2 ranges)/ up to 700 bar ⁻¹	-0.8 bar to 20 bar (3 ranges)/ up to 700 bar ⁻¹	Input 1: -0.97 bar to 2.48 bar Input 2: -0.83 bar to 345 bar ⁻³								
Temperature																			
Temperature: RTD types	8	7	8	7	7	7													
Temperature: TC types	13	12	12	12	9	7													
Source/Simulate																			
Voltage DC	15 V	10 V	20 V	10 V	75 mV							10 V							
Resistance	10 kΩ	3200 Ω	4000 Ω	3200 Ω		3200 Ω													
mA DC/% scale	22 mA	24 mA	24 mA	24 mA															24 mA
mA source; auto step, auto ramp																			
Frequency	50 kHz	10 kHz	15 kHz																
Temperature: RTD types	8	7	8	7	7	7													
Temperature: TC types	13	10	10	10	9	7													
Record																			
Min/Max	•						•	•	•	•	•								•
Hold							•	•	•	•									•
As Found/As Left results	•																		
Log data	•																		
Upload data to PC	•																		
Remote operation		•/-	•																•/-
Features																			
Loop supply	26 V	24 V/12 V	24 V	24 V			24 V/-	24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V/-
Hart communication	•/-						•												
Integrated hand pressure pump																			
Electric Pump																			
Intrinsically safe (ATEX)		725Ex					718Ex												
NIST traceable certification	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Warranty in years	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

¹ Fluke 700 pressure modules required
² Ranges for the internal sensor.

FLUKE 771, 772 AND 773 mA PROCESS CLAMP METERS



Fluke 771

Fluke 772

Fluke 773



Don't break the loop on 4-20mA signal measurements and save time with the Fluke 771, 772 and 773 milliamp Process Clamp Meters.

Use the Fluke 772 and 773 to:

- Source 4-20 mA signals for testing control system I/O or I/Ps
- Simulate 4-20 mA signals for testing control system I/O
- Measure 4-20 mA signals with in-circuit measurement
- Power a transmitter with the 24 V loop power supply
- Automatically ramp and step change the 4-20 mA output for remote testing

Use the Fluke 773 to:

- Measure DC voltage to verify 24 V power supplies or voltage I/O signals
- Source DC voltage to test voltage input devices
- Scaled mA output signal enables a logging DMM (289) to record 4-20 mA signal without breaking the loop
- mA in/out: simultaneously source a mA signal while measuring a mA signal with the clamp

Fluke 771, 772 and 773 mA Process Clamp Meters pay for themselves.

- The more you use them the more money you save
- Measuring 4 to 20 mA signals (five) times without operator intervention can pay for the 771
- Saving a trip back to shop to get a loop calibrator can pay for the price difference of the 772
- Saving a trip back to the shop for a voltage test source can pay for the price difference of the 773

Recommended Accessories



TL220
SureGrip Industrial
Test Lead Set



C550
Tool Bag

FEATURES

	mA measure w/ jaw	mA measure In circuit	mA source	mA sim	Loop power 24 V	DCV source 0-10 V	DCV measure 0-30 V	Scaled mA output to mA input	mA in/out
771	•	—	—	—	—	—	—	—	—
772	•	•	•	•	•	—	—	—	—
773	•	•	•	•	•	•	•	•	•

SPECIFICATIONS

	Function	Resolution and range	Accuracy	Notes
771, 772, 773	mA measurement	0 mA to 20.99 mA	0.2 % + 5 counts	Measured by clamp
		21.0 mA to 100.0 mA	1 % + 5 counts	—
772 and 773	mA measurement	0 mA to 24.00 mA	0.2 % + 2 counts	Measured in series with test jacks
772 and 773	mA source	0 mA to 24.00 mA	0.2 % + 2 counts	Maximum mA drive: 24 mA into 1,000 ohms
772 and 773	mA simulate	0 mA to 24.00 mA	0.2 % + 2 counts	Maximum voltage 50 V DC
773	Voltage source	0 V DC to 10.00 V DC	0.2 % + 2 counts	2 mA maximum drive current
773	Voltage measure	0 V DC to 30.00 V DC	0.2 % + 2 counts	—

General specifications	771	772	773
Battery	Two 1.5 V, Alkaline, IEC LR6	Four 1.5 V, Alkaline, IEC LR6	
Working hours	20 hours typical	12 hours @ 12 mA source into 500 ohms	
Size (HxWxL)	59 mm x 38 mm x 212 mm (2.32 in x 1.5 in x 8.35 in)	41.3 mm x 76 mm x 248 mm (1.625 in x 3 in x 9.75 in)	
Weight	260 g (9.1 oz)	415 g (14 oz)	
Operating temperature	-10 °C to 50 °C		
IP rating	IP 40		
Warranty	Three-year, one-year on mA clamp assembly and cable		

ORDERING INFORMATION

Included accessories	Part No
Soft carrying case, users manual.	FLUKE-771 Milliamp Process Clamp Meter
Test leads, alligator clips and hanging strap, soft carrying case, users manual.	FLUKE-772 Milliamp Process Clamp Meter
	FLUKE-773 Milliamp Process Clamp Meter

FLUKE 787 AND 789 MA PROCESSMETERS



Fluke 789

Fluke 787



(Fluke 789 only)

The Fluke 787 and 789 ProcessMeters combine a Digital Multimeter and a Loop Calibrator in one rugged handheld tool, giving process technicians double the power.

Fluke 789 ProcessMeter

With the Fluke 789 ProcessMeter™, process technicians can do a lot more while carrying a lot less.

- 24 V loop power supply
- CAT IV 600V rating
- HART mode setting with loop power (adds 250 ohm resistor)
- Double-sized, dual display
- 20 mA drive into 1200 ohms
- Backlight with two brightness settings
- 0 % to 100 % mA Span Check buttons to toggle between 4-20 mA
- Infrared I/O serial port compatible with FlukeView® Forms Software
- Improved battery power with four AA batteries
- Plus all the proven 787 features

Fluke 787 ProcessMeter

- Simultaneous mA and % of scale readout on mA output
- 25 % Manual Step plus Auto Step and Auto Ramp on mA output
- Min/Max/Avg/Hold/Relative modes
- Externally accessible battery for easy changes

Recommended Accessories



TPAK
Magnetic
Meter Hanger



TL220
SureGrip Industrial
Test Lead Set



80T-150UA
Universal
Temperature Probe



TL175
TwistGuard™
Test Leads



C115
Soft Carrying Case



80PK-8
Pipe Clamp
Temperature Probe

SPECIFICATIONS

Measurement function	Best accuracy range and resolution	(% of reading + LSD)	
V DC	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1 % + 1	
V DC (true-rms)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7 % + 2	
mA DC	30.000 mA	.05 % + 2	
A DC	1.000 A (0.440 A continuous)	0.2 % + 2	
A AC	1.000 A (0.440 A continuous)	1 % + 2	
Resistance	400.0 W, 4.000 k, 40.00 k, 400.0 k, 4.0 M, 40 M	0.2 % + 1	
Frequency (0.5 Hz to 20 kHz)	199.99 Hz, 1999.9 Hz, 19.999 kHz	.005 % + 1	
Diode test	789: 2.000 V (shows diode voltage drop) 787: 2.400 V (shows diode voltage drop)	2 % + 1 2 % + 1	
Continuity	Beeps for resistance < approx. 100 ohms		
Output function	Range and resolution	Drive capability	Accuracy (% of span)
DC current output (internal battery operation)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA (selectable at power-up) Over-range to 24.000 mA	789: 24 V compliance or, 1,200 ohms, @ 20 mA 787: 12 V compliance or, 500 ohms, @ 20 mA	.05 %
DC current simulate (external 24 V loop supply, up to 48 V on 789 only)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 ohms, @ 20 mA	.05 %
24 V loop supply	789: Minimum 24 V, 787: Not available	250 ohms @ 20 mA	> 24 V
Current adjustment modes	Manual: coarse, fine, 25 % and 100 % step (100 % step 789 only) Automatic: slow ramp, fast ramp, 25 % step		

Temperature range of 18 °C to 28 °C, for one year after calibration.

Maximum voltage applied between any jack and earth ground: 1000 V rms.

Storage temperature: -40 °C to 60 °C.

Operating temperature: -20 °C to 55 °C.

Relative humidity: 95 % up to 30 °C; 75 % up to 40 °C; 45 % up to 50 °C; 35 % up to 55 °C.

Safety: Designed in accordance with EN61010, ANSI/ISA S82.01-1994 and CAN/CSA C22.2 No. 61010.1-92 Over-voltage CAT III.

Size (HxWxD)/weight (787 with holster): 52 mm x 98 mm x 201 mm (2.06 in x 3.86 in x 7.93 in)/638 g (1.4 lb).

Size (HxWxD)/weight (789): 50 mm x 100 mm x 203 mm (1.97 in x 3.94 in x 8.00 in)/600 g (1.3 lb).

Warranty: Three-year.

ORDERING INFORMATION

Included accessories	Part No	Part No
Test leads, alligator clips, 4 AA alkaline batteries (installed), quick reference guide, users manual, multi-language manual CD.	FLUKE-789	ProcessMeter
Test leads, alligator clips, holster with test lead storage, one 9 V alkaline battery (installed), quick reference guide, users manual, multi-language manual CD.	FLUKE-787	ProcessMeter

FLUKE 715, 707 AND 705 LOOP CALIBRATORS

Complete family of Volt/mA calibrators



Fluke 715



Fluke 715 Volt/mA Calibrator

- Source voltage to 200 mV or 20 V
- Measure loop current (0-20 mA, 4-20 mA) signals with 0.01 % accuracy and 1 µA resolution
- Measure voltage output process signals from PLCs, transmitters
- Source or simulate 4-20 mA loop current
- 24 V loop supply with simultaneous current measurement
- Ramp and Step Ramp output functions

Fluke 707 and 705

- Innovative output adjustment dial on 707 provides 1 µA and 100 µA resolution and one-hand operation
- Large display and simple interface for ease of use
- Simultaneous mA and % readout for quick, easy interpretation of readings
- mA accuracy of 0.015 % on the Fluke 707 and 0.02 % on the 705
- HART™ mode on 707 connects 250 ohm resistor in series with 24 V loop for compatibility with HART communicators
- Push button 25 % steps for fast, easy linearity checks
- “Span Check” for fast confirmation of zero and span
- Selectable slow and fast linear step ramp provide ramping outputs for valve slewing, remote testing and loop functional tests
- 24 V internal loop supply, so you can power and read a transmitter at the same time without carrying a DMM
- 0-20 mA or 4-20 mA default start up modes



Fluke 707

Specialty Models

Fluke 707 Ex Intrinsically Safe Loop Calibrator



Recommended Accessories



TL28A Heavy Duty Test Lead Set



TL220 SureGrip Industrial Test Lead Set



C550 Tool Bag



PV350 Pressure Vacuum Module

Fluke 709/709H Precision Current Loop Calibrators

- Best-in-class accuracy at 0.01 % reading
- HART Communication (709H only) communicate with and test HART smart instruments
- Compact rugged design
- Intuitive user interface with quick-set knob for fast setup, easy to use
- 24 V DC loop power with mA measure mode
- Resolution of 1 µA on mA ranges
- Built in selectable 250 Ω resistor for HART communications
- Simple two wire connection for all measurements
- Valve test (source and simulate defined mA values with % keys)
- Upload logged mA measurements and HART device data using the 709H with optional 709H/TRACK software

For more information, go to www.fluke.com/au/709H



HART is a registered trade mark of the HART Communications Foundation.

SPECIFICATIONS

Functions	Fluke 705 and 707	Fluke 715
Voltage measurement		
Range	0 V to 28 V	0 mV to 200 mV 0 V to 25 V
Resolution	1 mV	10 µV 1 mV
Accuracy	705: 0.025 % Rdg + 1 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % Rdg + 2 LSD
Current measurement		
Range	0 mA to 24 mA	0 mA to 24 mA
Resolution	0.001 mA	0.001 mA
Accuracy	705: 0.02 % Rdg + 2 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % + 2 LSD
Current sourcing		
Range	0 mA to 20 mA or 4 mA to 20 mA	0 mA to 20 mA or 4 mA to 20 mA
Accuracy	705: 0.025 % Rdg + 2 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % Rdg + 2 LSD
Drive capability	705: 1000 W @ 24 mA 707: 1200 W @ 24 mA 707Ex: 700 W @ 20 mA	1000 W @ 24 mA
Loop power while measuring mA	24 V	24 V
Voltage sourcing		0 mV to 200 mV or 0 V to 20 V
Display current and % of span	Yes	mA or %
Auto step, auto ramp	Yes	Yes
Span Check	Yes	Yes
Battery life	18 hours typical, at 12 mA	18 hours typical, at 12 mA
Warranty	Three-year	

ORDERING INFORMATION

Included accessories	Part No	
Test leads, alligator clips, holster, traceable calibration report and data, single 9 V alkaline battery, instruction sheet (14 languages).	FLUKE-715	Volt/mA Calibrator
	FLUKE-707	Loop Calibrator
	FLUKE-707 Ex	Intrinsically Safe Loop Calibrator
	FLUKE-705	Loop Calibrator
Test leads, test probes and alligator clips. Quick reference guide, traceable certificate of calibration, manual on CD. Additional hook clips (709H only) for HART communication.	FLUKE-709	Precision Current Loop Calibrator
	FLUKE-709H	Precision Current Loop Calibrator-HART
Special Lemo to USB cable for upload-download, software media and manual on CD.	FLUKE-709H/TRACK	Datalogging Cable and Software

FLUKE 750 SERIES DOCUMENTING PROCESS CALIBRATORS

Calibrate/troubleshoot process control instrumentation



Fluke 754

- Calibrate temperature, pressure, voltage, current, resistance and frequency instruments
- Built-in procedures for transmitters, square root transmitters, pressure and temperature switches
- Simultaneously measure and source
- Automatically capture calibration results
- Document procedures and results to meet ISO 9000, EPA, FDA, OSHA and other requirements
- Measure/simulate 13 types of thermocouples and eight RTDs
- Store up to 8,000 readings in data logging mode
- Protected against dirt, dust and moisture; unaffected by vibration
- Includes a USB interface
- Operate in English, French, German, Italian and Spanish
- One and two year calibration cycles and a three year warranty (one-year for pressure modules)

Fluke 754: Get HART-ability™

The Fluke 754 offers all of the capabilities of the 753, plus the ability to calibrate, maintain and troubleshoot HART instrumentation. Integrated HART communication functions permit you to monitor, control and calibrate HART instrumentation. It handles fast pulsed instruments such as RTD transmitters and PLCs responding to pulses within 1 ms.

For more information, go to www.fluke.com/au/754



Fluke 753: A complete documenting calibrator

The 753 is a complete multifunction documenting calibrator and includes a PC interface that lets you load procedures, lists and instructions created with software—or unload data for printing, archiving, and analysis. The 753 can hold a full week of calibrations and procedures.



Fluke 753

Recommended Software

Instrumentation management software

The Fluke 753 and 754 are compatible with Fluke 750SW DPC/TRACK2 software and with software from Cornerstone, Emerson, Honeywell, On Time Support, Prime Technologies, Yokogawa, Intools, Meridium and Beamex.

For more information, visit www.fluke.com.au

Recommended Accessories



700Pxx Pressure Modules



750SW DPC/TRACK2 Software



700PTP-1 Pneumatic Test Pump



C799 Field Soft Case

SPECIFICATIONS

Functions	Measure	Sourcing
DC voltage	0.020 % reading + 0.005 % full scale	0.01 % output + 0.005 % full scale
DC current	0.01 % reading + 5 µA	0.01 % output + 0.003 mA
Resistance	0.05 % reading + 50 mΩ	0.01 % output + 240 mΩ
Frequency	0 to 50 KHz, ± 0.5 Hz to 1100 Hz	0 to 50 KHz, ± 0.1 Hz to 1099.9 Hz
Thermocouples	0.3 °C	0.2 °C
RTDs	0.3 °C	0.1 °C
Pressure	To 0.025 % of full scale, per pressure module specifications	

Summary specifications: best case, mid-range, one year.
 Battery life: Typically over eight hours
 Internal battery pack: Li ion 4400 mAh
 Battery replacement: Via twist lock fastener without opening calibrator; no tools required
 Weight: 1.2 kg (2.7 lb)
 Size (HxWxD): 245 mm x 136 mm x 63 mm (9.6 in x 5.4 in x 2.5 in)

ORDERING INFORMATION

Included accessories	Part No	
Three sets of stackable test leads, three sets of test probes with three sets of "extended tooth" alligator clips, two sets of hook clips, li-ion battery pack, battery charger, field soft case, USB communication cable, getting started guide, instruction manual on CD, traceable certificate of calibration, DPC/TRACK2 sample software that enables upload and printing of calibration records. Model Fluke-754 includes HART communication cable.	FLUKE-754	Documenting Process Calibrator-HART
	FLUKE-753	Documenting Process Calibrator
Software media, instruction manual, USB cable.	FLUKE-750SW	DPC/TRACK2 Software

FLUKE 726 AND 725 MULTIFUNCTION PROCESS CALIBRATORS



Fluke 726

Fluke 726 Precision Multifunction Process Calibrator

The Fluke 726 measures and sources nearly all process parameters and can calibrate almost anything. Interpret results without the help of a calculator and store measurement data for later analysis.

- Precise measurement and calibration source performance, accuracies of 0.01 %
- Transmitter error % calculation, interpret calibration results without a calculator
- Memory storage for up to eight calibration results, return stored calibration data from the field for later analysis
- Frequency totaliser and frequency pulse train source mode for enhanced flowmeter testing
- HART mode inserts 250 ohm resistor in mA measure and source for compatibility with HART instrumentation
- Integrated pressure switch test allows you to capture the set, reset and deadband of a switch
- Custom RTD curves, add calibration constants for certified RTD probes for temperature measurement
- Voltage input protection design for improved reliability



Fluke 725 Multifunction Process Calibrator

- Measure volts, mA, RTDs, thermocouples, frequency and ohms to test sensors and transmitters
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms and pressure to calibrate transmitters
- Measure/source pressure using any of 29 Fluke 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests
- Support flow meter testing with frequency and counts per minute (CPM) functions
- Perform fast linearity tests with auto step and auto ramp features



Intrinsically safe version available

SPECIFICATIONS

Measure and source

Functions	Range or type	Resolution	Accuracy	Notes
Voltage	0 to 100 mV 0 to 10 V (source) 0 to 20 V (source) 0 to 30 V (measure)	0.01 mV 0.01 V 0.01 V 0.01 V	0.01 % , 0.02 % Rdg + 2 LSD	Max load, 1 mA
mA	0 to 24	0.001 mA	0.01 % , 0.02 % Rdg + 2 LSD	Max load, 1000 W
mV (TC terminals)	-10.00 mV to +75.00 mV	.01 mV	0.01 % , 0.02 % of range + 1 LSD	—
Ohms	15 W to 3,200 W 5 W to 4,000 W	0.01 W to 0.1 W	0.10 W to 1.0 W 0.015 %	—
Hz - CPM	2.0 to 1,000 CPM 1 to 1000 Hz 1.0 to 10.0 kHz 10.0 to 15.0 kHz	0.1 CPM 1 Hz 0.1 kHz 0.1 kHz	± 0.05 % ± 0.05 % ± 0.25 % ± 0.05 %	Source; 5 V p-p 1 V to 20 V p-p squarewave, -0.1 V offset
Loop supply	24 V DC	N/A	10 %	—
T/C	J, K, T, E, L, N, U, XK	0.1 °C, 0.1 °F	to 0.7 °C to 0.2 °C	—
T/C	B, R, S, BP	1 °C, 1 °F	to 1.7 °C to 1.2 °C	—
RTDs	Cu (10) , Ni120 (672) Pt 100, 200, 500, 1000 (385) Pt 100 (3916), Pt 100 (3926)	0.01 °C , 0.01 °F 0.1 °C, 0.1 °F	to 0.15 °C to 0.2 °C	—

Unique 726 specifications are bolded.

Simultaneous function capability	Channel A	Channel B
24.000 mA DC	M	M or S
24.000 mA DC with 24 V loop supply	M	—
100.00 mV DC	—	M or S
30.000 V DC measure	M	—
20.000 V DC measure; 10.000 V DC source; 20.000 V DC source	—	M or S
15 Ohms to 3200 Ohms (725); 5 Ohms to 4000 Ohms (726)	—	M or S
Thermocouple J, K, T, E, R, S, B, M, L, U, N, XK, BP	—	M or S
RTD Cu 10, Ni120; Pt100 (392); Pt100 (JIS); Pt100, 200, 500, 1000 (385), XK and BP	—	M or S
Pressure (requires Fluke 700PXX Modules)	M	M used as S
Frequency; 10 kHz; (15 kHz 726)	—	M or S

M = Measure, S = Source/Simulate

General specifications

Storage temperature:
-20 °C to 71 °C
Operating temperature:
-10 °C to 55 °C
Relative humidity:
90 % (10 °C to 30 °C);
75 % (30 °C to 40 °C);
45 % (40 °C to 50 °C);
35 % (50 °C to 55 °C)
Shock: 1 metre drop test
Safety: CSA C22.2
No. 1010.1:1992
EMC: EN50082-1:1992 and
EN55022:1994 Class B
Size (HxWxD): 200 mm x
96 mm x 47 mm (7.9 in x
3.8 in x 1.9 in)
Weight: 650 g (23 oz)
Battery: Four AA alkaline
batteries
Battery life: 25 hours typical
Warranty: Three-years

Recommended Accessories



ORDERING INFORMATION

Included accessories	Part No
Test leads, test clips, one pair of stackable test leads, product overview manual, users manual in 14 languages on CD.	FLUKE-726 Precision Multifunction Process Calibrator
	FLUKE-725 Ex Intrinsically Safe Precision Multifunction Process Calibrator
	FLUKE-725 Multifunction Process Calibrator

FLUKE 717, 718 AND 719 PRESSURE CALIBRATORS

Accurate and rugged, temperature calibration tools



Fluke 719



Fluke 719 Electric Pressure Calibrators

- Electric pump enables one-handed pressure pumping and makes pressure calibration quicker and easier
- Best in class 0.025 % pressure measurement accuracy
- Programmable pump limit settings can eliminate over-pressurisation—set 'pump to' pressure values
- Two ranges, 30 psi and 100 psi

Fluke 718 Pressure Calibrators

- 1, 30, 100 and 300 psi ranges available
- Pump to 300 psi, 20 bar with internal pump (718-300G)
- 718-1G includes special low volume pump and high measurement resolution for low pressure calibration



Fluke 718



Fluke 717

Fluke 717 Pressure Calibrators

- Measure up to 10,000 psi/690 bar sensor (10000G model)
- Compatible with non-corrosive gases and liquids

718 and 719

- Precision vernier for fine pressure adjustment
- Variable release rate bleed valve for controlled pressure release

717, 718 and 719 common features

- Pressure switch test makes a difficult task easy, captures set, reset and deadband values of a pressure switch
- 717 and 718, measure pressure to 0.025 % of full scale with internal sensor
- Measure mA with 0.015 % accuracy and 0.001 mA resolution, while sourcing 24 V loop power

SPECIFICATIONS

Part No	Range	Resolution	Comment
717-1	+/- 1 psi, 27.5 in H ₂ O, (-7 - +7 kPa)	+0.0001 psi, 0.0001 kPa, 0.0001 in H ₂ O	Fluke 718 dry air only and includes on board pump
718-1G			
717-15G	-12 to 15 psi, -83 to 103 kPa	0.001 psi, 0.01 kPa, 0.01 in H ₂ O	—
717-30G			
718-30G* and 719-30G	-12 to +30 psi, (-83 to 207 kPa)	0.001 psi, 0.001 kPa, 0.001 in H ₂ O	Fluke 718 and Fluke 719 dry air only and includes on board pump
717-100G			
718-100G*	-12 to +100 psi, (-83 to 690 kPa)	0.01 psi, 0.01 kPa, 0.01 in H ₂ O	Fluke 718 and Fluke 719 dry air only and includes on board pump
717-300G			
718-300G* and 719-100G	-12 to +300 psi, (-83 to +2070 kPa)	0.01 psi, 0.01 kPa, 0.01 in H ₂ O	Fluke 718 dry air only and includes on board pump
717-500G	0-500 psi, 0-3450 kPa	0.01 psi, 0.1 kPa	Compatible with non-corrosive gases and fluids
717-1000G	0-1000 psi, 0-6900 kPa	0.01 psi, 0.1 kPa	Compatible with non-corrosive gases and fluids
717-1500G	0-1500 psi, 0-10342 kPa	0.1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
717-3000G	0-3000 psi, 0-20700 kPa	0.1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
717-5000G	0-5000 psi, 0-34500 kPa	0.1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
717-10000G	0-10000 psi, 0-69000 kPa	1 psi, 1 kPa	Compatible with non-corrosive gases and fluids
Pressure accuracy	0.035 % of range, 1 year. 0.025 % for 6 months, 717 and 718-1G: 0.05 % 6 months, 1 year, 718 and 717-300G 0.035 % 6 months, 0.05 % 1 year		
mA measurement	0-24 mA range	0.001 mA resolution	Accuracy: ± 0.015 % + 1 count
Loop power	24 V dc		Accuracy: ± 10 %

Warranty: Three-year on calibrator, one-year on pump.

ORDERING INFORMATION

Included accessories	Part No			
Test leads, alligator clips, holster, test hose (719), one 9 V alkaline battery (two 9 V batteries in 718 and 719), safety sheet.	FLUKE-719 30G	Electric Pressure Calibrator	FLUKE-719-100G	Electric Pressure Calibrator
	FLUKE-718 1G	Pressure Calibrator	FLUKE-718 30US	Pressure Calibrator
	FLUKE-718 100US	Pressure Calibrator	FLUKE-718 300G	Pressure Calibrator
	FLUKE-718Ex 30G	Intrically Safe Pressure Calibrator	FLUKE-718Ex 100G	Intrically Safe Pressure Calibrator
	FLUKE-717 1G	Pressure Calibrator		
	FLUKE-717 15G	Pressure Calibrator	FLUKE-717 30G	Pressure Calibrator
	FLUKE-717 100G	Pressure Calibrator	FLUKE-717 300G	Pressure Calibrator
	FLUKE-717 500G	Pressure Calibrator	FLUKE-717 1000G	Pressure Calibrator
	FLUKE-717 1500G	Pressure Calibrator	FLUKE-717 3000G	Pressure Calibrator
	FLUKE-717 5000G	Pressure Calibrator	FLUKE-717 10000G	Pressure Calibrator

Recommended Accessories



700ILF In-Line Filter



700LTP-1 Low Pressure Test Pump



700HTP-2 Hydraulic Test Pump



C116 Large Soft Case

Fluke 718Ex Intrinsically Safe Pressure Calibrator

The Fluke 718Ex offers a convenient, self contained solution for pressure measurements and calibration.

- ATEX II
- 1 G Ex ia IIC T4
- 30, 100, and 300 psi ranges (2, 7, and 20 bar)
- Pressure measurement to 0.05% of full span, using an internal pressure sensor.
- Pressure measurement to 200 bar using any of eight intrinsically safe Fluke 700PEX Pressure Modules



Fluke 700 Series Pressure Modules

- 29 pressure modules
- 8 intrinsically safe pressure modules*
- Ranges from 1.000 in H₂O (0.2491 kPa) to 10,000 psi (68.948 MPa)
- Gage, differential, dual (compound), absolute and vacuum modules
- Rugged cases protect the modules from harsh environments
- Full-accuracy performance from 0 °C to 50 °C



*For use with 718Ex and 725Ex only



Fluke Process Calibrators in this catalogue displaying the Pressure Enabled symbol display readings from the 700 Series Pressure Modules.



Fluke 719Pro



Eliminate the hassle of hand pumping!

The new Fluke 719Pro is an exciting enhancement of the popular original 719 pressure calibrators. Notable improvements include expanding the pressure measurement range of the 100 PSI model up to 150 PSI and the addition of a 300 PSI range. The 719Pro adds a backlit display and precision temperature measurement with the addition of an accessory RTD probe available as a new accessory.

Features:

- Electric pump for one handed pressure calibration
- Best in class pressure measurement uncertainty of 0.025%
- Variable release rate bleed valve for easy pressure adjustment
- 30 PSI, 150 PSI and the long requested 300 PSI (2,10 and 20 bar) pressure ranges
- Programmable pressure calibrator pump limit eliminates over-pressurisation and allows the user to program target pressures for pumping
- Extended pressure measurement range with any of 29 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to test valves and I/Ps
- Simulate mA signals to troubleshoot 4-20 mA loops
- Test pressure switches with built in switch test function
- Power transmitters during test using 24 V loop supply with simultaneous mA measurement

Pressure Modules

Fluke 700 Series Pressure Modules

- 29 pressure modules
- 8 intrinsically safe pressure modules*
- Ranges from 1.000 in H₂O (0.2491 kPa) to 10,000 psi (68.948 MPa)
- Gage, differential, dual (compound), absolute and vacuum modules
- Rugged cases protect the modules from harsh environments
- Full-accuracy performance from 0 °C to 50 °C



Fluke Process Calibrators in this catalogue displaying the Pressure Enabled symbol display readings from the 700 Series Pressure Modules.

SPECIFICATIONS

Pressure measurement	Range	Resolution	Accuracy	Comment
Fluke-719Pro-30G	-12 to 30 PSI / -0.8 to 2 bar	0.001 PSI, 0.0001 bar	± 0.025 % of full scale, 6 months ± 0.035 % of full scale, 1 year	Dry air and non-corrosive gas only
Fluke-719Pro-150G	-12 to 150 PSI / -0.8 to 10 bar	0.01 PSI, 0.001 bar		
Fluke-719Pro-300G	-12 to 300 PSI / -0.8 to 20 bar	0.01 PSI, 0.001 bar		
Temperature effect (all ranges)			Add ± 0.002 % F.S./°C for temps outside of 15 °C to 35 °C	No effect on accuracy on all functions from 15 °C to 35 °C
Function	Range	Resolution	Accuracy (1 year)	Comment
mA DC (simulation and measurement)	0-24 mA DC	0.001 mA	± 0.015 % of reading ± 2 counts	1000 Ohm maximum load in mA source, 26 V DC maximum voltage in mA simulate
Volts DC (measurement only)	30 V DC	0.001 V	± 0.015 % of reading ± 2 counts	No AC voltage measurement, do not exceed 30 V DC
Temperature (measurement only, Pt100 RTD)	-50 to 150 °C	0.01 °C 0.01 °F	Temperature ± 0.1 °C	± 0.25 °C combined uncertainty when using 720 RTD probe (optional accessory)
Loop power supply	24 V DC	N/A	24 mA at 24 V	
Temperature effect (all functions)			Add ± 0.002 % F.S./°C for temps outside of 15 °C to 35 °C	No effect on accuracy on all functions from 15 °C to 35 °C
Environmental				
Operating temperature			-10 °C to +50 °C	
Storage temperature (without batteries)			-20 °C to +60 °C	
Power requirements				
Battery			Eight (8) standard Alkaline AA batteries	
Battery life			300 pump cycles to 150 PSI minimum; 1000 pump cycles to 30 PSI; 100 pump cycles to 300 PSI minimum	
Physical				
Dimensions (HxWxD)			24.13 cm x 11.18 cm x 7 cm	
Weight			With holster 1.2 kg	
Connections				
Pressure			1/8 inch female NPT	
Electrical			Standard banana jacks	
RTD			4 pin miniature circular	
External module			6 pin miniature circular	

FLUKE 721 PRECISION DUAL PRESSURE CALIBRATORS

NEW



Fluke 721



The new Fluke 721 family of dual pressure calibrator products are ideal for gas custody transfer measurements with ranges, accuracies and capabilities specifically tailored to address gas custody transfers. Add the optional RTD probe for a complete solution for testing flow computers and instruments used in gas flow measurement.

Features:

- Two isolated, stainless steel, pressure sensors with 0.025% F.S. accuracy
- 14 available pressure range configurations standard
- Temperature-compensation ensures accuracy in field applications
- External pressure module connection supports all pressure modules (29 ranges) for even more measurement capability
- Pt100 RTD input for temperature measurement, accurate to 0.1°C (0.2°F)
- Internal 24 V Loop Power Supply can power a transmitter under test
- Large graphic style LCD with backlight can be configured to display up to 3 inputs simultaneously
- Ideal for gas flow calibration (custody transfer) applications
- Pressure displayed in the user's choice of 19 engineering units

Recommended Accessories



720RTD
RTD Probe
for 721 & 719Pro

SPECIFICATIONS - 1 YEAR

Model	Description	Low Pressure Sensor			High Pressure Sensor		
		Range sensor 1	Resolution sensor 1	Accuracy sensor 1	Range sensor 2	Resolution sensor 2	Accuracy sensor 2
Fluke-721-1601	Dual Sensor Pressure Calibrator, 16 PSIG, 100 PSIG	-14 psi to +16 psi -0.97 bar to 1.1 bar	0.001 psi, 0.0001 bar	0.025 % of full scale	-12 psi to +100 psi -0.83 bar to 6.9 bar	0.01 psi 0.0001 bar	0.025 % of full scale
Fluke-721-1603	Dual Sensor Pressure Calibrator, 16 PSIG, 300 PSIG				-12 psi to +300 psi -0.83 bar to 20 bar	0.01 psi 0.001 bar	
Fluke-721-1605	Dual Sensor Pressure Calibrator, 16 PSIG, 500 PSIG				-12 psi to +500 psi -0.83 bar to 34.5 bar	0.01 psi 0.001 bar	
Fluke-721-1610	Dual Sensor Pressure Calibrator, 16 PSIG, 1000 PSIG				0 psi to +1000 psi 0.00 bar to 69 bar	0.1 psi 0.001 bar	
Fluke-721-1615	Dual Sensor Pressure Calibrator, 16 PSIG, 1500 PSIG				0 psi to +1 500 psi 0.00 bar to 103.4 bar	0.1 psi 0.001 bar	
Fluke-721-1630	Dual Sensor Pressure Calibrator, 16 PSIG, 3 000 PSIG				0 psi to +3 000 psi 0.00 bar to 200 bar	0.1 psi 0.01 bar	
Fluke-721-1650	Dual Sensor Pressure Calibrator, 16 PSIG, 5 000 PSIG				0 psi to +5 000 psi 0.00 bar to 345 bar	0.1 psi 0.01 bar	
Fluke-721-3601	Dual Sensor Pressure Calibrator, 36 PSIG, 100 PSIG	-14 psi to +36 psi -0.97 bar to 2.48 bar	0.001 psi, 0.0001 bar	0.025 % of full scale	-12 psi to +100 psi -0.83 bar to 6,9 bar	0.01 psi 0.0001 bar	0.025 % of full scale
Fluke-721-3603	Dual Sensor Pressure Calibrator, 36 PSIG, 300 PSIG				-12 psi to +300 psi -0.83 bar to 20 bar	0.01 psi 0.001 bar	
Fluke-721-3605	Dual Sensor Pressure Calibrator, 36 PSIG, 500 PSIG				-12 psi to +500 psi -0.83 bar to 34.5 bar	0.01 psi 0.001 bar	
Fluke-721-3610	Dual Sensor Pressure Calibrator, 36 PSIG, 1000 PSIG				0 psi to +1 000 psi 0.00 bar to 69 bar	0.1 psi 0.001 bar	
Fluke-721-3615	Dual Sensor Pressure Calibrator, 36 PSIG, 1500 PSIG				0 psi to +1 500 psi 0.00 bar to 103.4 bar	0.1 psi 0.01 bar	
Fluke-721-3630	Dual Sensor Pressure Calibrator, 36 PSIG, 3 000 PSIG				0 psi to +3 000 psi 0.00 bar to 200 bar	0.1 psi 0.01 bar	
Fluke-721-3650	Dual Sensor Pressure Calibrator, 36 PSIG, 5 000 PSIG				0 psi to +5 000 psi 0.00 bar to 345 bar	0.1 psi 0.01 bar	

TEST EQUIPMENT

FLUKE 710 SERIES TEMPERATURE CALIBRATORS



Fluke 714



The Fluke 710 Series (724, 714, 712) temperature calibrators deliver outstanding performance, durability and reliability. With a push-button interface, similar to the multifunction Fluke 750 Series Documenting Process Calibrators, the 710 Series are easy to use. Each calibrator is EMI tolerant, dust-and splash-resistant, and features a removable battery door for quick battery changes.

Fluke 714 Thermocouple Calibrator

- Measure temperature from TC probes
- Simulate TC output
- Operable with nine types of thermocouples
- Calibrate linear TC transmitter with mV source function
- Selectable °C or °F
- 25 % stepping, auto-step and auto-ramp
- Available as accessories: Fluke 700TC1 and TC2 Thermocouple Mini-plug Kits
- Ramp and Step Ramp output functions

Fluke 712 RTD Calibrator

- Compatible with pulsed current transmitters
- Measure temperature from an RTD probe
- Simulate RTD output
- Operates with seven types of RTD
- Measure additional RTDs using ohms measurement function
- Simulate additional RTDs using ohms source function
- C° or F° selectable
- 25 % stepping, auto-step and auto-ramp
- Ramp and Step Ramp output functions



Specialty Model

Fluke 724 Temperature Calibrator

- Easy to read dual display allows for input and output simultaneous view
- Source/measure TCs, RTDs, volts and ohms
- Measure mA while supplying loop power
- 25 % and 100 % stepping, auto-step and auto ramp



Recommended Accessories



SPECIFICATIONS

Part No	Functions	Range	Resolution	Accuracy	Notes
Fluke 712	Measure/simulate RTD	-200 °C to 800 °C (Pt 100-385)	0.1 °C, 0.1 °F	0.2 °C, 0.4 °F (Pt 100-385)	Pt; 100 200 500 1000 (385); Pt 100 (392); Pt 100 (392) JIS; Ni 120 (672)
	Measure/simulate resistance	5 W to 4000 W	0.1 W	0.025 %	—
Fluke 714	Measure/simulate thermocouple	-200 °C to 1800 °C, depending on type (K, -200 °C to 1370 °C)	0.1 °C or °F (1 °C or °F; BRS)	0.5 °C, 0.8 °F (Type K)	9 TC types; J K T E R S B per NIST 175 and ITS-90 L U per DIN 43710 and PTS-68
	Measure/simulate mV	-10 mV to 75 mV	0.01 mV	0.015 % +10 μV	—

General specifications for all Fluke 712 through 718 calibrators.
 Maximum voltage: 30 V.
 Non-operating temperature: -40 °C to 60 °C.
 Operating temperature: -10 °C to 55 °C.
 Relative humidity: 95 % (10 °C to 30 °C); 75 % (30 °C to 40 °C); 45 % (40 °C to 50 °C); 35 % (50 °C to 55 °C).
 Operating altitude: 3,000 m max.
 Shock: 1m drop test.
 Vibration: Random, 2 g, 5-500 Hz.
 Safety: CSA C22.2 No. 1010.1:1992.
 EMC: EN50082-1:1992 and EN55022:1994 Class B.
 Size/weight (HxWxD) (712-717): 187 mm x 87 mm x 32 mm (7.35 in x 3.41 in x 1.25 in) 330 g (12 oz).
 Size/weight (HxWxD) (712-717 with holster): 201 mm x 98 mm x 52 mm (7.93 in x 3.86 in x 2.06 in) 600 g (21 oz).
 Size/weight (HxWxD) (718): 210 mm x 83 mm x 62 mm (8.25 in x 3.27 in x 2.44 in) 737 g (26 oz).
 Size/weight (HxWxD) (718 with holster): 216 mm x 94 mm x 66 mm (8.50 in x 3.72 in x 2.60 in) 992 g (35 oz).
 Power: 9 V battery ANSI/NEDA 1604A or IEC 6LR619V alkaline; two batteries in 718.
 Battery life: 4 to 20 hours, typical, depending on functions used.
 Warranty: Three-year

ORDERING INFORMATION

Included accessories	Part No
Test leads, test clips, one pair of stackable test leads, product overview manual, users manual in 14 languages on CD.	FLUKE-724 Temperature Calibrator
Test leads, alligator clips (excluding model 714), holster with test lead storage, single 9 V alkaline battery and instruction sheet (14 languages).	FLUKE-714 Thermocouple Calibrator
	FLUKE-712 RTD Calibrator

FLUKE Thermal Imagers & Thermometers

THERMAL IMAGERS SELECTION GUIDE

	Ti400	Ti300	Ti200
Temperature			
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +650 °C (-4 °F to +1202 °F)	
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)		
On-screen emissivity correction	Yes (by number and table)		
On-screen reflected background temperature compensation	Yes		
On-screen transmission correction	Yes		
Imaging performance			
Image capture frequency	9 Hz refresh rate or 60 Hz refresh rate depending upon model variation		
Detector type	Focal Plane Array, uncooled microbolometer, 320 x 240 pixels	Focal Plane Array, uncooled microbolometer, 240 X 180 pixels	Focal Plane Array, uncooled microbolometer, 200 X 150 pixels
Thermal sensitivity (NETD)	≤ 0.05 °C at 30 °C target temp (50 mK)		≤ 0.075 °C at 30 °C target temp (75 mK)
Total pixels	76,800	43,200	30,000
Infrared spectral band	7.5 µm to 14 µm (long wave)		
Visual (visible light) camera	Industrial performance 5.0 megapixel		
Standard infrared lens type			
Field of view	24 ° x 17 °		
Spatial resolution (IFOV)	1.31 mRad	1.75 mRad	2.09 mRad
Minimum focus distance	15 cm (approx. 6 in)		
Optional telephoto infrared lens type			
Field of view	12 ° x 9 °		
Spatial resolution (IFOV)	0.65 mRad	0.87 mRad	1.05 mRad
Minimum focus distance	45 cm (approx. 18 in)		
Optional wide-angle infrared lens type			
Field of view	46 ° x 34 °		
Spatial resolution (IFOV)	2.62 mRad	3.49 mRad	4.19 mRad
Minimum focus distance	15 cm (approx. 6 in)		
Focus mechanism			
LaserSharp™ Auto Focus System	Yes		
Advanced Manual Focus	Yes		
Image presentation			
Palettes			
Standard	Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted		
Ultra Contrast™	Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra		
Level and span	Smooth auto-scaling and manual scaling of level and span		
Fast auto toggle between manual and auto modes	Yes		
Fast auto-rescale in manual mode	Yes		
Minimum span (in manual mode)	2.0 °C (3.6 °F)		
Minimum span (in auto mode)	3.0 °C (5.4 °F)		
IR-Fusion® information			
Picture-In-Picture (PIP)	Yes		
Full screen infrared	Yes		
AutoBlend™ mode	Yes		
Color alarms (temperature alarms)	High-temperature , low-temperature, and isotherm (user-selectable)		
Image capture and data storage			
Image capture, review, save mechanism	One-handed image capture, review, and save capability		
Storage medium	Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection		
File formats	Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (.IS3)		
	No analysis software required for non-radiometric (.bmp, .jpg and .avi*) files		
Export file formats w/SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF		
Memory review	Thumbnail view navigation and review selection		
Other time-saving and productivity features			
Voice annotation	60 seconds maximum recording time per image; reviewable playback on imager		
IR-PhotoNotes™	Yes		
Wi-Fi connectivity	Yes, to PC, iPhone®, iPad® and WiFi to LAN*		
Text annotation*	Yes		
Video recording*	Standard and Radiometric		
Streaming Video	Via USB to PC and HDMI to HDMI compatible screen		
CNX™ Wireless System*	Yes*		
Cardinal Compass*	Yes*		
Auto capture (temperature and interval)*	Yes*		
Remote control and operation (for special and advanced applications)	Yes	No	No

Industrial-Commercial Infrared Cameras



Fluke Ti125

Fluke Ti110



Fluke Ti100

Fluke Ti105



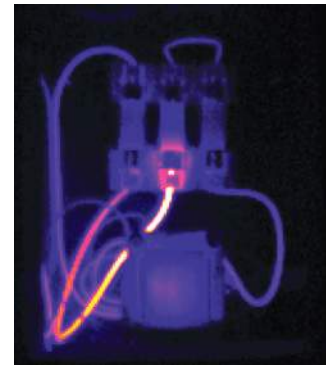
A Fluke infrared camera can save you time and money by finding potential problems before they become costly failures. With the innovative features and functionality in the Fluke Ti125, Ti110, Ti105 and Ti100 imagers, you can perform infrared inspections faster and more efficiently and thoroughly document problem areas for additional follow-up.

Key features

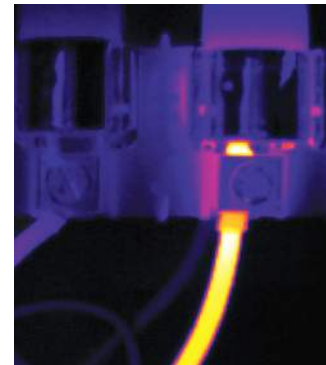
- Exclusive IR-OptiFlex™ focus system—ensures that images are in good focus from 1.2 metres and beyond for optimum image clarity and scanning convenience. For shorter distances change to manual mode with the touch of a finger (Ti110 and Ti125)
- Capture additional measurements fast and conveniently from up to five Fluke CNX wireless modules at once
- Always have references handy IR-PhotoNotes™ annotation system—Quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas (Ti110 and Ti125)
- Find problems faster and easier with Fluke IR-Fusion® technology (Ti125, Ti110, Ti105). Accurately identify potential issues by combining digital and IR images
- Get further clarification with AutoBlend™ mode—the blending of a digital and partially transparent IR image into a single information-filled image (Ti125 only)
- Multi-mode video recording—focus-free video in visible light and infrared with full IR-Fusion. (Ti110 and Ti125 only)
- Easily communicate the location of problems with the Electronic 8-Point Cardinal Compass (Ti110 and Ti125 only)

New features – Ti1XX Series

The Fluke IR-OptiFlex™ focus system difference



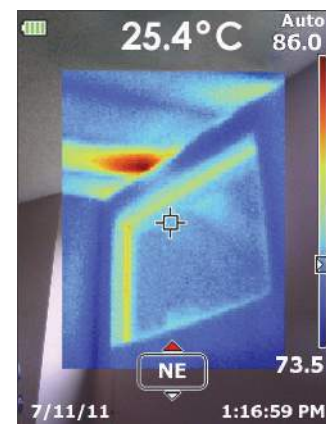
From 1.2 m (4 ft) and beyond, you're in clear focus.



Plus, you have the option to manually focus for closer views.

Electronic Compass

Make sure you and others know the location of the problem. Compass readings easily appear in images and reports.



SPECIFICATIONS

	Ti125	Ti110	Ti105	Ti100
	Industrial-Commercial			General use
CNX Wireless enabled	Yes			
IR resolution (FPA size)	160 x 120 FPA Uncooled Microbolometer			
Spectral band	7.5 µm to 14 µm (long wave)			
Capture or refresh rate	9 Hz or 30 Hz versions			9 Hz
NETD (Thermal sensitivity)	≤ 0.10 °C at 30 °C target temp (100 mK)			
FOV (Field of view)	22.5 °H x 31 °V			
IFOV (Spatial resolution)	3.39 mRad			
Temperature measurement range (not calibrated below -10 °C)	-20 °C to +350 °C (-4 °F to +662 °F)	-20 °C to +250 °C (-4 °F to +482 °F)		
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)			
Focus mechanism	IR-OptiFlex™ focus system		Focus-free 1.2 m (4 ft) and beyond	
IR-Fusion® technology	PIP, FULL IR, FULL VISIBLE, AutoBlend™	PIP, FULL IR, FULL VISIBLE	PIP (1.2 m (4 ft) to 4.6 m (15 ft)), FULL IR, FULL VISIBLE	No, full IR only
Colour alarms	High temperature, low temperature, Isotherm	High temperature	—	
Standard palettes	Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted Amber		Blue-Red, Ironbow, Grayscale, Amber	
Ultra Contrast™ palettes	Blue-Red, Grayscale, Inverted Grayscale, High-contrast, Hot Metal, Ironbow, Amber, Inverted Amber	Blue-Red, Grayscale, Ironbow	—	
Hot/Cold markers	Yes			—

THERMAL IMAGERS - SPECIFICATION COMPARISON

SPECIFICATIONS CONTINUED..

	Ti125	Ti110	Ti105	Ti100
	Industrial-Commercial			General use
User definable spot markers	Three on camera and in SmartView*			in SmartView* only
Centrepoint	Yes			
Centrebox (MIN/AVG/MAX)	Yes	—		
Level and span control	Manual and auto			
Minimum span in auto mode	5 °C			
Minimum span in manual mode	2.5 °C			
Minimum IR focus distance	15.25 cm (6 in)		122 cm (48 in)	
Weight	0.726 kg (1.6 lb)			
Size	28.4 x 8.6 x 13.5 cm (11.2 x 3.4 x 5.3 in)			
LCD display	3.5 inch diagonal (portrait format)			
Visible camera	2 megapixel industrial-grade			N/A
Minimum parallax	~45.7 – 55.9 cm (~ 18 in – 22 in)		~122 cm (48 in)	N/A
IR-PhotoNotes™ annotation system	Yes (3 images)			—
Laser pointer	Yes			
Torch	Yes			
Electronic (cardinal) compass	Yes	—		
Emissivity correction	Yes			
Transmission correction	Yes	—		
Background (reflected) compensation	Yes			
Voice annotation (audio)	Yes (60 seconds) per image			—
Video output	Streaming USB video output (infrared, visible and IR-Fusion modes)		—	—
Video recording (standard avi w/mpeg encoding)	Yes (AVI with MPEG encoding, up to 5 minutes)			—
Video recording (radiometric .is3)	Yes, radiometric .is3 for approx. 2.5 to 5 minutes depending upon thermal scene		—	—
Memory review	thumbnail review			
Battery (field-replaceable, rechargeable)	Two	One		
Battery life	4+ hours (each)*			
External battery charging base	Yes	Optional (accessory)		
Charging power supply	Yes			
Drop test	2 metre			
Ingress protection (IP) rating (IEC 60529)	IP54			
Recommended calibration cycle	Two-years			
Multifunction card reader	Included	—		
Memory storage	2 GB SD memory card			
Direct download capability	mini USB download direct to PC			
Operating temperature range	-10 °C to +50 °C (14 °F to 122 °F)			
Storage temperature range	-20 °C to +50 °C (-4 °F to 122 °F)			
Operating humidity	Operating and storage 10 % to 95 %, non-condensing			
Vibration and shock	2G, IEC 68-2-26 and 25G, IEC 68-2-29			
Safety standards	CSA (US and CAN): C22.2 No. 61010-1-04, UL: UL STD 61010-1 (2nd Edition), ISA: 82.02.01			
C Tick	IEC/EN 61326-1			
EMI, RFI, EMC	EN61326-1; FCC Part 5			
User manuals	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish, Dutch, and Hungarian			
Standard warranty period	Two-years (additional optional extended warranty available)			
Extended warranty and service plans	Yes			

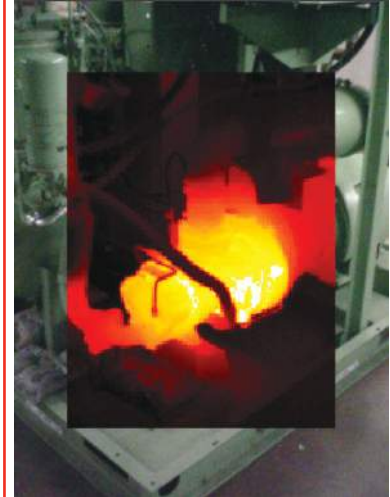
ORDERING INFORMATION

Included accessories	Part No	
Infrared cameras are shipped with AC power adapter, lithium ion smart battery (Ti125 includes 2 each, other models 1 each), USB cable, SD memory card, hard carrying case, soft transport bag, adjustable hand strap (left- or right-handed use), printed users manual, all other manuals on CD, SmartView* software and warranty registration card. Ti125 models also include a two-bay charging base and a multi-format USB memory card reader.	FLK-Ti125 30 Hz	Industrial-Commercial Infrared Camera
	FLK-Ti125 9 Hz	Industrial-Commercial Infrared Camera
	FLK-Ti110 30 Hz	Industrial-Commercial Infrared Camera
	FLK-Ti110 9 Hz	Industrial-Commercial Infrared Camera
	FLK-Ti105 30 Hz	Industrial-Commercial Infrared Camera
	FLK-Ti105 9 Hz	Industrial-Commercial Infrared Camera
	FLK-Ti100 9 Hz	General Use Infrared Camera

New features cont.

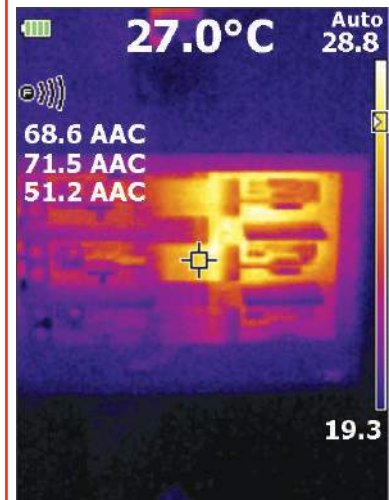
IR-Fusion® technology

The industry's first point-and-shoot IR-Fusion technology camera gives you aligned digital and infrared images.



Excellent alignment in Picture-in-Picture mode.

Capture additional measurements with Fluke CNX Wireless Modules



Up to five additional measurements can be added to your thermal image with Fluke CNX wireless modules.

*Assumes 50 % brightness of LCD.

TI SERIES BUILDINGS INFRARED CAMERAS

Optimised for energy audits and building inspection

Whether you're searching for air leaks, hidden moisture, construction defects, or other building issues, a Fluke thermal imager delivers a huge competitive advantage—it allows you to work faster and more efficiently, and document your findings.

Key features:

- Exclusive IR-OptiFlex™ focus system—ensures that images are in good focus from 1.2 m (4 ft) and beyond for optimum image clarity and scanning convenience. For shorter distances change to manual mode with the touch of a finger (TiR110 and TiR125).
- Always have references handy—IR-PhotoNotes™ annotation system. Quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas (TiR110 and TiR125).
- Find problems faster and easier with Fluke IR-Fusion® technology (TiR125, TiR110, TiR105). Accurately identify potential issues by combining digital and IR images.
- Capture additional measurements fast and conveniently from up to five wireless modules at once using your Fluke thermal imager and CNX™ wireless modules.
- Get further clarification with AutoBlend™ mode - the blending of a digital and partially transparent IR image into a single information-filled image (TiR125 only).
- Multi-mode video recording—focus-free video in visible light and infrared with full IR-Fusion (TiR110 and TiR125 only).
- Easily communicate the location of problems with the Electronic 8-Point Cardinal Compass (TiR125 and TiR110 only).

Spend less time in the field and more time growing your business with these new Fluke thermal imagers.



SPECIFICATIONS COMPARISON

	For building diagnostics use			For general use
	TiR125	TiR110	TiR105	Ti100
Infrared resolution	160 x 120	160 x 120	160 x 120	160 x 120
Focus mechanism	IR-OptiFlex™ focus system	IR-OptiFlex™ focus system	Focus-free: 1.2 m (4 ft) and beyond	Focus-free: 1.2 m (4 ft) and beyond
Thermal sensitivity (NETD)	≤ 0.08 °C at 30 °C target temp (80 mK)	≤ 0.08 °C at 30 °C target temp (80 mK)	≤ 0.08 °C at 30 °C target temp (80 mK)	≤ 0.10 °C at 30 °C target temp (100 mK)
Temperature measurement range	-20 °C to +150 °C (-4 °F to +302 °F)	-20 °C to +150 °C (-4 °F to +302 °F)	-20 °C to +150 °C (-4 °F to +302 °F)	-20 °C to +250 °C (-4 °F to +482 °F)
Temperature measurement accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)
IR-Fusion® technology	Full infrared, PIP, Full visible, AutoBlend™, Color alarms	Full infrared, PIP, Full visible, Color alarm	PIP 1.2m (4 ft) to 4.6m (15 ft), FULL IR, FULL VISIBLE	Full infrared only
IR-Photonotes® annotation system	Yes	Yes	—	—
Electronic compass	Yes	Yes	—	—
Multi-mode video recording	.AVI w/ MPEG encoding and .IS3 radiometric	.AVI w/ MPEG encoding	—	—
Voice annotation	Yes (60 seconds)	Yes (60 seconds)	—	—
Laser pointer/torch	Laser pointer and torch	Laser pointer and torch	Laser pointer and torch	Laser pointer
Streaming video output	USB video output	—	—	—
Rechargeable batteries (4+ hours each)	2 rugged lithium-ion smart batteries	1 rugged lithium-ion smart battery	1 rugged lithium-ion smart battery	1 rugged lithium-ion smart battery

ORDERING INFORMATION

Included accessories	Part No	
AC power adapter, lithium ion smart battery (TiR125 includes two each—other models one each), USB cable, SD memory card, SmartView® software, hard carrying case, soft transport bag, adjustable hand strap (left- or right-handed use), users manual and warranty registration card. TiR125 model also includes a two-bay charging base and a multi-format USB memory card reader.	FLK-TiR125 9 Hz	Building Diagnostics Infrared Camera
	FLK-TiR110 9 Hz	Building Diagnostics Infrared Camera
	FLK-TiR105 9 Hz	Building Diagnostics Infrared Camera

FLUKE 560 SERIES INFRARED THERMOMETERS



Fluke 568



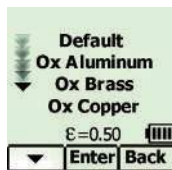
Fluke 566 and 568 IR and Contact Thermometers

With a straight-forward user interface and soft-key menus, the Fluke 566 and 568 make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, start data logging, or turn on and off alarms. With a rugged, easy-to-use design, the Fluke 566 and 568 can stand up to tough industrial, electrical, and mechanical environments.

- Measure up to 800 °C (1470 °F)
- Easily access advanced features with the soft-key buttons and graphical display
- Measure smaller objects from further away
- Compatibility with most type K thermocouples
- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Two levels of backlight
- Audible and visual alarms alert you to measurements outside of set limits
- Min/Max/Avg/Dif functions
- Includes KTC bead probe
- 1 % measurement accuracy
- Versatile interface with six languages



Choose your language



Select the measurement surface



See complete measurement details in seconds

FEATURES

Models	Fluke 561	Fluke 566	Fluke 568/568 Ex
Infrared temperature range	-40 °C to 535 °C (-40 °F to 1022 °F)	-40 °C to 650 °C (-40 °F to 1200 °F)	-40 °C to 800 °C (-40 °F to 1470 °F)
Accuracy	greater of ± 1 % or ± 1 °C (2 °F)		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)
Probe type	Thermocouple K		
Contact temperature range	-40 °C to 550 °C (-40 °F to 1022 °F)	-270 °C to 1372 °C (-454 °F to 2501 °F)	
Number of on-board memory locations	—	20	99
PC download and software	—	—	Yes, with FlukeView™ Forms
Soft-key feature menu navigation	—	Yes	
Min/Max/Avg/Dif	Min/Max/Dif	Min/Max/Avg/Dif	
Material type adjustment (emissivity)	Hi/Med/Lo	Material table or 0.1 to 1.00 by 0.01	
Two levels of backlight	—	Yes	
High and low alarms	—	High and low alarms	
Hands-free logging	—	—	Yes
Battery	2 AA		
Included case	Hard case (except 561/R and 561/P)	Hard case	
Warranty	Two-year		

ORDERING INFORMATION

Included accessories	Part No	
USB cable, FlukeView™ Forms software, thermocouple type K bead probe, carrying case, two AA batteries, users manual, quickstart guide.	FLUKE-568	Infrared Thermometer
Thermocouple type K bead probe, carrying case, two AA batteries, users manual and quickstart guide.	FLUKE-568Ex	IS Infrared Thermometer
Thermocouple type K bead probe, carrying case, two AA batteries, users manual.	FLUKE-566	Infrared Thermometer
Thermocouple type K pipe probe, carrying case, two AA batteries, users manual.	FLUKE-561	Infrared Thermometer
9 V battery, instruction sheet.	FLUKE-61	Infrared Thermometer

Specialty models

Fluke 561 Infrared and Contact Thermometer

The Fluke 561 combines the temperature measurement functions that professionals need for most HVAC and industrial jobs, all in one tool.

- Pipe probe for superheat and sub-cooling and other contact and ambient measurements
- Min/Max/Dif functions help you quickly identify problems
- Scan large areas or small objects quickly and efficiently



NEW

Fluke-568 Ex Intrinsically Safe Infrared Thermometer

- Measure -40 °C to 800 °C (-40 °F to 1472 °F)
- 50:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Display Resolution 0.1 °C of reading
- Adjustable emissivity and predefined emissivity table
- Data storage and review (99 data sets)
- Conductive case for carrying into hazardous areas
- Safety Certification ATEX/IECEx for Class1, Div 1 and Div 2 or Zone 1 and 2 hazardous environments



Recommended Accessories



80PK-11
Pipe Clamp Probe
Temperature Probe



80PK-27
Industrial Surface
Temperature Probe



80PK-8
Pipe Clamp Probe



80PK-18
Pipe Clamp Probe Kit



80PK-22
SureGrip™ Immersion Probe



C1600
Gear Tool Box

FLUKE VT04 AND VT02 VISUAL IR THERMOMETERS

NEW



Fluke VT02

Fluke VT04



Detect Issues Instantly

Fluke Visual IR Thermometers combine the convenience of a spot thermometer with the visual advantage of an infrared camera creating a brand new tool category. Detect Issues instantly.

Key features of a Visual IR Thermometer

Breakthrough affordability

Half the cost of infrared cameras that require training and software.

Built-in digital camera

Every Fluke Visual IR thermometer has a built-in digital camera.

Exclusive thermal heat map blending overlay

Blend digital and thermal images to instantly show the exact location of the issue. Blend between 0 %, 25 %, 50%, 75 %, and full thermal with one button.

No training required

Fully automatic with built-in intelligence.

True pocket size design

Forty percent smaller than entry-level infrared cameras.

SmartView® reporting software

Store up to 10,000 images per GB on included SD card and make professional reports on included professional software.

Hot and cold spot trackers

Automatically identifies hottest and coldest spots within field of view.

The Fluke VT04 adds powerful features that include:

- Powerful resolution with PyroBlend™ Plus optics
- Best-in-class field of view for tight spaces: 28° x 28°
- Four times sharper images: VT04 compared to VT02

Alarm and time lapse features

- Hi/Lo temperature alarm—Screen flashes if user-selected temperature is exceeded
- Time lapse image capture— automatically capture images
- Auto-monitor™ alarm—automatically capture images after a userselected temperature alarm has been triggered

Recommended Accessories



FLK-VT04-BATTERY
VT04 replacement Li-ion rechargeable battery



FLK-VT04-CHARGER
Extra charger for VT04



C90
Soft Case

No Image Available

FLK-VT04-HOLSTER
VT02/VT04 Handy Holster

Recommended Kits

Save money with these Fluke kits:



VT04 MAINTENANCE KIT
Kit includes a VT04 Visual IR Thermometer and a 1507 Insulation Multimeter



VT04 HVAC KIT
Kit includes a VT04 Visual IR Thermometer, a 902 True RMS HVAC Clamp Meter and a 116 Digital Multimeter



VT04 ELECTRICIAN'S KIT
Kit includes a VT04 Visual IR Thermometer, a 117 Electrician's Multimeter and a 376 AC/DC True RMS Clamp Meter

SEE THE DIFFERENCE

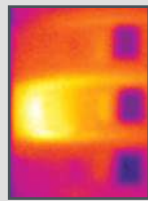
See how a traditional IR thermometer and an entry level infrared camera make it challenging to communicate the issue on breaker 20.



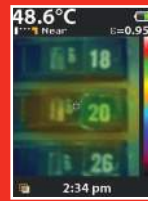
Visual inspection
No issues are obvious to the naked eye.



Traditional IR Thermometer
Optimised for single point measurements



Entry level infrared camera
Challenging to see the exact location



Visual IR Thermometer
Digital image with heat map overlay detects the exact location of the issue

ORDERING INFORMATION

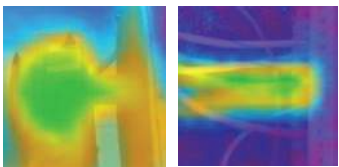
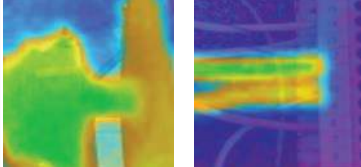
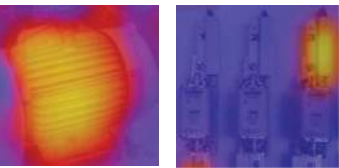
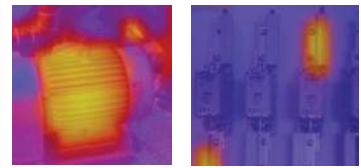
Included accessories

Hard case, hand strap, mini SD card and adapter, SmartView software on CD, Lithium Ion batteries and Micro USB Charger/Power Supply (including mains adapters) (VT04) or 4 AA batteries (VT02), Quick Start Guide, Users manual

Part No

FLUKE-VT02	Visual IR Thermometer
FLUKE-VT04	Visual IR Thermometer
FLK-VT04-MAINT-KIT	Includes a VT04 Visual IR Thermometer and a 1507 Insulation Multimeter
FLK-VT04-HVAC-KIT	Includes a VT04 Visual IR Thermometer, 902 True-RMS HVAC Clamp Meter and a 116 Digital Multimeter.
FLK-VT04-ELEC-KIT	Includes a VT04 Visual IR Thermometer, a 117 Electrician's MultiMeter and a 376 AC/DC True-RMS Clamp Meter

SPECIFICATIONS

Key features	VT02	VT04
Built-in digital camera	Yes	
Thermal heat map overlay	Yes, five blending modes	
Image optics system	PyroBlend™ optic 	PyroBlend™ Plus optic *4x sharper image than VT02 
Field of view	20° x 20° 	28° x 28° 
Hi-Lo temperature alarms	—	Yes
Time lapse image capture	—	Yes
Auto-monitor alarm	—	Yes
Battery type	Four (4) AA batteries	Li-Ion rechargeable
Training	No training required	
Ergonomics	Slim pocket-sized design	
Hot and cold markers	Yes	
General features		
Battery life	Eight (8) hours	
Temperature measurement range	-10 °C to +250 °C (14 °F to 482 °F)	
Temperature measurement accuracy	+/- 2 °C or +/- 2 %	
Temperature measurement	Yes, centerpoint	
Storage medium (micro SD card)	Stores up to 10,000 images per Gb (Four (4) Gb card included)	
Infrared spectral band	6.5 µm to 14 µm	
Level and span	Auto	
Dimensions	21 cm x 7.5 cm x 5.5 (8.3 in x 3 in x 2.2 in); < 300 g. (10.5 oz.)	
Warranty	Two (2) years	

SmartView® Software

Document problems

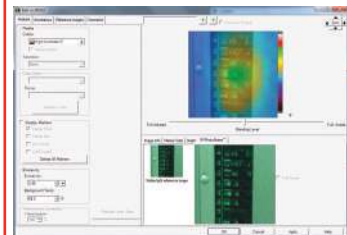
Producing a professional report with Smartview software is just as powerful as the VT02 and VT04 tools themselves. You will be able to communicate the issues that you've detected or document repairs that have been fixed.

Free upgrades. Free to share.

We don't charge you for software upgrades. They're free for the life of the product. We enable you to share this software with others.

The smart choice

- Extensive optimisation and analysis tools with multiple viewing options
- Multiple reporting options and templates
- Enhance and analyse images quickly and easily
- Report Wizard guides you through automatic report generation
- Communicate image details with text annotation drag and drop feature
- Lifetime software upgrades, and no sharing limitations



Sample SmartView software view.

FLUKE 560 SERIES INFRARED THERMOMETERS



Fluke 61

Fluke 63

N10140

The Fluke 60 Series non-contact thermometers are the ideal professional diagnostic tools for quick and accurate temperature measurements. These handheld tools are ideal for measuring surface temperatures of rotating, hard-to-reach, electricity live or dangerously hot targets like electrical motors and – panels, and heating and ventilation systems. The laser sighting system guides measurements to the right target and in less than a second, the large temperature display provides a readout of the surface temperature.

The 60 Series IR thermometers feature:

- Laser guided sighting system for easy targeting with 1% accuracy
- Up to 12:1 optical resolution
- Backlit display for easy reading in the dark
- Temperatures up to 535°C

FEATURES

	61	63
Form factor	Flat grip	Pistol grip
Temperature range	-18 to 275°C	-32 to 535°C
Optical resolution	8:1	12:1
Laser beam for accurate targeting	•	•
Backlit LCD display	•	•
Use selectable °C or °F	•	•
Min/max/avg/dif readings		Max

SPECIFICATIONS

	61	63
Range	-18 to 275°C	-32 to 535 °C
Response time	< 500ms	≤ 0.5 second
Resolution	0.2 °C	0.2 °C
Repeatability (% of reading)	± 2% or ± 2 °C*	± 0.5% or ≤ ± 1 °C*
Accuracy: (assumes ambient operating temperature of 23°C)	For targets at: -18 to -1°C: ± 3°C -1 to 275°C: ± 2% of reading or ± 2°C	For targets at: -32 to -26°C: ± 3°C -26 to -23°C: ± 2.5°C -18 to 23°C: ± 2°C 23°C -510°C: ± 1% of reading or ± 1°C* For targets above 510°C: ± 1.5% of reading
Typical distance to target	Up to 1m	Up to 2 m
Emissivity	Fixed at 0.95	Fixed at 0.95

Battery Life:

Fluke 63: 10 hours with laser and backlight on
Fluke 61: 12 hours with laser and backlight on

Size (HxWxD):

Fluke 63: 200 mm x 160 mm x 55 mm
Fluke 61: 184 mm x 45 mm x 38 mm

Weight:

Fluke 63: 0.320 kg
Fluke 61: 0.227 kg

ORDERING INFORMATION

Included accessories	Part No	
9V Battery	FLUKE 61	Infrared Thermometer
Hard carrying case, 9V batteries	FLUKE 63	Infrared Thermometer
AA Battery, quick start guide	Fluke FP	FoodPro™ Food Safety Thermometer
Built in contact probe, 9 V alkaline battery, quick start guide, operator's guide, soft carry pouch	Fluke FP Plus	FoodPro™ Plus Food Safety Thermometer

Fluke FoodPro™ and FoodPro Plus Food Safety Thermometers



Fluke brings its test and measurement equipment expertise to the food service industry with contact and non-contact temperature measurement solutions. The Fluke FoodPro Thermometer Series provides a complete temperature measurement and monitoring solution for foodservice professionals. It includes two useful temperature inspection tools, which are designed to enable foodservice professionals to quickly and accurately measure food product temperatures and to help detect potential food safety problems.

The Fluke FoodPro non-contact thermometer is the first line of defense against improper receiving, storage and holding temperatures. Using an infrared measurement technique, the highly accurate FoodPro quickly reads surface temperatures, allowing workers to make rapid and frequent temperature measurements – faster than contact units and without fear of cross contamination. The easy-to-see illumination light shows you the measurement area.

The Fluke FoodPro Plus combines the same infrared surface temperature scanner, as well as a probe thermometer and integrated countdown timer for complete inspections of food temperatures and monitoring cooking and cooling intervals.

Recommended Accessories



C23
Soft Carrying Case



H6
Electrical Tester Holster

FLUKE 62 MAX AND 62 MAX+ INFRARED THERMOMETERS



Fluke 62 Max+



N10140 Fluke 62 Max



- Dust and water-resistant: IP54 rated for dust/water resistance
- Rugged: 3 m (9.8 ft) drop tested
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: Precise laser technology makes for more accurate and repeatable measurements
- Dual lasers: The 62 MAX+ has dual rotating lasers to help you identify area to be measured. The measurement area is the spot between the dots
- Min/Max/Avg/Dif: Displays the minimum, maximum or average temperature, or the difference between two measurements
- Alarm: Hi and Lo alarms for rapid display of measurements outside the limits

	62 Max	62 Max+
Temperature range	-30 °C to 500 °C (-22 °F to 932 °F)	-30 °C to 650 °C (-22 °F to 1202 °F)
Accuracy	± 1.5 °C or ± 1.5 % of reading, whichever is greater -10 °C to 0 °C: ± 2.0 -30 °C to -10 °C: ± 3.0	± 1.0 °C or ± 1.0 % of reading, whichever is greater -10 °C to 0 °C: ± 2.0 -30 °C to -10 °C: ± 3.0
Emissivity	0.10 to 1.00	
Optical resolution	10:1 (calculated at 90 % energy)	12:1 (calculated at 90 % energy)
Power	AA battery	
Compliance	EN/IEC 61010-1: 2001	
Laser safety	FDA and EN 60825-1 Class II	
Warranty	Three-year (conditional)	

Specialty models

Fluke 572-2 High Temperature Infrared Thermometer

The Fluke 572-2 Infrared Thermometer is the one product you can use in high temperature industrial environments all around the world. This is the best choice for when you need accurate results for high temperature readings from a long distance. Combined with ease of use and Fluke's ruggedness and reliability you can't go wrong.



- Measure -30 °C to 900 °C
- 60:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Compatible with standard mini-connector K-type thermocouples, including ones you already own and have installed
- Adjustable emissivity and predefined emissivity table
- FlukeView® Forms documenting software

FLUKE 50 SERIES II THERMOMETERS

Lab accuracy in a field thermometer



Fluke 54 II B

The Fluke 50 Series II contact thermometers offer fast response and laboratory accuracy in a rugged handheld test tool.

All models offer:

- Laboratory accuracy: ± (0.05 % + 0.3 °C)
- Large backlit dual display
- Min/Max/Avg
- Electronic offset function maximises overall accuracy
- Supports a wide range of thermocouple types
- Temperatures displayed in °C, °F, or Kelvin (K)

Powerful data logging capabilities

The Fluke 53 II B and 54 II B can log up to 500 points of data to internal memory.

- User-adjustable recording intervals
- Real-time clock captures the exact event time
- Recall function lets logged data be easily reviewed
- Download data to optional FlukeView® PC software



FEATURES

Features	54 II B	53 II B	52	51
Thermocouple types	K,J,T,E,N,R,S	K,J,T,E,N,R,S	K,J,T,E	K,J,T,E
Number of inputs	Dual	Single	Dual	Single
Time stamp	Time of day	Time of day	—	—

ORDERING INFORMATION

Included accessories	Part No	
Instruction sheet and battery	FLUKE-62 Max	Infrared Thermometer
	FLUKE-62 Max+	Infrared Thermometer, Dual Lasers
	FLUKE-62 Max*/T+PRO/1AC	IR Thermometer, Voltage Tester and Voltage Detector Kit
	FLUKE-T5-600/62 Max*/1AC	IR Thermometer, Electrical Tester and Voltage Detector Kit
	FLUKE-62 Max*/323/1AC	IR Thermometer, Clamp Meter and Voltage Detector Kit
Bead thermocouple(s), batteries, overview manual and instructional guide on CD.	FLUKE-414D/62 Max+	IR Thermometer and Laser Distance Meter Kit
	FLUKE-54-2-B	Datalogging Thermometer, Dual Input
	FLUKE-53-2-B	Datalogging Thermometer, Single Input
	FLUKE-52-2	Digital Thermometer, Dual Input
	FLUKE-51-2	Digital Thermometer, Single Input
K-type thermocouple bead probe, USB 2.0 computer interface cable, FlukeView® Forms Documenting Software, hard carrying case, getting started guide (print) and user's manual (CD).	FLUKE-572-2	Infrared Thermometer

Recommended Kits

T5-600/62 MAX+/1AC-II Kit

- 62 MAX+ IR Thermometer
- T5-600 Voltage Electrical Tester
- 1AC-II Voltage Detector
- Carrying case



62 MAX*/323/1AC-II Kit

- 62 MAX+ IR Thermometer
- 323 Clamp Meter
- 1AC-II Voltage Detector
- Test leads
- Carrying case



414D/62 MAX+ Kit

- 62 MAX+ IR Thermometer
- 414D Laser Distance Meter
- Soft pouch for 414D



FLUKE TEMPERATURE ACCESSORIES

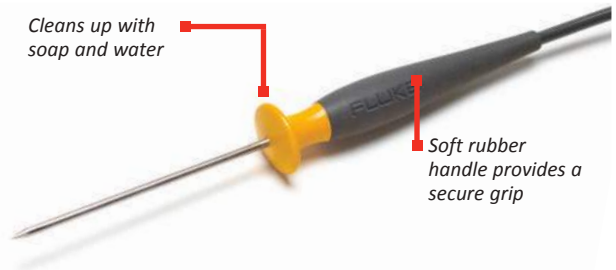
Hot probes with cool designs

SureGrip™ temperature accessories

The innovative SureGrip™ design from Fluke is now available in select temperature probes. The soft rubber handle combined with a new ergonomic shape is so comfortable to hold that you'll forget about the probe and focus on the measurement. All SureGrip probes have an improved, more flexible strain relief for a long life.



Cleans up with soap and water



Soft rubber handle provides a secure grip

	Bead	Bead	HVAC	Immersion	Surface	Air	Piercing	General purpose	Industrial surface
	80BK-A	80PK-1 80PJ-1	80PK-11	80PK-22	80PK-3A	80PK-24	80PK-25 80PT-25	80PK-26	80PK-27
Lowest temperature	-40 °C (-40 °F)		-30 °C (-22 °F)	-40 °C (-40 °F)	0 °C (32 °F)	-40 °C (-40 °F)	K Type: -40 °C (-40 °F) T Type: -196 °C (-321 °F)	-40 °C (-40 °F)	-127 °C (-196 °F)
Highest temperature	260 °C (500 °F)		105 °C (221 °F)	1090 °C (1994 °F)	260 °C (500 °F)	816 °C (1500 °F)	350 °C (662 °F)	816 °C (1500 °F)	600 °C (1112 °F)
Probe material	Type K wire with teflon insulation		Velcro	Inconel 600	Type K sensor with teflon body	Inconel	316 Stainless Steel	304 Stainless Steel	
Probe length	1 m lead wire		19 in Velcro cuff	21.27 cm (8.375 in)	9.525 cm (3.75 in)	21.59 cm (8.5 in)	10.16 cm (4 in)	21.57 cm (8.5 in)	20.32 cm (8 in)
Cable length	1 m (3.3 ft)			1.3 m (4 ft)		1 m (3.3 ft)			
Connection	Standard banana jack	Molded thermocouple plug							
SureGrip handle	No	No	No	Yes	No	Yes	Yes	Yes	Yes
Key feature	Ideal for initial troubleshooting. Can be secured in place with a magnet.		Velcro probe allows hands free temperature measurement.	For use in liquids or in gels.	Exposed junction for direct contact with flat or slightly convex surfaces.	Perforated baffle for air and non-caustic gas measurements.	Probe material safe for use in foods. Sharp tip pierces solid surfaces.	Use for general purpose air or surface measurements.	Low conductivity stainless steel minimises thermal shunting. Extra rugged.
Thermocouple types	K	K, J	K	K		K, T		K	
Typical use									
General purpose	•	•	•	•	•	•	•	•	•
HVAC	—	•	•	•	•	•	—	•	•
Food service	—	—	—	•	—	—	—	—	—
Industrial	•	•	•	—	—	—	—	—	•
Residential	•	•	—	—	•	•	•	—	—
Commercial	•	•	•	•	•	•	•	•	•

The 80TK enables your meter to read temperature using mV.
For the Fluke Thermometer, 51, 52, 53, and 54 III, no adapter is necessary for thermocouple types K, J, T and E.

Temperature Accessories Selection Guide	110/111/112	114/115/117	116	27 II	28 II	175/177	179	233	80 Series III/83V	87V	187/189	287/289	45/84/5/84/6	43B	120 Series	190 Series	51-II/52-IV 53-II B/64-II B	561	574/576	714	715	725/726	741/743/744/754	787/789	902	1587	1577
80BK-A	—	—	•	—	—	—	•	•	—	•	•	•	—	—	—	—	—	—	—	—	—	—	—	—	•	•	—
All 80PK Probes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	•	•	•	•	•	•	•	•	•	•	•
80PJ-1/80PJ-9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80PT-25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	•	•	•	•	•	•	•	•	•	•	•
80TK	•	•	—	•	—	•	—	—	•	—	•	•	•	•	•	•	—	—	—	—	—	—	—	—	—	—	—
80T-150UA	•	•	—	•	—	•	—	—	•	—	•	•	•	•	•	•	—	—	—	—	—	—	—	—	—	—	—
80PJ-EXT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80PK-EXT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80PT-EXT	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80CK-M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80CJM	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

★ Requires 80TK ▲ Requires 80AK-A — N/A

If you did not find what you were looking for, please call our sales team now!

TEST EQUIPMENT

FLUKE TEMPERATURE ACCESSORIES

Turn your digital multimeter into a thermometer

Other temperature accessories

80TK Thermocouple Module

- Converts type K thermocouple signals into mV output
- Connects to DMM via standard banana plugs
- Switch selectable °C or °F
- Range: -50 °C to 1000 °C (-58 °F to 1832 °F)
- Includes 80PK-1 probe



80T-150UA Universal Solid State Temperature Probe

- For measurement of air, surface and non-corrosive materials
- Measurement range: -50 °C to 150 °C (-58 °F to 302 °F)
- Output: 1 mV/°C or 1 mV/°F (switch selectable)
- Connects to DMM via standard banana plugs



80PK-8, 80PK-10, Pipe Clamp Temperature Probes

- Type K thermocouples clamp securely onto pipes for fast temperature and superheat measurements
- Durable ribbon sensors
- 1 m (39 in) lead
- Measure from -29 °C to 149 °C
- 80PK-8 for 6.4 mm to 34.9 mm (0.25 in to 1.375 in)
- 80PK-10 for 32 mm to 64 mm (1.25 in to 2.5 in)



Thermocouple Plug Kits

700TC1

A kit of ten mini-plug connectors. One each of the following:

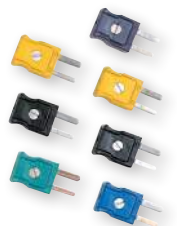
- Type J (black)
- Type K (yellow)
- Type T (blue)
- Type E (purple)
- Type R/S (green)
- Type B or Cu (white)
- Type L (J-DIN) (blue)
- Type U (T-DIN) (brown)
- Type C (red)
- Type N (orange)



700TC2

A kit of seven mini-plug connectors.

- Type J (black), two
- Type K (yellow), two
- Type E (purple), one
- Type T (blue), one
- Type R/S (green), one



80PK-18, Pipe Clamp Temperature Probe Kit

- Includes both 80PK-8 and 80PK-10 Type K clamps
- Provides full range of pipe measurement sizes
- Includes soft carrying case to conveniently keep both clamps handy for any situation



80CK-M and 80CJ-M Type K and J Male Mini-Connectors

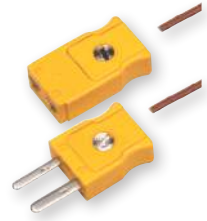
- Isothermal screw terminal for K or J wire
- Suitable for up to 20 gauge thermocouple wire
- Colour coded to industry standards (K-yellow, J-black)
- Two per package



80PJ-EXT, 80PK-EXT, 80PT-EXT Thermocouple Wire Extension Kits

For extending and repairing type J, K or T thermocouple wires.

- Kit includes 3 m (9 ft) of thermocouple wire and 1 pair of male/female mini-connectors
- Maximum continuous exposure temperature: 260 °C (500 °F)
- 80PK-EXT is compatible with type K thermometers; 80PJ-EXT is designed for type J thermometers, and 80PT-EXT is designed for type T thermometers



Process tools accessories

BP7240

- Li-ion rechargeable battery; nominal 7.2 volt, 4400 mA hr
- Use with 750 Series Calibrators



BP7235

- NiMH rechargeable battery; nominal 7.2 volt, 3500 mA hr
- Use in 700 and 740 Series Calibrators



700LTP-1 Low Pressure Test Pump

Hand operated pressure pump designed to generate either vacuum to -13 psi/-90 bar or pressures to 100 psi/6.9 bar. Ideal for low pressure applications requiring accurate low pressure testing.



700ILF In-line Filter

The Fluke 700ILF can be used to isolate the calibrator from incidental contact with fluids. Particularly useful with the 718 calibrator to help keep moisture or oils from contaminating the on-board pump.



700PTP-1 Pneumatic Test Pump

The Fluke 700PTP is a hand-held pressure pump designed to generate either vacuum to -11.6 psi/-0.8 bar or pressure to 600 psi/40 bar.



700HTP-2 Hydraulic Test Pump

The Fluke 700HTP is designed to generate pressures up to 10,000 psi/700 bar. Use the Fluke 700PRV adjustable relief valves to limit pressures from 1360 psi to 5450 psi.



700HTH-1 Hydraulic Test Hose

The 700HTH is a 10,000 psi, 700 bar test hose that connects to a calibration unit under test from a Fluke 700HTP hydraulic test pump.



700PMP Pressure Pump

The 700PMP is a hand-operated pressure pump to provide pressures up to 150 psi/1000 kPa. Output fitting is 1/8 FNPT.



Fluke 700-IV Current Shunt

Conversion factor: 10 mV = 1 mA
Accuracy (% of input, one-year): 0.025 %
Input current: 0 mA to 55 mA
Input resistance: 250 Ω nominal
Output resistance: 10 Ω nominal
Accuracy specification applies from +18 °C and 28 °C to 50 °C
Maximum input voltage: 30 V dc



FLUKE Air Measurement

FLUKE 975 AIRMETER



Fluke 975

Simple, one-touch air velocity

The Fluke 975 AirMeter™ combines five powerful air quality tools into one. Identify and diagnose indoor air quality issues quickly and easily with one rugged, handheld device.

- Simultaneously measures, logs and displays temperature, humidity, CO₂ and CO on a bright, backlit LCD display
- % of outside air calculation
- One-touch air flow and velocity with available probe*
- Dew point and wet bulb temperature
- CO₂ and CO field calibration feature
- Min/Max/Avg on all measured and calculated readings
- Audible and visual threshold alarms
- Extensive discrete or continuous data logging capacity, downloadable to PC via USB interface
- Includes NIST-traceable certificate of calibration
- Automatically compensates for barometric pressure changes
- Two-year warranty

*Included with Fluke 975V, optional with Fluke 975.



N10140

FLUKE 922 AIRFLOW METER/MICROMANOMETER



Fluke 922

Make airflow measurements easy by combining differential pressure, air flow and velocity into a single, rugged meter. Used with any pitot tube, the Fluke 922 is the perfect entry point for technicians measuring air flow for the first time, yet powerful enough for advanced users.

- Measures differential and static pressure, air velocity and flow readings
- User-defined duct shape and size for maximum airflow accuracy
- Bright, backlit display
- Min/Max/Avg/Hold functions
- Auto power off



N10140

SPECIFICATIONS

975 features	Range	Display resolution	Accuracy
Temperature	-20 °C to 50 °C (-5 °F to 122 °F)	0.1 °C (0.1 °F)	± 0.9 °C/± 1.62 °F from 40 °C to 60 °C ± 0.5 °C/ ± 1.00 °F from 5 °C to 40 °C ± 1.1 °C/± 1.98 °F from -20 °C to 5 °C
Relative humidity	10 % to 90 % RH non-condensing	1 %	± 2 % RH (10 % RH to 90 % RH)
Air velocity	50.0 fpm to 3000 fpm 0.25 m/sec to 15 m/sec	1 fpm (0.005 m/sec)	± 4 % or 4 fpm* ± 4 % or 0.02 m/sec* whichever is greater * Accuracy specification only valid for velocity readings above 50 fpm
CO ₂	0 ppm to 5000 ppm	1 ppm	Warm up time 1 min (5 minutes for full specification) 2.75 % ± 75 ppm
CO	0 ppm to 500 ppm	1 ppm	± 5 % or ± 3 ppm, whichever is greater, @ 20 °C and 50 % RH

922 features	Range	Accuracy
Air pressure	± 4000 Pascals / ± 16 in H ₂ O / ± 400 mm H ₂ O / ± 40 mbar / ± 0.6 PSI	± 1 % + 1 Pascal / ± 1 % + 0.01 in H ₂ O / ± 1 % + 0.1 mm H ₂ O / ± 1 % + 0.01 mbar / ± 1 % + 0.0001 PSI
Air velocity	250 fpm to 16,000 fpm (1 to 80 m/s)	± 2.5 % of reading at 2000 fpm (10.00 m/s)
Air flow (volume)	0 to 99,999 cfm; 0 to 99,999 m ³ /hr; 0 to 99,999 l/s	Accuracy is a function of velocity and duct size
Temperature	0 °C to 50 °C (32 °F to 122 °F)	0.1 °C (0.1 °F)
Data storage	99 readings	
Warranty	Two-year	
Power	Four AA batteries	

ORDERING INFORMATION

Included accessories	Part No	
Calibration cap, air velocity probe (Fluke 975V only), FlukeView® Forms software, power adapter, international power plugs, hard carrying case, three AA alkaline batteries, users manual with safety information.	FLUKE-975	AirMeter™
	FLUKE-975V	AirMeter™ with Velocity
Two rubber hoses, soft carrying case, four AA alkaline batteries 1.5 V, users manual.	FLUKE-922	Airflow Meter
12 inch pitot tube, two rubber hoses, ToolPak Magnetic Meter Hanging Kit, hard carrying case, four AA alkaline batteries 1.5 V, users manual.	FLUKE-922/KIT	Airflow Meter Kit

Recommended Accessories

Fluke 975VP
AirMeter Velocity Probe for use with Fluke 975 AirMeter.



Recommended Kits

- Fluke 975V**
- 975 AirMeter™
 - Calibration cap
 - Air velocity probe
 - FlukeView® Forms software
 - Power adapter
 - International power plugs
 - Hard carrying case
 - Three AA alkaline batteries
 - Users manual with safety information



- Fluke 922/Kit**
- 922 Airflow meter
 - 12 inch pitot tube
 - Two rubber hoses
 - TPak magnetic strip
 - TPak strap, 9 inches
 - TPak latch tab
 - Four AA 1.5 V alkaline batteries
 - Users manual
 - Hard carrying case



INDOOR AIR QUALITY TOOLS

Tools to help you maintain good IAQ



 Fluke 971
N10140

FLUKE 971 TEMPERATURE HUMIDITY METER

Temperature and humidity are two important factors in maintaining optimal comfort levels and good indoor air quality. Quickly and conveniently take accurate humidity and temperature readings with the Fluke 971. It is invaluable for facility maintenance and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). Lightweight and easy to hold, it's the perfect tool for monitoring problem areas. With a rugged holster and protected sensor, the Fluke 971 is built to perform and made to last.

Features:

- New and improved digital sensor for faster response times
- Backlit dual display of humidity and temperature
- Measures dew point and wet bulb temperatures
- 99 record storage capacity
- Ergonomic design with belt clip and protective holster
- Compact and lightweight at 188 g (6.6 oz)
- Temperature range from -20 °C to 60 °C (-4 °F to 140 °F)
- Relative humidity from 5 % to 95 %
- Min/Max/Avg/Hold functions
- Low battery indicator
- One-year warranty

Specialty Models

Fluke RLD2 UV Refrigerant Leak Detector Flashlight

Leak detection made easy. The compact, easy-to-use, RLD2 UV flashlight uncovers refrigerant leaks instantly. Use the UV light to find the leakage area, then, use the laser pointer to pinpoint the exact leak location. With 100,000 hours of life, and four operating modes, this versatile leak detector is a must have for HVAC technicians.



- Six UV LEDs (395 nm wavelength) detect leak detection dyes
- Laser pointer clearly locates centre of the UV field for accuracy
- Three LED flashlight with 100,000 hour LED life
- Operating temperature 0 °C to 50 °C
- Four operating modes: flashlight, UV light, laser light, UV/laser light combination
- Convenient detachable key chain carabiner and AAA battery included



 Fluke 985
N10140

FLUKE 985 AIRBORNE PARTICLE COUNTER

The new Fluke 985 Particle Counter is ideal for troubleshooting and monitoring indoor air quality issues and verifying HVAC filter performance in critical locations. With its easy to read and fully configurable channel display, lightweight yet rugged form and highly accurate measurements, the Fluke 985 is the perfect tool for the maintenance, HVAC, and IAQ professional.

- Six channels and particle size range of 0.3 µm to 10.0 µm: Assures accurate measurements even for critical locations requiring ISO Class 5 – 9 certification.
- Ultra-lightweight and ergonomic design: Promises easy single-hand operation in tight or awkward spaces with less operator fatigue
- Long battery life: Ten hours of standard-use battery life to last a full work day
- Large 3.5 inch QVGC colour display: Easy navigation and viewing with the intuitive icons and large font options
- 10,000 record storage: Quick access to historical data
- On-screen data presentation: Data can be viewed in a traditional tabular or trend graph view at the user's preference
- Personalised setting and configurations: Customisable settings for the display, sample methods, and alarm settings for sample count
- Data export options: Download data to a PC using a USB memory stick, USB cable or Ethernet connection. No special software is required to download or view data
- Option password control: Confirms security when required
- USB/Ethernet charge cradle: Assures device is always ready to go when needed

CO-220 Carbon Monoxide Meter

- Stand-alone CO meter that does not require a digital multimeter
- Large backlit LCD displays CO levels from 0 ppm to 999 ppm
- Beeper triggers with increasing frequency as CO levels rise
- MAX hold function stores and displays the maximum CO level
- Automatic sensor zeroing and self-test upon startup



For more information, go to www.fluke.com/au/co-220

CO-205 Aspirator Kit

The CO-205 flue gas sampling accessory kit includes:

- Stainless steel sampling tube
- Aspirator to draw flue sample
- Replaceable particulate filter
- Nose cap for connection to the Fluke CO-220



ORDERING INFORMATION

Included accessories

Certificate of Calibration (NIST traceable), cradle for charging and convenient USB and Ethernet communications, ethernet cable, USB cable, power supply, zero count inlet filter, filter adapter, sample inlet protective cap, hard case, and manual.

Four AAA alkaline batteries, users manual.

Part No

FLUKE-985	Airborne Particle Counter
FLUKE-971	Temperature Humidity Meter
FLUKE-CO-205	Aspirator Kit
FLUKE-CO-220	Carbon Monoxide Meter
FLUKE-RLD2	Refrigerant Leak Detector Flashlight

FLUKE Cases & Accessories

A PREMIUM METER DESERVES A PREMIUM CASE



Soft cases

CAMO-C25 Camouflage Carrying Case

- High quality 1000D fabric
- Dimensions (HxWxD): 20.3 x 12.1 x 4.6 cm (8 x 4.8 x 1.8 in)

CAMO-C37 Camouflage Carrying Case

- High quality 1000D fabric
- Dimensions (HxWxD): 26.5 x 9 x 3 cm (10.5 x 3.5 x 1.2 in)

C12A Meter Case

- Case with inside pockets and belt loop
- Dimensions (HxWxD): 172 x 128 x 38 mm (6.8 x 5 x 1.5 in)

C75 Accessory Case

- Zippered carrying case
- Dimensions (HxWxD): 179 x 103 x 26 mm (7 x 4 x 1 in)

C50 Meter Case

- Case with inside pocket, belt loop and inside meter strap
- Dimensions (HxWxD): 192 x 90 x 38 mm (7.56 x 3.5 x 1.5 in)

C25 Large Soft Case for DMMs

- Case with padding and inside pocket
- Dimensions (HxWxD): 218 x 128 x 64 mm (8.6 x 5 x 2.52 in)

C90 Soft Case for DMMs

- Case with inside pocket and belt loop
- Dimensions (HxWxD): 205 x 90 x 72 mm (8 x 3.5 x 2.8 in)

C35 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 220 x 140 x 65 mm (8.7 x 5.5 x 2.6 in)

C23 Soft Carrying Case

- Case with inside pocket and belt loop
- Dimensions (HxWxD): 225 x 95 x 58 mm (8.9 x 3.75 x 2.3 in)

C280 Soft Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 230 x 185 x 65 mm (9 x 7.3 x 2.6 in)

C115 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 240 x 205 x 75 mm (9.5 x 8 x 3 in)

C116 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 240 x 230 x 65 mm (9.5 x 9 x 2.6 in)

C781 Meter Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 269 x 141 x 90 mm (10.6 x 5.6 x 3.5 in)

C33 Soft Carrying Case

- Case with inside pocket and belt loop
- Dimensions (HxWxD): 280 x 115 x 55 mm (11 x 4.5 x 2.2 in)

C789 Meter and Accessory Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 308 x 256 x 77 mm (12 x 10 x 3 in)

C43 Soft Carrying Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 318 x 230 x 90 mm (12.5 x 9.1 x 3.5 in)

C550 Tool Bag

- Made of ballistic cloth with heavy-duty hardware
- Dimensions (HxWxD): 333 x 513 x 231 mm (13 x 20.2 x 9.1 in)

C345 Soft Case

- Made of durable polyester 600D
- Dimensions (HxWxD): 360 x 200 x 240 mm (14 x 8 x 9.5 in)

Hard cases

CXT Series Extreme Cases

- Models CXT80, CXT170, and CXT280 for various meter compatibility
- Unbreakable, watertight, airtight, chemical resistant and corrosion proof

C800 Meter and Accessory Case

- Dimensions (HxWxD): 230 x 385 x 115 mm (9 x 15 x 4.5 in)

C101 Hard Case

- Dimensions (HxWxD): 305 x 360 x 105 mm (12 x 14.2 x 4.1 in)

C100 Universal Carrying Case

- Dimensions (HxWxD): 397 x 346 x 122 mm (15.7 x 13.6 x 4.8 in)

C1600 Gear Box

- Includes five hook and loop straps to wrap cords and test leads
- Dimensions (HxWxD): 260 x 390 x 200 mm (10 x 15 x 7.8 in)

Leather cases

C520A Leather Tester Case

- Dimensions (HxWxD): 256 x 154 x 106 mm (10 x 6 x 4 in)

C510 Leather Meter Case

- Dimensions (HxWxD): 287 x 179 x 106 mm (11 x 7 x 4 in)

Holsters

H80M Protective Holster

- Includes a hanging magnet, general purpose hanger, and hook and loop straps
- Dimensions (HxWxD): 190 x 95 x 43 mm (7.5 x 3.7 x 1.7 in)

H5 Electrical Tester Holster

- Dimensions (HxWxD): 192 x 90 x 38 mm (7.5 x 3.5 x 1.5 in)

H3 Clamp Meter Holster

- Dimensions (HxWxD): 231 x 90 x 64 mm (9 x 3.5 x 2.5 in)

H6 IR Thermometer Holster

- Dimensions (HxWxD): 302 x 178 x 57 mm (11.9 x 7 x 2 in)

Cases and Holsters Selection Guide	113/114/115/116/117	27/28 II	77-1/175/177/179	83V/87V	233	287/289	8845A/8846A/8808A	120/190/22X Series	51-1/52-1/53-1/54-1/54-1/55	561/566/568	63/66/68	321/322	365	365/373/302	374/375/376/381	705/707	712/714/715/717/72X Series	718/719	753/754	787/789	T+/T+PRO	T5-600/T5-1000	1503/1507/1577	
C12A	*																							
C23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
CAMO-C25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C33	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C35	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
CAMO-C37	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C43	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C50	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C75	The C75 is designed to hold test leads, probes, clips and other required accessories																							
C90	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C100	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	71X	*	787	*	*	*	*	
C101	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C115/C116	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C125	*	*	*	83V	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C280	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C345	The perfect case for carrying a wide range of Fluke handheld test tools and accessories																							
C510	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	787	*	*	*	
C520A	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C550/C1600	The C550 and C1600 are large enough to hold accessories and multiple test tools																							
C781	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	72X	*	*	789	*	*	*	
C789	*	*	*	*	*	*	*	*	*	*	*	*	*	365	*	*	*	*	*	*	*	*	*	
C799	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
C800	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	71X	*	787	*	*	*	*	
CXT80	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	72X	*	*	*	*	*	*	
CXT170	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	71X	*	*	*	*	*	*	
CXT280	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

FLUKE ACCESSORY SETS AND KITS

Get an outstanding value with our most popular accessories



- TL220 Industrial Test Lead Set**
- Starter kit for industrial applications
 - TP238 has insulated stainless steel tip
 - Includes 1 pair: AC220, TP220, TL222
 - CAT III 1000 V, CAT IV 600 V, 10 A



- TL223 Electrical Test Lead Set**
- Starter kit for electrical applications
 - TP1 has flat blades for wall sockets
 - Includes 1 pair: AC220, TP1, TL224
 - CAT II 1000 V, 10 A



- TLK-220 SureGrip™ Accessory Kit with Meter Carrying Case**
- Plunger style alligator clips
 - Large jaw alligator clips
 - Sharp test probes
 - Right to straight test leads
 - Zippered vinyl carry case with moveable divider
 - Holds large DMMs



- TLK287 Electronics Master Test Lead Set**
- The perfect test lead kit for today's electronics test and design.
- Precision electronic probes with multiple spring-loaded sharp tips to maximise contact with SMD test points
 - Micro-grabbers and leads to enable fine SMD test
 - Modular mini-alligator clips, grabbers, leads, probes, and couplers for virtually every electronics need



- TLK289 Industrial Master Test Lead Set and Case**
- Designed for electrical and electronics test in today's industrial environment.
- SureGrip™ alligator clips, grabbers and hook clips for dependable contact with a variety of test points
 - TP175 TwistGuard™ Test Probes
 - Magnetic hanger for suspension of your DMM
 - Temperature adapter with type K thermocouple for direct temperature measurement with your DMM's



- TLK-225 SureGrip™ Master Accessory Kit**
- TP175 TwistGuard™ Test Probes
 - Plunger style alligator clips
 - Plunger style hook clips
 - Plunger style pincer clips
 - Large jaw alligator clips
 - Right to straight test leads
 - Six-pocket storage pouch, keeps the entire set together



- T5-Kit, Tester Starter Kit**
- Getting started kit for electricians who already own a Fluke T5 Tester.
- Test probes
 - Large jaw alligator clips
 - Zippered soft case

Test Lead Kits Selection Guide	113/114/115/116/117	27 II/28 I/27	77 IV	175/177/179	83V/87V/233	287/289	434/435	88/95A/8846A/8808A	120 Series	190 Series	225C	321/322	355	365/373	374/375/376/381	902	705/707	71X Series	724/725/726	753/754	787/789	T/T+Pro	T5-600/T5-1000	1503/1507/1577/1587
TLK287	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TLK289	116	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TL220	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TL223	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TL225	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TL238	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TL80A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TL81A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80K-8, 80K-15, 80K-40	DC only	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

FLUKE TEST LEADS, PROBES AND CLIPS

The best leads for all your measurement needs

For electronic applications



TL80A Basic Electronic Test Lead Set

- Six piece set with zippered case
- Probes, alligator clips and tip extenders for electronic applications
- CAT II 300 V
- CAT III 1000 V, CAT IV 600 V with protective cap

TL910 Electronic Test Probes with Replacement Tips

- Small profile provides accessibility
- Comes with five sets of replaceable tips
- Replacement tips: TP912
- CAT II 1000 V, 3 A



TP80 Electronic Test Probes

- Tapered tip ideal for probing electronic components or boards
- Removable guard for IC probing
- CAT III 1000 V, 10 A



TP920 Test Probe Adapter Kit

- IC test tip adapters, extended tips, medium alligator clips fit over TL71 and TL75 test lead sets
- IC test tip Adapter, 3 A
- Extended probe tip, 3 A
- Med. alligator clip, 5 A
- CAT II 300 V



TL40 Retractable Probe Assembly

- Retractable, insulated sharp probe tip
- CAT III 300 V, 3 A



TL26A Telecom Test Lead Set

- Five-way multipoint test clips for telecommunications applications
- Flexible silicone insulated leads are heat and cold resistant
- CAT I 30 V, 8 A



For automotive applications

TP81 and TP82

- Stainless steel probe pierces insulation on 14, 16 and 18 gauge wire
- Design provides complete insulation while working on fuel injectors or sensors
- TP81 for use with modular test leads (Fluke TL224)
- TP82 slips over probe tips (Fluke TL71)
- Rated to 60 V dc



TP88 Rigid Backprobe Pin Set

- Two inch long pins pass between the weather pack seal and wire
- Use with Fluke TL71 or TL75 test lead sets
- Rated to 60 V dc



TP40 Automotive Back Probe Pin Set

- Set of five 1.5 inch pins
- Rated to 60 V dc
- Provide an easy connection past weather pack seals to connector conductors
- Use with Fluke TL71 or TL75 test lead sets



TL82 Automotive Pin & Socket Adapter Set

- Collection of male and female adapters allows you to make firm connection to pin and socket connectors
- Adapters with flexible tips come in the following sizes: 22, 20, 16 and 12
- Rated to 60 V dc



TLK281 Automotive Test Lead Kit

- Insulation piercing probes
- SureGrip™ silicone test leads
- SureGrip test probes
- SureGrip plunger style alligator clips
- SureGrip alligator clips
- Carrying case



TLK282 Deluxe Automotive Test Lead Kit

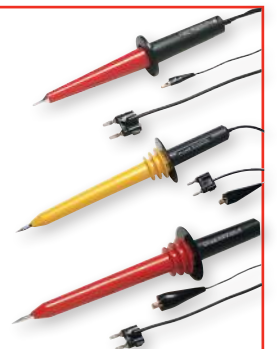
- Insulation piercing probes
- Set of five automotive back probe pins
- SureGrip silicone test leads
- SureGrip test probes
- SureGrip plunger style alligator clips
- SureGrip alligator clips
- SureGrip hook clips
- Carrying case



High-voltage probes

80K-6, 80K-15, 80K-40 High Voltage Probes

- Allows a digital multimeter to measure up to 6,000 volts peak, 15,000 volts peak and 40,000 volts peak respectively
- 1000:1 division ratio output when connected to 10 MΩ multimeter
- Ground clip included
- For low energy applications that are referenced to ground only
- 80K-15



As tough as your meter

Modular test leads and test probes (use test probes with test leads)

TP175, TwistGuard™ Test Probes

- Converts probe tip length between 4 mm, a CAT III 1000 V, CAT IV 600 V measurement and 19 mm, a CAT II 1000 V measurement
- Fits standard modular test leads



TL224 SureGrip™ Silicone Insulated Test Leads

- Superior strain relief
- 1.5 m silicone-insulated wire resists heat and cold
- CAT III 1000 V, CAT IV 600 V, 10 A



FTPL-1 SureGrip™ Fused Test Probes with Leads

- FTP-1 Fused Test Probes with built-in fuses for added protection
- TL224 Silicone Insulated Test Leads
- CAT III 1000 V, CAT IV 600 V, 10 A



FTP-1 SureGrip™ Fused Test Probes

- Built-in fuses for added protection
- 2 mm threaded probe tips include removable 4 mm lantern-style spring contacts
- Removable GS38 insulated caps
- CAT III 1000 V, CAT IV 600 V, 10 A



TL221 SureGrip™ Silicone Test Lead Extension Kit

- Superior strain relief
- Includes two adapters to extend leads 1.5 m
- CAT III 1000 V, CAT IV 600 V, 10 A



TP1, TP2, TP4 and TP38 Slim Reach™ Test Probes

- Slender probe bodies for probing closely spaced or recessed points
- TP1 has a flat blade
- TP2 has 2 mm diameter tip
- TP4 has 4 mm diameter tip
- TP38 has stainless steel insulated probe to help lessen the risk of arc flash explosion
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V (TP38 only)



TL222 SureGrip™ Silicone Insulated Test Leads

- Superior strain relief
- Recommended for use with AC220, AC280, AC283 test clips
- CAT III 1000 V, CAT IV 600 V, 10 A



TP220 SureGrip™ Industrial Test Probes

- Sharp, .5 inch stainless steel tip provides reliable contact
- Flexible finger barrier improves grip
- CAT II 1000 V, 10 A



Modular clips (use with test leads, includes one red, one black)

AC220 SureGrip™ Alligator Clips

- Insulated, nickel plated jaws grip objects up to .375 inch
- Blunt tip grabs round screw heads
- CAT III 1000 V, CAT IV 600 V, 10 A



AC280 SureGrip™ Hook Clips

- Profile narrows to .22 inch at tip
- Hook opening .20 inch at front, .08 inch at base
- CAT III 1000 V, CAT IV 600 V, 3 A



AC283 SureGrip™ Pincer Clips

- 4.5 inch flexible, insulated shaft
- Nickel plated pincers open to .20 inch
- CAT III 1000 V, CAT IV 600 V, 1 A



AC285 SureGrip™ Alligator Clips

- Multi-purpose tooth pattern grips anything from fine gauge wire to a .75 inch nut
- Nickel-plated steel jaws
- Accepts standard modular 4 mm test leads
- CAT III 1000 V, CAT IV 600 V, 10 A



AC175 Threaded Alligator Clips

- Threads securely onto TL175 or TP175 probes
- Insulated alligator clips with flexible boots
- Jaw opening: 7 mm (0.275 in), jaw contact material: nickel-plated steel
- CAT III 1000 V, CAT IV 600 V



AC173 Extended Tooth Alligator Clips

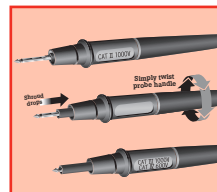
- Extended tooth jaw with front placement for attaching to screw heads
- Accepts standard 4 mm modular test leads
- Jaw opening: 8 mm (0.31 in), jaw contact material: nickel-plated steel
- CAT III 1000 V, CAT IV 600 V



The new standard for safety

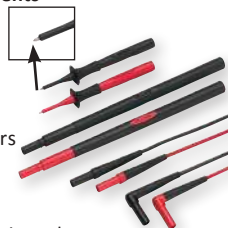
TL175 TwistGuard™ Test Leads

- Probes meet new IEC 61010-031 requirements for safety
- Patented extendable tip guard meets new CAT III 1000 V, CAT IV 600 V requirements while providing the flexibility you need for CAT II measurements
- New WearGuard™ test lead wear indicator that changes colour when leads are damaged and in need of replacement
- Probes always show correct category rating for tip being used
- Advanced strain relief exceeds 5,000 bend life
- TP175 probes fit modular test leads



TL238 SureGrip™ Test Lead Set for high energy environments

- Insulated tip probes help lessen risk of arc flash explosion
- Probe extenders keep hands away from live current
- Includes one pair each, insulated test tip probes, probe extenders and TL224 Test Leads
- Probes and leads CAT III 1000 V, CAT IV 600 V, 10 A, extenders CAT III 1000 V 10 A



TL71 Premium DMM Test Lead Set

- Flexible silicone insulated leads are heat and cold resistant
- Distinctive comfort grip probes
- Recommended for μ V measurements
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V with protective cap



TL75 Hard Point Test Lead Set

- Extremely hard alloy tips resist wear
- Distinctive comfort grip probes
- 1.5 m PVC leads
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V with protective cap



LOGIC PROBE



- Detects 30ns Pulses
- Pulse memory
- TTL/CMOS switchable
- Unique, tone beeper varies sound output with frequency/pulses

Part No.	Description
LP25A	Logic Probe

OSCILLOSCOPE PROBES



General purpose, switchable x1x10 scope probes. Maximum 600V input.

Part No.	Description	BandWidth
Q 0174	Scope probes x1x10	60mHz
Q 0176	Scope probes x1x10	100mHz
PMT 221	Scope probes x1x10 (German)	250mHz

TEST LEADS

Fluke Test Lead Sets

- One pair (red, black) comfort grip probes with PVC insulated, test leads with right-angle shrouded banana plugs
- Recommended for general purpose measurements
- CAT IV 600V, CAT III 1000V, 10 A rating. UL listed



Part No.	Description
TL 71	Premium test lead set
TL 75	Standard test lead set

Fluke Industrial Test Lead Set

Handy all-in-one kit includes:

- AC220 SureGrip™ Alligator Clip Set
- TP220 SureGrip™ Test Probe Set
- TL222 SureGrip™ Silicone Test Lead Set (right to right)



Part No.	Description
TL 220	Industrial test lead set



Silicone Test Lead Set

Silicone rubber with lantern shaped test probes, which fit modular test lead accessories but also work as a sharp probe. 1m long.

Part No.	Description
HDT 1288	Test lead set

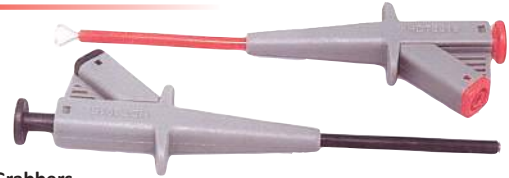
MODULAR TEST LEAD COMPONENTS



PVC Test Leads

With shrouded 4mm plugs at both ends. 1m long. Right angle plug suits most multimeters.

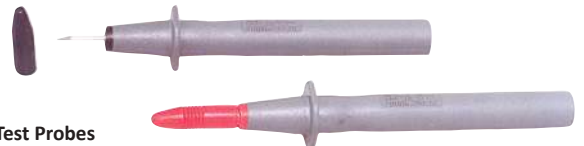
Part No.	Description
HDT 3081	PVC test leads 1m (pair)



Flexible Grabbers

With 4mm socket to accept modular test leads.

Part No.	Description
HDT 3916	Flexible grabbers (pair)



Test Probes

Standard sharp test probes with 4mm socket to accept modular test leads.

Part No.	Description
HDT 3907	Test probes (pair)

Croc Clips

Standard croc clips with 4mm socket to accept modular test leads.



Part No.	Description
HDT 3909	Croc clips (pair)

Large Croc Clips

Large croc clips with 4mm socket to accept modular test leads.



Part No.	Description
HDT 3917	Large croc clips (pair)



Parallel Busbar Grabbers

For up to 30m conductors.

Part No.	Description
HDT 3915	Busbar grabbers

MODULAR TEST LEAD KIT -

PART NO. MT822 (SELECTED FROM ABOVE)

A set of Test Leads is available comprising of:
 1 pair HDT3081 leads 1 pair HDT3907 Probes
 1 pair HDT3917 Grabbers 1 pair HDT3909 Croc clips

LOW CURRENT AC/DC CLAMP METER

- Measure AC and DC current into the low milliamp range up to 40A
- Auto zero DC for correct measurement every time
- High 1mA current resolution for quick circuit comparison on sensor and control circuits
- Auto power off
- Jaw accepts cables up to 20mm diameter
- IEC/EN6010 safety rating CAT III 300V



Part No.	Description
LH41A	Low Current AC/DC Clamp

LIGHT METER

- Measurement ranges of 20/200/2000/20 000 Foot-Candles or Lux
- Data and Peak Hold features
- Analogue DC voltage output to operate with Chart Recorder or Data Logger
- Accuracy: <10 000 lux/fc range \pm 3% of reading \pm 0.5% full scale
- Accuracy: >10 000 lux/fc range \pm 4% of reading \pm 10 digits



Part No.	Description
LM-80	Light Meter

SOUND LEVEL METER AND CALIBRATOR



- Range of 35dB to 130dB
- A and C weightings for checking compliance with safety regulations or making acoustic analysis
- Frequency range of 31.5Hz to 8kHz
- Sound level calibrator with two output levels of 94dB and 114dB with output frequency of 100Hz to set audio levels

Part No	Description
SM-70	Sound Level Meter
CAL-SM	Calibrator

LABORATORY POWER SUPPLY



Regulated variable voltage output bench power supply with variable current limiting. Auxillary SV + 12V outputs at 500MA. Overload protected.

Part No.	Description	Variable: V	Variable: A
M 8200 A	Bench PSU	0-30	0-3
M 8205	Bench PSU	0-30	0-5

LOW COST MULTIMETER

- CAT IV 600V, CAT III 1000V
- IP67 dust and waterproof
- Large LCD display
- Auto ranging
- Auto power off
- DCV, ACV, DCA, ACA
- OHM, frequency
- Diode check
- Continuity test
- Supplied with a soft case



Part No.	Description
DT9115	Digital Multimeter Autoranging

NON-CONTACT VOLTAGE TESTER



- Tests for voltage from 40V to 600VAC
- Audible and visual indication
- Locates breaks along live insulated wires
- Tests for energised circuits

Part No.	Description
61-063	Volt-Sensor NCV Tester

PORTABLE APPLIANCE TESTER



- For electrical safety checking of earthed appliances (Class1), double insulated appliances (Class 2) and extension leads.
- 4 Dual colour LED's for indication of pass or fail (according to threshold values dictated by: AS/NZS 3760)
- Selectable insulation test voltage of 250V and 500V
- Test results displayed on large LCD
- IEC/EN6010-1 safety rating CAT III 300V

Part No.	Description
K6201A	PAT Portable Appliance Tester

If you did not find what you were looking for, please call our sales team now!

Owon Oscilloscopes

NEW

SMARTDS SERIES DEEP MEMORY DIGITAL STORAGE OSCILLOSCOPE



• Ultra-Thin Body



• Large 8-inch Colour LCD, TFT Display, 800x600 pixels, 65535 Colours

Main Features

- 60MHz ~ 300MHz with dual channels
- 500MS/s ~ 3.2GS/s sample rate
- 10M record length for each channel
- Large 8-inch 800x600 pixels display
- Autoscale function
- Pass/Fail function
- Smart design with easy workplace
- Battery (Optional)
- Multiple interface: USB, VGA, LAN
- Dimensions: 340(L) x 155(H) x 70mm(W)
- Weight: 1.8kg (without battery)

Applications

- Electronic circuit debugging
- Circuit testing
- Design and manufacture
- Education and training
- Automobile maintenance and testing

Model	SDS6062	SDS7102	SDS8102	SDS8202	SDS8302	SDS9302
BandWidth	60MHz	100MHz	100MHz	200MHz	300MHz	300MHz
Sample Rate	500MS/s	1GS/s	2GS/s	2GS/s	2.5GS/s	3.2GS/s
Horizontal Scale (S/Div)	5ns/div~100s/div, step by1~2~5		2ns/div-100s/div step by1~2~5		1ns/div-100s/div, step by1~2~5	
Rise Time	≤5.8ns	≤3.5ns	≤1.7ns		≤1.17ns	
Display	8" Colour LCD, 800x600 pixels, 65535 colours					
Channel	2 + 1 (External)					
Record Length	Max 10M					
Input Coupling	DC, AC, Ground					
Input Impedance	1MΩ±2%, in parallel with 10pF±5pF					
Channels Isolation	50MHz: 100 : 1, 10MHz: 40 : 1					
Max. Input Voltage	400V (PK-PK) (DC + AC PK-PK)					
DC Gain Accuracy	±3%					
DC Accuracy Average	>16: ±(3% rdg + 0.05 div) for V					
Probe Attenuation Factor	1X, 10X, 100X, 1000X					
LF Respond(AC, -3dB)	≥5Hz (at input, AC coupling, -3dB)					
Sampling Rate / Relay Time Accuracy	±100ppm					
Interpolation	(sin x)/x					
Interval (T) Accuracy (Full BandWidth)	Single: ±(1 interval time + 100ppm reading+0.6ns); Average>16:±(1 interval time +100ppm×reading+0.4ns)					
Vertical Resolution (A/D)	8 bits resolution (2 Channels simultaneously)					
Vertical Sensitivity	2mV/div~10V/div					
Trigger Type	Edge, Pulse, Video, Slope, Alternate					
Trigger Mode	Auto, Normal, Single					
Trigger Level	±6 Divisions from screen centre					
Acquisition Modes	Sample, Peak Detect and Average					
Line/Field Frequency (Video)	Support standard NTSC, PAL and SECAM broadcast systems					
Cursor Measurement	V and T between cursors					
Automatic	Vpp, Vmax, Vmin, Vtop, Vbase, Vamp, Vavg, Vrms, Overshoot, Preshoot, Freq, Period, Rise Time, Fall Time, Delay A→B↑, Delay A→B↓, +Width, -Width, +Duty, -Duty					
Waveform Math	+, -, *, /, FFT					
Waveform Storage	15 waveforms					
Communication Interface	USB, USB flash disk storage, Pass/Fail, LAN, VGA / COM (optional)					
Cymometer	Available					
Power Supply	100V-240V AC, 50/60HZ,CAT					
Power Consumption	< 18W					
Fuse	2A, T class, 250V					

ODP SERIES PROGRAMMABLE DC POWER SUPPLY

Main Features

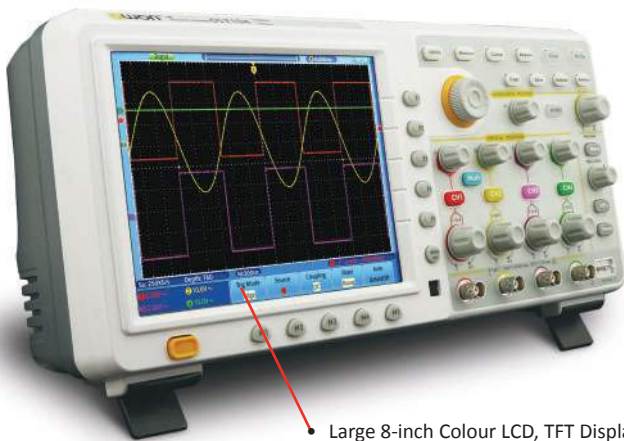
- Up to 195W total power
- Two independent and isolated channels
- Highest output resolution: 1mV/1mA
- Outstanding line regulation rate: ≤0.01%+2mv(voltage),≤0.01%+1mv(current)
- Low Ripples Noise: <300uVrms/2mVpp
- Up to 100 groups timers and predefine or unlimited output loop to generate arbitrary waveforms
- Up to 10 groups preset system configurations
- Auto-cooling system
- 3.9 inch high resolution (480 x 320 pixels) TFT LCD display
- Multiple Interface: USB2.0,RS232
- Dimensions: 298mm(L) x 202mm(H) x 450mm(D)



Part No.	Description
ODP3032	Owon DP Series Programmable DC Power Supply

TDS SERIES TOUCH SCREEN DIGITAL STORAGE OSCILLOSCOPE

NEW



Large 8-inch Colour LCD, TFT Display, 800x600 pixels, 65535 Colours

Main Features

- Max 200MHz bandWidth, up to 2GS/s real time sample rate
- 7.6M record length
- 50,000 wfms/s waveform capture rate
- Waveform zooming (horizontal / vertical), and saving
- FFT points (length, and resolution variable)
- Multi-window extension
- User-friendly voice warning
- 8 inch 800 x 600 pixels high def. LCD
- Multi- communication interface : USB, VGA, LAN

Applications

- Electronic circuit debugging
- Circuit testing
- Design and manufacture
- Education and training
- Automobile maintenance and testing

Model	SDS6062	SDS8302	SDS9302
BandWidth	100MHz		200MHz
Channel	4		
Sample Rate	1GS/s	2GS/s	
Waveform Capture Rate	50,000 wfms/s		
Display	8" touch screen colour LCD		
Input Coupling	DC, AC, and GND		
Input Impedance	1MΩ ± 2%, in parallel with 10pF ± 5pF; 50Ω ± 1%		
Probe Attenuation Factor	1X, 10X, 100X, 1000X		
Max Input Voltage	1MΩ input impedance : 400V (PK - PK) (DC + AC, PK - PK) ; 50Ω input impedance : 5V (PK - PK) (DC + AC, PK - PK)		
Channel Isolation	50Hz:100:1 ; 10MHz:40:1		
Interpolation	sin(x)/x		
Record Length	7.6M		
Horizontal Scale	(s/div) 2ns/div - 100s/div, step by 1 - 2 - 5		
Interval (T) Accuracy (full bandWidth)	Single : ±(1 interval time + 100ppm × reading + 0.6ns), Average>16 : (1 interval time + 100ppm × reading + 0.4ns)		
Vertical Resolution (A/D)	8 bits resolution (4 channels simultaneously)		
Vertical Sensitivity	2mV/div - 10V/div (at input)		
Analogue BandWidth	100MHz 200MHz		
LF Respond (AC, -3dB)	≥5Hz (at input, AC coupling, -3dB)		
Rise Time	≤3.5ns ≤1.7n		
DC Accuracy	±3%		
Trigger Type	Edge, Pulse, Video, Slope		
Trigger Mode	Auto, Normal, Single		
Trigger Level Range	±6 div from the screen centre		
Trigger level Accuracy (typical)	±0.3 div		
Line / Field Frequency (video)	NTSC, PAL, and SECAM standard		
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B↑, Delay A→B↓, +Width, -Width, +Duty, -Duty		
Waveform Math	+, -, ×, ÷, invert, FFT		
Waveform Storage	4 reference waveforms		
Cursor Measurement	V, and T between cursors		
Communication Port	USB host, USB device, VGA, LAN		
Power Supply	100 - 240 V AC, 50/60Hz, CAT II		
Dimension (W×H×D)	380 × 180 × 115 (mm)		
Weight (without package)	1.5 kg		

VDS SERIES PC OSCILLOSCOPE

Main Features

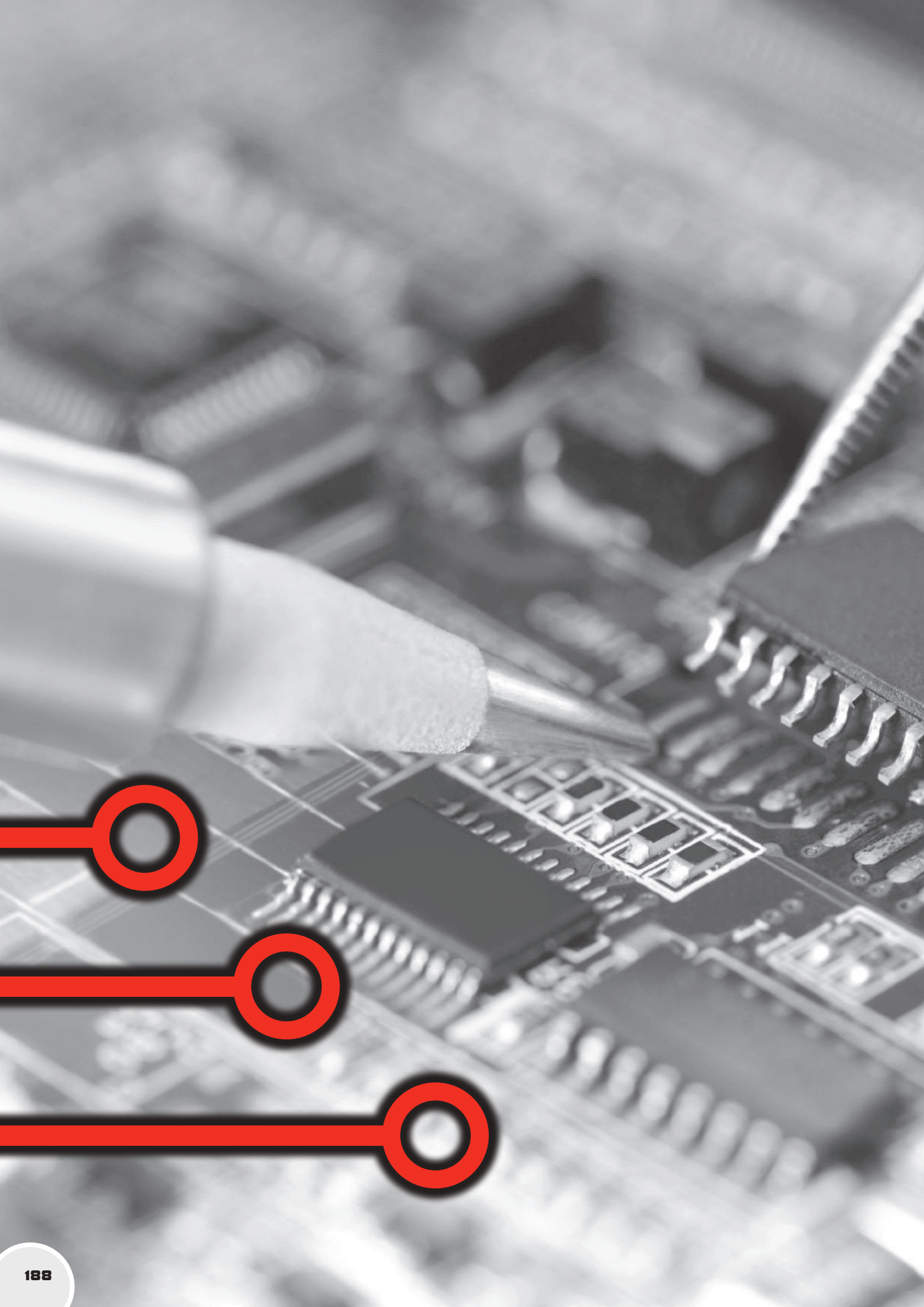
- Up to 100MHz bandWidth, and max 1GS/s real-time sample rate
- 10M record length
- Friendly UI : FFT, or X-Y, and waveform 2 views displayed on the same screen
- Multi-trigger option : edge, video, slope, pulse, and alternate
- USB isolation - less signal inference, more PC protection
- USB bus powering, and LAN remote control (optional)
- Ultra-thin body design, easy portability

Applications

- Design and debug
- Circuit function test
- Education and training



Part No.	BandWidth	Sample rate (Real time)	Record Length	Channels
VDS1022	25MHz	100MS/s	5K	2 + 1 (Multi)
VDS1021	25MHz	100MS/s	5K	(2 + 1) USB Isolation
VDS2062	60MHz	500MS/s	10Mpts	2 + 1 (Multi)
VDS3102	100MHz	1GS/s		



Soldering Equipment

JBC Soldering Stations.....	190-197
JBC Tips.....	198-201
Hakko Soldering Stations	202-205
Hakko Tips	206-212
OKI/Metcal Tips	212-213
Weller Mains Irons & Tips.....	213
Solder Pots.....	214
Pace Soldering Stations.....	215
Portable Gas Irons	216
Chipquick	217
Solder Wick.....	218
Solder Wire.....	219
Fluxes & Pastes	220-221

JBC Soldering Equipment

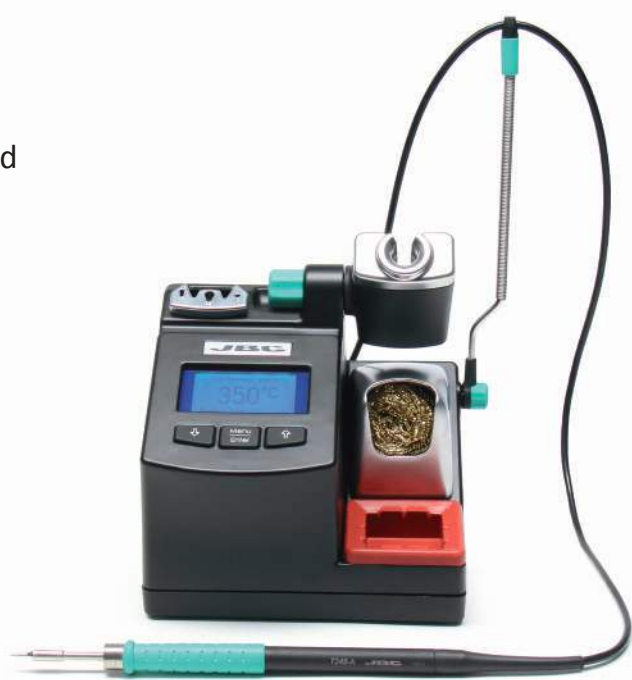
Probably the best soldering station in the world

Probably The Best Soldering Station In The World



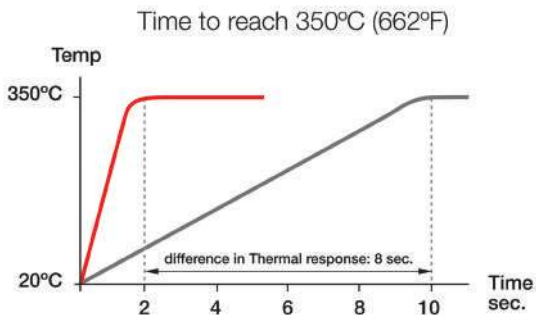
Top 10 Reasons for buying a JBC station

The key to successful hand soldering in a lead free era



1. Fast Temp Recovery

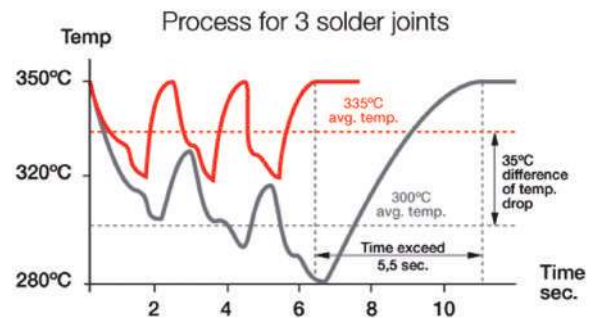
Time to reach the best temperature



JBC stations can reach 350°C (662°F) in only two seconds, while others need between 10 and 90 seconds.

3. Soldering At Lower Temps

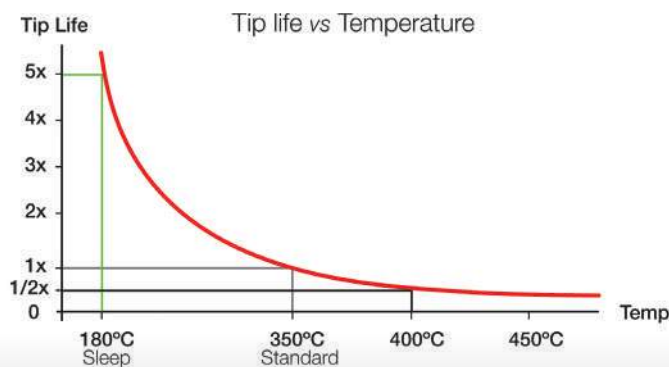
Process for 3 solder joints



JBC stations can reach 350°C (662°F) in only two seconds, while others need between 10 and 90 seconds.

2. Tip Life X 5 Times

Tip life vs Temperature



By using lower temperatures and sleep & hibernation features, tip life increases exponentially as shown in the graph.

4. Increase Your Productivity

Easy Cartridge Extraction Saves Time

5. 6 Different Tools

Control Unit Accepts 6 Tool Changes

6. Ergonomic Tools

Comfortable & Light

7. Friendly Menu

Over 20 Parameters To Personalize Your Station

8. 400 Cartridge Shapes

To Suit All Your Needs

9. Constant Product Innovation

Is Our Commitment

10. Communication Station - Pc

The Freedom To Manage Your Work Remotely

JBC Compact Line Stations

The JBC Compact line incorporates 6 stations. These all use the JBC exclusive heating system and can satisfy all your soldering and desoldering requirements in a minimum footprint.

- **Cartridge extractor:** An easily accessible location of the extractor for rapid cartridge change.
- **Adjustable stand:** Fast and simple adjustment of the angle of the stand without requiring additional tools.
- **Cable collector:** Maintains working area free of cable.
- **Brass wool housing:** Contains metal wool and minimises splashing of solder particles.
- **Tip wiper:** Tapping and wiping: Very soft and temperature resistant receptacle allows tapping and wiping of the tip to eliminate excess solder.
- **Sponge:** For final cleaning.



JBC CD-2BC SOLDERING STATION

- For general electronics jobs
- Features a large back-lit graphic display. Any changes to the original setting can be easily made via menu on the display
- Incorporates a USB Connector (Type B) to update station software and create graphs
- All settings can be locked by PIN.
- Nominal power: 75W
- Peak power: 140W
- Temperature range: 90-450° C
- Includes: Control unit CD; Handpiece T245-A; Cartridges C245-903 & C245-741



Part No.	Description
CD-2BC	JBC Digital Lead-Free Solder Station - STD Handpiece

JBC CD-2SC SOLDERING STATION

- For high precision solder joints
- Features a large back-lit graphic display. Any changes to the original setting can be easily made via menu on the display
- Incorporates a USB Connector (Type B) to update station software and create graphs
- All settings can be locked by PIN.
- Nominal power: 75W
- Peak power: 140W
- Temperature range: 90-450° C
- Includes: Control unit CD; Handpiece T210-A; Cartridges C210-001 & C210-008



Part No.	Description
CD-2SC	JBC Digital Lead-Free Solder Station - Micro Handpiece

JBC CF-2C SOLDER FEED STATION

- Designed for repetitive soldering or when you need a free hand
- Equipped with solder feed iron of 1mm diameter
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Nominal power: 75W
- Peak power: 140W
- Temperature range: 90-450° C
- Includes: Control unit CF; AP130-A Solder feed iron; C130-403 cartridge



Part No.	Description
CF-2C	JBC Solder Feed Station

JBC CP-2C MICRO TWEEZER STATION

- For soldering and desoldering SMD components with Micro-Tweezers
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Nominal power: 2 x 20W
- Peak power: 2 x 40W
- Temperature range: 90-450° C
- Includes: Control unit CP; PA120-A micro hot tweezers; 2 X C120-002 cartridge



Part No.	Description
CP-2C	JBC Micro Tweezer Station

JBC CS-2C ELECTRIC DESOLDERING STATION

- Desoldering station with electric suction system.
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Nominal power: 20 W
- Peak power: 30 W
- Temperature range: 180°-450° C
- Includes: Control unit CS; DS360-A Micro desoldering iron with tip C360-004; MS-A Electric vacuum pump



Part No.	Description
CS-2C	JBC Electric Desoldering Station

JBC CV-2C PNEUMATIC DESOLDERING STATION

- Desoldering station with pneumatic suction system.
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Nominal power: 20 W
- Peak power: 30 W
- Temperature range: 180°-450° C
- Includes: Control unit CV; DS360-A Micro desoldering iron with tip C360-004; MV-A Pneumatic suction system fed by compressed air max. 6 bar



Part No.	Description
CV-2C	JBC Pneumatic Desoldering Station

JBC Modular Line Stations

The JBC Modular Line features 4 control units, 6 stands, 8 tools, and more than 300 cartridges and tips adaptable for the tools. All components can be freely combined for a completely personalised set-up.

You can choose different control units according to the number of tools you need and every unit accepts any JBC tool.

All the units incorporate the JBC exclusive heating system that increases work efficiency thanks to quick temperature recovery.

For a basic working system, you need 1 control unit, 1 stand 1 tool and 1 cartridge.



JBC DI-2B 1 TOOL CONTROL UNIT

- Features a digital read-out display for accurate temperature and tool control
- Adjustable sleep and hibernation modes, as well as adjustable temperature settings. All values can be locked by PIN
- Nominal power: 75W
- Peak power: 140W
- Sleep power: 10W
- Hibernation power: 4W
- Temperature selection: 90-450 °C
- Weight: 2 kg

For a complete soldering station the following is needed:

- Control unit
- 1 tool with corresponding stand & cartridge.



Part No.	Description
DI-2B	JBC 1 Tool Control Unit

JBC DD-2B 2 TOOLS CONTROL UNIT

- The DD-2B 2 tools control unit offers connectivity for working with 2 tools simultaneously.
- Adjustable sleep and hibernation modes, as well as adjustable temperature settings. All values can be locked by PIN
- Nominal power: 2 X 75W
- Total peak power :2 X 140W
- Sleep power: 2 X 10W
- Hibernation power: 2 X 4W
- Temperature selection: 90-450°C
- Weight: 3.5 kg

For a complete soldering station the following is needed;

- Control unit
- From 1 to 4 tools with its corresponding stand & cartridge



Part No.	Description
DD-2B	JBC 2 Tools Control Unit

JBC DM-2B 4 TOOLS CONTROL UNIT

- The DM-2B 4 tools control unit offers connectivity for working with 4 tools simultaneously.
- Nominal power: 4 X 75W
- Total peak power: 4 X 140W
- Sleep power: 4 X 10W
- Hibernation power: 4 X 4W
- Temperature selection: 90-450°C
- Adjustable sleep and hibernation modes, as well as adjustable temperature settings. All values can be locked by PIN
- Weight: 4.5 kg

For a complete soldering station the following is needed:

- Control unit
- From 1 to 4 tools with its corresponding stand & cartridge



Part No.	Description
DM-2B	JBC 4 Tools Control Unit

JBC DT-2A TOUCH SCREEN 4 TOOLS CONTROL UNIT

- Access the menu by touching the screen to change parameters.
- Total soldering control.
- Frontal USB-A connection: to download data and update the equipment via pen-drive
- Swing screen, allowing orientation to suit station positioning.
- Allows the simultaneous connection of up to 4 tools and 8 peripheral devices such as: desoldering pump, nitrogen module, pedal and fume extractor.
- Compatible with the following tools: T210, T245, AP130, HT420, PA120, DR560 and DS360.
- Nominal power: 4 X 75W
- Total peak power: 4 X 140W
- Temperature selection: 90-450°C



Part No.	Description
DT-2A	JBC Touch Screen 4 Tools Control Unit

JBC MS-A / MV-A DESOLDERING SUCTION MODULES

MS-A Electric Suction Module

- Electric suction module with overdrive start up function.
- This suction system is regulated by the control unit.
- Power: 12W
- Supply: 24V
- Weight: 1.7 Kg

MV-A Pneumatic suction module

- This pneumatic suction module uses compressed air and a Venturi valve.
- This suction system is powered by compressed unit.
- Power: 3W
- Supply: 24V
- Recommended air pressure: 5 Bar
- Weight: 1.4 Kg



Part No.	Description
MS-A	JBC Electric Suction Module
MS-A	JBC Pneumatic Suction Module

JBC AP-SD MODULAR LINE STAND

- For AP130-A Solder feed iron
- Sleep mode
- All stands can be connected to all Modular stations
- Cable collector allows you to work efficiently without any cable confuse



Part No.	Description
AP-SD	JBC Stand For AP130-A Solder Feed Iron

JBC HT-SD MODULAR LINE STAND

- For HT420-A hot tweezers
- Sleep mode
- All stands can be connected to all Modular stations
- Cable collector allows you to work efficiently without any cable confuse
- Quick cartridges change



Part No.	Description
HT-SD	JBC Stand For HT420-A Hot Tweezers

JBC DR-SD MODULAR LINE STAND

- For DR560-A desoldering iron
- Sleep mode
- All stands can be connected to all Modular stations
- Cable collector allows you to work efficiently without any cable confuse



Part No.	Description
DR-SD	JBC Stand For DR560-A Desoldering Iron

JBC AD-SD MODULAR LINE STAND

- For T210-A & T245-A handpiece
- 3 cartridges extractor magazine for C210 or C245
- Quick cartridges change
- Sleep mode
- All stands can be connected to all Modular stations
- Cable collector allows you to work efficiently without any cable confuse



Part No.	Description
AD-SD	JBC Stand For T210-A & T245-A Handpiece

JBC PA-SD MODULAR LINE STAND

- For PA120-A Micro hot tweezers
- Sleep mode
- All stands can be connected to all Modular stations
- Cable collector allows you to work efficiently without any cable confuse



Part No.	Description
PA-SD	JBC Stand For PA120-A Micro Hot Tweezers

JBC DS-SD MODULAR LINE STAND

- For DS360-A micro desoldering iron
- Sleep mode
- All stands can be connected to all Modular stations
- Cable collector allows you to work efficiently without any cable confuse



Part No.	Description
DS-SD	JBC Stand For DS360-A Micro Desoldering Iron

JBC CL9885 TIP CLEANING STAND

- Designed to be able to be used right next to the point of work.
- Hood contains brass wool and minimises splashing of solder particles.
- Tapping and wiping: Very soft and temperature resistant receptacle allows tapping and wiping of the tip to eliminate the excess of solder.
- Brass wool: Very effective cleaning method. Leaves a small layer of solder on the tip preventing oxidation between cleaning and rewetting.
- Sponge: To help the final cleaning.



Part No.	Description
CL9885	JBC Tip Cleaning Stand

JBC T470 COMFORT HANDPIECE

- Designed for intensive soldering jobs with high power requirements.
- The screw incorporated in the handpiece is used to fix the cartridge to prevent rotation.
- This soft touch tool can provide up to 250W when used with a C470 cartridge and a HD station, but it can also work with C245 cartridges.



Part No.	Description
T470-A	JBC Handpiece with Screw

JBC T210-A MICRO HANDPIECE

- Specially designed for accurate soldering jobs with medium power requirements. It is able to provide up to 40W, if necessary.
- Perfect for working with SMD electronic components, under a microscope, or with conventional components.
- Works with the C210 family of cartridges ranging from round tips of 0,1 mm diameter to chisel tips of 2,3 mm diameter.
- The blue grip allows the user to differentiate the tool for leaded jobs from the lead-free ones.



Part No.	Description
T210-A	JBC Micro Green Handpiece
T210-PA	JBC Micro Blue Handpiece

JBC HT420-A TWEEZERS

- Designed specifically for soldering and desoldering small and medium sized SMD components.
- Each cartridge is individually controlled by the control unit.
- HT420-A tweezers connect to JBC station DI, DD, DM, AM and Single line AP.
- Uses C420 cartridges.
- Weight: 102 g.



Part No.	Description
HT420-A	JBC HT420-A Thermal Tweezers

JBC DR560-A DESOLDERING IRON

- Desoldering iron for thin desoldering jobs of SMD or conventional components.
- It is capable to provide up to 160W
- Very easy cleaning and maintenance.
- Two different types of solder residue chambers are available: metal and glass.
- Tips are easily placed by thread..
- Supplied with tip C560-003.
- Weight: 254 gr



Part No.	Description
DR560-A	JBC Desoldering Iron

JBC T245 HANDPIECE

- General soldering purposes.
- Able to provide up to 160W, if necessary.
- With the suitable cartridge, it is perfect for both SMD components and for jobs with high power requirements (eg., ground plane soldering).
- It works with C245 family of cartridges, the largest one with more than 120 different tips.



Part No.	Description
T245-A	JBC Advanced Green Handpiece T245-A
T245-PA	JBC Advanced Blue Handpiece T245-A

JBC PA120-A MICRO TWEEZERS

- Designed for soldering and desoldering SMD micro components.
- Each cartridge is individually controlled by the control unit.
- The available range of cartridges (C120) is made for desoldering a wide range of components.
- The PA120-A micro tweezers connect to JBC stations DI, DD, DM, AM and Single line AP and CP.
- Supplied without cartridges.
- Weight: 102 g.



Part No.	Description
PA120-A	JBC Micro Tweezers

JBC DS360-A MICRO DESOLDERING IRON

- The DS360-A micro desoldering iron adapts to the ever decreasing size of new components.
- Very easy cleaning and maintenance.
- Tips are easily inserted by gentle pushing.
- The iron connects to JBC stations DS, DV, CS, CV, DI, DD, DM, AM and Single line AP.
- Supplied with tip C360-004.
- Weight: 176 g.



Part No.	Description
DS360-A	JBC Micro Desoldering Iron

JBC AP130-A SOLDERING WIRE FEEDING IRON

- The AP130-A soldering wire feeding iron offers a 'third hand' by feeding soldering wire from diameters 0.8 to 1 mm.
- Specifically helpful for high-volume soldering jobs, and whenever an extra hand is needed.
- The iron connects to JBC stations DI, DD, DM, AM and Single line AP.
- Supplied with cartridge C130-403.
- Weight : 234 gr.



Part No.	Description
AP130-A	JBC Soldering Wire Feeding Iron

JBC NT105-A NANO SOLDERING IRON

- Designed for intensive soldering jobs with high power requirements.
- For the smallest SMD components like chips 0201 and smaller.
- For high-precision soldering jobs.
- Perfect for work with magnifying system thanks to easy handling and low weight.
- Capable of delivering 15W of power.
- Uses cartridges C105



Part No.	Description
NT105-A	JBC Nano Soldering Iron

JBC NP105-A NANO TWEEZERS

- Designed for the smallest SMD components like chips 0201 and smaller.
- Perfect for work with magnifying system thanks to easy handling and low weight.
- Capable of delivering 15W of power.
- Uses cartridges C105



Part No.	Description
NP105-A	JBC Nano Tweezers

JBC AL250-B AUTO-FEED IRON

- The most appropriate tool for extensive soldering applications that require one free hand.
- Supplies the tin wire automatically provided by the AL Auto-Feed station.
- This comfortable tool incorporates an anti-rotation screw to best align the cartridge.
- The AL250 works with C250 cartridges.



Part No.	Description
AL250-B	JBC Auto-Feed Iron

JBC CL6210 BRASS WOOL

- Very effective cleaning method.
- Leaves a small layer of solder on the tip preventing oxidation between cleaning and reworking.



Part No.	Description
CL6210	JBC Brass Cleaning Wool

JBC METAL BRUSHES

- For more in depth cleaning of the tips and cartridges



Part No.	Description
CL6217	JBC Metal Brush
CL8973	JBC Metal Brush for NAST station
CL6220	JBC Metal Brush

JBC CLEANING SPONGES

- The sponge is the softest cleaning method to eliminate excess in any soldering or rework job.
- It allows you to maintain tips continuously clean by reducing their wear.
- It has been designed to be placed into the tip wiper. This way you just need one hand to use it.
- The S0354 is also supplied with the tip cleaning stand or can be purchased separately.



Part No.	Description
CL6217	JBC Sponge 46 x 37mm
CL8973	JBC Sponge 36 x 69mm
CL6220	JBC Sponge 58 x 58mm

JBC PROTECTORS / TRIPODS

Protectors

- Protectors are the perfect accessory to ensure the best result in any desoldering job.
- They concentrate the heat in the desired area and protect adjacent components.
- The protector must fit the size of the component.
- The JBC range features different shapes and sizes.



Tripods

- The JBC Hot Air stations use jointly protectors and tripods for a faster and more comfortable desoldering job.
- Tripods allow the user to remove the component easily.



Part No.	Size mm	Part No.	Size mm	Part No.	Size mm
P3353	4.3 x 3	P2220	10 x 10	P4005	18 x 29
P3786	5.2 x 5.2	P4045	10.5 x 21	P4030	18.5 x 18.5
P3352	5.2 x 7.5	P4090	11 x 16	P1068	18.5 x 24
P3355	5.2 x 9.5	P2235	12 x 17	P2685	28.5 x 28.5
P3356	6.2 x 4.2	P1249	12 x 23	P4085	31.5 x 31.5
P3785	7.2 x 7.2	P4000	12.5 x 12.5	P2672	33 x 46
P3784	8.2 x 8.2	P3354	13.2 x 13.2	P4002	50 x 50
P4035	9 x 13	P4025	13.5 x 21.5	P3357	52.5 x 14
P4040	9.5 x 19	P2230	15 x 15	T2050	Tripod 39mm
P4080	9.5 x 21	P4010	17 x 17	T2250	Tripod 85mm

JBC EXTRACTORS

Extractors

- JBC's Hot Air stations use jointly extractors and hot air for fast and quick desoldering.
- Extractors protect surrounding components by concentrating heat on the component.



Part No.	Size mm	Part No.	Size mm
E4020	28.5 x 28.5	E4015	31.5 x 31.5
E2052	20 x 20	E2084	33 x 33
E2064	20 x 26	E2100	38 x 38
E2184	24 x 24	E2124	45 x 45
E2068	27 x 27	E2190	7mm dia

JBC Premium Line Stations

Premium line stations are designed for industrial and extensive use, with extraordinary thermal performance. They are easy to use and built to last. The Premium line offers 10 different models, each of them designed for specific soldering applications. All stations are ready for immediate use and feature Plug & Play connectivity. All components of Premium line stations are stackable for occupying little work-bench space. All JBC tools are fully compatible to all control stations; there are no limits to putting together a station that covers all your personal requirements. Premium line stations are designed for industrial and extensive use, with extraordinary thermal performance. They are easy to use and built to last. The Premium line offers 10 different models, each of them designed for specific soldering applications. All stations are ready for immediate use and feature Plug & Play connectivity. All components of Premium line stations are stackable for occupying little work-bench space. All JBC tools are fully compatible to all control stations; there are no limits to putting together a station that covers all your personal requirements.

JBC DIR-2B PRECISION SOLDERING STATION

- For high and medium precision solder-joints
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Nominal power: 75W
- Total peak power: 140W
- Temperature selection: 300-450 °C
- Weight: 2 kg

Included

- Control unit DI-2B
- Soldering iron T210-A
- Cartridge C210-001
- Stand AD-SB
- CL9885 Tip Cleaning Stand



Part No.

Description

DIR-2B

JBC Precision Soldering Station

JBC DIT-2B SOLDERING STATION

- For general electronic applications
- Incorporates a USB Connector (Type B) to update station software and create graphs
- Nominal power: 75W
- Total peak power: 140W
- Temperature selection: 300-450 °C
- Weight: 2 kg

Included

- Control unit DI-2B
- Stand AD-SB
- Soldering iron T245-A
- Cartridge C245-903
- CL9885 Tip Cleaning Stand



Part No.

Description

DIT-2B

JBC General 1 Tool Soldering Station

JBC DIS-2B / DIV-2B DESOLDERING STATION

- For desoldering insertion components and cleaning circuits with SMD components.
- Nominal power: 75W
- Total peak power: 140W
- Temperature selection: 300-450 °C
- Weight: 2 kg

Included

- Control unit DI-2B
- Desoldering iron DR560-A with tip C560-003
- Stand DR-SB
- MS-A Suction module (DIS-2B)
- MV-A Suction module (DIV-2B)
- CL9885 Tip Cleaning Stand
- Accessories set



Part No.

Description

DIS-2B

JBC Desoldering Station with Electric Suction Module

DIV-2B

JBC Desoldering Station with Pneumatic Suction Module

JBC DDST / DDVT REWORK STATION

- Offers a complete solution for fast and safe repair of insertion component circuits by suction of the solder.
- The station can also be used for cleaning pads in SMD circuits.

Included

- Control unit DD-2B;
- Handpiece T245-A- Cartridge C245-903 and C245-906;
- Desoldering DR560-A- Tip C560-003;
- Stand AD-SB; DR-SB; CL9885
- MS-A Suction module electric system
- (DDST-2B); MV-A Suction module pneumatic system (DDVT-2B);
- Set of tools and accessories



NEW

Part No.

Description

DDST-2B

Digital Rework Station with Electric Suction Module

DDVT-2B

Digital Rework Station with Pneumatic Suction Module

JBC RMST REWORK STATION

- A complete solution to repair and rework quick and safe electronic circuits.
- The station can also be used for cleaning pads in SMD circuits.
- It is composed by stackable modules and all the necessary accessories to make your job easier.

Included:

- Control unit DD-2B
- Control unit JTE-2A
- Stand AD-SB
- Stand JT-SB
- Stand DR-SB
- Desoldering DR560-A
- Handpiece T245-A
- Heater 1000 W
- MS-A Suction module
- CL9885 Tip Cleaning Stand
- Cartridge C245-903 & C245-906
- Tips C560-004, C560-005 & C560-013
- Extractor stand with 5 extractors, 5 protectors & two tripods



NEW

Part No.

Description

RMST-2B

JBC Digital Rework Station

JBC PH-2A INFRARED PREHEATER

- Facilitates any soldering or desoldering job by applying infrared.
- The heat projected under the PCB allows you to reduce the working time and the tool's temperature.
- The PC connection enables transfer of the selected programs directly to the computer and conversely.
- Nominal Power: 600VA
- Heated Area: 75/130 x 105mm (2 zones)
- Heating Power: 50-500 watt
- Temperature Rate: 50-170°C
- Heating Rate: 3.5°C/s



Part No.

Description

PH-2A

JBC Infrared Preheater

JBC JT-2B HIGH POWER HOT AIR STATION

- A high power hot air station used for desoldering SMDs.
- Its powerful heater desolders even the biggest QFPs and PLCCs quickly and safely.
- Digital readout of temperature and airflow offers maximum accuracy and control.

Included

- Control unit JTE-2A
- Heater 1000 W
- Extractor stand with 5 extractors, 5 protectors and two tripods.
- Heater stand and set of accessories.



Part No.

Description

JT-2B

JBC Digital High Power Hot Air Station

JBC TE-2B PRECISION HOT AIR STATION

- Ideal for soldering and desoldering small and medium-sized SMD components.
- In combination with JBC's unique system of extractors, the TE-2A hot air station is the safest hot air desoldering system available in the market.

Included

- Control unit JTE-2A
- Heater 300 W.
- Heater stand JT-SA
- Accessories.
- Extractor stand with 2 tripods, 3 extractors and 5 protectors.



Part No.

Description

TE-2B

JBC Digital Precision Hot Air Station

JBC HD-2B HEAVY DUTY STATION

- The ideal solution for high thermal demand and prolonged heavy duty soldering applications.
- Designed for extensive soldering of multi-layered circuits and parts which require high temperatures.
- The temperature of the tip is controlled by a sensor integrated in the heater, which permits quick temperature recovery.

Included

- Control unit HD-2B
- Stand HD-SB
- CL9885 Tip Cleaning
- Handpiece T470-A



Part No.

Description

HD-2B

JBC Heavy Duty Soldering Station

JBC AL-2A AUTOMATIC SOLDER FEED STATION

- The ideal solution for extensive soldering application, and any soldering application that requires one or two free hands.
- This station automates the soldering process by feeding soldering wire, using all advantages of JBC soldering stations.

Included

- Control unit AL-2A
- Complete handle AL250-A
- Cartridge C250403
- Stand AL-SB
- CL9885 Tip Cleaning Stand
- Tubes set and guides, for: wires \varnothing 0,9 - 1 mm



Part No.

Description

AL-2A

JBC Automatic Solder Feed Station

JBC NAST-2B NANO REWORK STATION

- Designed for micro soldering and desoldering of small-size components
- It works simultaneously with NT105 Nano Soldering Iron and NP105 Nano Tweezers.
- Nominal Power 15W
- Peak power 30W
- Temperature regulation: 90-400 ° C
- Weight: 2.6 kg

Included

- Control unit NA-2A
- Nano soldering iron NT105-A
- Nano tweezers NP105-A
- Cartridge set x 2 (10 pcs)
- Set: C105-101; C105-103; C105-105; C105-108; C105-111



Part No.

Description

NAST-2B

JBC Nano Station System

JBC NANT-2B NANO SOLDERING STATION

NEW

- The ideal solution for soldering very small-sized components at high precision.
- It works simultaneously with two NT105 Nano Soldering Irons.
- The short distance from the tip to the handle offers maximum control even when using a microscope.
- Included
- Control unit NAST-2B
- Nano soldering iron NT105-A
- Cartridges: C105-101; C105-103; C105-105; C105-107; C105-112; C105-113



Part No.

Description

NANT-2B

JBC Nano Soldering Station

JBC JT-2QB HOT AIR STATION WITHOUT EXTRACTOR DESK

- A high power hot air station used for desoldering SMDs.
- Its powerful heater desolders even the biggest QFPs and PLCCs quickly and safely.
- The station works with the JT-TA heater and incorporates a USB connector (type B).
- It comes with a heater stand with the quick nozzle changer.

Included

- Control unit JTE-2A
- Stand JT-SB
- JT-T2A Heater



Part No.

Description

JT-2QB

JBC Hot Air Station without Extractor Desk

JBC TE-2QB HOT AIR STATION WITHOUT EXTRACTOR DESK

- Ideal for soldering and desoldering small and medium-sized SMD components.
- Using the menu you can personalize over 20 parameters to help manage the soldering process.
- The station works with the TE-TB heater and incorporates a USB connector (type B).
- It comes with the heater stand with a quick nozzle changer.

Included

- Control unit JTE-2A
- Stand TE-SA
- TE-TB Heater



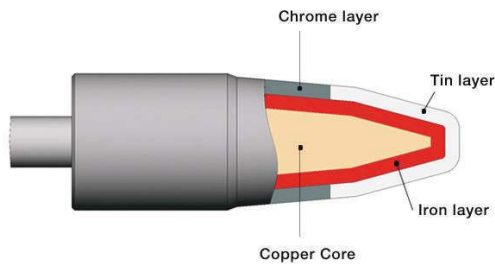
Part No.

Description

TE-2QB

JBC Precision Hot Air Station without Extractor Desk

Tip's structure



JBC Cartridges with extended tip life

Largest Tip Range In The World

Up to 400 cartridges and tips that last 5 times longer.

Excellent Heat Transfer

The compact element reduces thermal barriers.

Instantaneous Heating Up

A fully integrated thermal sensor to the heater ensures a quick temp recovery.

Great Durability

The intelligent algorithm control program increases life.

Custom Tips

Complete Customised Tips available with low MOQ's Call us now with your unique requirement

C245 SERIES TIPS FOR T245 STANDARD HANDPIECE

C245 cartridge range is the widest one of JBC with many shapes, sizes and special models.

They are appropriate for general soldering purposes and they are perfect for both SMD components or for applications with high power requirements such as ground plane soldering.

C245 Series Tips for use in conjunction with the T245 Handpiece



	Part No. C245-029	Description Bent Conical Tip		Part No. C245-030	Description 0.3mm Conical Tip		Part No. C245-032	Description 0.4mm Conical Tip		Part No. C245-126	Description Bent Conical Tip
	Part No. C245-259	Description Bent Conical		Part No. C245-260	Description Bent Conical		Part No. C245-444	Description Chisel Tip		Part No. C245-731	Description 0.3mm Chisel
	Part No. C245-741	Description Chisel Tip		Part No. C245-742	Description Chisel Tip		Part No. C245-903	Description S1mm Conical		Part No. C245-906	Description Chisel Tip
	Part No. C245-907	Description Chisel Tip		Part No. C245-908	Description Chisel Tip		Part No. C245-930	Description 0.5mm Conical		Part No. C245-931	Description 2.7mm Mini Spoon
	Part No. C245-938	Description 3.8mm Mini Spoon		Part No. C245-939	Description 6mm Knife Tip		Part No. C245-965	Description 1.9mm Mini Spoon		Part No. C245-966	Description Chisel Tip


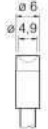




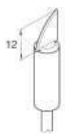
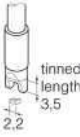



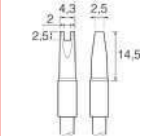
SPECIAL TIPS FOR T245 STANDARD HANDPIECE

Special Tips For T245 Handpiece.

Customised Tips available Call us now with your unique requirement
C245 cartridge range is the widest one of JBC with many shapes, sizes and special models.

C245 Series Tips for use in conjunction with the T245 Handpiece



	Part No. C245-041	Description 1mm Conical		Part No. C245-052	Description 4.9 Dome		Part No. C245-053	Description 3.8mm Dome		Part No. C245-054	Description 6.5mm Dome
	Part No. C245-119	Description 1mm Teflon Conical		Part No. C245-121	Description 13mm Scraper		Part No. C245-138	Description 12mm Knife		Part No. C245-150	Description Chip Removal Tip
	Part No. C245-301	Description 8.8mm Chamfered		Part No. C245-753	Description Chisel Nickel Tip		Part No. C245-757	Description Chip Removal Tip		Part No. C245-758	Description Chip Removal Tip

TIPS FOR T470 COMFORT HANDPIECE

C470 cartridges are the largest ones of the JBC range.

This range features many shapes, sizes and special models.

Due to their size, these cartridges are appropriate for intensive soldering purposes and they are perfect for both SMD and applications with high power requirements.

They work with any of T470 handpieces.



	Part No. C470-001	Description 1.7mm Chisel		Part No. C470-002	Description 6mm Chisel		Part No. C470-003	Description 7.5mm Chamfered		Part No. C470-007	Description 15.5mm Chisel
	Part No. C470-013	Description 2mm Chisel		Part No. C470-014	Description 4mm Chisel		Part No. C470-015	Description 6mm Chisel		Part No. C470-016	Description 7.5mm Chisel
	Part No. C470-018	Description 8.9mm Bent Chisel		Part No. C470-034	Description 3.5mm Bent Chisel		Part No. C470-035	Description 4mm Chisel		Part No. C470-040	Description 4mm Chisel

C105 SERIES TIPS FOR NT105 & NP105 HANDPIECE









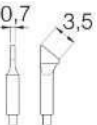
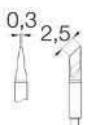


C105 Series Tips for use in conjunction with the NT105 & NP105 JBC Handpiece.

C105 cartridges are the smallest of the JBC range.

They are appropriate for soldering and repairing very small-sized components at high precision, even under a microscope.

NOTE: Tips are sold individually, QTY 2 are required for a Tweezer Handpiece



			
Part No. C105-101	Description 0.1mm Conical	Part No. C105-103	Description 0.3mm Conical
			
Part No. C105-107	Description 0.8mm Conical	Part No. C105-108	Description Chisel Tip
			
Part No. C105-111	Description 3.5mm Knife	Part No. C105-112	Description 2.5mm Knife
Part No. C105-113	Description Chisel Tip	Part No. C105-114	Description Chisel Tip

TIPS FOR PA120 MICRO TWEEZERS

C120 Series Tips for use in conjunction with the PA120 JBC Micro Tweezers

C120 cartridges are appropriate for soldering and desoldering chip components or dual in line easily, reducing handling time.

They work with PA120 Micro Tweezers which enables to align the cartridges according to the user needs.

NOTE: Tips are sold individually, QTY 2 are required for a Tweezer Handpiece



			
Part No. C120-001	Type Inline Tweezer	Part No. C120-002	Type Chip Component
Part No. C120-003	Type Inline Tweezer	Part No. C120-004	Type Chip Component
			
Part No. C120-005	Type 5mm Inline	Part No. C120-006	Type Chip Component
Part No. C120-007 C120-008	Type 3.5mm Right Inline 3.5mm Left Inline	Part No. C120-009 C120-010	Type 6mm Right Inline 6mm Left Inline
			
Part No. C120-011	Type Chip Component	Part No. C120-012	Type Chip Component
Part No. C120-092	Type Chip Component		

TIPS FOR DR560 DESOLDERING HANDPIECE



C560 Tips for DR560 desoldering iron.

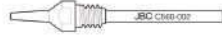
JBC Long Life Tips offer instant heat up, excellent heat transfer and great durability.

They last 5 times longer than other brands thanks to the Exclusive Heatir System and the Sleep & Hibernation features.



C560-001 ØA=1,4 ØB=0,6
Ømax. pin=0,4

Part No.	Description
C560-001	Desolder Tip 0.6mm



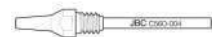
C560-002 ØA=1,8 ØB=0,8
Ømax. pin=0,6

Part No.	Description
C560-002	Desolder Tip 0.8mm



C560-003 ØA=2,7 ØB=1
Ømax. pin=0,8

Part No.	Description
C560-003	Desolder Tip 1mm



C560-004 ØA=3,2 ØB=1,3
Ømax. pin=1,1

Part No.	Description
C560-004	Desolder Tip 1.3mm



C560-005 ØA=3,4 ØB=1,5
Ømax. pin=1,3

Part No.	Type
C560-005	Desolder Tip 1.5mm



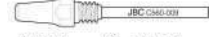
C560-006 ØA=4,2 ØB=1,9
Ømax. pin=1,7

Part No.	Type
C560-006	Desolder Tip 1.9mm



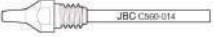
C560-007 ØA=4,8 ØB=2,4
Ømax. pin=2,2

Part No.	Type
C560-007	Desolder Tip 2.4mm



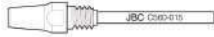
C560-009 ØA=5 ØB=1,3
Ømax. pin=1,1

Part No.	Type
C560-009	Desolder Tip 1.3mm



C560-014 ØA=2,5 ØB=0,8
Ømax. pin=0,6

Part No.	Type
C560-014	Desolder Tip 0.8mm



C560-015 ØA=5,2 ØB=3
Ømax. pin=2,8

Part No.	Type
C560-015	Desolder Tip 3mm

TIPS FOR HT420 THERMAL TWEEZERS

C420 Cartridges for HT420 Thermal Tweezers

C420 cartridges are appropriate for soldering and desoldering SMD components, reducing handling time.

This range works with HT420 Thermal Tweezers which enables to align the cartridges according to user needs

NOTE: Tips are sold individually, QTY 2 are required for a Tweezer Handpiece



Part No.	Description
C420-273	4mm Dual In Line



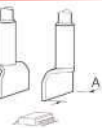
Part No.	Description
C420-274	6mm Dual In Line



Part No.	Description
C420-275	8mm Dual In Line



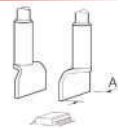
Part No.	Description
C420-276	10mm Dual In Line



Part No.	Description
C420-277	15mm Dual In Line



Part No.	Description
C420-278	20mm Dual In Line



Part No.	Description
C420-285	22mm Dual In Line

Hakko Soldering

FX888D

ESD SAFE



LEAD
FREE

- Digital model in an analog-model price bracket
- Small footprint only 100 (W) x 120 (D) mm.
- Simple and easy operation, with only two operation buttons of UP and ENTER in the center, operation is simple and easy.
- Digital display - The FX-888D's digital display makes it easy to check the set temperature at a glance.
- Password function - Settings can be locked using a password to prevent them from being changed unexpectedly. Of course, it is possible to restrict all setting changes or prevent users from switching to particular modes.
- Preset mode - Convenient feature to change the set temperature, Simply select the desired temperature from a selection of preset temperatures registered in advance. (Up to 5 preset temperatures can be registered.)
- Adjustment mode - Temperature adjustment is an essential part of any strict quality control system. With adjustment mode you can adjust the tip temperature to match the set temperature in case that there is a difference between those temperatures due to tip shape, heater replacement, or other factors

Part No.	Description
FX888D	Digital Soldering Station excluding tip

FX838

ESD SAFE



LEAD
FREE

- High powered 150W soldering iron with high heat capacity
- Best suited for soldering of power-supply boards, heat sinks and shield cases
- Great thermal recovery - which allows soldering at lower set temperatures and can shorten the soldering working time, which minimize concern about the influence of heat on components and tip life.
- Maximum operating temperature of 500°C
- Cartridge style Integrated heater improves thermal conductivity.
- HAKKO FX-838 uses the T20 series tips
- Temperature preset mode allows you to input three frequently-used temperatures in advance and recall them with one push of a button. Dimensions: 183(W)×280(H)×205(D)mm

Part No.	Description
FX838	Digital Heavy Duty Soldering Station excluding tip

HAKKO FX 951

ESD SAFE



LEAD
FREE

- The new standard for lead-free soldering utilizing a 70W composite tip
- Rapid thermal response accurately maintains tip temperature
- 84 different tip profiles available
- Vertical, small foot print ESD safe design
- "Supervisor" card control of parameter settings
- Selectable shut-down and sleep modes to extend tip life and reduce oxidation
- Optional anti-bacterial coloured sleeves for quick tip selection
- Additional Nitrogen systems available for low flux soldering

Part No	Description
FX951	Digital S/ Station & Iron excluding tip

HAKKO FX 950

ESD SAFE



LEAD
FREE

- The new standard for lead-free soldering utilizing a 70W composite tip
- Allows use of different tips and temperature settings for different

Part No.	Description
FX950	Analogue S/ Station & Iron excluding tip

FM-206 3 PORT DESOLDER/ SOLDER STATION ESD SAFE



LEAD FREE

- Multi-station enabling soldering, desoldering, & SMD rework
- Single-nozzle hot air handpiece comes as standard equipment
- Graphic LCD enables easy viewing and operation
- Features expandability in which the handpiece can be switched as needed for added functions.
- Comes with hot air-type rework functions which expands the range of repair of SMD parts with hot air handpiece.

Included as Standard:
FM-2024 - Desoldering tool
FM-2029 - Hot Air Tool
FM-2027 - Solder Handpiece



Optional Additional handpieces

- * HAKKO FM-2024 can be connected to FM-206 to all 3 receptacles, but it can only be used with one receptacle at a time
- ** HAKKO FM-2029 can only be used with FM-206 receptacle 3

Receptacle 1	Receptacle 2	Receptacle 3
FM-2024 - Desoldering tool	FM-2022 - Tweezer Handpiece	FM-2029 - Hot Air Tool
FM-2026 - Solder Handpiece	FM-2023 - Tweezer Handpiece	FM-2024 - Desoldering tool
FM-2027 - Solder Handpiece	FM-2024 - Desoldering tool	FM-2026 - Solder Handpiece
	FM-2026 - Solder Handpiece	FM-2027 - Solder Handpiece
	FM-2027 - Solder Handpiece	FM-2026 - Solder Handpiece
		FM-2027 - Solder Handpiece

Part No.	Description
FM206	3 port soldering/ desoldering station

FM-204 DESOLDER STATION



LEAD FREE

- New design with reduced distance between the nozzle end and filter pipe prevents clogging of sucked solder
- Easy maintenance
- Detachable handle allows two-ways use - Gun Type or Straight type
- Equipped with a nozzle lock function
- Sleep function
- Auto power shut-off function
- Excellent thermal recovery with nozzle integrated with heater and sensor

Part No.	Description
FM204	Lead Free desoldering station

FM-203 2 PORT DESOLDER/ SOLDER STATION ESD SAFE



LEAD FREE

A single station plays multiple roles: Soldering, desoldering, and SMD rework

- Two handpieces can be selected in various combinations (Supplied with one HAKKO FM-2027 solder handpiece as standard)
- A wide range of handpiece selection
- Power save function
- Auto power shut-off function
- Two connection ports for simultaneous use of two handpieces
- N2 system can be incorporated with an optional handpiece (HAKKO FM2026)
- Selectable buzzer and alert ON/OFF setting
- Excellent thermal recovery with the use of composite tip

Compatible Hand Pieces:

FM2022	FM2026**
FM2023	FM2027
FM2024*	

* HAKKO FM-2024, each handpiece needs a desoldering control box and compressor.

** HAKKO FM-2026, each handpiece needs an N2 generator (HAKKO FX-780), flowmeter (HAKKO FX-791), compressor, regulator etc.

Part No.	Description
FM203	Dual port soldering station

HAKKO REPAIR SYSTEM ESD SAFE

- The all-in-one systems for soldering and desoldering
- ESD safe by design
- Compact design for minimum use of bench space
- All the features of the 936-48 and 474-10 combined to offer you a perfect package



Part No.	Description
701-10	Repair System Complete

HAKKO DESOLDERING STATION

- The HAKKO 474 is a powerful desoldering station equipped with either the 809 gun suitable for conventional desoldering or the 815 gun for lead free work
- With very low maintenance required for either styles it is the perfect choice for production line work ESD safe



Part No.	Description
474-10	474 Desoldering Station with 809 Gun
A1313	Spare Element

HAKKO ANALOGUE HOT AIR STATION ESD SAFE

- The ideal solution to all simple SMD repair type applications
- Comes with airflow meter for higher accuracy
- Low cost
- Space-saving design
- ESD safe

LEAD FREE



Part No.	Description
FR801	Analogue hot air station

HAKKO DIGITAL HOT AIR STATION WITH PROFILING

- User selectable 3 stage + cool-down profile
- 3 profile memory for different chip sizes/alloys
- Perfect for cost effective BGA rework on mobile phones, PDA etc
- Small foot print ESD safe design
- Card lock functions with optional auto shut down
- Accurate temperature and air flow settings
- Vacuum pick up for chip removal
- Turbine style heater provides even heating of chip

LEAD FREE



Part No.	Description
FR803	Digital hot air station with profiling

HAKKO PREHEATER ESD SAFE

- Compact design
- Fast heating
- Temperature range 120 to 250°C
- Excellent thermal stability
- Closed loop variable temperature control
- ESD safe by design

LEAD FREE



Part No.	Description
FR820	Preheater

HAKKO OMNIVISE ESD SAFE

- Holds boards easily, safely and securely. Unique design allows 360° use
- Five (5) adjustable heights
- Can accommodate any board size



Part No.	Description
C1390C	Omnivise

HAKKO DIGITAL HOT AIR STATION

- The air outlet has a new mechanism to reduce the temperature irregularity
- Digital display
- Comes with the offset function to compensate for difference of air outlet temperatures depending on the nozzle size
- The power saving function will automatically stop the hot airflow after a specific time passes
- Comes with the auto cool-down function. If the power is turned off, it continues to supply air until the temperature in the nozzle pipe decreases down to 100°C to protect the heating element
- Card lock function to lock the setting details.
- Comes with an airflow meter to allow more accurate and easier control of the flow rate
- Space saving design
- ESD safe by design

LEAD FREE



Part No.	Description
FR802	Digital hot air station

HAKKO SMD & BGA REWORK STATION

- The highly versatile FR803 grouped together with the preheater, rework standard omnivise sets up as a very low cost and suitable for any BGA and SMD
- Components makes this the perfect choice for any hot air rework application

LEAD FREE



Part No.	Description
FR803/KIT	SMD and BGA Rework Station

HAKKO REWORK FIXTURE ESD SAFE

- This compact and stable rework fixture allows the handpiece to be mounted securely
- Great for accurate and repetitive rework
- Smooth vertical motion makes operation easy



Part No.	Description
C1392	Rework Fixture

HAKKO SOLDERING HANDPIECE

ESD SAFE

FM2027

Compatible with:

FM202 (discontinued)
FM203
FM204
FM206

FM2028

Compatible with:

FX951
FX950
FX952



LEAD
FREE

Part No.

Description

FM2027

Hakko Soldering Handpiece

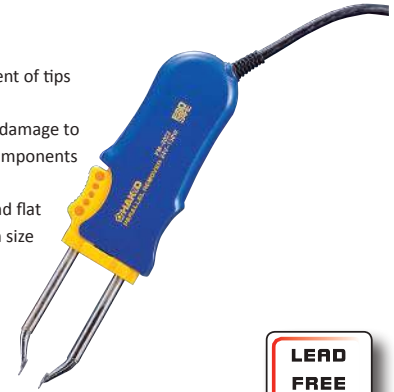
HAKKO PARALLEL REMOVER

ESD SAFE

Compatible with:

FM203
FM206

- Unique parallel movement of tips allows easy removal
- Direct heating prevents damage to neighboring sensitive components comparing with hot air
- Can be used for chips and flat packages up to 25mm in size



LEAD
FREE

Part No.

Description

FM2022

Parallel Remover excluding tip set

HAKKO SOLDERING HANDPIECE

ESD SAFE

Compatible with:

FX888D



LEAD
FREE

Part No.

Description

FX8801

Hakko Soldering Handpiece for FX888

HAKKO MINI PARALLEL REMOVER

ESD SAFE

Compatible with:

FM203
FM206

- Standard or reverse tweezers action can be selected with a switch lever
- Equipped with a small ergonomic grip



LEAD
FREE

Part No.

Description

FM2023

Mini Parallel Remover - excludes tip set

HAKKO DESOLDERING TOOL

ESD SAFE

Compatible with:

FM204
FM206
FM203

- Small ergonomic style grip with light weight provides fatigueless work
- New design with reduces distance between the nozzle end and filter pipe prevents clogging by sucked solder
- Easy maintenance: - Uses disposable paper filter pipes
- One-touch nozzle replacement
- Detachable handle allows two-way use:- gun type or straight type
- Safe design:- Equipped with a nozzle lock function. Nozzles can be safely replaced with the nozzle remover
- Requires compressed air



LEAD
FREE

Part No.

Description

FM2024-17

Desoldering Control Box and Tool W/out Nozzle

A1511

Disposable Filter Pipe Assembly.Pack of 10

HAKKO LOW PROFILE HOT AIR HANDPIECE

ESD SAFE

Compatible with:

FM206

- Single-nozzle hot air handpiece designed exclusively for HAKKO FM-206
- Slim grip is ideal for work in narrow spaces
- Hand switch enables easy ON/OFF operation
- Securely and easily remove 10 x 10 (mm) chips
- hand switch for air control



LEAD
FREE

Part No.

Description

FM2029

Low Profile Hot Air Handpiece - Excludes Nozzle

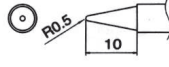
TIPS FOR FX951, FX952 SOLDERING IRONS

T12 Series Tips for use in conjunction with the FM2027 Handpiece.



Part No.
T12-B

Description
Shape B



Part No.
T12-B2

Description
Shape 0.5B



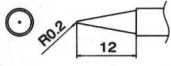
Part No.
T12-B3

Description
Shape 0.7B



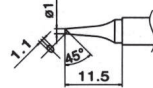
Part No.
T12-B4

Description
Shape 0.4B



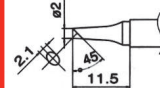
Part No.
T12-BL

Description
Shape B



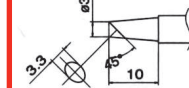
Part No.
T12-BC1

Description
Shape 1BC



Part No.
T12-BC2

Description
Shape 2BC



Part No.
T12-BC3

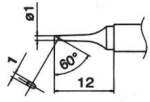
Description
Shape 3BC

T12-BCF2*
T12-BCM2

Description
Mini Wave tip

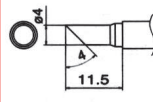
T12-BCF3*
T12-BCM3

Description
Wave Tip



Part No.
T12-C1

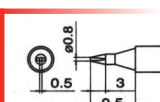
Description
Shape 1C



Part No.
T12-C4

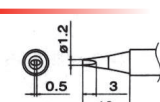
Description
Shape 4C

T12-CF4*
Shape 4C



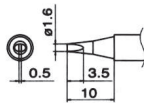
Part No.
T12-D08

Description
Shape 0.8D



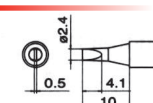
Part No.
T12-D12

Description
Shape 1.2D



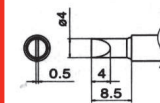
Part No.
T12-D16

Description
Shape 1.6D



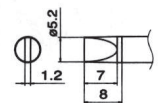
Part No.
T12-D24

Description
Shape 2.4D



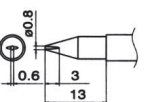
Part No.
T12-D4

Description
Shape 4D



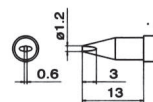
Part No.
T12-D52

Description
Shape 5.2D



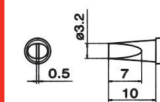
Part No.
T12-DL08

Description
Shape 0.8DL



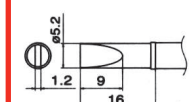
Part No.
T12-DL12

Description
Shape 1.2D



Part No.
T12-DL32

Description
Shape 3.2DL



Part No.
T12-DL52

Description
Shape 5.2DL



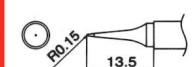
Part No.
T12-I

Description
Shape I



Part No.
T12-IL

Description
Shape IL



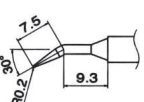
Part No.
T12-ILS

Description
Shape ILS



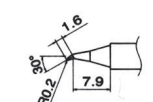
Part No.
T12-J02

Description
Shape 0.2J



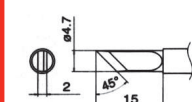
Part No.
T12-JL02

Description
Shape 0.2JL



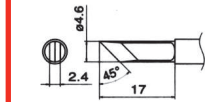
Part No.
T12-JS02

Description
Shape 0.2JS



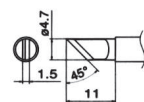
Part No.
T12-K

Description
Shape K



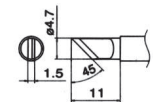
Part No.
T12-KF

Description
Shape KF



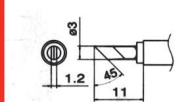
Part No.
T12-KL

Description
Shape KL



Part No.
T12-KR

Description
Shape KR



Part No.
T12-KU

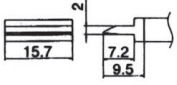
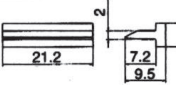
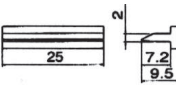
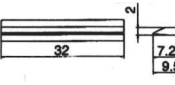
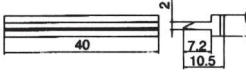
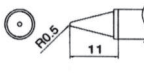
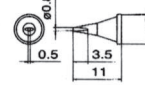
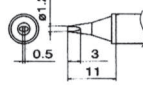
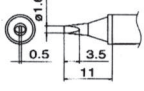
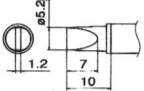
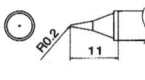
Description
Shape KU

*These tips are tinned on the soldering surface only

SMD TYPE TIPS FOR FX951, FX952 SOLDERING IRONS

T12 Series Tips for use in conjunction with the FM2027 Handpiece.



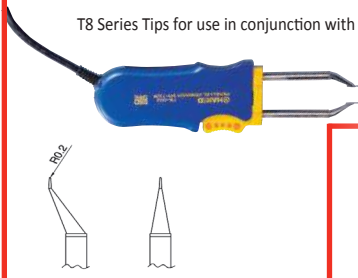
			
Part No. T12-1402	Description Spatula 15.7	Part No. T12-1403	Description Spatula 21.2
Part No. T12-1404	Description Spatula 25	Part No. T12-1405	Description Spatula 32
			
Part No. T12-1406	Description Spatula 40	Part No. T12-WB2	Description Shape 2WB
Part No. T12-WD08	Description Shape 0.8WD	Part No. T12-WD12	Description Shape 1.2WD
			
Part No. T12-WB16	Description Shape 1.6WB	Part No. T12-WD52	Description Shape 5.2WD
Part No. T12-WI	Description Shape WI		

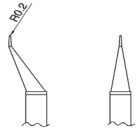
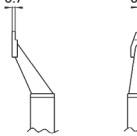
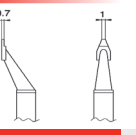
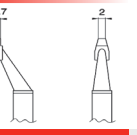
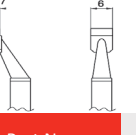
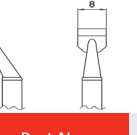
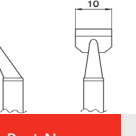
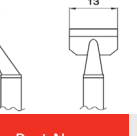
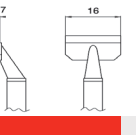
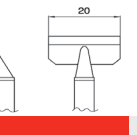
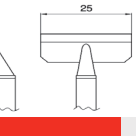
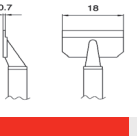
SMD TYPE TIPS FOR FX951, FX952 SOLDERING IRONS

			
Part No. T12-1201	Description Quad 13.6 x 8.5	Part No. T12-1202	Description Quad 10.3 x 10.3
Part No. T12-1203	Description Quad 12.8 x 12.8	Part No. T12-1204	Description Quad 17.9 x 17.9
			
Part No. T12-1205	Description Quad 23.4 x 17.3	Part No. T12-1206	Description Quad 22.5 x 16.5
Part No. T12-1207	Description Quad 15.5 x 15.5	Part No. T12-1208	Description Quad 15.8 x 15.8
			
Part No. T12-1209	Description Quad 8.4 x 8.4	Part No. T12-1001	Description Tunnel 5.1 x 4.6
Part No. T12-1002	Description Tunnel 5.1 x 10.4	Part No. T12-1003	Description Tunnel 9.5 x 18.3
			
Part No. T12-1004	Description Tunnel 9.5 x 15.8	Part No. T12-1005	Description Tunnel 9.5 x 13.2
Part No. T12-1006	Description Tunnel 6.9 x 11.4	Part No. T12-1007	Description Tunnel 7.9 x 18.8
			
Part No. T12-1008	Description Tunnel 19.5 x 10.2	Part No. T12-1009	Description Tunnel 13.4 x 20.5
Part No. T12-1010	Description Tunnel 19.5 x 12	Part No. T12-1401	Description Spatula 10.4

TIP SET FOR FM2022 PARALLEL REMOVER (1 SET = 2PCS)


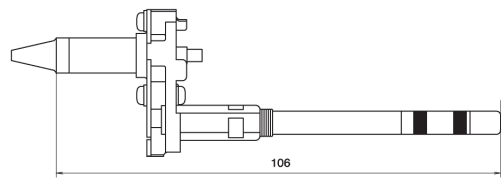
T8 Series Tips for use in conjunction with the FM2022 Handpiece.

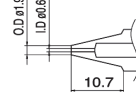
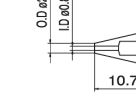
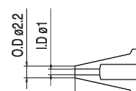
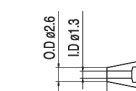
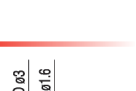
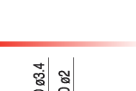
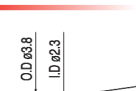
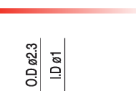


	
Part No. T8-1001	Part No. T8-1002
Description Chip 0.51	Description Chip 0.5C
	
Part No. T8-1003	Part No. T8-1004
Description Chip 1L	Description Chip 2L
	
Part No. T8-1005	Part No. T8-1006
Description SOP 6L	Description SOP 8L
	
Part No. T8-1007	Part No. T8-1008
Description SOP 10L	Description SOP 13L
	
Part No. T8-1009	Part No. T8-1010
Description SOP 16L	Description SOP 20L
	
Part No. T8-1011	Part No. T8-1012
Description SOP 25L	Description SOP 18L

TIPS FOR FM-2024

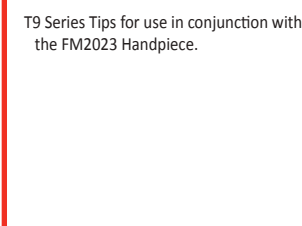
N1 Series Tips for use in conjunction with the FM2024 Handpiece.

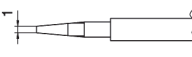
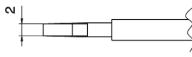
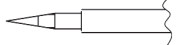



	
Part No. N1-06	Part No. N1-08
Description Nozzle 0.6mm	Description Nozzle 0.8mm
	
Part No. N1-10	Part No. N1-13
Description Nozzle 1.0mm	Description Nozzle 1.3mm
	
Part No. N1-16	Part No. N1-20
Description Nozzle 1.6mm	Description Nozzle 2mm
	
Part No. N1-23	Part No. N1-10L
Description Nozzle 2.3mm	Description Nozzle 1mm Long

TIP SET FOR HAKKO FM2023 MINI PARALLEL REMOVER (1 SET = 2PCS)

T9 Series Tips for use in conjunction with the FM2023 Handpiece.



	
Part No. T9-L1	Part No. T9-L2
Description Chip 1L	Description Chip 2L
	
Part No. T9-I	
Description Chip 1	

T9 Series Tips for use in conjunction with the FM2023 Handpiece.



TIPS FOR HAKKO FX888, FX888D SOLDERING IRONS

T18 Series Tips for use in conjunction with the FX8801 Handpiece.

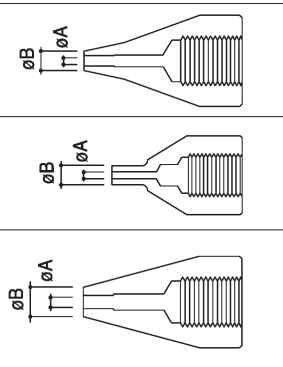


<p>T18-B</p>	<p>Part No. T18-B</p> <p>Description Shape B</p>	<p>T18-C05</p>	<p>Part No. T18-C05</p> <p>Description Shape 0.5C</p>	<p>T18-C1</p>	<p>Part No. T18-C1</p> <p>Description Shape 1C</p>	<p>T18-C2</p>	<p>Part No. T18-C2</p> <p>Description Shape 2C</p>
<p>T18-C3</p>	<p>Part No. T18-C3</p> <p>Description Shape 3C</p>	<p>T18-C4</p>	<p>Part No. T18-C4</p> <p>Description Shape 4C</p>	<p>T18-CF1</p>	<p>Part No. T18-CF1</p> <p>Description Shape 1CF</p>	<p>T18-CF15</p>	<p>Part No. T18-CF15</p> <p>Description Shape 1.5CF</p>
<p>T18-CF2</p>	<p>Part No. T18-CF2</p> <p>Description Shape 2CF</p>	<p>T18-CSF25</p>	<p>Part No. T18-CSF25</p> <p>Description Shape 2.5CF</p>	<p>T18-CF3</p>	<p>Part No. T18-CF3</p> <p>Description Shape 3CF</p>	<p>T18-CF4</p>	<p>Part No. T18-CF4</p> <p>Description Shape 4CF</p>
<p>T18-D08</p>	<p>Part No. T18-D08</p> <p>Description Shape 0.8D</p>	<p>T18-D12</p>	<p>Part No. T18-D12</p> <p>Description Shape 1.2D</p>	<p>T18-D16</p>	<p>Part No. T18-D16</p> <p>Description Shape 1.6D</p>	<p>T18-D24</p>	<p>Part No. T18-D24</p> <p>Description Shape 2.4D</p>
<p>T18-D32</p>	<p>Part No. T18-D32</p> <p>Description Shape 3.2D</p>	<p>T18-I</p>	<p>Part No. T18-I</p> <p>Description Shape I</p>	<p>T18-K</p>	<p>Part No. T18-K</p> <p>Description Shape K</p>	<p>T18-SB</p>	<p>Part No. T18-SB</p> <p>Description Shape SB</p>

NOZZLES FOR HAKKO 815 GUN

For 815, 816

Part No.	A	B
A1496	0.8	1.8
A1499	1.0	2.0
A1497	0.8	2.2
A1498	0.8	2.3
A1500	1.0	2.5
A1501	1.3	3.0
A1502	1.6	3.0
A1503	2.0	3.6

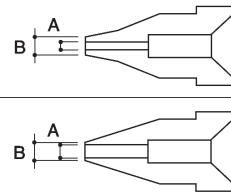


Part No.	A	B
A1496	0.8	1.8
A1499	1.0	2.0
A1497	0.8	2.3
A1498	0.8	2.3
A1500	1.0	2.5
A1501	1.3	3.0
A1502	1.6	3.0
A1503	2.0	3.6

SPARE FILTERS FOR 809/815

Part No.	Description
A1030	Pack of 10 Spring Filters
A1033	Pack of 10 Paper Filters Large
A1009	Pack of 10 Paper Filters Small
B2073	Filter Pipe with Filters

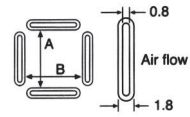
NOZZLES FOR HAKKO 809 GUN






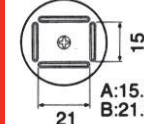
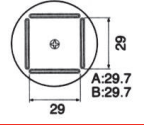
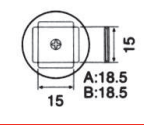
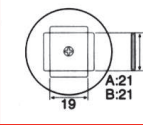
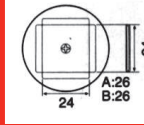
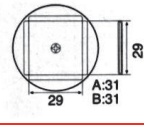
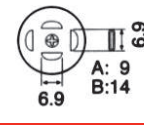
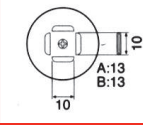
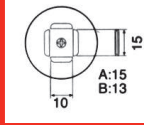
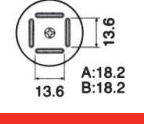
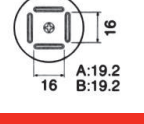
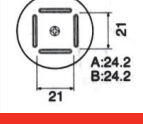
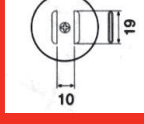
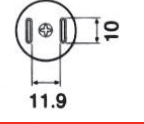
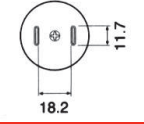
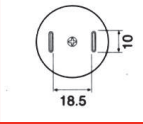
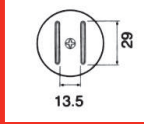
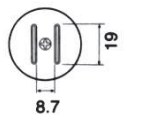
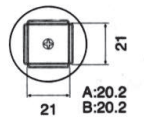
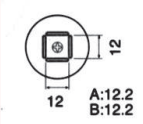
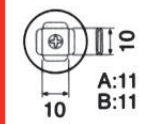
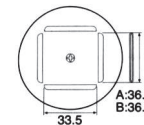
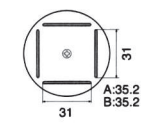
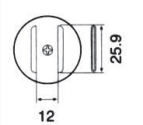
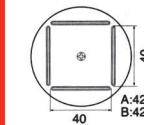
Part No.	A	B	Style
A1002	0.8	1.8	Slim
A1003	1.0	2.0	Slim
A1004	0.8	2.3	Standard
A1005	1.0	2.5	Standard
A1006	1.3	3.0	Standard
A1007	1.6	3.0	Standard

VACUUM FUNCTION OPERATIVE NOZZLES FOR FR801/802/803

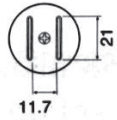
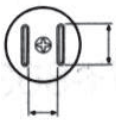
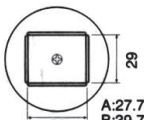
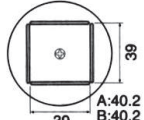
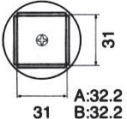
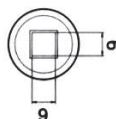
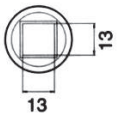
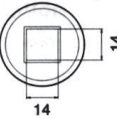
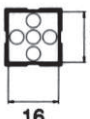
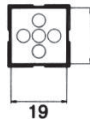
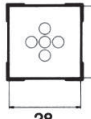
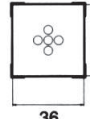
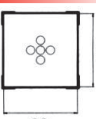
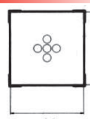
QFP SOP PLCC SOJ BGA(CSP)





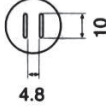
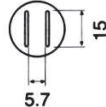
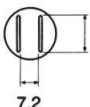
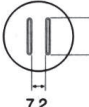
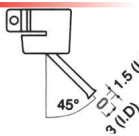
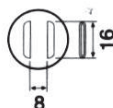

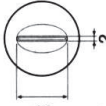
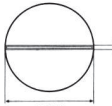
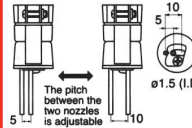
*The size in Specifications indicates the size of IC package.

 A:10.2 B:10.2	 A:15.2 B:15.2	 A:19.2 B:19.2	 A:15.2 B:21.2				
Part No. A1125B	Description QFP 10 x 10	Part No. A1126B	Description QFP 14 x 14	Part No. A1127B	Description QFP 17.5 x 17.5	Part No. A1128B	Description QFP 14 x 20
 A:29.7 B:29.7	 A:18.5 B:18.5	 A:21 B:21	 A:26 B:26				
Part No. A1129B	Description QFP 28 x 28	Part No. A1135B	Description PLCC 17.5 x 17.5	Part No. A1136B	Description PLCC 20 x 20	Part No. A1137B	Description PLCC 25 x 25
 A:31 B:31	 A: 9 B:14	 A:13 B:13	 A:15 B:13				
Part No. A1138B	Description PLCC 30 x 30	Part No. A1139B	Description PLCC 12.5 x 7.3	Part No. A1140B	Description PLCC 11.5 x 11.5	Part No. A1141B	Description PLCC 11.5 x 14
 A:18.2 B:18.2	 A:19.2 B:19.2	 A:24.2 B:24.2	 A:19				
Part No. A1180B	Description BQFP 17 x 17	Part No. A1181B	Description BQFP 19 x 19	Part No. A1182B	Description BQFP 24 x 24	Part No. A1184B	Description SOJ 18 x 8
 A:11.9	 A:18.2	 A:18.5	 A:13.5				
Part No. A1185B	Description TSOL 13 x 10	Part No. A1186B	Description TSOL 18 x 10	Part No. A1187B	Description TSOL 18.5 x 8	Part No. A1259B	Description SOP 13 x 28
 A:8.7	 A:20.2 B:20.2	 A:12 B:12.2	 A:11 B:11				
Part No. A1260B	Description SOP 8.6 x 18	Part No. A1261B	Description QFP 20 x 20	Part No. A1262B	Description QFP 12 x 12	Part No. A1188B	Description PLCC 9 x 9
 A:36.5 B:36.5	 A:35.2 B:35.2	 A:25.9	 A:42.5 B:42.5				
Part No. A1189B	Description PLCC 34 x 34	Part No. A1203B	Description QFP 35 x 35	Part No. A1214B	Description SOJ 10 x 26	Part No. A1215B	Description QFP 42.5 x 42.5

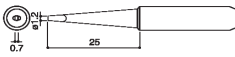
VACUUM FUNCTION OPERATIVE NOZZLES, CONTINUED

	Part No. A1257B	Description SOP 11 x 21		Part No. A1258B	Description SOP 7.6 x 12.7		Part No. A1263B	Description QFP 28 x 40		Part No. A1264B	Description QFB 40 x 40
	Part No. A1265B	Description QFP 32 x 32		Part No. A1407	Description BGA 8 x 8		Part No. A1471	Description BGA 12 x 12		Part No. A1472	Description BGA 13 x 13
	Part No. A1473	Description BGA 15 x 15		Part No. A1474	Description BGA 18 x 18		Part No. A1475	Description BGA 27 x 27		Part No. A1476	Description BGA 35 x 35
	Part No. A1477	Description BGA 38 x 38		Part No. A1478	Description BGA 40 x 40	If you did not find what you were looking for, please call our sales team now!					

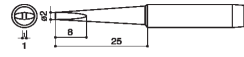
STANDARD NOZZLES (NON VACUUM FUNCTION TYPE) FOR FR801/802/803

	Part No. A1124B	Description Single ø2.5		Part No. A1130	Description Single ø4.4		Part No. A1131	Description SOP 4.4 x 10		Part No. A1132	Description SOP 5.6 x 13
	Part No. A1133	Description SOP 7.5 x 15		Part No. A1134	Description SOP 7.5 x 18		Part No. A1142B	Description Bent Single 1.5 x 3		Part No. A1183	Description SOJ 15 x 8
	Part No. A1190	Description Dual Single 2.5 x 9.5		Part No. A1191	Description SIP 25L		Part No. A1192	Description SIP 50L		Part No. A1325	Description Dual Single ø 1.5 x 5-10 Adjustable Pitch

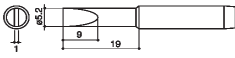
SPARE TIPS FOR HAKKO 936-48 SOLDERING STATIONS



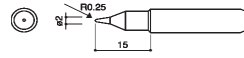
Part No. 900M-T-1.2LD
Description Shape 1.2LD



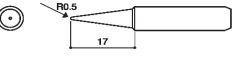
Part No. 900M-T-2LD
Description Shape 2LD



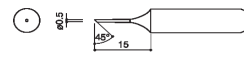
Part No. 900M-T-S3
Description Shape S3



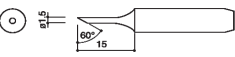
Part No. 900M-T-S4
Description Shape S4



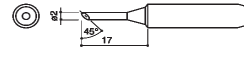
Part No. 900M-T-B
Description Shape B



Part No. 900M-T-0.5C
Description Shape 0.5C

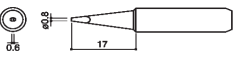


Part No. 900M-T-1.5CF*
Description Shape 1.5C

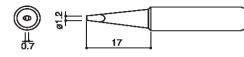


Part No. 900M-T-2C
Description Shape 2C

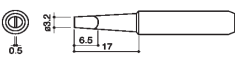
900M-T-2CF* Shape 2C



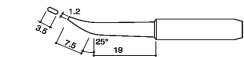
Part No. 900M-T-0.8D
Description Shape 0.8D



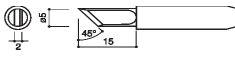
Part No. 900M-T-1.2D
Description Shape 1.2D



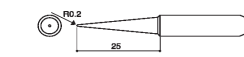
Part No. 900M-T-3.2D
Description Shape 3.2D



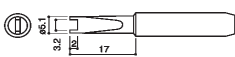
Part No. 900M-T-H
Description Shape H



Part No. 900M-T-K
Description Shape K



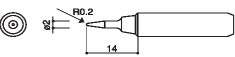
Part No. 900M-T-LB
Description Shape LB



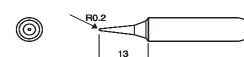
Part No. 900M-T-R
Description Shape R



Part No. 900M-T-RT
Description Shape RT



Part No. 900M-T-SB
Description Shape SB



Part No. 900M-T-SI
Description Shape SI

*These tips are tinned on the soldering surface only

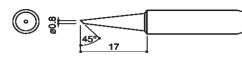
HAKKO 950 SMD HOT TWEEZER

ESD SAFE

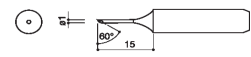
- Available for your HAKKO 936, 937, 701, 702B, 928 stations
- Direct heating; less influence upon surrounding components on crowded boards
- Easy removes SMD chips and flat pack's up to 25mm
- The collet allows easy replacement and alignment of the tips



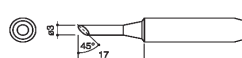
Part No. C1311/13
Description Tweezer and Stand



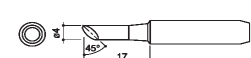
Part No. 900M-T-0.8C
Description Shape 0.8C



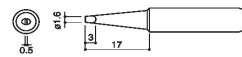
Part No. 900M-T-1C
Description Shape 1C
900M-T-1CF* Shape 1C



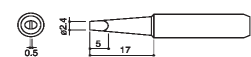
Part No. 900M-T-3C
Description Shape 3C
900M-T-3CF* Shape 3C



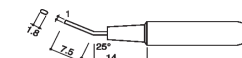
Part No. 900M-T-4C
Description Shape 4C
900M-T-4CF* Shape 4C



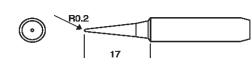
Part No. 900M-T-1.6D
Description Shape 1.6D



Part No. 900M-T-2.4D
Description Shape 2.4D



Part No. 900M-T-1.8H
Description Shape 1.8H



Part No. 900M-T-I
Description Shape I

*These tips are tinned on the soldering surface only

OKI/METCAL HANDPIECES



Part No.	Description	Style
407-825	SP200 Handpiece	SP-HC1
406-022	MX520 Handpiece	MX-RM3E

OKI/METCAL SP200 TIPS



Part No.	Size and Shape	Temp f
SSC-613A	1/8" 300°	600
SSC-713A	1/8" 90° Chisel	700
SSC-636A	3/32" 385°	600
SSC-736A	3/32" 30° Chisel	700
SSC-637A	1/16" 385°	600
SSC-737A	1/16" 30° Chisel	700
SSC-638A	3/64" 400°	600
SSC-738A	3/64" 30° Chisel	700
SSC-625A	1/32" 425°	600
SSC-725A	1/32" 30° Chisel	700
SSC-601A	1/32" 594°	600
SSC701A	Conical Sharp	700
SSC-642A	1/16" 628°	600
SSC-742A	1/16" 60° Chisel	700
SSC-622A	1/64" 445°	600
SSC-722A	1/64" Conical Sharp	700
SSC-626A	1/64" 445°	600
SSC-726A	1/64" Sharp Bent 30°	700
SSC-645A	1/64" 746°	600
SSC-745A	1/64" Conical Sharp	700
SSC-639A	1/8" 700°	600
SSC-739A	1/8" Multi-Lead Speed Solder	700

OKI/METCAL MX500 TIPS



Part No.	Size and Shape	Temp f
STTC-017	200°	600
STTC-117	X Large Chisel	700
STTC-036	.100" 30°	600
STTC-136	Chisel	700
STTC-037	.070" 30°	600
STTC-137	Chisel	700
STTC-038	.060" 30°	600
STTC-138	Chisel	700
STTC-025	.040" 30°	600
STTC-125	Chisel	700
STTC-022	.016" Conical Sharp	600
STTC-122	Sharp	700
STTC-043	.020" Conical Sharp	600
STTC-143	Sharp	700
STTC-047	.070" 60°	600
STTC-147	Bevel	700
STTC-045	.016" 60°	600
STTC-145	Bevel	700
STTC-041	.050" Conical Bent 30°	600
STTC-141	Bent 30°	700
STTC-044	.020" Conical Sharp Bent 30°	600
STTC-144	Sharp Bent 30°	700
STTC-040	.016" Conical Sharp Bent 30°	600
STTC-140	Sharp Bent 30°	700
STTC-026	.016" Sharp Bent 30°	600
STTC-126	Sharp Bent 30°	700

WELLER ET & PT SERIES TIPS

PT Series suit WTCP/S/T stations and TCP Series soldering pencils + ET Series to suit WES51D Solder stations.

WES51	WTCP	Description	Fig.	Tip Size MM	Reach MM
ETA	PTA7	Screwdriver		1/16" (1.6)	15.9
ETAA	PTAA7	Single Flat		1/16" (1.6)	15.9
EB	PTB7	Screwdriver		3/32" (2.4)	15.9
ETBB	PTBB7	Single Flat		3/32" (2.4)	15.9
ETC	PTC7	Screwdriver		1/8" (3.2)	15.9
ETCC	PTCC7	Single Flat		1/8" (3.2)	15.9
ETD	PTD7	Screwdriver		3/16" (4.8)	15.9
ETDD	PTDD7	Single Flat		3/16" (4.8)	15.9
ETH	PTH7	Screwdriver		1/32" (0.8)	15.9
ETK	PTK7	Long Screwdriver		3/64" (1.2)	25.4
ETL	PTL7	Long Screwdriver		5/64" (2.0)	25.4
ETM	PTM7	Long Screwdriver		1/8" (3.2)	25.4
ETO	PTO7	Long Conical		1/32" (0.8)	25.4
ETP	PTP7	Conical		1/32" (0.8)	15.9
ETR	PTR7	Narrow Screwdriver		1/16" (1.6)	15.9
ETS	PTS7	Long Conical		1/64" (0.4)	25.4
ETT	PTT7	Conical		.025" (0.6)	15.9
ETGW	-	Mini Wave Tip		-	-

NOTE- Type 7 Solder Tips for WTCP/T soldering stations are 700°F (370°C). For higher temperature requirement use Type 8, which is 800°F (427°C). For Type 8, change to PT...8, eg. PTA8

WELLER LT SERIES TIPS

LT Tip Chart for WP & O

Part No.	Description	Fig.	Size 1	Reach
LT1	Round		0.25	12.5
LT1L	Round		0.2	25
LT1LX	Bent Round		0.2	25
LT1S	Round		0.2	15
LT1SLX	Bent Round		0.4	20.5
LT1X	Bent Round		0.4	20.5
LT4	Single Flat		1.2	15
LT4X	Bent Chisel		1.2	16.5
LTA	Chisel		1.6	12.5
LTAS	Round		1.6	12.5
LTAX	Bent Chisel		1.6	14
LTB	Chisel		2.4	12.5
LTC	Chisel		3.2	12.5
LTD	Chisel		4.6	12.5
LTGW	Gull Wing		3.2	17.8
LTF	Single Flat		1.2	12.5
LTH	Chisel		0.8	12.5
LTHX	Bent Chisel		0.6	20
LTK	Chisel		1.2	20
LTKN	Knife (J-Lead)		1.5	20
LTL	Chisel		2.0	20
LTM	Chisel		3.2	20
LTS	Round		0.4	20

WELLER MAINS MAGNASTAT IRONS



Weller 220V Magnastat Irons

- Temperature controlled mains soldering irons for all day use on production lines where static sensitive components are not involved.

Part No.

Description

W 60D

60W Magnastat Iron

W 100D

100W Magnastat Iron

TIP TINNER CLEANING PASTE

Chemical tip tinning paste. Does not contain any diammonium phosphate, so it is safe to tip, P.W.B., operator and global environment. 10grams.



Part No.	Description
FS100	Tip Tinner

TIP CLEANER STEEL WOOL

- Great for lead free solder
- Replaces sponges in the FX 951 stand
- Does not cause thermal shock to tip like a wet sponge does.



Part No.	Description
599B	Tip Cleaner
599-029	Spare Cleaning Wire

TIP POLISHER

A tip polisher for users who have a problem with tip oxidation due to Lead-Free and high temperature solder. Removes and oxides with out damaging the tip. Energy saving design, consumes only 4.5watts. Dimensions; 70 x 54 x 101mm



Part No.	Description
FT700	Tip Polisher

TIP TRAY SELECTOR

- Convenient tip tray for easy selection of Hakko T12 and T7 tips



Part No.	Description
B2756	Tip Tray

TIP THERMOMETER

Enables you to perform temperature control surely and easily, which is essential in lead-free soldering. Suitable for lead-free solder – quick and accurate tip temperature measurement using fine CA wire sensor. Disposable sensor always maintains accurate temperature measurement. MAX hold function. Auto shut off function. Compact size.



Part No.	Description
FG100	Tip Thermometer

HAKKO SOLDERING POT ESD SAFE

- Large capacity solder pot holds a larger amount of solder, the solder temperature remains high even during continuous soldering operations
- The stainless steel solder pot and other heavy duty components offer greater durability, while the solder overflow prevention rim around the pot provides greater safety
- The raised rim around the pot enhances soldering and desoldering efficiency
- A waste collector adds a final touch of operating ease and efficiency
- 100 - 450°C



Part No.	Description
96W	Solder Pot 50mm x 50mm
96-1	Solder Pot 70mm x 70mm

HAKKO DIGITAL LEAD FREE SOLDERING POT



- Selectable heating programs allows to get optimum temperature quickly
- Select from four heating programs: Sn-Pb (Tin/Lead), Sn-Ag-Cu (Tin/Silver/Copper), Sn-Cu (Tin/Copper), and Sn (Tin)
- Precise temperature control by digital temperature display & offset function
- Use different pots for different composition solder, or different post sizes (50mm square and 75mm square) with the same unit
- A timer function helps you keep tabs on how long the soldering pot has been in use, making it easy to judge the time for pot replacement

Part No.	Description
FX301	Solder Pot Complete with 50mm Square Pot
A1517	Spare Pot 50mm x 50mm
A1518	Spare Pot 75mm x 75mm

HAKKO ANALOGUE SOLDERING POT



- Analog-type low-cost model
- Temperature can be adjusted just by turning a knob during the operation
- It becomes compatible with lead-free solder by adding an optional specially-coated stainless-steel pot

Part No.	Description
FX300	Solder Pot Complete with 50mm Square Pot
A1517	Spare Pot 50mm x 50mm
A1518	Spare Pot 75mm x 75mm

Pace Solder Stations

ST30 PACE SOLDER STATION

- Single channel IntelliHeat control technology
- °C/°F Temperature scales
- Temperature adjustment lockout
- ESD grounding jack
- ESD safe metal housing
- Supplied with TD-100 soldering iron



Note: stations available to order only

Part No.	Description
ST 30	Solder Station

ST70 PACE SOLDER STATION

- Single channel IntelliHeat control technology
- Supplied with 6.5, 7 and 7.5 power modules
- Performance level lockout
- Supplied with TD-100 iron
- ESD safe metal housing
- ESD grounding jack



Note: stations available to order only

Part No.	Description
ST 70	Solder Station

MBT350 PACE SOLDER STATION

- Temperature range of 100° to 900°F
- 3 continuously active handpiece channels
- Channels can be programmed individually
- LCD screen can display the temperature of one or all three channels
- Lead free compatible



Note: stations available to order only

Part No.	Description
MBT 350	Rework Station

PACE PS90 HANDPIECE



Part No.	Description
420-190	Replacement PS90 Handpiece

TIPS FOR PS90, PS80, SP2A & IR70

NOTE- All tips are sold in packs of 5 only



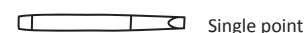
Part No.	Model	Shape	
130-209	1121-0358-P5	3/16" Chisel	5
112-187	1121-0337-P5	1/8" Chisel	5
112-185	1121-0335-P5	1/16" Chisel	5
113-691	1121-0349-P5	1/16" Taper Micro	5
112-216	1121-0499-P5	1/16" Long Chisel	5
130-217	1121-0500-P5	1/16" Long Bent	5
112-205	1121-0414-P5	1/16" Hi Capacity	5
112-191	1121-0359-P5	1/32" Chisel	5
130-210	1121-0361-P5	1/32" Bent Chisel	5



Part No.	Model	Shape	
112-186	1121-0336-P5	1/32" Conical	5
112-190	1121-0357-P5	1/64" Conical	5



Part No.	Model	Shape	
401-533	1121-0528-P5	1/64" Conical	5
401-532	1121-0527-P5	1/32" Conical	5



Part No.	Model	Shape	
401-531	1121-0533-P5	1/16" Chisel	5
401-530	1121-0529-P5	1/8" Chisel	5



Part No.	Model	Shape	
401-294	1121-0510-P5	1/16" Chisel	5
401-292	1121-0518-P5	1/8" Chisel	5



Part No.	Model	Shape	
112-204	1121-0406-P5	0.13" Chamfered	5

DESOLDERING TIPS FOR SX80 & SX70

NOTE- All tips are sold in packs of 5 only



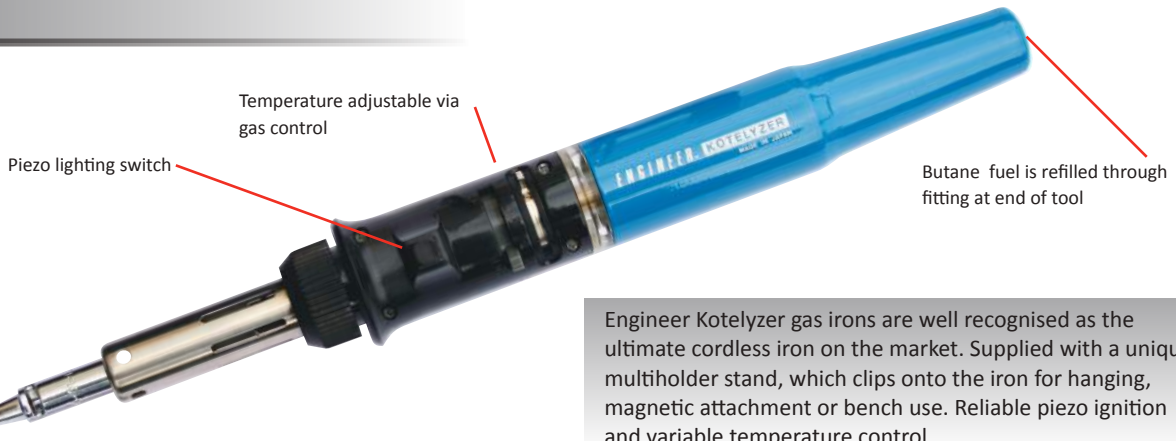
Part No.	Model	I.D. (mm)	O.D. (mm)	
412-830	1121-0625-P5	0.76	2.03	5
412-831	1121-0624-P5	1.02	2.29	5
412-832	1121-0626-P5	1.52	3.05	5
412-833	1121-0627-P5	2.29	5.10	5



Part No.	Model	I.D. (mm)	O.D. (mm)	
412-834	1121-0628-P5	0.76	2.29	5
412-835	1121-0629-P5	1.02	2.54	5
412-836	1121-0630-P5	1.52	3.05	5

SOLDERING & SOLDER PRODUCTS

Engineer Gas Soldering Irons



ENGINEER PIEZO IRON HEAVY DUTY



Heavy Duty Cordless Soldering

- Rugged unit for field service and maintenance where instant heat is required
- Flameless and safe heat generating system by patented gas catalyst reaction
- Hot blow for heat shrinking applications
- Supplied with convenient, magnetic multistand & protective shroud
- About 3 hours operation on one gas fill

Part No.	Description
SKC 70	Heavy duty cordless iron
SK 71	Tip, tapered 1mm needle
SK 72	Tip, chisel 3.3mm
SK 73	Tip, chamfered 2mm
SK 74	Tip, chamfered 3mm
SK 75	Tip, tapered 0.5mm needle
SK 82	Hot blow tip, 1.5mm diameter
SK 83	Hot blow tip, 3.3mm diameter
SK 84	Hot blow tip, 4.9mm diameter
SK 94	Heatshrink deflector
SK 96	Ceramic unit

ENGINEER COMPACT PIEZO IRON



Compact Cordless Soldering

- Lightweight, compact version for where accessibility may be limited
- Flameless and safe heat generating system by patented gas catalyst reaction
- Hot blow for heat shrinking applications
- Supplied with convenient multistand and protective shroud

Part No.	Description
SKA 60	Compact cordless iron
SK 61	Tip, tapered 1mm needle
SK 62	Tip, chisel 2.4mm
SK 63	Tip, chamfered 2mm
SK 64	Tip, chisel 5mm
SK 65	Hot blow tip, 1.5mm diameter
SK 66	Hot blow tip, 4.7mm diameter
SK 67	Hot knife
SK 68	Ceramic unit

Engineer Kotelyzer gas irons are well recognised as the ultimate cordless iron on the market. Supplied with a unique multiholder stand, which clips onto the iron for hanging, magnetic attachment or bench use. Reliable piezo ignition and variable temperature control.

BUTANE GAS



Gas for Piezo Cordless Soldering
Use only filtered butane gas in piezo irons.

Part No.	Description
NP 300	Butane Gas, 300ml

PORTASOL PIEZO KIT



Portasol Piezo Kit

- Gas soldering iron supplied in box with sponge
- Comes with hot knife tip

Part No.	Description
PSI 100K	Portasol Kit

HAKKO RECHARGEABLE IRON



- This innovative battery powered solderer iron is perfect for hobby, field service and repair applications. Quick and easy replacement tips< which simply plug in.

Part No.	Description
FX901	Cordless Iron
T1-B	Replacement Tip, 0.5mm round
T1-D4	Replacement Tip, 4.0mm chisel

ChipQuik

SMD Rework Kit

With Chip Quik® and a Soldering Iron You Can Remove any SMD Safely & Easily.
Now Eliminate Expensive Rework Equipment.

QUIK SMD COMPLETE SOLDER/DESOLDER REWORK KIT



Kit Contains:

- Chip Quik® Removal Alloy SMD 4.5 (4.5 ft. Removal Alloy)
- Solder Paste - No Clean 63/37 Rework Solder Paste with Flux in 1 cc Syringe with Nozzle & Cap (Trial Size)
- Solder 3 ft. 63/37 2% Silver .031 in.
- Chip Quik® Paste Flux - No Clean Flux in 1 cc Syringe with Nozzle & Cap (for Solder/Desolder)
- Liquid Flux Remover/Cleaner - 5 cc Container with Applicator (Non-Flammable)
- Probe Kit - 4 Stainless Steel Dental Picks for SMD Removal & Placement.
- Solder Wick - No Clean - 5 ft.
- Handi Vac - SMD Pick & Place Tool / with Tips
- Acid Brush - Qty. 2.
- Precision Tweezers - for SMD Removal & Placement.
- Cleaning Wipers - Tight Weave / Low Lint 4"x4" qty. 6 (for Cleaning PC Board).
- Swabs - Double Ended Qty. 10. (for PC Board Cleanup)
- Alcohol Pads - Qty. 6. (for PC Board Cleanup)

Part No.	Description
CQ701-778	Complete Solder/Desolder Rework Kit

CHIP QUIK SMD LEAD-FREE REMOVAL KIT

- Remove SMD's Safely & Easily with Chip Quik® & a Soldering Iron
- Low Temperature Rework - Removes QFP's, PLCC's, SOIC's, and chip components under 150 degrees
- Fast, Safe, Easy to Use
- No Damage to PC Board or Adjacent Components



Kit Contains:

- 2.5 ft. Chip Quik® material - removes 8-10 SMD'S
- 1 cc Syringe of Chip Quik® No Clean Rework Paste Flux
- Alcohol Pads for cleanup
- Complete instructions for SMD removal and cleanup

Part No.	Description
CQ701-773	SMD Lead Free Removal Kit

CHIP QUIK SMD LEAD-FREE REMOVAL ALLOY



- Industrial Pack of 4.5 ft. (137cm.)
- Chip Quik® lead-free alloy in 9 convenient 6.5" lengths

Part No.	Description
CQ701-774	SMD Lead Free Removal Alloy

CHIP QUIK® SURFACE MOUNTED DEVICES REMOVAL ALLOY



- Industrial Pack of 4.5 ft. (137 cm.)
- The same Chip Quik® material in 8 convenient 6.5" lengths

Part No.	Description
CQ701-769	SMD Removal Alloy

CHIP QUIK SMD LEAD-FREE REMOVAL ALLOY (LARGE PACK)



- Industrial Pack of 16ft. (487cm.)
- Chip Quik® lead-free alloy in 30 convenient 6.5" lengths

Part No.	Description
CQ701-776	SMD Lead Free Removal Alloy

CHIP QUIK® SMD REMOVAL ALLOY (LARGE PACK)



- Industrial Pack of 16 ft. (487cm.)
- The same Chip Quik® material in 30 convenient 6.5" lengths

Part No.	Description
CQ701-771	SMD Removal Alloy

SOLDERING & SOLDER PRODUCTS

Easy Braid Desolder Wick

QUICK BRAID - GENERAL PURPOSE

- Cleaner, Faster, More Consistent
- Oxide-free clean copper
- More strands of copper (more surface area) per square inch
- Designed to leave residue which is environmentally safe
- Uses pure type 'R' resin flux conforming to all the requirements of Mil-F-14256F, Type 'R' and ANSI/J-STD-004
- Packaged in 5, 25 and 100 foot lengths



Part No.	Width	Length	Colour
Q-A-5	0.63mm	1.5m	Silver
Q-B-5	1.27mm	1.5m	Gold
Q-C-5	1.90mm	1.5m	Green
Q-D-5	2.54mm	1.5m	Blue
Q-E-5	3.17mm	1.5m	Brown
Q-A-25	0.63mm	7.6m	Silver
Q-B-25	1.27mm	7.6m	Gold
Q-C-25	1.90mm	7.6m	Green
Q-D-25	2.54mm	7.6m	Blue
Q-E-25	3.17mm	7.6m	Brown
Q-A-100	0.63mm	30.5m	Silver
Q-B-100	1.27mm	30.5m	Gold
Q-C-100	1.90mm	30.5m	Green
Q-D-100	2.54mm	30.5m	Blue
Q-E-100	3.17mm	30.5m	Brown

SEA BRAID - FLUX FREE

- Ready to use with the flux of your choice
- Oxide-free clean copper
- More strands of copper (more surface area) per square inch
- Can be used in conjunction with any flux to fit your process
- Stocked in 5 foot lengths. 25 and 100 foot lengths available to order.



Part No.	Width	Length	Colour
S-A-5	0.63mm	1.5m	Silver
S-B-5	1.27mm	1.5m	Gold
S-C-5	1.90mm	1.5m	Green
S-D-5	2.54mm	1.5m	Blue
S-E-5	3.17mm	1.5m	Brown

DESOLDERING PUMP PIERGIACOMI



Aluminium Desolder Pump
Standard aluminium solder sucker, ideal for the toolkit

Part No.	Description	OAL
PIER PD	Desolder Pump Aluminium	215mm

ONE STEP - NO CLEAN

- Clean, Fast, Reliable
- Oxide-free clean copper
- More strands of copper (more surface area) per square inch
- Flux residue remaining on board does not need to be cleaned
- To be used in conjunction with processes using RMA type no-clean fluxes; conforms to the requirements of ANSI/J-STD-004, Type LO
- Packaged in 5, 25 and 100 foot lengths



Part No.	Width	Length	Colour
OS-A-5	0.63mm	1.5m	Silver
OS-B-5	1.27mm	1.5m	Gold
OS-C-5	1.90mm	1.5m	Green
OS-D-5	2.54mm	1.5m	Blue
OS-E-5	3.17mm	1.5m	Brown
OS-A-25	0.63mm	7.6m	Silver
OS-B-25	1.27mm	7.6m	Gold
OS-C-25	1.90mm	7.6m	Green
OS-D-25	2.54mm	7.6m	Blue
OS-E-25	3.17mm	7.6m	Brown
OS-A-100	0.63mm	30.5m	Silver
OS-B-100	1.27mm	30.5m	Gold
OS-C-100	1.90mm	30.5m	Green
OS-D-100	2.54mm	30.5m	Blue
OS-E-100	3.17mm	30.5m	Brown

ONE STEP LF - LEAD FREE

- No clean
- RoHS compliant
- Oxide-free clean copper
- On static - dissipative spools
- Flux residue remaining on board does not need to be cleaned
- To be used in conjunction with processes using RMA type no-clean fluxes; conforms to the requirements of ANSI/J-STD-004, Type LO
- Stocked in 5 foot lengths only



Part No.	Width	Length	Colour
LF-A-5AS	0.63mm	1.5m	Silver
LF-B-5AS	1.27mm	1.5m	Gold
LF-C-5AS	1.90mm	1.5m	Green
LF-D-5AS	2.54mm	1.5m	Blue
LF-E-5AS	3.17mm	1.5m	Brown

DESOLDERING PUMP SOLDAPULT



Plastic Desolder Pump
Plastic barrel desolder pump for one-handed, high-vacuum solder suction

Part No.	Description	OAL
CE 114-202	Desolder Pump Plastic	330mm
CE 407-294	Desolder Pump Conductive	330mm

Kester Solder

LEADED SOLDER - NO CLEAN

- Kester SN63 PB37 in 1lb (450g) spools in "275" no-clean cored flux, 50 core size (1.1%)



Part No.	Description	Diameter
24-6337-7604	Solder Wire, No Clean	0.38mm
24-6337-7602	Solder Wire, No Clean	0.51mm
24-6337-7616	Solder Wire, No Clean	0.64mm
24-6337-7600	Solder Wire, No Clean	0.78mm
24-6337-7624	Solder Wire, No Clean	1.01mm
24-6337-7612	Solder Wire, No Clean	1.27mm

LEADED SOLDER - ROSIN

- Kester SN60 PB40 in 1lb (450g) spools in "44" rosin cored flux, 58 core size (2.2%)



Part No.	Description	Diameter
24-6040-0006	Solder Wire, Rosin	0.38mm
24-6040-0009	Solder Wire, Rosin	0.51mm
24-6040-0017	Solder Wire, Rosin	0.64mm
24-6040-0026	Solder Wire, Rosin	0.78mm
24-6040-0038	Solder Wire, Rosin	1.01mm
24-6040-0052	Solder Wire, Rosin	1.27mm
24-6040-0068	Solder Wire, Rosin	3.17mm

LOW MELTING POINT - RMA

- Kester SN62 PB36 AG02 in 1lb (450g) spools in "285" RMA cored flux, 58 core size (2.2%)



Part No.	Description	Diameter
24-7150-9727	Solder Wire, RMA	0.38mm
24-7150-9717	Solder Wire, RMA	0.64mm
24-7150-9713	Solder Wire, RMA	0.78mm

LEAD FREE SOLDER BAR & SOLDER GRANULES

Lead free Solder Bar and Solder Granules for use in Solder Pots
NOT KESTER (Kester bar available to order)

Part No.	Description
HPLFB	96.5/3 0/0.5 Lead Free Solder Bar
HPLFG	96.5/3.0/0.5 Solder Granules

LEAD FREE SOLDER WIRE - NO CLEAN

ROHS
READY



- Kester SN96.5 AG3 CU05 in 1lb (450g) spools in "275" no-clean cored flux, 58 core size (2.2%)

Part No.	Description	Diameter
24-7068-7608	LF Solder Wire, No Clean	0.38mm
24-7068-7603	LF Solder Wire, No Clean	0.51mm
24-7068-7617	LF Solder Wire, No Clean	0.64mm
24-7068-7601	LF Solder Wire, No Clean	0.78mm

LEAD FREE SOLDER WIRE - ROSIN

ROHS
READY



- Kester SN96.5 AG3 CU05 in 1lb (450g) spools in "48" activated, rosin cored flux, 66 core size (3.3%)

Part No.	Description	Diameter
24-7068-1401	LF Solder Wire, Rosin	0.38mm
24-7068-1406	LF Solder Wire, Rosin	0.64mm
24-7068-1402	LF Solder Wire, Rosin	0.78mm
24-7068-1404	LF Solder Wire, Rosin	1.27mm

LEAD FREE - WATER SOLUBLE

ROHS
READY



- Kester SN96.5 AG3 CU0.5 in 1lb (450g) spools in "331" water soluble core flux, 66 core size (3.3%)

Part No.	Description	Diameter
24-7068-6422	LF Solder Wire, Water Soluble	0.38mm
24-7068-6417	LF Solder Wire, Water Soluble	0.64mm
24-7068-6403	LF Solder Wire, Water Soluble	0.78mm

KESTER K100LD - LEAD FREE (SN100 ALTERNATIVE)

NEW

ROHS
READY



- Kester K100LD 1lb (450g) spools in "275" no-clean flux, 58 core size (2.2%)

Part No.	Description	Diameter
24-9574-7608	K100LD Solder Wire	0.38mm
24-9574-7617	K100LD Solder Wire	0.64mm
24-9574-7601	K100LD Solder Wire	0.78mm

NO-CLEAN FLUX

Kester 958

A no-clean, non-corrosive halogen free flux for wave soldering of conventional and SMD circuit board assemblies. Improved wetting and excellent soldering performance on printed circuit boards, with corrosion inhibiting properties. Provides a non-tacky residue which does not require cleaning.



Classified as ORLO per J-STD-004.

Part No.	Description	Size	Solid %
958-1G	No-clean flux	1 gal	2.7
958-5G	No-clean flux	5 gal	2.7

NO-CLEAN FLUX (WEE COMPLIANT)

Kester 959T

A no-clean, non-corrosive halogen free flux for wave soldering conventional and SMD circuit board assemblies. Contains a small percentage of rosin (0.5%) for improved solderability, heat stability and surface insulation resistance. Provides the best wetting and shiniest solder joints of any no-clean solvent based chemistry. Minimises the formation of micro-solderballs during wave soldering.



**ROHS
READY**

Classified as ORLO per J-STD-004.

Part No.	Description	Size	Solid %
959T-1G	No-clean flux LF	1 gal	2.9
959T-5G	No-clean flux LF	5 gal	2.9

NO-CLEAN FLUX

Kester 959

Formulated for wave soldering of conventional and surface mount circuit board assemblies. Suited to both lead free and leaded soldering. Designed for spray or foam applications.



**ROHS
READY**

Classified as ORLO per J-STD-004.

Part No.	Description	Size	Solid %
959-1G	No-clean flux LF	1 gal	3.9
959-5G	No-clean flux LF	5 gal	3.9

RMA FLUX

Kester 186

High thermal stability and superior solderability with non-corrosive residue. Stocked in 18% solids formulation. Cleaning not necessary.



**ROHS
READY**

Classified as ROL0 per J-STD-004.

Part No.	Description	Size	Solid %
186-1G	RMA Flux	1 gal	36
186-5G	RMA Flux	5 gal	36

WATER-SOLUBLE FLUX

Kester 2220-VF

A high activity organic flux designed for lead-free automated wave soldering applications. Provides maximum capillary wetting action up plated through-holes in multi-layer boards. Produces bright shiny solder joints. Residue is effectively removed in standard water cleaning systems. VOC-free, eliminating the use of ozone depleting chemicals.



Classified as ORH1 per J-STD-004.

Part No.	Description	Size	Solid %
2220VF-1G	Water soluble flux	1 gal	7
2220VF-5G	Water soluble flux	5 gal	7

WATER-SOLUBLE FLUX VOC FREE

Kester 979

A no-clean, active VOC-free flux for optimal topside wetting and solderball reduction. May only be applied by spray fluxer.



**ROHS
READY**

Classified as ORLO per J-STD004

Part No.	Description	Size	Solid %
979-1G	Water Soluble Flux, NC	1 gal	4.5
979-5G	Water Soluble Flux, NC	5 gal	4.5

FLUX THINNERS

Kester 4662-SM

Is used to replace evaporative losses for the Kester 958 and 959T (DI water can be used for the Kester 2220-VF). The Kester PS22 test kit provides an effective means to determine the flux concentration.



Part No.	Description	Size
4622-SM	Flux Thinner	1 gal

FLUX PENS



Kester no-clean, low solids flux pens for rework applications.

Part No.	Description	Size
952-D6	Flux pen (ROHS compliant)	10mL
951	Flux pen (leaded applications)	10mL

FLUX GEL



Kester RF741

A high-viscosity, no-clean flux gel for easy syringe type dispensing. Can be precisely dispensed, staying in place until solder occurs due to its gel-like consistency. Ideal for QFP or BGA rework applications.

Classified as ROL0 per J-STD-004.

Part No.	Description	Size
RF 741-30	Flux Gel	30g

KESTER LEAD-FREE SOLDER PASTE



- Kester NXG33 is a lead-free, no-clean and halogen-free solder paste with state-of-the-art capabilities to support modern electronics assembly challenges.
- Kester NXG33 is fully capable of printing and reflowing 01005 components, even in air reflow, with minimal graping behavior.
- NXG33 can handle a wide variety of printer variables, including print speed, long idle times and a wide range of temperature and humidity.
- Post-soldering, the NXG33 offers minimized defects, including head- in-pillow and QFN/BGA voiding.
- This paste meets the IPC definition for halogen-free and is classified as type ROL0 per IPC J-STD-004. Kester NXG33 is available in Type 4 powder with the SAC305 alloy.

Part No.	Description	Size
NXG33	Lead Free SAC305 Paste	500g jar

EASY PROFILE KESTER 63/37 SOLDER PASTE



- Easy Profile® 256 is a SN63/PB37 no-clean, air or nitrogen reflowable, solder paste specifically designed for maximum robustness in reflow profiling and stencil printing.
- EP256 has the widest possible reflow processing window. EP256 is also capable of stencil printing downtimes of up to 90 minutes with an effective first print down to 20 mils.
- EP256 is a solderpaste formula that maintains its activity and printing characteristics for up to 8 hours without any shear thinning.
- Type 4 Powder Mesh

Part No.	Description	Size
EP256	256 Easy Profile	500g jar



Please see Page 283 for Lead Free labels, tape, etc

MULTICORE SPOT-ON SOLDER M



- Multicore Spot-On is a temporary solder resistance designed to be used on printed circuit boards prior to soldering and will withstand fluxing and wave soldering operations.
- Withstands high temperatures
- Thixotropic - holds position
- Suitable for hand, robotic, pneumatic or template screening applications and is simply removed after soldering by peeling off
- Opaque white liquid
- 2mm application thickness
- Dries in 2 hours at ambient temperature or 40 minutes at 80°C
- Not recommended for use on PCBs that require washing after soldering

Part No.	Description
MC463	Multicore Spot-On Solder Resist 250ml

KAPTON® MASKING TAPE

- Masks solder from edge connectors, holes and other areas on circuit boards during wave soldering
- High temperature resistance (250°C) and removes easily without leaving residue



Part No.	Description	Size
K250006	KAPTON® Tape	1/4"
K250009	KAPTON® Tape	3/8"
K250012	KAPTON® Tape	1/2"
K250016	KAPTON® Tape	5/8"
K250020	KAPTON® Tape	3/4"
K250025	KAPTON® Tape	1"
K250034	KAPTON® Tape	1 1/4"

SHERCON PAPERMASKING DISCS



- Creped back paper discs withstand 5-8 seconds of wave solder exposure & up to 256°C without adhesive transfer
- 5000 discs per roll

Part No.	Description	Size	
CE 113-497	Paper Disc	1/4"	5000
CE 191-802	Paper Disc	3/8"	5000
CE 113-495	Paper Disc	1/2"	5000

GALDEN VAPOUR PHASE FLUID

Galden® is a fully fluorinated fluid specifically designed for the vapor phase soldering process

FEATURES:

- Low heat of vaporization
- Vapor density greater than air
- Excellent thermal and chemical stability
- Good compatibility with materials
- No flash or fire points
- No auto-ignition point
- No explosion hazards.



Part No.	Description	Size	Boiling Point
LS200	Galden Vapour Phase Fluid	5KG	200 °C
LS230	Galden Vapour Phase Fluid	5KG	230 °C



Production/Laboratory Equipment

Fume Extraction	224-225
Dispensing Equipment	226-229
Bench Inspection	230-231
Andilog Testing Systems.....	232-234
Desoutter Tightening Systems ...	235-236
Pick & Place Machines	236-237
Component Forming Machines.....	238
Ultrasonic Cleaners	239

Fume Extraction

Applications

- Wave Soldering
- Selective Wave Soldering
- Reflow Ovens
- Component Underfill
- Selective Soldering
- Hand Soldering
- Point to Point Soldering
- Tip Extraction
- Arm Extraction
- Extraction Cabinets
- Laser Soldering
- Printing

Features

- Protects the health of personnel
- Static-safe fume extraction arms
- Real time airflow measurement.
- Long life filters.
- Fully mobile
- Compact and quiet.
- Ensures compliance with international health and safety regulations
- Removes solvent odours.
- Prevents medical conditions caused by solvent fumes such as nausea, fatigue and headaches.
- Submicron HEPA filter technology
- Fully mobile stainless steel cabinets
- Extra long life filters
- Airflow is adjustable meet different requirement
- Very easy to install and remove

PUREX FUME EXTRACTION GUIDE - WHICH FUME EXTRACTOR DO YOU NEED?

Notes:

1. The selection is based on the use of a standard connection kit.
2. Longer pipe runs may require a larger extraction machine.
3. * Point-to-point soldering machines only, not suitable for handheld tip extraction.
4. Continuous use may require a machine with larger filtration capacity. Contact Purex for further advice.
5. IMPORTANT: Choose a vacuum control machine for Arm and Tip extraction and a volume control machine for other applications.

MACHINE	CAPTURE ARMS			TIP EXTRACTION	REFLOWS	WAVE
	Max No. Arms 38mm	Cleancabs Max No.	Cowls Max No.	Number of Soldering iron tips	Extract Volume Required M ³ /hr	Extract Volume Required M ³ /hr
FumeCube Lite	1 or 2	-	-	1*	-	-
FumeCube	1 or 2	-	-	1*	-	-
FumeMAX	1 or 2	-	-	1*	-	-
FumeBuster	-	1 or 2	1 or 2	-	-	-
200	3	2	2	Up to 30	-	-
400	6	4	4	-	-	-
200i	3	2	2	Up to 30	-	-
400i	6	4	4	-	-	-
800i	9	6	6	-	-	-
1500i	12	8	8	-	Below 900	-
2000i	15	10	10	-	Below 1200	Below 2000
5000i	30	20	20	-	Over 1200	Over 2000

ANALOGUE CONTROL



FumeCube Lite



FumeCube



FumeCubeMAX



FumeBuster

DIGITAL CONTROL



200/400



200i/400i



800i



1500i/2000i



5000i

IMPORTANT: This is a guide only, many factors influence the choice of fume extraction system. For more help and information please contact us now

Solder Fumes

When heated, rosin-based solder fluxes form fumes containing a range of resin acid particulates and other components as gases.

When inhaled, rosin based solder flux fume can lead to occupational asthma or make existing asthmatic conditions worse. The fume can also cause irritation to the eyes and upper respiratory tract and can also cause dermatitis.

Rosin-based solder flux fume is now regarded as one of the most important causes of occupational asthma and the effects can be permanent and irreversible.

Continued exposure, even to very small amounts of fume, may cause asthma attacks and the person affected may be unable to do any soldering with rosin-based fluxes again. Solder fume is classed as a hazardous substance and should be controlled according to any appropriate legislation.





Hand & Machine Soldering

Electronic components can be soldered by hand using a soldering iron or by using automated machines such as reflow ovens.

In both cases a fume extraction system is vital to protect the health of employees and to keep the process and products clean.

The correct fume extraction system can also benefit production speeds and reduce downtime.

ANALOGUE CONTROL FUME EXTRACTION SYSTEMS - PART NO GUIDE

				
MODEL	FUMECUBE LITE	FUMECUBE	FUMECUBE MAX	FUMEBUSTER
Single Arm	-	072066	072115 - 1 ARM	-
Dual Arm	200001	072065	072115 - 2 ARM	070362
Hose	-	-	072115 - HOSE	-

DIGITAL CONTROL FUME EXTRACTION SYSTEMS - PART NO GUIDE

											
MODEL	200	400	200I	400I	800I - TIER 2	800I - TIER 3	1500I	2000I - 220V	2000I - 400V	5000I - 220V	5000I - 400V
Volume Control	0LX2100D	0LX4000D	0LX2110D	0LX4010D	080502D	080505D	0LX1510D	0LX2011D	0LX2010D	0LX5551D	0LX5550D
Vacuum Control	080026D	080410D	080026ID	080410ID	080501D	080504D	021820ID	022121ID	022120ID	044251D	044250D

REPLACEMENT FILTER MATRIX - PART NO GUIDE

IMPORTANT: Each System requires a pre-filter and main filter, Not all filters are stocked as some filters listed below are for special applications and aren't standard, should you require any help finding the correct filter for your needs please contact us now

	FILTER	FUMECUBE LITE	FUMECUBE	FUMECUBE MAX	FUMEBUSTER	200	400	200I	400I	800I TIER 2	800I TIER 3	1500I	2000I	5000I
Pre-Filters	Pad F5	200225	200225	-	200314	202260	202260	-	-	-	-	-	-	200310
	Pad F6	-	200226	-	-	-	-	-	-	-	-	-	-	-
	Pad F8/F9	-	200316	-	200098	-	-	-	-	-	-	-	-	-
	Pad Absorbent PVC	-	-	-	-	-	-	-	-	200262	200262	200281	200281	200312
	Pleated Bag	-	-	-	-	-	-	-	-	-	-	-	-	111144
	Labyrinth F6	-	-	-	-	-	-	202268	202268	202280	-	111037	111037	-
	Labyrinth F8	-	-	-	-	-	-	-	-	-	-	-	-	111072
Main Filters	Labyrinth F8/F9	-	-	111124	-	-	-	202271	202271	202272	202273	111099	111099	111006
	HEPA Chemical	110507	110536	110507	110531	113505	113505	113505	113505	113652	-	110615	110615	-
	HEPA Twin Chemical	-	-	-	-	113579	113579	113579	113579	113660	-	110614	110614	-
	HEPA/Chem Cleanroom	-	110538	-	110533	113512	113512	113512	113512	113658	-	110632	110632	-
	Chemical Std Filter	110504	110537	110504	110532	113508	113508	113508	113508	-	113651	110610	110610	110627
	HEPA	-	-	-	-	113809	113809	113809	113809	-	113650	-	-	110633
	Chemical Special	-	110544	-	110542	113662	113662	113662	113662	-	-	-	-	-
Pleated Bag	-	-	-	-	113531	113531	113531	113531	-	-	-	-	-	110645
Solvent Lock	-	110543	-	110541	113513	113513	-	-	-	-	113667	-	-	-

EDSYN SMOKE EXTRACTOR



Part No.	Description
CE 174-350	Benchtop Fume Extractor
CE 174-905	Filter Front Rotating (Pack of 5)
CE 174-906	Filter Rear Stationery (Pack of 5)

HAKKO SMOKE ABSORBER



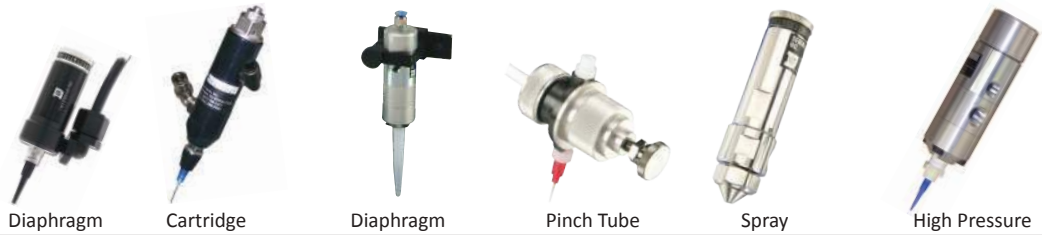
- Desktop solder smoke absorber that can be mounted horizontally or vertically
- A third mounting position is also available with an optional arm stand

Part No.	Description
FA400	Hakko Smoke Absorber
A1001	Filters Set (Pack of 5)

Fisnar Dispensing

Dispensing Valves and Controllers

DISPENSING VALVES



Model No.	VD510	CV629	DV509	710PTNM	SV1000SS	790HPNM-LF
Applications						
Spraying					✓	
Beads - Sealants	✓	✓	✓	✓		✓
Potting - Filling	✓	✓	✓	✓		✓
High Precision	✓	✓	✓			
High Pressure						✓
Materials						
Adhesives	✓	✓	✓	✓		✓
Acids			✓	✓		
Alcohol-Methanol	✓	✓	✓	✓	✓	
Anerobics	✓		✓	✓		
Bases	✓		✓	✓		
Conformal Coating		✓		✓	✓	✓
Cyanoacrylates	✓		✓	✓		
Oils - Lubricants		✓		✓	✓	✓
RTV / Silicone / Gel				✓		✓
Solder Mask - PVA						✓
Sealants						✓
Solvents	✓		✓	✓		
UV Adhesives			✓	✓		✓

JBE1113N FLUID DISPENSER

The JB1113-LF is a system designed to dispense material from syringes and provides a simple solution to fluid dispensing.



Part No.	Description
JBE1113N	Automatic Liquid Dispenser

SL101N DIGITAL DISPENSER

The SL101 digital controller dispenses timed micro shots from 0.01 to 9999 seconds. It has three modes of operation, manual, timed and cycling.



Part No.	Description
SL101-220	Digital Dispenser

DB815 FOOT VALVE DISPENSER

The DB815 is controlled by an air-actuated valve using a foot-pedal. It is suitable for hazardous environments since the units do not require electricity to operate.



Part No.	Description
DB815	Foot Dispenser
DB815-SB	Foot Dispenser with Suck-Back

PPD-130 PERISTALTIC PUMP DISPENSER

The PPD-130 peristaltic pump dispenser transfers low viscosity liquids by pressure displacement applied to a turning rotor against a tube carrying material.



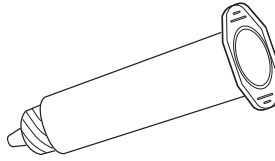
Part No.	Description
PPD-130-220	Peristaltic Pump Dispenser

Fisnar Dispensing

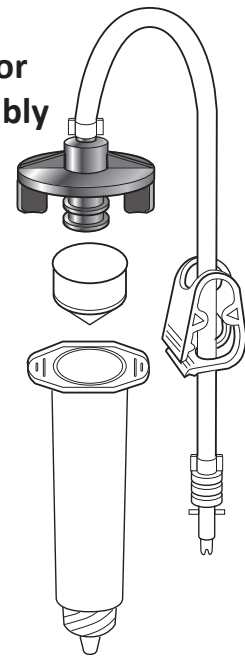
Dispensing Consumables

BARRELS

Size	Clear Part No.	Black Part No.	Amber Part No.
3cc	560036H	560036H-A-BLACK	
5cc	560001H	560001H-BLACK	
10cc	560041H	560041H-BLK	560635-AMBER
30cc	560002E	560002D-BLK	560002C-AMBER
55cc	561138A-H	561329	561138-BRN



Barrel Adaptor Assembly



BARREL PISTONS

Size	White-PE Part No.	Black-PE Part No.	Black Neoprene
3cc	H560667		560040
5cc	560550HA		560018A
10cc	560573H	560573-BLK	560045A
30cc/55cc	560552H	560552H-BLK	560019A

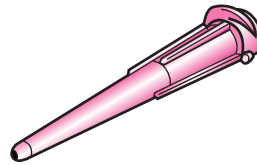


Piston

Barrel

TAPERED TIPS

Gauge	ID mm	Color	Part No.
14	1.60	Olive	H560783B
16	1.20	Grey	H560010B
18	0.84	Green	H560011B
20	0.58	Pink	H560012B
22	0.41	Blue	H560013B
25	0.25	Red	H561751A



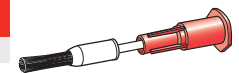
TEFLON LINED TIPS

IDmm	Length	Part No.
0.58	35mm	H560913
0.15	35mm	H560017B



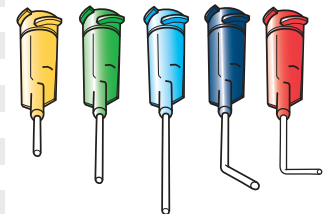
BRUSH TIPS

Part No.	Description
H561087B	Soft Bristles
H561088	Hard Bristles



BLUNT END PRECISION TIPS

Gage	ID mm	6mm Length	13mm Length	25mm Length	38mm Length	45° Angle	90° Angle
14	1.60		H560085B	H560085B-1	H560085-1.5	H560085B-45	H560085B-90
15	1.37		H560086	H560086-1	H560086-1.5	H560086A-45	H560086A-90
18	0.84	H560087-1/4	H560087	H560087-1	H560087-1.5	H560087A-45	H560087A-90
20	0.58	H560088-1/4	H560088	H560088-1	H560088-1.5	H560088-45	H560088-90
21	0.51	H560089-1/4	H560089	H560089-1	H560089-1.5	H560089-45	H560089-90
22	0.41	H560090-1/4	H560090	H560090-1	H560090-1.5	H560090-45	H560090-90
23	0.33	H560014-1/4	H560014	H560014-1	H560014-1.5	H560014-45	H560014-90
25	0.25	H560015-1/4	H560015	H560015-1	H560015-1.5	H560015-45	H560015-90
27	0.20		H561020A	H561020-1	H561020-1.5	H561020-45	H561020-90
30	0.15		H560016	H560016-1	H560016-1.5	H560016-45	H560016-90
32	0.11	H561387					



FLOW-SEAL PENS & BOTTLES

Flow-seal environmental pens and bottles channel controlled amounts of no-clean flux, rma, solvents, lubricants, masking and water based liquids. Flow seal products prevent evaporation of material and conform to current regulations for controlling substances capable of evaporation hazard. A unique dispensing valve prevents flooding and spattering, releasing material in controlled amounts to the nib.



Part No.	Description
FV-0100	flow-seal pen clear
FV-0200	Flow-seal pen esd safe, aluminum
FV-0300	Flow-seal bottle 2oz. clear
FV-0400	Flow-seal bottle 2 oz. esd safe, aluminum
FV-0500	Flow-seal bottle 4 oz. clear
FV-0600	Flow-seal pen jumbo 1.5oz

Fisnar Dispensing

Dispensing Automation



DISPENSING AUTOMATION

Fisnar industrial robots are an economic solution to automation, a wide range of desktop, gantry-Cartesian and SCARA dispensing robots are available. Suitable for low, medium and high production environments. Automating with a Fisnar robot will help in saving costs in material waste, rejects, time and labor. Fisnar has a wide range of 3 and 4 axes robots for automatic dispensing of adhesives, liquid gaskets, resins and UV materials.

F7900N DESKTOP ROBOT

The F7900N is a compact desktop robot with a working area 200 x 200mm making it an ideal choice when cost and bench space are important considerations.



Part No.

F7900N

Description

200 x 200mm Desktop Robot

F7300N DESKTOP ROBOT

F7300N bench robot is our most popular industrial robot with a dispensing area of 300 x 300mm. This model also has a resolution of 0.01mm and a resolution of +/- 0.02mm.



Part No.

F7300N

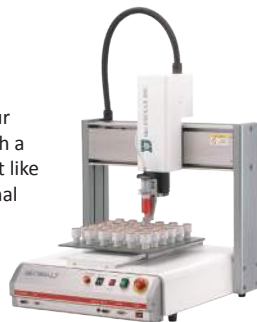
F7300RN

Description

300 x 300mm Desktop Robot
4-axis 300 x 300mm Desktop Robot

F7400 DESKTOP ROBOT

The F7400N is the largest of our desktop dispensing robots with a work area of 400x400mm. Just like the I&J7400-LF it has an optional 4th-axis.



Part No.

F7400N

F7400RN

Description

400 x 400mm Desktop robot
4-axis 400 x 400mm Desktop robot

F9000 GANTRY ROBOT

Hoses include a PTFE core, a reinforced stainless steel braid and high temperature insulation with a durable polyester braid cover for abrasion resistance.



Part No.

F9332N

F9332RN

F9662N

F9662RN

F9862N

F9862RN

Description

300 x 300mm Gantry Style Robot
4-axis 300 x 300mm Gantry Style Robot
600 x 600mm Gantry Style Robot
4-axis 600 x 600mm Gantry Style Robot
800 x 600mm Gantry Style Robot
4-axis 800 x 600mm Gantry Style Robot

Fisnar Dispensing

Hot Melt Dispensing

THERMADOSE® HOT MELT SYSTEM

Thermadose® positive-displacement, all electric Hot Melt systems are designed to provide the ultimate in temperature controlled thermoplastic delivery and dispensing for industrial applications using pressure sensitive adhesives, contact adhesives, waxes and sealants. The tank controllers are rugged heavy-duty, bulk storage dispensing systems with gear-pump technology for use with Hot Melt solids.



14 LB TANK CONTROLLER

The HM14 includes two fluid outputs and is designed for either medium to high volume dispensing of up to 30,000cps.



Part No.	Description
HM14-220	14 lb (7 Liter) Tank controller 220/230V CE
HM14-220NA	14 lb (7 Liter) Tank controller 220/230V Non-Adhesive CE

HAND DISPENSERS

Ergonomic and lightweight balanced dispensing guns with an integrated hanger for suspension hook up. A built in Thermistor sensor provides an accurate temperature control for the applicator.



Part No.	Description
HGBE220	Hand gun bottom entry 220V
HGTE220	Hand gun top entry 220V

APPLICATOR VALVE HEAD ELECTRIC (NO AIR)

For mounted installations. Fast "snap" function solenoid valve with precise needle and seat action producing a clean cut off preventing drip.



Part No.	Description
HE22024	Valve 220V - 24VDC Coil
HE220	Valve 220V - 220V Coil
HB015	Universal Mounting Bracket
HM562198	Mounting Bracket for I&J Robot

THERMADOSE HEATED HOSES

Hoses include a PTFE core, a reinforced stainless steel braid and high temperature insulation with a durable polyester braid cover for abrasion resistance.



Part No.	Description
HE	Extrusion Style Hose (Beads)
HS	Swirl / Spray Style Hose

PRODUCTION / LABORATORY EQUIPMENT

MAGNIFYING LAMPS



- The ultimate magnifier, German design, 2x mag, 4 dioptre.
- Offers excellent optical viewing and rugged arm design. 115mm lens diameter.
- Auxilliary lens available.

Part No.	Description
ML150	Magnifying Lamp
ML151	Auxilliary Lens, 3x mag



- Economy version, LED illumination
- 130mm lens diameter.

Part No.	Description	Magnification
ML610	Economy LED Magnifyng Lamp	3 Dioptre
ML611	Economy LED Magnifyng Lamp	5 Dioptre



- German magnifying lamp, 1.75x mag, 3 dioptre.
- Infinitely adjustable positioning due to the ball joint on head and also the lens being able to pivot.
- 160 x 105mm lens size.
- Auxilliary lens also available

Part No.	Description
ML100	Rectangular Magnifying Lamp
ML101	Auxilliary Lens, 2.75x mag
ML102	Auxilliary Lens, 2.75x mag (4.75 x bubble)



- The well-known, original Maggylamp with weighted base and gooseneck arms.
- Features a 120mm diameter, 3x mag, 4 dioptre lens.

Part No.	Description
ML201	Maggylamp

ILLUMINATED MAGNIFYING GLASS



Part No.	Illumination	Lens Diameter	Magnification
151024	LED	60 mm	3 x
151054	LED	58 mm	5 x
151074	LED	35 mm	7 x
1571	Incandescent	30 mm	6.25 x
1572	Incandescent	60 mm	3.5 x

HD CAMERA INSPECTION SYSTEM

NEW



ASH Inspex HD

The Inspex HD Table is a high definition camera inspection system offering incredible image quality and magnification with superb colour reproduction, contrast and resolution. It is extremely versatile due to its moveable arm and table which can be used in a wide variety of industries. The table area and adjustable arm makes it ideal for rework and repair.

The system requires minimal bench space as its ultra lightweight & compact design makes it highly portable. The ergonomic design allows the user to sit or stand in a comfortable and safe posture, thus providing relief from back, neck and eye strain typically associated with traditional microscopes. The Inspex HD Table allows more than one person to view the same image simultaneously enabling training and discussions on quality assurance and failure diagnosis.

Dimensions: 45cm x 12cm x 10cm
 Weight: 1.1Kg
 Connections: HDMI out
 Zoom: 5D Lens 2.5x-60x (22" screen)
 4D Lens 2.0x-55x (22" screen)

Camera resolution: HD 720p 1280x720 50/60 Hz

Auto/manual Focus: Yes

Basic Functions:

- Brightness adjustment
- Magnification adjustment
- Height adjustment
- Snapshot
- Overview
- High contrast mode

Recommend Monitor:

- Panel Format: 16:9
- Connections: DVI & HDMI
- Response time: 5ms
- Signal format: HD 720p

Height Adjustable: Yes

Keyboard: Yes

Power: 8 Watts

Part No.	Description
FI801-011	HD Camera Inspection System

PRECISION MAGNIFIER

NEW



The Ion 4.3 is an award winning inspection magnifier designed with unique display technology and liquid lens technology which delivers bright, sharp and highly contrasted images (480 x 272 pixels). Its ergonomic design provides comfortable use in awkward to access areas and its LED illumination modes are ideal for use in poor lighting conditions. Its unique patent applied for dimensioning grids and image capture capability for upload to PC make it an ideal tool for inspection operators and technicians in a wide variety of industries. **Ask Us for More Details**

Part No.	Description
FI800-102	ASH ION With Measuring Grids

VIEWING SYSTEM



- The Viewing System provides three-dimensional stereo imaging without the need for eyepieces.
- Magnification of x4 - x20 options (2 in quick change turret)
- Shadow-free LED cold illumination.

Part No.	Description
441-437	Viewing System on Bench Stand

FIBRE OPTIC LIGHT GUIDES



- Fibre optic light guides for use with microscopes.
- Variable light intensity.

Part No.	Description
FO150	Fibre Optic Light Guide

MICROSCOPES STERIO ZOOM



- Compact stereo zoom microscope with integrated base.
- Magnification range of x7 - x45 plus optional auxilliary lenses on request.
- Ring illuminator sold separately.

Part No.	Description
WLZ-03	Stereo Zoom Microscope
WLZ-10	Flourescent Ring Illuminator

LED RING ILLUMINATOR



- Adjustable brightness
- 98mm Diameter with a 61mm Diameter Interface
- Brightness max 12000 LUX
- Supplied with 12V Power adapter

Part No.	Description
YK-S48	Ring Illuminator-48 LED's

PRECISION MAGNIFIER



- Adjustable focus
- Comes with precision 0.1mm scale (0.005")
- Provides sharp image

Part No.	Description	Magnification
CE 119-529	Precision Magnifier	x10

MICROSCOPE STERIO ZOOM ON BOOM STAND



- Stereo zoom microscope on boom stand with magnification range of x7 - x45 plus optional auxilliary lenses on request
- C-mount camera option available
- Ring illuminator sold separately.

Part No.	Description
WLZ-06	SZM with Boom Stand
WLZ-08	Stereo Trinocular Microscope with C-Mount Camera
WLZ-10	Flourescent Ring Illuminator
701-417	Supplementary Lens For Microscope X 0.5 Mag

WATCHMAKERS EYELOUPE



Part No.	Description	Magnification
11243	Eyeloupe	x3
11245	Eyeloupe	x5
11247	Eyeloupe	x7
112410	Eyeloupe	x10

MAGNIFYING GLASS



Part No.	Description	OAL
LPM 58	Magnifying Glass	58mm

ANDILOG CENTORMETER



The ANDILOG CENTORMETER range allows you to calibrate and check all of your measuring instruments: torque wrenches, torque screwdriver, screw gun, compression and tension system, force gauges, etc.

The new version of the CentorMeter equipment verifies the regulating torque value of screw guns. This includes electric, pneumatic and hydraulic screw guns where rotation speed can be regulated up to 3,000 RPM.

The CentorMeter traces the curve, enabling immediate visualization of the increase in the torque.

The range of sensors allows for precise measurements from 0–6 Nm up to 0–1,400 Nm.

Each base is equipped with a main sensor and can support additional sensors, which will be recognized without the user doing a thing.

System Includes:

- A Centormeter with one torque sensor
- Power plug
- A support base with fixing holes
- One square drive on the torque sensor
- Certificate of calibration traceable to COFRAC

Software Options:

- RSiC software compatible: Download your data to Microsoft Excel
- Datastick compatible: Save all your data directly on a SD memory card and read your results on a computer.

Features:

- Accuracy 0,5 % FS
- Resolution 1/10 000 PFS
- Display current value and peak ✓
- Units N.m, kg.cm, lb.in, mN.m, lb.ft
- Sampling rate 1 000 Hertz
- Tare ✓
- Auto-off ✓
- Average and standard deviation ✓
- Low battery indicator ✓
- RS232 output ✓
- Backlight display ✓
- Rechargeable battery ✓
- Operating time 8h
- Power supply 110V / 220V

Part No.	Capacity	Accuracy	Resolution	Square
CTRMTR-H3	3Nm	0.015Nm	1.5 mNm	3/8" Female
CTRMTR-H6	6Nm	0.03Nm	1.5 mNm	3/8" Female
CTRMTR-W15	15Nm	0.075Nm	1.5 mNm	3/8" Female
CTRMTR-W60	60Nm	0.3Nm	6 mNm	3/8" Female
CTRMTR-W150	150Nm	0.75Nm	15 mNm	1/2" Female
CTRMTR-W300	300Nm	1.5Nm	30 mNm	1/2" Female
CTRMTR-W650	650Nm	3.25Nm	65 mNm	3/4" male
CTRMTR-W1400	1400Nm	7Nm	1.4 Nm	1" male

ADDITIONAL TORQUE SENSORS

Vertical Torque Sensor



Horizontal Torque Sensor



All ANDILOG additional torque sensors can be used with the same display screen in order to measure different capacities with great precision. Each sensor is provided with a support stand, a SPIP connector to connect to the instrument and its certificate of calibration traceable to COFRAC. Mounted with a SPIP connector, the Centor meter can read and recognize automatically the sensor and load all the parameters.

Available with horizontal or vertical axis.

Part No.	Capacity	Accuracy	Resolution	Square	Axis
CMV/TH 3	3Nm	0.015Nm	1.5 mNm	3/8" F/M	Vertical
CMV/TH 6	6Nm	0.03Nm	1.5 mNm	3/8" F/M	Vertical
CMV/TH 15	15Nm	0.075Nm	1.5 mNm	3/8" F/M	Vertical
CMV/TH 60	60Nm	0.3Nm	6 mNm	3/8" F/M	Vertical
CMV/TH 150	150Nm	0.75Nm	15 mNm	1/2" F/M	Vertical
CMV/TH 300	300Nm	1.5Nm	30 mNm	1/2" F/M	Vertical
CMV/TH 650	650Nm	3.25Nm	65 mNm	3/4" male	Vertical
CMV/TH 1400	1400Nm	7Nm	1.4 Nm	1" male	Vertical
CMH/TH 3	3Nm	0.015Nm	1.5 mNm	3/8" F/M	Horizontal
CMH/TH 6	6Nm	0.03Nm	1.5 mNm	3/8" F/M	Horizontal
CMH/TH 15	15Nm	0.075Nm	1.5 mNm	3/8" F/M	Horizontal
CMH/TH 60	60Nm	0.3Nm	6 mNm	3/8" F/M	Horizontal
CMH/TH 150	150Nm	0.75Nm	15 mNm	1/2" F/M	Horizontal
CMH/TH 300	300Nm	1.5Nm	30 mNm	1/2" F/M	Horizontal
CMH/TH 650	650Nm	3.25Nm	65 mNm	3/4" male	Horizontal
CMH/TH 1400	1400Nm	7Nm	1.4 Nm	1" male	Horizontal

ADDITIONAL DYNAMIC TORQUE SENSORS

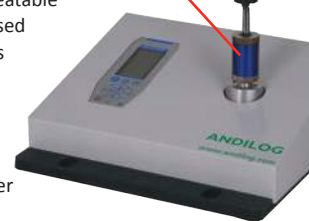
The dynamic torque sensors are used to check torque on assembled parts. It is placed between the screwdriver and the screw and measure directly the torque applied on the screw.



Part No.	Capacity	Accuracy	Resolution	Square
SPIP DT 6	6Nm	0.03Nm	0.6 mNm	1/4"
SPIP DT 12	12Nm	0.06Nm	1.2 mNm	1/4"
SPIP DT 24	24Nm	0.1Nm	2.4 mNm	3/8"
SPIP DT 60	60Nm	0.3Nm	6 mNm	3/8"
SPIP DT 150	150Nm	0.75Nm	15 mNm	1/2"
SPIP DT 600	600Nm	1.5Nm	60 mNm	3/4"

RUN DOWN ADAPTERS

The run down adapter (RDA) is designed to provide consistent and reliable torque readings for use with power driven torque control tools. The RDA's reduce the impact and irregular peaks that cause poor repeatability. Each RDA has an effective and will supply repeatable torque data within that range if used correctly. The run down adapter is mounted in-line between the tool drive and transducer. These run down adapters are designed to provide consistent and reliable torque readings for use with power driven torque control tools.



Part No.	Range	Square	Height
RDA 10i	0.1 - 1 Nm	1/4"	63 mm
RDA 25i	0.3 - 3 Nm	1/4"	63 mm
RDA 50i	0.6 - 6 Nm	1/4"	63 mm
RDA 100i	1 - 12 Nm	1/4"	63 mm
RDA 250i	2.8 - 28 Nm	1/4"	60 mm
RDA 50F	6 - 60 Nm	3/8"	83 mm
RDA 100F	13 - 135 Nm	1/2"	83 mm
RDA 250F	30 - 300 Nm	1/2"	83 mm
RDA 500F	65 - 650 Nm	3/4"	111 mm
RDA 1000F	140 - 1400 Nm	1"	182 mm

WIRETEST 1 - CABLE TESTING

Ideal for test on small cross-sections, the WIRETEST 1 instrument measures the pullout forces or crimp forces for terminals up to 500 N. With its two lines display, the operator can see the current value and the peak force in the same time. The high accuracy force gauge can be set to beep as soon as the necessary force has been reached. The operator then stops the wire pull test without reaching the pull-out force. It can also be connected to a computer using RS232 to download the tensile test results.

Ready to use, supplied with a basic excentric fixture for wire and a carousel suitable for all standard terminals.

FEATURES

- Accuracy 0,1 % PE
- Resolution 1/10 000 PE
- Units N, Lb, Kg, g, Oz
- Sampling rate 1 000 Hertz
- Tare ✓
- Force limit ✓
- Average and standard deviation ✓

FEATURES

- Peak in tension and compression ✓
- Memory for setup ✓
- Digimatic output ✓
- Backlit display ✓
- Operates on ✓ rechargeable batteries
- Operation without recharging 8 hours



Wire terminal carousel:

Our accessory carousel is designed for maintaining crimp terminals during quality tensile tests to determine the break force of crimps, stands up to a crimping force of 500N. It can be used with all types of crimp terminals but also for crimp pins or crimp sleeves fitted to the beams and electrical harnesses.

With its 8 slots with various openings, the operator may test the cable with a size between AWG24 to AWG14 without changing the holding accessory.



Part No.	Capacity	Accuracy	Resolution	Travel
WIRETEST 1	0-500N	0.5N	0.05 N	200mm

WIRETEST T1 - CABLE TESTING

Ideal for testing pull force on terminals, the WIRETEST T1 system measures the break forces for terminals up to 1,000N. The test stand TEX 555 features a reversible arm to pull on the terminal, small footprint, durable design and portable. The force gauge can be set to beep as soon as the necessary force has been reached. The operator then stops the wire pull test without reaching the pullout force.

Mounted with a carousel, the WIRETEST T1 can be used to test cables from AWG24 to AWG3 (with no insulation) without changing the holding fixture. The operator saves time and the tester is always operational. Ready to use, supplied with a self-closing wedge clamp and a carousel for all standard terminals.

FEATURES

- Accuracy 0,1 % FS
- Resolution 1/10 000 FS
- Units N, Lb, Kg, g, Oz
- Sampling rate 1 000 Hertz
- Tare ✓
- Force limit ✓
- Low battery indicator ✓
- Peak in tension and compression ✓
- Memory for setup ✓

FEATURES

- RS232 output Send current reading, peak or minimum
- Reversible display ✓
- Digimatic output ✓
- Backlit display ✓
- Sensor protected from overloads up to 200% capacity ✓
- battery Life
- Operation without recharging 8 hours
- Power supply 110V / 220V

System Includes

- Force gauge center Easy with internal sensor capacity 500N or 1,000N
- Test stand TEX555
- carousel for terminal
- Self-closing wedge clamp
- certificate of calibration traceable to COFRAC



Part No.	Capacity	Accuracy	Resolution	Travel
WRTST T1-500	0-500N	0.5N	0.05N	150mm
WRTST T1-1000	0-1000N	1N	0.1N	150mm

WIRETEST 2 - MOTORIZED WIRE TESTING

The WIRETEST 2 test bench is designed to test the quality of connections in place. The success of a connection is related to the quality of the setting tools and the proper adjustment of the setting machines. Because these settings tend to evolve over the course of production, it is essential to check them regularly.

Measuring the force needed to pull out the connections is a quick and easy step that very clearly shows the condition of the setting. Several aeronautic, automotive or railway standards define the test conditions: minimum acceptable forces depending on the diameter of the cable, tension rates, etc. WIRETEST 2 meets all those conditions. Thanks to its control console, the operator selects the settings for the tension rates, the return speed and the automatic return to the starting position. The force gauge displays the current values and the pull-out force. These results can either be stored in the memory (up to 1000 values) or even transferred to a computer.

Designed for use in the production workshop, the WIRETEST 2 guarantees a faultless wiring. Maximum force 2,000 n, displacement length 300 mm, maximum length of samples 400 mm, sold with a carousel for terminals and a self-closing wedge clamp.

FUNCTIONS

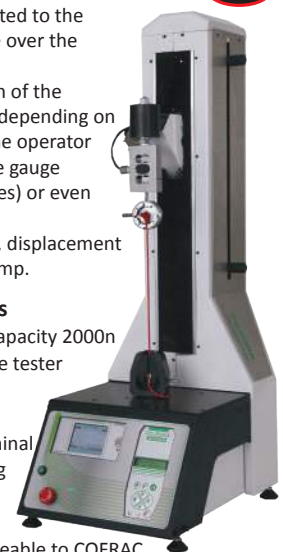
- accuracy 0,5 % fs
- Resolution 1/10 000 fs
- Data rate 1000 Hz
- Units n, Lb, Kg, g, oz
- Bargraph ✓
- peak in traction and compression ✓
- Display curve force / Deflection ✓
- average and standard deviation ✓
- automatic calculations ✓

FUNCTIONS

- Emergency stop ✓
- Manual high speed ✓
- automatic return ✓
- Manual & automatic tare
- USB output current reading
- Data rate on USB 500 values / second
- Data rate on RS232 50 values / second
- Stop on force ✓

System Includes

- One load cell capacity 2000n
- Motorized force tester tentor II 2500
- One carousel fixture for terminal
- One self-closing wedge clamp
- Certificate of calibration traceable to COFRAC



Part No.	Capacity	Max Travel	Travel Resolution	Travel Accuracy	Table Dim	External Dim	Weight
WIRETEST 2	2KN	300mm	0.01mm	0.05mm	200 x 300mm	947 x 345 x 500mm	50kg

CENTOR FIRST - DIGITAL FORCE GAUGE

The force gauge Centor First is a simple and yet complete digital force gauge which uses efficient technology to simplify force measurements, in tension and compression. A big display shows the force measured in tension or compression in the unit selected by the operator: newtons, kilograms or pounds. The bar graph completes the measurement. It can be used on a test stand (manual or motorized) or as a manual force gauge.

The three keys make it very easy to use this force gauge and access the essential functions: measurement of the peak tension or compression value, resetting to zero, and changing the measuring units. It is an ideal tool for basic tests during production. Its metal casing, protected by an elastomer hull, gives it exceptional strength.

The internal sensor stands up to an overload of 200 % of its maximum capacity.

Simple, accurate, robust, supplied with its own carrying case, mains adaptor and certificate of calibration, ready for use, it is the basic force gauge for force measurement.

Specifications:

- Accuracy 0.25% FS
- Resolution 1 / 1,000
- Sampling rate 1,000 Hz
- Auto-off 15min
- Bargraph ✓
- Units N, lb, kg
- Battery life 8h



Ask us TODAY for the full specification sheet

Part No.	Capacity	Model	RS232 Port
CNR-FT-100	100N	Centor First	No
CNR-FT-250	250N	Centor First	No
CNR-FT-500	500N	Centor First	No
CNR-FTXZ-100	100N	Centor First XZ	Yes
CNR-FTXZ-250	250N	Centor First XZ	Yes
CNR-FTXZ-500	500N	Centor First XZ	Yes

CENTOR EASY - GRAPHICAL FORCE GAUGE

The Centor Easy force gauges are designed to meet the production needs of its users. This group offers several features which are indispensable today for quality control, for example : ease of reading with its large backlit graphical display, RS232 output, memory of the last 100 values and ability to set thresholds with visual and sound alarms.

A new STATISTICS feature is available on the new Centor Easy models: the average and standard deviation of the current batch are calculated and displayed after each measurement. All the values of the production batch are kept in the memory and can be sent to a computer by RS232. The operator is spared any data entry, knows his results in real time and saves everything at the end of the tests. The entirely configurable RS232 output sends the data to a PC

Specifications:

- Accuracy 0.1 % FS
- Resolution 1 / 10,000
- Sampling rate 1,000 Hz
- Auto-off Adj 5 to 15min
- Overload protection 200 %
- Calibration Cert incl ✓
- Bargraph ✓
- Units N, lb, kg, g, oz
- Tare function ✓
- Use of a Foot pedal ✓
- Battery life 8 Hours



Ask us TODAY for the full specification sheet

Part No.	Capacity	Model	RS232 Port
CNR-EA-10	10N	Centor Easy	Yes
CNR-EA-25	25N	Centor Easy	Yes
CNR-EA-50	50N	Centor Easy	Yes
CNR-EA-100	100N	Centor Easy	Yes
CNR-EA-250	250N	Centor Easy	Yes
CNR-EA-500	500N	Centor Easy	Yes
CNR-EA-1000	1000N	Centor Easy	Yes

CENTOR STAR TOUCH - ADVANCED TOUCH SCREEN FORCE GAUGE

Centor Touch is designed for manufacturing environments, providing performance and easy operations to use and understand with the addition of the new, colored touch screen technology. Icons guide the operator in the selection of the appropriate measurement technique and method for their application. Setup menus, prompts and results are available in multiple languages.

Specifications:

- Tension and compression ✓
- Accuracy 0.1 % FS
- Resolution 1 / 10,000
- Sampling rate 1000 Hz
- Auto-off Adj - 5 to 15 min
- Overload protection 200 %
- Calibration certificate incl ✓
- Bargraph ✓
- Units N, lb, kg, g, oz
- Tare function ✓
- Use of a Foot pedal ✓
- Internal memory ✓
- Statistics on 100 tests ✓
- Backlight display ✓
- Display curve (force/time) ✓
- Automatic calculations ✓
- Memory card compatible ✓
- Simultaneous reading of two ✓ channels
- Recognition of displacement ✓ sensors
- Battery life 8 hours



Ask us TODAY for the full specification sheet

Part No.	Capacity	Model	RS232 Port
CNR-CT-5	5N	Centor Star Touch	Yes
CNR-CT-10	10N	Centor Star Touch	Yes
CNR-CT-25	25N	Centor Star Touch	Yes
CNR-CT-50	50N	Centor Star Touch	Yes
CNR-CT-100	100N	Centor Star Touch	Yes
CNR-CT-250	250N	Centor Star Touch	Yes
CNR-CT-500	500N	Centor Star Touch	Yes
CNR-CT-1000	1000N	Centor Star Touch	Yes

CENTOR DUAL - 2 CHANNEL FORCE GAUGE

Thanks to its ability to read two sensors simultaneously with a 500 Hertz sampling rate per channel, the Centor Dual is a true test console designed for advanced force testing. It offers all of the functionality of an efficient force gauge and its calculating power enables it to save values from two different sensors simultaneously and perform calculations on each channel.

It also traces an F1/F2 graphs on its display or even a force / displacement graph, as well as read potentiometric rules and incremental encoders.

Specifications:

- Tension and compression ✓
- Accuracy 0.1 % FS
- Resolution 1 / 10,000
- Sampling rate 1000 Hz
- Auto-off Adj - 5 to 15 min
- Bargraph ✓
- Units N, lb, kg, g, oz
- Use of a Foot pedal ✓
- Internal memory ✓
- Statistics on 100 tests ✓
- Display curve (force/time) ✓
- Automatic calculations ✓
- Memory card compatible ✓



Ask us TODAY for the full specification sheet

Part No.	Capacity	Model	RS232 Port
CNR-DL-5	5N	Centor Dual	Yes
CNR-DL-10	10N	Centor Dual	Yes
CNR-DL-25	25N	Centor Dual	Yes
CNR-DL-50	50N	Centor Dual	Yes
CNR-DL-100	100N	Centor Dual	Yes
CNR-DL-250	250N	Centor Dual	Yes
CNR-DL-500	500N	Centor Dual	Yes
CNR-DL-1000	1000N	Centor Dual	Yes

Desoutter Fastening Systems

NEW

Desoutter is your single source of electric and pneumatic tool solutions covering a wide range of assembly and manufacturing processes in the aerospace, motor vehicle, general industry and light assembly sectors, in particular the electronics industry.



CVIC II RANGE - ELECTRIC CURRENT CONTROL

Assembly process for controlling torque and angle with multiphase strategies, tightening reports, high sensitivity torque transducerized Ergostop, Preset graphs, etc

- Multitorque capability
- Control torque & angles
- Control tightening order of screws with additional positioning system
- Batch count to ensure all bolts are tightened



Please note, the CVIC range is a very complex range and requires assistance, please enquire

TELESCOPIC REACTION ARMS

Telescopic carbon arm, ideal for busy workplace. (Overhead balancers required to be ordered separately)

- Extremely strong, lightweight carbon torque arm for improved comfort.
- The ultimate flexible solution
- From 12 up to 200Nm torque capacity. (many models, please enquire)
- 90 degree tool clamp interface for straight or pistol grip tools



Various sizes and styles available, please enquire

LINEAR TORQUE REACTION ARMS

- The D53 series linear arms take away tool torque and weight from the operator wrist
- Improves quality of work and torque accuracy
- Folding arm unit available for confined space, please enquire

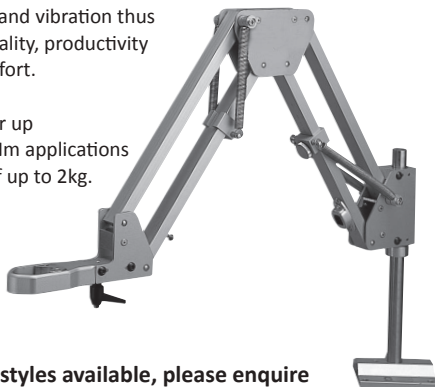


Various sizes and styles available, please enquire

DESOUTTER BLANCING ARMS

Balancing arms for increased performance, relieving stress caused by torque and vibration thus yielding higher quality, productivity and operator comfort.

- Bench Mount for up to maximum 20Nm applications and tool weight of up to 2kg.



Other sizes and styles available, please enquire

Part No.	Description	Vertical Stroke
D57	Desoutter Balancing Arm	95mm
D58	Desoutter Balancing Arm	180mm

OVERHEAD BALANCERS

Spring Retractors:

- Cylindrical shape
- Automatic load retraction
- Working area remains free
- Reduces operator fatigue



Other sizes and styles available, please enquire

Part No.	Description	Max Kg	Min Kg
2DU	Overhead Balancer	1.0	0.5
3DU	Overhead Balancer	1.5	1.0
5DU	Overhead Balancer	2.4	1.4
10D	Overhead Balancer	5.0	2.0

PRODUCTION/LABORATORY EQUIPMENT

DESOUTTER SCREW PRESENTER

- Can accommodate various types of screws, even screws with washers attached.
- Supports M1.4mm to M5.0mm.
- Pick-up bay guide helps position screw driver at pick-up
- Mains powered.
- Allows for screw size change by changing rail.



Part No	Screw Diameter
ASD	Automatic Screw Dispenser

DESOUTTER PNEUMATIC SCREWDRIVERS



1/4" drive, push start, shut off screwdrivers with shut off torque control.

Other sizes and styles available, please enquire

Part No.	RPM	Torque Range
SB015-AB1100S40	1100	0.4 - 1.5Nm
SB025-AB750S4Q	750	0.4 - 2.5Nm
SD075-AB1100S4Q	1100	2.5 - 7.5Nm

DESOUTTER ELECTRIC SCREWDRIVER



A wide range of sizes available in various Torque Ranges of 0.1Nm up to 4.7Nm. with clutch control shut off.

Description	
Please Enquire	Desoutter Low voltage range

Eurolplacer Surface Mount Machines

PICK AND PLACE IINEO-II

NEW

The lineo is widely configurable, allowing for 24 different machine possibilities, for the dual head machine:

- Dual linear motor gantries including two rotary turret heads with 8 or 12 pickup nozzles
- The lineo platform features many improvements to the Eurolplacer machine range, such as an extremely high feeder count, largest industry board size and increased maximum component height.
- The platform uses Eurolplacer's unique Integrated Intelligence plus proven core features:
 - 2 board positioning mechanisms
 - Oversized board options
 - Feeders in front and rear, or front only
 - Highly robust and flexible turret head
 - Intelligent feeders
 - 3DPS
 - Powerful software tools

- Intelligent feeder technology
- 'Smart' nozzles
- True 'on the fly' vision
- Protection of investment
- Modular compact footprint
- Huge component range
- Linear motors
- Hi-resolution digital cameras

Specifications	
Heads:	2 rotary heads on dual linear X/Y gantries with 8 or 12 pick ups & a 40 position 'smart' nozzle bank per head (different options available)
Rate:	26 300 cph (IPC: 22 030 cph) 30 000 cph (IPC: 24 200 cph) - Tornado head
Components	01005 to 50x50mm (70 x70mm and 100mm connectors with fixed camera option) (100 x100mm under conditions)
Lead Pitch:	0.3mm (QFP), 0.4mm (µBGA) 0.15mm (QFP), 0.2mm (µBGA) with fixed camera option
Lead size:	0.15mm (QFP), 0.2mm (µBGA) 0.07mm (QFP), 0.1mm (µBGA) with fixed camera option
Accuracy:	standard 35µm (QFP) to 50µm (Chip)
Feeders:	264 * 8mm + 3or4 Jedecs
Max PCB Size:	500 x 460mm or 500 x 600mm or 700 x 460mm or 700 x 600mm or 1610 x 460mm or 1610 x 600mm



Part No.	Description
IINEO-II	Pick & Place Machine

PICK AND PLACE IICO

NEW

To build an iico, Europlacer upcycles the EP600 and Progress6 systems into a machine that meets the latest electronic production needs. iico is compatible with other machines in the Europlacer range and is built to the Europlacer standard.

Europlacer exchanges all critical mechanical parts and installs new encoders on the X and Y axis to improve accuracy, and the nozzles are changed for "smart" nozzles with a new magazine. The complete head is changed and fit with an 8-position turret head with optical sensors and high-resolution digital cameras.

Additionally, the system gets a new cover with a flat screen and control panel. Finally the PC is exchanged for a new one that features the latest machine software.



Specifications

Heads:	1 rotary head on X/Y gantry with 8 pick ups & a 40 position 'smart' nozzle bank
Rate:	9 100 cph (IPC: 7 750 cph)
Components:	0201 to 50x50mm
Pitch:	0.3mm (QFP), 0.4mm (μ BGA)
Accuracy:	40 μ m (QFP's) @ 3 sigma 75 μ m (Chips) @ 3 sigma (at full speed) 60 μ m (Chips) @ 3 sigma (at reduced speed)
Feeders:	198 * 8mm + internal matrix trays
PCB Size:	60 x 60mm to 500 x 460mm
Max. PCB Length:	500mm
Max. PCB Width:	460mm (405mm with tray sequencer)

Part No.

Description

IICO

Pick & Place Machine

PICK AND PLACE XPii-II

NEW

XPii is a refreshing new approach to modular pick and place. Incorporating technology from Europlacer's innovative award winning iineo platform, XPii benefits from low maintenance linear motors, high resolution digital cameras and advanced on-head optical component sensing. With these advanced features you can benefit from all the capability of iineo in a compact space and the modularity enables you to build your line to meet growing demands.

XPii uses Europlacer proven core features, such as turret head, intelligent feeders and powerful software without compromise. It is equipped with a choice of turret heads and incorporates optical sensors that can detect, on the fly, the presence of components as small as 01005 and as large as 50 x 50 mm from picking to placement. XPii will accommodate components supplied on tape, strip tape, stick and matrix tray.

The XPii -II features two rotary heads on X/Y gantries with 8 or 12 pick ups and 'Smart' nozzles.



Specifications

Heads:	2 rotary heads on X/Y gantries with 8 or 12 pick ups & 2 x 40 position 'smart' nozzle banks or (1 x 40 + 1 x 20 + 1 special) in option
Rate:	26 400 cph (IPC: 20 070 cph) 30 000 cph (IPC: 22 380 cph) - Tornado head
Components:	01005 to 50x50mm (70 x70mm and 100mm connectors with fixed camera option) (100 x100mm under conditions)
Lead Pitch:	0.3mm (QFP), 0.4mm (μ BGA) 0.15mm (QFP), 0.2mm (μ BGA) with fixed camera option
Lead size:	0.15mm (QFP), 0.2mm (μ BGA) 0.07mm (QFP), 0.1mm (μ BGA) with fixed camera option
Accuracy:	standard 35 μ m (QFP) to 50 μ m (Chip)
Feeders:	92 * 8mm
Max. PCB Length:	500mm
Max. PCB Width:	460mm (405mm with tray sequencer)

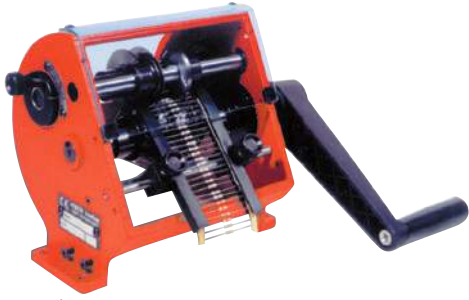
Part No.

Description

XPii-II

Pick & Place Machine

AXIAL BENDING MACHINE



- Superform/A is a machine made for cutting and bending axial taped component.
- Compact and sturdy - its main characteristic is to form components with rheophore up to 1.4mm. Its tracking wheels are adjustable independently to allow rapid setup at different forms.
- Production rate up to 40000pcs/hr

Part No.	Description
7915 100A	Axial Lead Former

HAKKO AXIAL BENDING MACHINE



- Cutting and forming for tape-type axial components
- Easy to use: simply set the taped components in place and turn the handle.
- Improved longer-life cutting blade for a clean, smooth cut
- Sealed bearings for longer service life and greater durability and efficiency
- Can be used for forming and cutting, forming only, or cutting only
- Forming size 5.6mm pitch
- Max lead diameter 0.8mm

Part No.	Description
153-01	Axial Lead Former

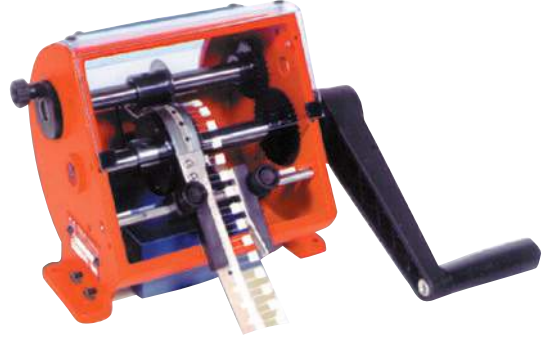
LOOSE RADIAL COMPONENT FORMING MACHINE



- The 2000S is a pneumatic machine for the preforming and cutting of loose radial components.
- A wide variety of preforming dies are available for different versions of preforming.
- Electric model also available

Part No.	Description
2000S	Loose Radial Component Forming Machine

RADIAL CROPPING MACHINES



- Superform/R is a machine made for cutting radial taped components such as capacitors, transistors and stand-off resistors
- Production rate: up to 20000pcs/hr

Part No.	Description
7915 113A	Radial Lead Cropper

RADIAL CUTTING & FORMING



- Cutting and forming for tape-type radial components
- Easy to use: simply set the taped components in place and turn the handle. The super sharp, high quality blade allows you to cut all types of tape-type radial parts, including resistors, capacitors and transistors cleanly and smoothly. Continuous operation ensures faster more efficient processing
- Sealed bearings make it long-lasting, durable and efficient
- The compact design allows you to place it virtually anywhere.

Part No.	Description
155-1	Radial Lead Cutter

COMPONENT COUNTER

- Component counter with maximum counting value of 999,999
- Counts radial and axial components
- SMD reel to reel adaptor is an optional accessory which can be fitted to the county by snap action. A bandolier handle then draws the components through the counter.



Part No.	Description
8301.051	County 220V Machine
8301.018	SMD Adapter
8301.028	Reel Support (2 required.)
8301.030	Bandolier Handle

Ultra Sonic Cleaners

Ultrasonics are like soundwaves but have frequencies above our range of hearing. Ultrasound energy is transmitted to the liquid in the cleaning bath by transducers underneath. This energy causes cavitation - which is the rapid implosion and explosion of the tiny bubbles of air within the liquid. The cavitation causes turbulence in the liquid that gently scrubs all surfaces of the items being cleaned.

Pulse Swept power technology ensures printed circuit boards, instruments and delicate items are cleaned to your exacting requirements without damage. Enables cleaning without manual scrubbing. All models fitted with a timer and touch control keypad. Heating offered as an option.



Part No.	Bath L x W x D (mm)	Size L x W x D (mm)	Capacity (L)	Heating (Peak)	Power
80TD	235 x 138 x 65	279 x 219 x 170	1.6	-	60W
120TD	153 x 138 x 100	180 x 219 x 179	2	-	60W
160TD	235 x 138 x 100	279 x 219 x 170	3	-	70W
160HD	235 x 138 x 100	279 x 219 x 170	3	100W	70W
250TD	295 x 150 x 150	338 x 234 x 232	6	-	120W
250HD	295 x 150 x 150	338 x 234 x 232	6	200W	120W
500TD	298 x 238 x 150	338 x 323 x 237	10	-	130W
500HD	298 x 238 x 150	338 x 323 x 237	10	200W	130W
800TD	300 x 330 x 150	340 x 323 x 285	15	-	250W
800HD	300 x 330 x 150	340 x 323 x 285	15	200W	250W
1000TD	495 x 295 x 150	545 x 380 x 240	20	-	250W
1000HD	495 x 295 x 150	545 x 380 x 240	20	400W	250W
2000TD	495 x 295 x 200	545 x 382 x 290	30	-	350W
2000HD	495 x 295 x 200	545 x 382 x 290	30	400W	350W
3000TD	620 x 495 x 200	545 x 382 x 290	60	-	600W
3000HD	620 x 495 x 200	545 x 382 x 290	60	1600W	600W
3800TD	600 x 450 x 300	712 x 591 x 419	80	-	650W
3800HD	600 x 450 x 300	712 x 591 x 419	80	1600W	650W

NOTE - Models with TD = Timer, no heater
Models with HD = Timer and heater

ISOPROPRANOL



- Mild cleaning of circuit boards, for removal of fluxes and other contaminants

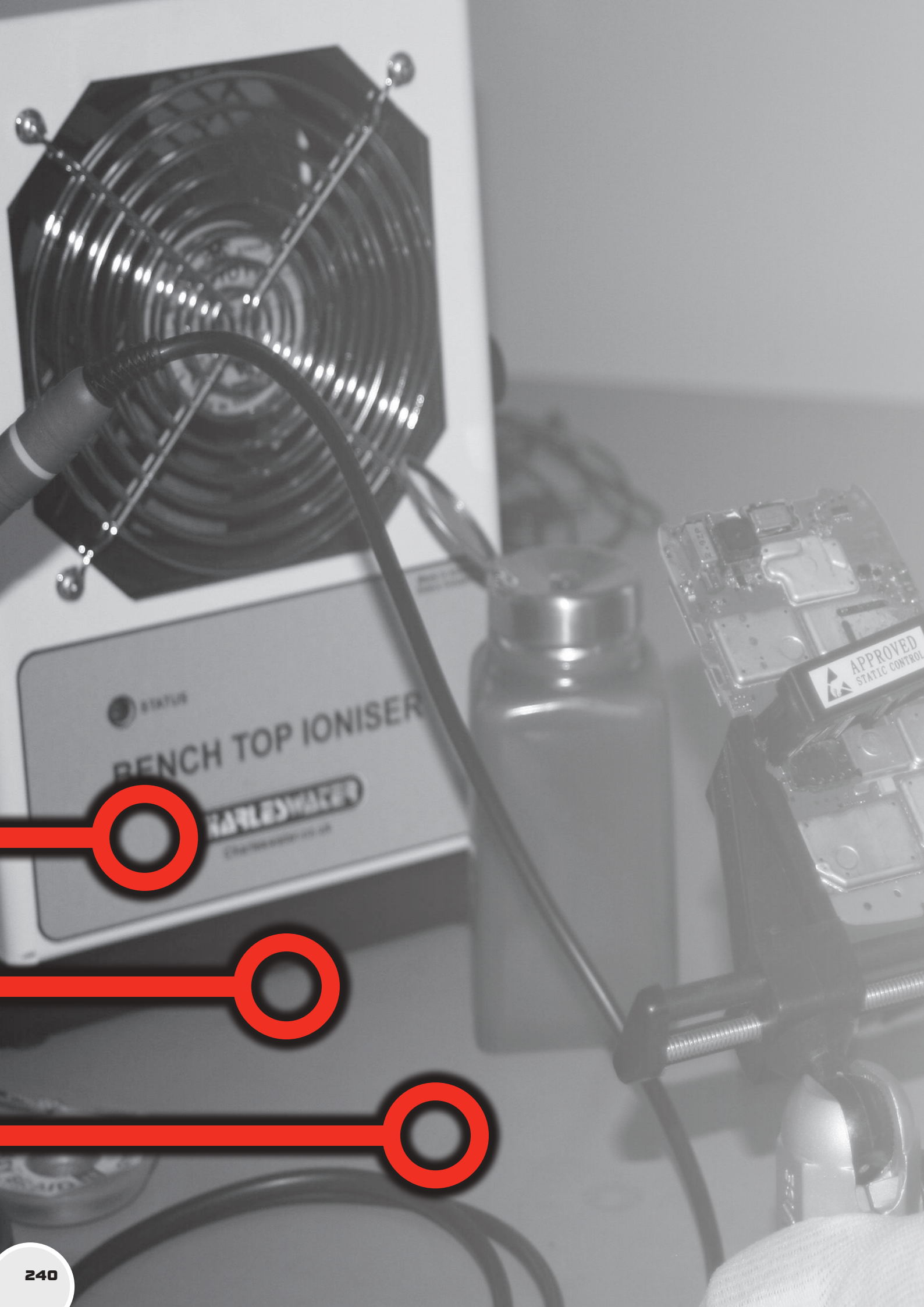
Part No.	Description	Size
ISO-20L	Isopropanol	20L
ISO-5L	Isopropanol	5L
ISO-1L	Isopropanol	1L

SAFESHASH SUPER



- Electrolube Safewash is the most effective aqueous cleaning product available. It is currently in use by major manufacturers in a wide variety of cleaning machines. Safewash is effective in all equipment types including batch ultrasonics, in-line spray, dishwasher and also by hand. Removes fluxes, solder paste and other contaminants.

Part No.	Description	Size
ESWAS 05L	Safewash	5L
ESWAS 25L	Safewash	25L



STATUS

BENCH TOP IONISER

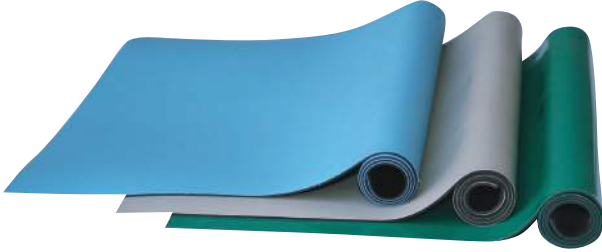
CHARLESWALCO
CharlesWalco.co.uk

APPROVED
STATIC CONTROL

Static Control

ESD Mats	242
Wristraps	243
ESD Clothing	244-245
Ionizers	245
ESD Maintenance Products	246
Conductive Storage.....	247
ESD Test Equipment.....	248-249
ESD Cleaning Brushes	250
Shielding Bags.....	251

BENCH & TABLE MATTING



Dual Layer Rubber Mat

The ultimate dual-layer rubber bench mat provides an easy to clean dissipative surface in either grey or blue. The black conductive layer beneath forms a good non-slip layer on the bench. Chemical and heat resistant. Green version is ideal to designate a lead-free work area.

NOTE: continuous runs of static dissipative materials should be grounded at 1.8m intervals to ensure proper dissipation rates. Grounding hardware is to be ordered separately.

ELECTRICAL PROPERTIES

Upper layer (dissipative): $10E7 \sim 10E9$ ohms,
 Bottom layer (conductive): $10E3 \sim 10E5$ ohms,
 Volume Resistance: $10E7 \sim 10E10$ ohms
 Abrasion Rate: 0.02g/c

Part No.	Description	Colour
HRM 060/10B	10m roll 600mm wide	blue
HRM 060/10G	10m roll 600mm wide	grey
HRM 090/10B	10m roll 900mm wide	blue
HRM 090/10G	10m roll 900mm wide	grey
HRM 090/10GR	10m roll 900mm wide	green
HRM 120/10B	10m roll 1200mm wide	blue
HRM 120/10G	10m roll 1200mm wide	grey

MAT KIT

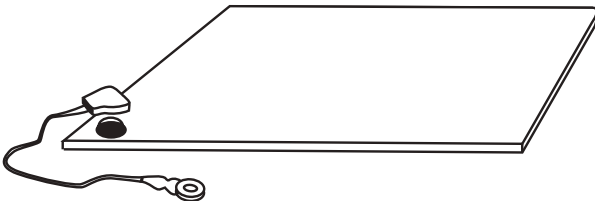


Table Mat Kits

Convenient table mat kits, supplied with one fitted stud and one common point ground cord (HGC 8431).

Part No.	Mat Size	Colour
HTM 060/09B	0.6m x 0.9m	blue
HTM 060/09G	0.6m x 0.9m	grey
HTM 060/09GR	0.6m x 0.9m	green
HTM 060/12B	0.6m x 1.2m	blue
HTM 060/12G	0.6m x 1.2m	grey
HTM 060/12GR	0.6m x 1.2m	green

SNAP STUDS



Universal Snap Kit

Can be installed with a screwdriver.

Part No.	Description
80014	Universal snap kit

Cost saving snap studs for where larger quantities are required. A riveting tool is required to install these studs.



Part No.	Description
03-DUR-550	Female 10mm Socket
03-DUR-550A	Fixing Post

SNAP STUD ADAPTER



Converts 10mm stud to 10mm socket



Converts 10mm socket to 10mm stud.

Part No.	Description
80010	Stud to socket adapter
80012	Socket to stud adapter

FIELD SERVICE KIT

This mat is ideal for field service work, providing a temporary ESD work surface and also can be used to protect a PCB if wrapped around it.



Part No.	Mat Size	Colour
HSK-1	600 x 600mm	Red

ESD CHAIRS

- Size of seat & backrest: 430*400mm/400*300mm
- Height-adjusting range: 460 to 600mm (equipped with 140mm gas strut)
- Surface resistance: 10^{4-6} ohm or 10^{6-9} ohms
- System resistance: ≤ 109 ohms
- Alu. alloy five-star leg and alu alloy castors
- Fixed footrest is optional
- Chair can be adjusted up-down and left-right



Part No.	Desk Height
SCH0067	± 700 mm

BENCH GROUND PLATE

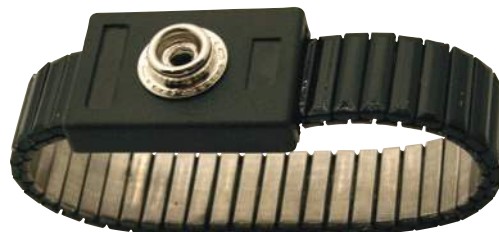


Wrist Strap Ground

An under-bench wrist strap ground for two wrist straps. Fitted with a 3.0m cord, terminated with a ring terminal. Two 10mm park studs

Part No.	Description
HWSG 01	Wrist strap ground, metal plate

WRIST STRAPS



Metal wrist band for superior skin contact and durability. Adjustable system leaves no extra link loose. Fitted with 10mm snap.

Part No.	Description
60106	Metal wrist band (band only)
CORD 6PL	Coil cord 1meg (see image at bottom of page)

BENCH GROUND BOX

Wrist Strap Ground

An under-bench wrist strap ground for two wrist straps. Fitted with a 3.0m cord, terminated with a ring terminal. One 10mm park stud.



Part No.	Description
HWSG 02	Wrist strap ground, box



Premium Quality Wrist Strap

Premium quality soft elastic fabric with silver coated filament. Easily adjusted for size. The standard choice for production lines. Includes cord (3m extended).

Part No.	Description
HWSR 8001	Premium wrist strap

DOME GROUND CORD

Dome Ground Cord

For grounding of mats. Fitted with a dome shaped, low profile top. 3.0m cord terminated with ring terminal. Normally used in conjunction with the HWSG 02 for bench mats.



Part No.	Description
HGC 8430	Dome ground cord

COMMON POINT GROUND

Common Point Ground Cord

A popular method of grounding mats in a simple manner. Plugs onto the stud on a mat and provides two sockets for wrist straps.



Part No.	Description
HGC 8431	Common point ground cord

MAINS GROUNDING PLUG

Mains Ground Plug

A convenient plug for earthing to mains ground. With earth screw to accept ring terminals.



Part No.	Description
463 SAS	Mains ground plug

REPLACEMENT COIL CORDS



Various options of coil cords fitted with 1meg resistors in cord.

Part No.	Description	Length
CORD-6FT-P1	10mm snap-banana plug	1.8m
CORD-6FT-P2	10mm snap-snap	1.8m
60332	4mm snap-banana plug	3.6m
60316	10m snap-banana plug	3.6m

ESD Clothing

ESD DUST COAT



Polycotton Coats

A range of ESD polycotton coats with carbon fibre thread available for production facilities. Stocked in light blue colour. White available to order.

Part No.	Description	Size
HCPC-S	Small polycotton coat	S
HCPC-M	Medium polycotton coat	M
HCPC-L	Large polycotton coat	L
HCPC-XL	Extra Large polycotton coat	XL
HCPC-2XL	2 Extra Large polycotton coat	2XL
HCPC-3XL	3 Extra Large polycotton coat	3XL
HCPC-4XL	4 Extra Large polycotton coat	4XL
HCPC-5XL	5 Extra Large polycotton coat	5XL
HCPC-6XL	6 Extra Large polycotton coat	6XL
HCPC-7XL	7 Extra Large polycotton coat	7XL

DOCUMENT STORAGE



Document Storage

Static safe ring binders and document holders with surface resistance $\pm 10^{11}$ ohm.

Part No.	Description
7804.414	A4 document pouch
7804.400	A4 ring binder 35mm

ESD T-SHIRTS AND POLO SHIRTS



ESD Shirts

An alternative to coats particularly during the warm season. Fabric has carbon fibre thread. Made in Italy. Light grey polo shirt with ESD symbol. Woven with 96% cotton and 4% carbon fibre.

Part No.	Description	Size
7807.700	Medium ESD T shirt	M
7807.702	Large ESD T shirt	L
7807.704	Extra Large ESD T shirt	XL
7807.705	2 Extra Large ESD T shirt	2XL
7807.710	Medium ESD Polo shirt	M
7807.712	Large ESD Polo shirt	L
7807.714	Extra Large ESD Polo shirt	XL
7807.716	2 Extra Large ESD Polo shirt	2XL

ESD PU COATED GLOVES

Polyurethane Coated Gloves

Polyurethane coating on palm and fingers for delicate handling of components.

NOTE: glove on left is top fit, glove on right is palm fit.



Part No.	Description	Size
HPFG-900S	Small palm fit glove	S
HPFG-900M	Medium palm fit glove	M
HPFG-900L	Large palm fit glove	L
HPFG-900XL	Extra large palm fit glove	XL
HTFG-900S	Small top fit glove	S
HTFG-900M	Medium top fit glove	M
HTFG-900L	Large top fit glove	L
HTFG-900XL	Extra large top fit glove	XL

ESD WORKER SHOES

The Worker Shoe, supplied in european sizes. (Sizes given are cross referenced)



Part No.	Description	Size
8908 041	Worker Shoe	7
8908 042	Worker Shoe	8
8908 043	Worker Shoe	9
8908 044	Worker Shoe	9.5
8908 045	Worker Shoe	10.5
8908 046	Worker Shoe	11

PREMIUM HEELSTRAP

Velcro Heel Strap

American heel strap with non-marking interior. Fastening system with velcro for quick fitting.

Double heel cup offers two wear surfaces. 1 meg resistor RG 10⁶ to 10⁷



Part No.	Description
70030	Heel strap

HI-VIS PREMIUM HEELSTRAP

Hi-Vis Heel Strap

Hi-Vis, three layer, American premium quality heel strap. Hook and stretch loop fastening system for maximum comfort. RG 10⁶ to 10⁷



Part No.	Description
70007	Hi-Vis heel strap

ECONOMY HEELSTRAP

Economy Heel Strap

Lower cost heel strap of remarkable durable rubber. Well suited to production facilities.

Snug fitting ensured by elastic strap around back of heel. 1meg resistor.



Part No.	Description
HHS 8501	Heel strap

DISPOSABLE HEELSTRAP

Disposable Heel Straps

Disposable heel straps with self adhesive section adhering to the underside of heel. Comes in pack of 100.



Part No.	Description
70001	Disposable heel strap
249220	Wall mounted dispenser

LADIES SHOE TOE STRAP

Toe Strap

Toe strap with an adjustable elastic strap around back of heel and adjustable velcro strap over top of foot. Suits all shoe sizes. 1meg resistor.



Part No.	Description
70031	Toe strap

CRITICAL ENVIRONMENT IONISER

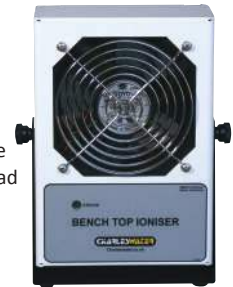


- Minimal contamination ioniser - rapid static discharge neutralisation of insulators. Designed for use in clean rooms.
- Emitter cassettes (US Patent 6137670) slide out for easy cleaning and replacement.
- Multiple high output fans - provides more consistent and wider coverage.
- Overhead mounting - no waste of valuable work surface space.
- Flashing front panel display - signals when cleaning is needed.
- Balance ±10 voltage offset.

Part No.	Description
50682	Overhead ioniser (CE approved)

JUNIOR ENVIRONMENT IONISER

- Features steady State DC ionization and patented Sense Feedback balancing
- Small and compact
- Designed to be easily and quickly disassembled for cleaning or replacing emitter points. This method removes the contamination from the work area instead of redistributing it
- Emits a gentle flow of ionized air that provides uniform coverage and faster neutralization times
- < 1.5 second 1,000 to 100 volt discharge time at 30cm
- Balance ±5 voltage offset



Part No.	Description
92290	Benchtop ioniser 220V

ION VECTOR SYSTEMS



- Eliminate ElectroStatic Attraction by blowing particles off products.
- Balance adjustable - flexibility in uses.
- Optional pin-point nozzle tip - directs air stream to a localised area.
- Replaceable air filter - keeps air free of contaminants.
- Adjustable 5 to 100 PSI air pressure.

Part No.	Description
50621	Ion Vector with foot pedal
50623	Ion Vector with finger control

CLEAN ROOM VAC - HEPA TYPE

ESD Safe Cleanroom vacuum which exceeds Cleanroom Class 100,000 standards. The Omega cleanroom vacuum comes standard with a true HEPA cartridge filter, 10' ESD safe hose, shoulder strap, 16" ESD safe rubber flexible gooseneck, and power cord.



Part No.	Description
VACOMEGAS2ECRH	Cleanroom vacuum

STICKY MATS



Sticky Floor Mats

Sixty-layer sticky mats for entrances to controlled work areas. Removes contamination from heels and soles of shoes, and wheels of trolleys, etc.

Part No.	Description	Size
HSM 3645	Large sticky mats	36" x 45"
HSM 2435	Small sticky mats	24" x 36"

ESD FLOORING



Polyflor

- Polyflor static dissipative floor covering is a homogenous, vinyl material available in a 2m wide roll.
- Resistance is 10^9
- Applied to floor with conductive glue, copper tape in grid and welded joints
- Inspection and measurement of area is required prior to quotation.
- Various colours available to order

Please contact our sales team for quotations

ESD FLOOR FINISH

Statguard Floor Finish

- Static dissipative (Rp 10^7 - 10^8 ohms)
- Can be applied on many hard surfaces or sealed floors including vinyl, VCT, linoleum, rubber, asphalt, and concrete.
- Easy to apply: improves productivity
- Produces beautiful, long lasting, durable finish, but easier to strip
- UL classified for slip resistance only



Part No.	Description	Size
71046	Floor finish	10L

CONDUCTIVE FLOOR PAINT

Conductive Floor Paint

- Grey conductive floor paint in accordance with MIL-HDBK-263-B for manufacturing and test areas.
- 10^5 OHMS RTG
- Coverage: 7.2 - 9.6m² per liter per coat. Two coats recommended.



Part No.	Description	Size
71017	Floor paint	19L

ESD SPRAYS



ESD Sprays

Part No.	Description	Size
70995	Carpet/fabric protector	1.1L
71029	Topical antistat	1.1L
71021	Mat cleaner, dissipative	1.1L

ESD LABELS

ESD Labels (Sensitivity Label)

Superior quality paper label for closing ESD bags and other packaging applications. 500 labels per roll



Part No.	Description	Size
CE421-301	ESD Label	15 X 50mm

ESD Labels (Sensitivity Label)

Superior quality paper label for closing ESD bags and other packaging applications. 500 labels per roll.



Part No.	Description	Size
91302	ESD Label	2" x 2"

AISLE MARKING TAPE



Bright Marking Tape

Durable aisle marking tape to designate ESD controlled work areas.

Part No.	Description	Size
91350	Aisle marking tape	76mm x 33m

ESD SIGNAGE

Attention Sign

Plastic sign ideal for over sorting areas and production areas



Warning Poster

A low cost, stiff paper poster used at entrances to production facilities.



Part No.	Description	Size
HSP 1722	Warning poster, paper	430 x 560mm
91315	Attention sign, plastic	100 x 250mm

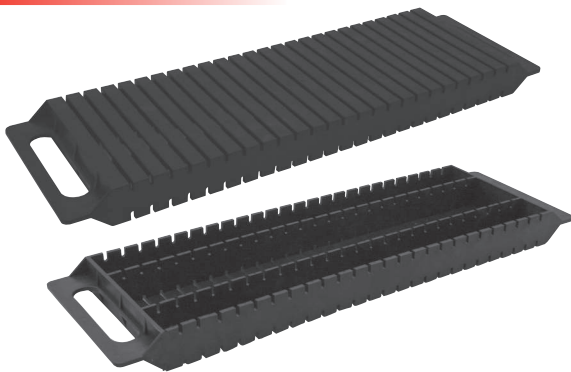
ESD Storage

PCB RACKS



Conductive rack with 25 slots for easy handling of PCBs. Size: 150mm x 450mm. Made in the USA

Part No.	Description
RA 18C	PCB rack

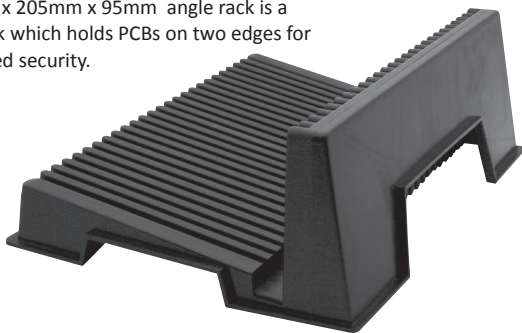


Economical, reversible rack with 25 slots or grooves. Size: 140mm x 480mm.

Part No.	Description	Resistance
SM06D02	Ladder rack	104-106Ω

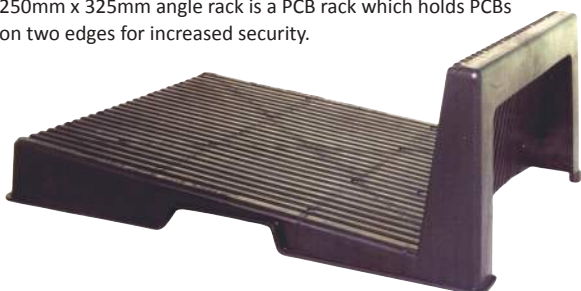
ANGLE PCB RACKS

265mm x 205mm x 95mm angle rack is a PCB rack which holds PCBs on two edges for increased security.



Part No.	Description
SMO6D03	Angle rack

250mm x 325mm angle rack is a PCB rack which holds PCBs on two edges for increased security.



Part No.	Description
PCBH 2L C	Angle rack

STORAGE BINS



Conductive Storage Bins

With rear clip for wall rail, fitting most rail systems

Part No.	Description	L	W	H
7804.715	Conductive bin	96mm	100mm	50mm
7804.719	Conductive bin	175mm	100mm	75mm
7804.721	Conductive bin	235mm	145mm	125mm
7804.725	Conductive bin	350mm	200mm	200mm
7804.727	Conductive bin	500mm	300mm	200mm

TOTE BOX



- A range of conductive Tote Boxes are available to order for electronic production line applications. Please enquire for more sizes and availability.

Part No.	Description	Size L x W x D (mm)
7804-690	Newbox 10 ESD Tote Box	400 x 300 x 120
7804-687	Newbox 14 ESD Tote Box	400 x 300 x 170
7804-688	Newbox 20 ESD Tote Box	400 x 300 x 220
7804-689	Newbox 31 ESD Tote Box	400 x 300 x 320
7804-694	Newbox 24 ESD Tote Box	600 x 400 x 120
7804-699	Newbox 42 ESD Tote Box	600 x 400 x 220
7804-691	Newbox Lid	400 x 300
7804-700	Newbox Lid	600 x 400

CONDUCTIVE TOOLBOX

- Convenient toolbox for electronic production line applications with tote tray.



Part No.	Description	Size
116-632	Toolbox	368 x 184 x 134mm

DIMPLE TRAY PCB RACK

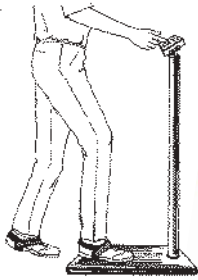


Dimple Tray

Part No.	Description	Size
3-884-EL	Dimple tray	352 x 252mm

ESD Test Equipment

COMBINATION TESTER



The Combo Tester is a 3-state touch tester designed for fast, frequent testing of ESD personnel grounding devices. The Combo Tester incorporates a unique dual test circuit design which improves accuracy of testing and eliminates the need for separate wrist strap and foot grounder test units. The 99000 is equipped with a 750 Kilohm - 35 Megohm circuit, ideal for testing of wrist straps and footwear.

Test parameters are factory set but can be adjusted to match your own specifications. The Combo Tester is very simple to operate. A green light signals the user that everything is OK. A red light and an audible indicator means that the circuit resistance is either too low or too high.

Part No.	Description
99000	Combo tester
99004	Combo tester with stand

WRIST STRAP AND FOOTWEAR TESTERS

Wrist Strap and Heel Strap Tester

Wrist strap and heel strap tester operates off 9V battery. Range 900K - 35meg ohm. A wall plate/sign is available to mount the tester at a central point. For heelstraps, a stainless steel footplate and ground cord is available as show below.



Part No.	Description
HWT8401	Wrist strap and heel strap tester



HWP8401

Convenient wall plate holds HWT8401 tester and a ground cord connects the tester to the stainless steel floorplate for footwear testing. Ground cord supplied with the footplate.



Part No.	Description
HWP 8401	Wall plate for wrist tester
HWP 8404	Foot plate with ground cord

DUAL OPERATOR MONITOR

Dual Station Continuous Monitor for 2 Operators and 2 Work Surfaces

Continuously monitors the integrity of both operators and ESD workstations, eliminating the need for periodic testing and recording. Ideal for adjacent workstations for assembly, test, packaging, or other applications.



- NEW Improved Banana Jack
- Wave Distortion Technology Provides Real-Time Continuous Monitoring for Operator Path to Ground and Presence Of 1 Meg Resistor
- Ready To Use Unit Includes Control Unit and Two Satellite Remote Monitors.
- Park Snap Feature for Each Operator on Satellite Remote
- Full Time Status LEDs and Audible Alarm for Operator and Workstation Monitoring.
- Easy to Install Housing with Screws or Adhesive Backed Velcro® Strips
- NIST Calibrated
- Made in the USA

Part No.	Description
99093	Dual Operator Monitor, with Split Remotes & Adapter

CONTINUOUS MONITOR WITH MULTI - MOUNT

Single Station Continuous Monitors for Operator And ESD Work Surface

Continuously monitors the integrity of one operator and ESD workstation, eliminating the need for periodic testing and recording. Ideal for individual workstations for other applications.

- NEW Improved Banana Jack
- Wave Distortion Technology Provides Real-Time Continuous Monitoring for Operator Path to Ground and Presence of 1 Meg Resistor
- Park Snap Feature - Provides means for operator to disconnect wrist strap cord when normally leaving the workstation without audible (false) alarm sounding.
- Made in the USA



Part No.	Description
99129	Continuous Monitor - Multi Mount

CONTINUOUS MINI MONITOR

Single Station Continuous Monitor for Operator And ESD Work Surface

Continuously monitors the integrity of one operator and ESD workstation, eliminating the need for periodic testing and recording. Ideal for individual workstations for assembly, test, packaging or other applications.

- NEW Improved Banana Jack
- Wave Distortion Technology Provides Real-Time Continuous Monitoring for Operator Path to Ground and Presence of 1 Meg Resistor
- Full Time Dual Status LEDs and Audible Alarm for Operator and Workstation Monitoring
- Includes two 10mm Snaps for Easy to Installation on Work Surface
- Use with Single-Wire Wrist Straps
- NIST Calibrated
- Made in the USA



Part No.	Description
99135	Continuous wrist strap monitor

DIGITAL SURFACE RESISTANCE METER

Surface Resistance Test Kit

The 99026 Digital Surface Resistance Meter Kit is an instrument designed to measure resistance point-to-point (Rp-p) or surface to ground (Rg) in accordance with EN 61340-5-1 Electrostatics and its test method IEC 61340-2-3.

99026 Kit Includes:

- 1 x Digital Resistance Meter
- 2 x Shielded Test Leads, 1.5 m
- 2 x 2.2 kg Electrodes
- 1 x Plastic Carrying Case
- 1 x Cert of Calibration
- 2 x AA Batteries
- 1 x Gator Clip



Test functions include:

- Resistance range of $<1 \times 10^3$ ohms to $>1 \times 10^{12}$ ohms
- Under load voltages of 10 and 100 volts $\pm 5\%$
- Electrification period of approximately 15 seconds
- Resistance measurement accuracy of $\pm 10\%$ ($\pm 20\%$ for resistance values 1×10^{11} ohms and greater)

The Digital Surface Resistance Meter also measures ambient temperature and relative humidity.

Part No.	Description
99026	Digital Surface Resistance Meter Kit
99027	Digital Surface Resistance Meter
99028	Concentric Ring Probe
99120	Concentric Ring Probe Kit
99108	Shielded Test Leads
99109	2.2 kg Electrodes, 1 Pair

MICRO MEG® POCKET MEGOHMMETER

Micro Meg Tester

The 99035 Micro Meg Pocket Megohmmeter is a portable test instrument designed for measuring both surface and surface-to-ground resistance of static dissipative and conductive materials. Seven color-coded LEDs, read from right to left, easily identify static dissipative and conductive ranges. The Micro Meg will test materials with surface resistivity of 1×10^5 to 1×10^{10} . This test instrument is ideally suited for Quality Control and Field Service personnel as well as for use in routine auditing of your ESD protective materials.



Part No.	Description
99035	Micro Meg Pocket Megohmmeter

SURFACE TESTER

Surface Tester

A lower cost alternative to the Mini Meg tester, with clear LED indication.



Part No.	Description
35-001	Surface tester

DIGITAL FIELD METER

Field Meters

Used for identifying charges or ionisation in the work environment

50597 Kit Includes:

- 1 x Digital Static Field Meter
- 1 x Conductive Plate
- 1 x Charger
- 2 x 9V Batteries
- 1 x Data Output Cord
- 1 x Carry Case
- 1 x Cert of Calibration



Part No.	Description
50597	Digital field meter
50598	Ionisation test kit (Full Kit - Incl 50597)

ESD SURVEY KIT - 220VAC

NEW

ESD Survey Kit

Used to measure, verify and qualify products for use in the ESD Protected Area in accordance with EN 61340-5-1 test procedures including IEC 61340-2-3, IEC 61340-4-1, ANSI/ESD STM2.1, and ANSI/ESD STM3.1.



ESD Survey Kit Includes:

- ESD Survey Kit Includes:
- Digital Surface Resistance Meter Kit (99026)
- Low Resistance Tester (99036)
- Digital Static Field Meter/Ionisation Test Kit (50598)
- Human Body Model Test Fixture (50553)
- Training Paddles Set (91420)
- Jewel® Wristband and Coil Cord (60000 & 60260)
- Wescorp® Heel Grounder, Medium (70030)
- Pelican Case 1510 with Wheels, Retractable Handle, and Custom Foam

Part No.	Description
99201-AU	ESD Survey Kit

CONTINUOUS MONITOR CALIBRATION UNIT

NEW

Used to calibrate Multi-Mount Continuous Monitor, Full Time Continuous Monitor, Dual Operator Continuous Monitor and Jewel® Workstation Continuous Mini Monitor

- Passive device with no power source required
- Multiple jacks
- Made in the USA



Part No.	Description
50512	Calibration Unit

ESD Brushes

Brushes that last...

DOUBLE ENDED ESD BRUSHES



Double End Brushes

ESD safe. Hog bristle is clamped either end of 125mm tube. One end is chisel shaped for difficult access areas

Part No.	Description	Bristle Lengths
1005CK	Double End Brush	13 and 6mm
1010CK	Double End Brush	6 and 4.5mm

APPLICATOR ESD BRUSHES



Applicator Style Brush

ESD Safe. Available in stiff hog bristle or soft horsehair.

Part No.	Description	Width
403-239	Applicator brush, soft	19mm
403-240	Applicator brush, stiff	19mm

LARGE SCRATCH ESD BRUSH



Large Scratch Brush

ESD safe. Stiff hog bristle is perfect for board rework.

Part No.	Description	Brush Face
36CK	Large scratch brush	22 x 57mm

SMALL SCRATCH ESD BRUSH



Scratch Brush

ESD safe. Stiff hog bristle is ideal for cleaning applications.

Part No.	Description	Brush Face
30CK	Scratch brush	9 x 35mm

FLUX ESD BRUSH



Flux Brush

ESD safe. Hog Bristle.

Part No.	Description	Brush Face
WA12CK	Flux brush	9 x 22mm

CONDUCTIVE PLASTIC BRUSHES



Conductive plastic brush for general PCB cleaning. Plastic handle and Nylon bristles

Part No.	Brush Face	Bristle length
SRB0851	4 x 15 mm	18 mm
SRB0852	10 mm diameter	18 mm



Conductive Brush

Conductive plastic brush for general PCB cleaning.

Part No.	Description	Brush Face
HCB-B	Conductive brush	9 x 35mm



Conductive plastic brush for general PCB cleaning. Plastic handle with Nylon Bristles

Part No.	Description	Brush Face
STB0813	18mm hair ,2 rows,20 clusters	8 x 57mm
STB0814	20mm hair, 3 rows, 34 clusters	15 x 90 mm



Wide conductive plastic brush can be used for cleaning or safe discharging of a surface/PCB.

Part No.	Face Size	Bristle length
SHB0831	220 x 8 mm	48 mm
SHB0832	128 x 5mm	33 mm



Conductive plastic brush for general PCB cleaning. Plastic U shaped handle with Nylon bristles

Part No.	Description	Brush Face
SUB0821	U - Shaped Brush Large	45 x 90mm
SUB0822	U - Shaped Brush Small	30 x 65mm

Charleswater ESD Bags


Renowned quality.

Metallised shielding bags are designed to protect against static induced damage. The metallised layer is close to to the surface for low resistance readings. The bags will dissipate a 5,000 volt static charge to zero in less than 100 microseconds. Light transmission of better than 30% allows for easy identification, so that PC boards can be seen without removal. Metallised bags have a unique abrasion resistance outer layer to prevent scratching the metallic layer.

CHARLESWATER ZIP-LOCK BAGS

Specifications:

Material:	Laminated metallised film
Thickness	3.0 mls (0.003 in.>40%)
Surface resistivity	
Outer surface:	<10 ¹² ohms/sq.
Metallised layer:	<100 ohms/sq.
Inner surface:	<10 ¹² ohms/sq.
Charge decay:	<100 microseconds
(FTMS 101C, M-4046)	

Part No.	Item	
PS 30100	76 x 127mm	100
PS 30105	102 x 152mm	100
PS 30110	127 x 203mm	100
PS 30115	152 x 254mm	100
PS 30120	203 x 254mm	100
PS 30130	254 x 306mm	100
PS 30135	254 x 356mm	100



APEX METALLISED SHIELDING BAGS

1. CONSTRUCTION, METAL-IN

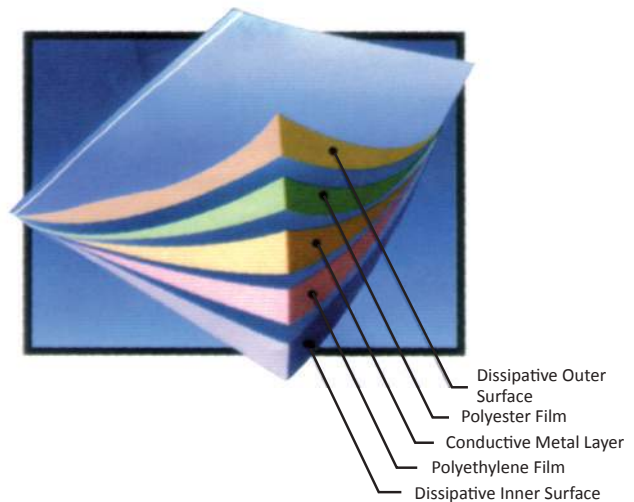
ESD Coat/PET (AL Shield) /PE Film/ESD Coat


2. PHYSICAL CHARACTERISTICS

Thickness:	0.08mm+10%
Tensile Strength:	(kg/cm ²) MD: 290 TD: 270 (LNS1059126075)
WVTR:	(g/M ² - 24H) 4 below (40 ^c - 90% RH) (JIS-Z-2020)
Light Transmission:	(%) 40+5 (ASTMD-1003-77)
Tear Strength:	(kg) MD: 1.2 TD: 1.0 (ASTMD-1004-66)
Puncture Resistance:	(kg) 0.8 (CNS11247N6198)
Bursting Resistance:	(kg/cm ²) 5.0 above (ASTMD774-87)
Heat Seal Strength:	(kg/15mm) 3 above (155°C x 3kg x 1 sec)

3. ELECTRICAL CHARACTERISTICS

Surface Resistivity:	(/) outer 10 ⁸ ~ 10 ¹⁰ (ASTMD-257)
Metal	10 ² inner 10 ⁸ ~ 10 ¹⁰
Static Decay	(5000V ---0)
Static Shielding	< 0.03 Sec 30V below (EIA 541)
EMI Shielding	45dB between 1 ~ 10.0 GHZ (MIL-B-71805C)



Part No.	Item (sold per 100)	
HSB 0204	51 x 102 mm	100
HSB 0305	76 x 127 mm	100
HSB 0406	102 x 152 mm	100
HSB 0412	108 x 305 mm	100
HSB 0508	127 x 203 mm	100
HSB 0608	152 x 203 mm	100
HSB 0610	152 x 254 mm	100
HSB 0810	203 x 254 mm	100
HSB 0812	203 x 305 mm	100
HSB 1012	254 x 305 mm	100
HSB 1014	254 x 356 mm	100
HSB 1115	279 x 381 mm	100
HSB 1212	305 x 305 mm	100
HSB 1216	305 x 406 mm	100
HSB 1218	305 x 457 mm	100
HSB 1518	381 x 457 mm	100
HSB 1818	457 x 457 mm	100
HSB 1824	457 x 610 mm	100





4DX

NO OFF

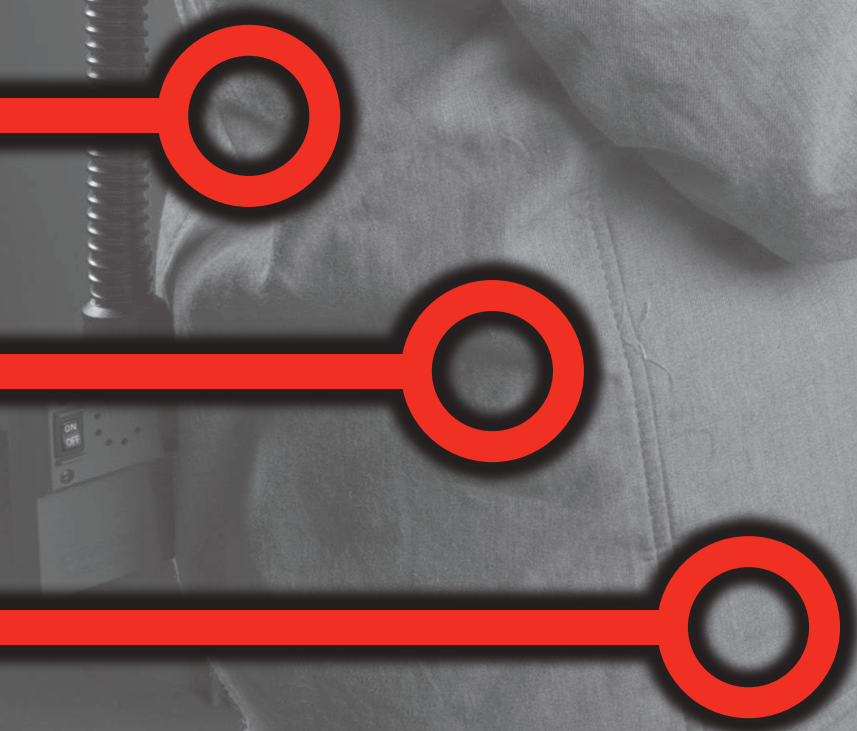
LAB CONDITIONER

OFF



PANEL 4DX5

PANEL 4DX5 OFF



Specialist Tools, Power Tools & Other

Telecomms/Fiber Optics	254-255
Insulated Live Working Tools.....	256-259
Toner Vacuums	260-261
Glue Guns	262
Heat Guns	263
Panasonic Battery Tools	264-265
Electric Power Tools	266
Panavise	267

Telecoms/ Fibre Optics

TONE AND PROBE KIT



The ideal tone generator outputs a high power tone and the inductive amplifier with volume control easily identifies cables within a bundle. Supplied in a convenient nylon holster.

Part No.	Description
33-864	Tone and Probe Kit

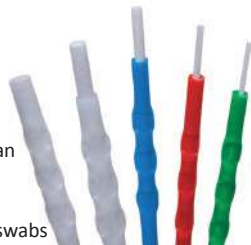
SCOTCH-LOCK PLIER



UR/UY/UG connector crimper with cutter and stripper hole

Part No.	Description
420-944	Scotch-Lock Plier

STICKLERS FIBRE OPTIC CLEANING



- Capillary action wicks liquid contamination off the end-face to clean all types of connectors
- Swabs conform to every end-face
- Moulded tip out-cleans foam or cloth swabs

Part No.	Description	Model
441-653	Pk 50 Sticks (10 x S25/S16/S12/XMT/P25)	MCC-VM
441-653	Pk 50 Sticks (20 x S25/P25, 10 x S12)	MCC-VS

PROBEPIC



Handy, pocket size insulated probe can be used to check for loose or damaged connections or to spread apart wires for direct access. Use pic end for tracing or pulling wires from a bunch.

Part No.	Description
412-654	ProbePic

CAN WRENCH



Common tool used for opening telecommunications pedestals and covers. Deep nutdrivers on both ends: 3/8" and 7/16" by 1 1/8" deep.

Part No.	Description
23-018	Can Wrench

NO-NIK WIRE STRIPPERS



No-Nik Wire Strippers for precise removal of buffer and coating with no risk of damage to the optic fibre.

Part No.	Description	Description
118-823	No-Nik Stripper	125-150µ
118-808	No-Nik Stripper	159-200µ
4-303	No-Nik Stripper	200-250µ

FIBRE OPTIC STRIPPER



Fibre optic stripper with two V-notch blades for removal of outer jacket insulation and the small V-notch for removal of the buffer and coating from 125 fibre.

Part No.	Description
415 681	Minilite-Strip

FLUKE TELEPHONE TEST SET

- DropSafe™ PRO – passed 20-foot drop test onto concrete
- RainSafe™ PRO – protection for extreme weather conditions
- DataSafe™ PRO – prevents disruption of data transmission on the line
- High-visibility keypad with glow-in-the-dark keys for any outside plant environment
- Extra-large, backlit LCD screen
- Familiar, cell phone-like menu and user interface
- Two-way, hands-free speakerphone
- Low battery and mute indication
- Optional headset



Part No.	Description
TS53	Fluke Networks TS53-P-01 TS53 With Piercing Pin

TELEPHONE TEST SET

- Luminescent (glow-in-the-dark) keypad
- Can be used safely on a DSL enabled line
- High Impedance Monitor for monitoring line without disrupting existing traffic
- Over voltage and over current protection
- Tone and Pulse dialing for versatility on old and new phone lines
- Polarity test with LED indicator
- 32 digit last number redial and pause
- 10 number speed dial
- Adjustable volume control plus mute
- Pause
- Flash to generate a timed break recall
- Line powered, no battery needed
- Headset (included) for hands free operation
- RJ11 socket



Part No.	Description
476-656	Greenlee Telmate

KRONE PUNCHDOWN TOOL



Part No.	Description
6089 2003 00	KRONE Tool Standard
6417 2055 01	KRONE Tool With Sensors

SAPPHIRE SCRIBE



Part No.	Description
262-600	Sapphire Scribe 60°

SHARPS BIN

Sharps container with sealable lid for the safe disposal of sharps/contaminated sharps with a maximum capacity of 1 KG



Part No.	Description
BLR-1L	Sharps Bin

KYNAR® WIRE WRAP WIRE



- Kynar wire wrap wire for prototyping is available in many colours and sizes.
- Stocked in 30AWG and four colours; other options available on request.

Part No.	Description	Length
WW30B	Black Wire Wrap 30AWG	1000ft
WW30R	Red Wire Wrap 30AWG	1000ft
WW30G	Green Wire Wrap 30AWG	1000ft
WW30GY	Grey Wire Wrap 30AWG	1000ft

WIRE WRAP TOOL BITS AND SLEEVES



Bits Part No.	Wire Size (AWG)	Wrap	Matching Sleeves Part No.
191-559	18	REG	191-497
180-663	20	REG	118-023
191-561	20	MOD	191-551
117-998	22	REG	118-023
118-069	22	MOD	118-023
759-032	22-24	REG	759-034
191-441	22-24	MOD	118-023
118-000	24	REG	118-023
424-976	24	MOD	118-023
759-033	26	REG	759-035
118-073	26	MOD	118-023
118-076	28	REG	759-061
118-076	28	MOD	759-061
759-060	30-32	MOD	759-061

Wire Wrapping

HAND WRAPPING TOOL



- Wraps, unwraps and strips
- Ideal for bench use or toolkit in service and repair applications.

Part No.	Description
118-083	Hand Wrapper 30AWG (modified)
118-084	Hand Wrapper 22-24AWG (regular)

HAND WRAPPING GUN



- Wire wrap connection for production line and field use
- Accepts wire from 22-32 AWG
- Chuck-type holder accepts bits and sleeves to suit post and wire sizes, select from table.

Part No.	Description
117-965	Manual Wrap Gun

WIRE WRAP STRIPPER



Adjustable wire stripper for the stripping of PVC, Teflon & Similar Coated Wire. Well suited to Wire Wrap wire.

Part No.	Description	Wire Range
CK 3757-2	Mini Wire Stripper	20-30AWG

Friedrich Insulated Tools

Live-Line Double Insulated Hand Tools

Friedrich insulated tools from Germany, have PVC dipped handles of a two-colour coating. The yellow PVC inner buried layer provides a clear indication of any damage to outer red insulation. High quality tools tested individually according to International IEC 60900 standards..

VDE COMBINATION PLIERS



- For hard and soft wire, cutting edges induction hardened, made out of steel, tempered in oil, Chromium plated

Part No.	mm	Weight	1000V
109161	165	230g	⚠
109192	190	290g	⚠ ⚠
109208	210	390g	⚠ ⚠

VDE SIDE CUTTER



- Has sharp edges, induction hardened for hard and soft wire, chromium plated made out of steel for a long lasting life

Part No.	mm	Weight	1000V
209168	160	210g	⚠ ⚠
209182	180	290g	⚠ ⚠

VDE DIAGONAL SIDE CUTTER



- For soft and piano wire, cutting edges induction hardened made out of special alloyed steel, tempered in oil, chromium plated

Part No.	mm	Weight	1000V
299176	170	275g	⚠
299206	200	380g	⚠ ⚠

VDE LONG NOSE PLIER



- Symmetrical, thin points for hard and soft wire, cutting edges induction hardened, made out of steel tempered in oil and Chromium plated

Part No.	mm	Weight	1000V
609166	160	170g	⚠
609203	200	240g	⚠ ⚠

VDE LONG NOSE PLIER, BENT 45 DEGREE



- Symmetrical, thin points for hard and soft wire, cutting edges induction hardened, made out of steel tempered in oil and Chromium plated

Part No.	mm	Weight	1000V
629164	160	170g	⚠
629201	200	250g	⚠ ⚠

VDE MULTIGRIPS



- Box jointed, 7 pivot points, integrated protection against squeezing, Jaws designed for sure grip, Chrome Vanadium, Chromium plated

Part No.	mm	Weight	1000V
889247	240	450g	⚠

VDE INSULATED TWEEZERS



- Precision tweezers made out of steel, nickel plated, multilayer dipped insulation,

Part No.	mm	Weight	1000V
959155	145	40g	⚠
969154	150	40g	⚠

VDE ADJUSTABLE WRENCH



- Jaw angle at 15%, made out of steel, tempered in oil and dipped insulation of various layers

Part No.	mm	bits/up to	Weight	1000V
269087	200	26mm	300g	⚠
269100	250	30mm	500g	⚠
269124	300	35mm	800g	⚠

NON-CONDUCTIVE TAPE MEASURE



NEW

- Three meter non-conductive tape measure with fully plastic housing and fibreglass tape (no metal parts).

Part No.	Description
03195	Non-Conductive 3m tape

VDE INSULATED FLAT SCREWDRIVER



- Ergonomically designed handle for comfortable working and maximum torque transmission, for flat screws

Part No.	Blade mm	Handle mm	1000V
207904	75x2.5x0.4	70	⚡ ⚡
207935	100x3.5x0.6	80	⚡ ⚡
207911	100x4.0x0.6	90	⚡ ⚡
207928	125x5.5x0.8	100	⚡ ⚡
207942	150x6.5x1.0	100	⚡ ⚡
207959	175x8.0x1.2	110	⚡ ⚡
207966	200x10.0x1.6	110	⚡ ⚡

VDE INSULATED PHILLIPS SCREWDRIVER



- Ergonomically designed handle for less tiring working and maximum torque transmission, for phillips screws

Part No.	Blade	Handle mm	1000V
210928	PH 0 x 60mm	80	⚡ ⚡
210904	PH 1 x 80mm	90	⚡ ⚡
210911	PH 2 x 100mm	100	⚡ ⚡
210942	PH 3 x 150mm	110	⚡ ⚡

VDE INSULATED POZI SCREWDRIVER



- Ergonomically designed handle for comfortable working and maximum torque transmission, for Pozidriv screws

Part No.	Blade	Handle mm	1000V
211901	PZ 0 x 60mm	80	⚡ ⚡
211918	PZ 1 x 80mm	90	⚡ ⚡
211925	PZ 2 x 100mm	100	⚡ ⚡
211932	PZ 3 x 150mm	110	⚡ ⚡

VDE INSULATED SAW



- Fully insulated according to IEC 60900:2004, with 150mm exchangeable blade
- Made out of die cast metal.

Part No.	mm	Weight	1000V
441155	150	180g	⚡

VDE INSULATED SAW



- Fully insulated according to IEC 60900:2004, with 300 x 13mm exchangeable blade, Made out of high speed steel, teeth hardened

Part No.	mm	Weight	1000V
440301	300	580g	⚡

VDE CABLE AND DISMANTLING KNIFE



- Stainless steel blade, plastic shock resistant handle, injection moulded with safety cap

Part No.	mm	Weight	1000V
143097	180	66g	⚡ ⚡
143295	180	66g	⚡ ⚡
143691	180	63g	⚡ ⚡

VDE INSULATED TORQUE WRENCH



- 4% accuracy of the taken measurement
Adjustable through button at the end of the handle
You feel the desired measurement is reached by the slight bending of the head
- IEC 60900:2004, each piece is tested with 10,000V

Part No.	mm	Drive	Range	1000V
314497	370	3/8"	5- 50Nm	⚡
364492	370	1/2"	5- 50Nm	⚡
364508	460	1/2"	20- 100Nm	⚡
364522	530	1/2"	60- 220Nm	⚡

VDE INSULATED HEX KEY



- Made out of Chrome Vanadium steel, nickel plated, insulated according to IEC 60900:2004, each piece is tested with 10,000V

Part No.	Blade mm	Handle mm	1000V
225038	3	130	⚡
225045	4	140	⚡
225052	5	160	⚡
225069	6	180	⚡
225083	8	200	⚡
225106	10	225	⚡
226035	3	65	⚡
226042	4	70	⚡
226059	5	80	⚡
226066	6	90	⚡
226080	8	100	⚡
226103	10	115	⚡

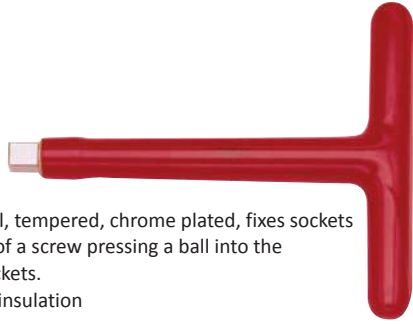
VDE INSULATED REVERSIBLE RATCHET



- Chrome plated, insulated in various layers,
- fixing and exchanging by pushing the bottom
- Every piece tested with 10,000V

Part No.	Handle	Drive	1000V
310499	200mm	3/8"	⚡
360494	260mm	1/2"	⚡ ⚡

VDE INSULATED T- HANDLE



- Made out of steel, tempered, chrome plated, fixes sockets firmly by means of a screw pressing a ball into the groove of our sockets.
- Various layers of insulation

Part No.	mm	Drive	1000V
320498	200	3/8"	⚡
370493	200	1/2"	⚡ ⚡

VDE INSULATED EXTENSION BAR



- Made out of steel, tempered, chrome plated, fixes sockets firmly by means of a screw pressing a ball into the groove of our sockets.
- Various layers of insulation

Part No.	Length	Drive	1000V
325134	125mm	3/8"	⚡
325257	120mm	3/8"	⚡
375139	125mm	1/2"	⚡
375252	250mm	1/2"	⚡

VDE INSULATED SOCKET COMBINED FOR METRIC/ INCH SIZES



- Hexagonal socket for metric and imperial nuts and bolts, made out of chrome vanadium steel, chromium plated, insulation after IEC 60900:2004, tested with 10,000V

Part No.	mm	Inches	1000V
354103	10	3/8	⚡
354110	11	7/16	⚡
354127	12	15/32	⚡
354134	13	1/2	⚡
354141	14	9/16	⚡
354165	16	5/8	⚡
354172	17	11/16	⚡
354189	18	23/32	⚡
354196	19	3/4	⚡
354202	20/21	13/16	⚡
354226	22	7/8	⚡
354240	24	15/16	⚡
354257	25	1	⚡
354288	28	1.1/8	⚡
354325	32	1.1/4	⚡

VDE INSULATED SCREWDRIVER SOCKET



- For hex screws, for working on live wire only in connection with ratchets Made with high quality chrome Vanadium steel
- Various layers of insulation

Part No.	mm	Drive	1000V
306041	4	3/8"	⚡
306058	5	3/8"	⚡
306065	6	3/8"	⚡
306089	8	3/8"	⚡
306102	10	3/8"	⚡
307048	4	3/8"	⚡
307055	5	3/8"	⚡
307062	6	3/8"	⚡
307086	8	3/8"	⚡
307109	10	3/8"	⚡
356046	4	1/2"	⚡
356053	5	1/2"	⚡
356060	6	1/2"	⚡
356084	8	1/2"	⚡
356107	10	1/2"	⚡
358040	4	1/2"	⚡
335057	5	1/2"	⚡
358064	6	1/2"	⚡
358088	8	1/2"	⚡
358101	10	1/2"	⚡

VDE INSULATED 3/8" DRIVE SOCKET



- Made out of Chrome Vanadium steel, Chromium plated, insulated after IEC 60900:2004, each piece is tested with 10,000V

Part No.	mm	Drive	1000V
300063	6	3/8"	⚡
300070	7	3/8"	⚡
300087	8	3/8"	⚡
300094	9	3/8"	⚡
300100	10	3/8"	⚡
300117	11	3/8"	⚡
300124	12	3/8"	⚡
300131	13	3/8"	⚡
300148	14	3/8"	⚡
300155	15	3/8"	⚡
300162	16	3/8"	⚡
300179	17	3/8"	⚡
300186	18	3/8"	⚡
300193	19	3/8"	⚡
300209	20	3/8"	⚡
300216	21	3/8"	⚡
300223	22	3/8"	⚡

VDE INSULATED 1/2" DRIVE SOCKET



- Made out of Chrome Vanadium steel, Chromium plated, insulated according to IEC 60900:2004, each piece is tested with 10,000V

Part No.	mm	Drive	1000V
350082	8	1/2"	△△
350099	9	1/2"	△△
350105	10	1/2"	△△
350112	11	1/2"	△△
350129	12	1/2"	△△
350136	13	1/2"	△△
350143	14	1/2"	△△
350154	15	1/2"	△△
350167	16	1/2"	△△
350174	17	1/2"	△△
350181	18	1/2"	△△
350198	19	1/2"	△△
350204	20	1/2"	△△
350211	21	1/2"	△△
350228	22	1/2"	△△
350235	23	1/2"	△△
350242	24	1/2"	△△
350266	26	1/2"	△△
350273	27	1/2"	△△
350280	28	1/2"	△△
350303	30	1/2"	△△
350327	32	1/2"	△△

VDE INSULATED 1/2" DRIVE EXTRA DEEP SOCKET



- Made out of Chrome Vanadium steel, Chromium plated, insulated according to IEC 60900:2004, each piece is tested with 10,000V

Part No.	mm	Drive	1000V
352109	10	1/2"	△△
352116	11	1/2"	△△
352123	12	1/2"	△△
352130	13	1/2"	△△
352147	14	1/2"	△△
352154	15	1/2"	△△
352161	16	1/2"	△△
352178	17	1/2"	△△
352185	18	1/2"	△△
352192	19	1/2"	△△
352208	20	1/2"	△△
352215	21	1/2"	△△
352222	22	1/2"	△△
352246	24	1/2"	△△

VDE INSULATED SINGLE END SPANNER



- Drop forged from Chrome vanadium, chrome plated, torque as per DIN, angled 15%, insulation according to IEC 609000:2004 regulations, each piece tested with 10,000V ,

Part No.	mm	1000V
250061	6	△△
250078	7	△△
250085	8	△△
250092	9	△△
250108	10	△△
250115	11	△△
250122	12	△△
250139	13	△△
250146	14	△△
250153	15	△△
250160	16	△△
250177	17	△△
250184	18	△△
250191	19	△△
250207	20	△△
250214	21	△△
250221	22	△△
250238	23	△△
250245	24	△△
250269	26	△△
250276	27	△△
250283	28	△△
250306	30	△△
250320	32	△△

VDE INSULATED RING SPANNER



- Offset drop forged from Chrome vanadium, chrome plated, torque as per DIN, insulation according to IEC 609000:2004 regulations, each piece tested with 10,000V ,

Part No.	mm	1000V
255066	6	△△
255073	7	△△
255080	8	△△
255097	9	△△
255103	10	△△
255110	11	△△
255127	12	△△
255134	13	△△
255141	14	△△
255158	15	△△
255165	16	△△
255172	17	△△
255189	18	△△
255196	19	△△
255202	20	△△
255219	21	△△
255226	22	△△
255233	23	△△
225240	24	△△
255264	26	△△
255271	27	△△
255288	28	△△
255301	30	△△
255325	32	△△

NOTE: Whitworth sizes available to order for certain spanners, please enquire.

Vacuum Cleaners

For copier toner applications

ESD SAFE - VACUUM CLEANER

Self Storage Compartment

- All accessories store conveniently under the plastic cover insert.

Standard Filter

with 0.3 micron Retention
- Ideal for soot, pollen, black toner and most colour toner.

Shoulder strap

- for portability!

Crevice Tool and Crevice Brush

- To loosen dust and toner particles in tight areas.

Flexible Goose-Neck

- To get to those hard-to-reach places!

ESD Safe

- Conductive construction provides maximum static protection to safeguard the operator and sensitive electronic components.

Toner-proof conductive 6' Hose

- Provides continual operation with no clogging.

Omega Supreme Plus Vacuum Cleaner Kit

- Way quieter than any other Toner service vacuum at 69.6 db.
- Filter cartridges are compatible with the 3m vacuum.
- Three year warranty!
- Kit contains: vacuum, one standard filter cartridge, 1.5m ESD hose, power lead, crevice tool, crevice brush, goose neck and shoulder strap.

Part No.	Description
VACOMEGA220	Omega Vac Supreme Plus Kit
VACOMEGAS2ECRH	Omega CleanVac (Cleanroom)

BACKPACK



- Backpack for the Omega Supreme and Cleanroom Vacuum

Part No.	Description
AVAP-014	Back Pack for the Omega

REPLACEMENT FILTERS - OMEGA SUPREME

- Replacement filters for the Omega Supreme and Cleanroom Vacuum
- Fits the 3M and Katun vacuums.



Part No.	Description
31700C	Standard Filter (0.3 micron retention)
OF612HE-1P	Geniune HEPA Filter (0.3 micron retention)

EXPRESS VACUUM



- Compact and lightweight version - nearly half the size of the Omega Supreme.
- Suits technicians who have long distances to walk.
- ESD (Static) Safe.
- Vac Kit includes: hose, crevice tool, goose neck, brush and power lead.
- 18 Month warranty
- Powerful 600 Watt Motor

Part No.	Description
75000-06	Express Vac Kit
HT4626006	Tote bag for Express Vac

REPLACEMENT EXPRESS FILTER CARTRIDGE.



Part No.	Description
710333	Express Filter Cartridge (2 PACK)

WORKSHOP ESD SAFE VAC

HCTV (High capacity Vacuum)

- suited to workshop applications at copier repair centres and, being ESD safe, is also ideally suited to electronic production equipment maintenance.
- 0.3 Micron filter capacity - standard
- Hepa Versions available to order.



Part No.	Description
ATIHCVT5F	High Capacity 5 Gal Toner Vacuum

REPLACEMENT 5 GALLON FILTER CARTRIDGE.



Part No.	Description
421-000-02	Replacement 5 Gal Cartridge

ACCESSORIES - FOR ALL ATRIX TONER VACUUMS



Toner-proof conductive Hose
- Provides continual operation with no clogging.

Part No.	Description	Length
31661	ESD Safe Vacuum Hose	1.5m
31671	ESD Safe Vacuum Hose	2.5m
31681	ESD Safe Vacuum Hose	4.8m

CREVICE TOOL & BRUSH



- Crevice Tool and Crevice Brush
- To loosen dust and toner particles in tight areas.

Part No.	Description	Fig
31654	Crevice Tool	1
31652	Crevice Tool Brush	2

MAINS POWER CORD



Part No.	Description
P 8410C	Power Cord

FLEXIBLE NOZE ATTACHMENT

- 16" rubber flex neck attachment for the Omega, cleanroom and express vacuums



Part No.	Description
31657	16" Rubber Flex Neck

Steinel Glue Guns

STEINEL GLUE GUN

SPECIFICATIONS:

- Dimensions (l x w x h) 185 x 32 x 180 mm
- Weight: 330 g (without stand)

Output:

idle approx. 20 W
In use approx. 120 W
Warming-up approx. 500 W

- Voltage: 220 – 240 V
- Warm-up time: 3–5 min.
- Glue sticks: \varnothing 11 mm dia.
- Melt temperature: 210° – 220°C
- Delivery rate: approx. 22 g/min.



FEATURES:

- Very high melting capacity.
- Cordless thanks to heat storage capability.
- Charging station with integrated drip tray.
- Nozzle can be changed
- On placing the unit on the charging station it automatically connects to power and starts heating the adhesive.
- Electronic temperature control with PTC heating technology.
- Power cord simply plugs into unit for continuous operation.
- Energy-saving standby mode and electronically controlled dual heating system for short warm-up times.
- Mechanical glue stick feeder for a speedy, well-metred flow of glue.

Part No.	Description
GLM 3002	Mains Glue Gun

STEINEL "CORDLESS" GLUE GUN

SPECIFICATIONS:

- Dimensions (l x w x h) 185 x 32 x 180 mm
- Warm-up time: 3–5 min.
- Melt temperature: 210° – 220°C
- Glue sticks: \varnothing 11 mm dia.
- Output:

Warming-up approx. 500 W
Idle approx. 20 W
In use approx. 120 W



FEATURES:

- Cordless thanks to heat storage capability.
- On placing the unit on the charging station it automatically connects to power and starts heating the adhesive.
- Electronic temperature control with PTC heating technology.
- Power cord simply plugs into unit for continuous operation.
- Energy-saving standby mode and electronically controlled dual heating system for short warm-up times.

Part No.	Description
GLM 5000	Cordless Glue Gun

STEINEL NEO 3 CORDLESS LI-ION 7.2V HOT GLUE GUN

NEW



FEATURES:

- Ready to glue in 15 seconds
- Switches off automatically after use
- Cordless operation with rechargeable lithium-ion battery
- Set and capable of withstanding loads after 2 minutes
- Electronic temperature control through modern PTC heating technology.

SPECIFICATIONS:

- Dimensions (L x W x H) 140 x 50 x 180 mm without charging station
- Weight: 260g
- Voltage: 7.2-volt rechargeable lithium-ion battery
- Battery run-time: approx. 45 minutes of continuous use
- Battery charge time: 90 % in 1.5 h
- Voltage: 230–240 V, 50/60 Hz
- Warm-up time: under 15 sec.
- Glue sticks: \varnothing 7 mm
- Melt temp: approx. 190°C - 7 mm cristal-sticks (150 mm x 7 mm dia. 60 g)
- The clear craft glue for invisible bonds.
- Transparent and low-drip.
- 7mm ultra power-sticks (150 mm x 7 mm dia. 60g)

Part No.	Description
GLM 3002	Mains Glue Gun

STEINEL 1.0MM SILICONE HOT MELT GLUE GUN NOZZLE



Steinel Fine Glue Nozzle

Replacement Fine Silicone hot melt nozzle, 1.0mm diameter.

Part No.	Description
076160	Silicone 1.0mm Glue gun nozzle

STEINEL GLUE NOZZLE



Steinel Glue Nozzle

Replacement long glue nozzle, 2.8mm diameter.

Part No.	Description
075965	Replacement 2.8mm dia Nozzle

Heat Guns

STEINEL 2 SPEED HEAT GUN

Basic Heat Gun

Attractively priced entry-level model with two heating and airflow stages for all standard hot air applications.

With this entry-level model, the brand leader offers a tried and tested, robust tool for all applications up to 500°C that don't require the use of reduction nozzles. A resettable thermostat additionally provides effective overheating protection determined by legal legislation.

The basic model heat gun with two speeds. 1600W.
Stage 1: 300°C at 240l/min. Stage 2: 500°C at 450l/min.



Part No.	Description
HL1610S	2 speed heat gun

STEINEL VARIABLE SPEED HEAT GUN

Features:

- 2000 Watts.
- 3 Heat Settings 50-600.
- Great for general purpose work.
- Weight 850 grams.
- Cool air for rapid cooling.
- Maintains Consistent heat.
- Blower Controlled by 3 Speed Operation Switch.
- Suitable For Plastic Welding

Variable Heat Gun

Stage 1 is used as a cooling stage. 2000W.
Stage 2: 50° – 600°C at 300l/min.
Stage 3: 50° – 600°C at 500l/min



Part No.	Description
HL1910E	Variable heat gun

STEINEL 36V CORDLESS LI-ION HEAT GUN

FEATURES:

- ESD-safe
- Thermal cut-out
- Integrated LED light
- Integrated ring for hanging the tool
- "Thermo-Signal" temperature indicator
- Three-stage switch for setting OFF/COLD/HOT

NEW

SPECIFICATIONS:

- Output: 300 W
- Run time: 15 min.
- Airflow rate: 100 l/min.
- Dimensions: (h x w x d) 240 x 65 x 265 mm
- Voltage: 36 V, rechargeable li-ion battery
- Charging time: 2.6 Ah 30 min (75%) 60 min. (100%)
- Temperature: 400 °C without nozzle / 500 °C 7 mm reduction nozzle incl



Part No.	Description
BHG360	36V Cordless Li-Ion Heat gun

STEINEL LCD VARIABLE SPEED HEAT GUN

LCD Heat Gun

Variable temperature model with both adjustable air speed of 150 – 500l/min and temperature of 50° – 650°C. A second position is for cooling.

- 2310 Watts.
- LCD Display for precise heat setting.
- Variable blower settings.
- Variable heat setting.
- Cool air stage for rapid cooling and nozzle changing.
- With the variable heat gun be used in any application for continuous use.



Part No.	Description
HG 2310 LCD	LCD heat gun

STEINEL VARIABLE SPEED STRAIGHT VERSION HEAT GUN



Straight Heat Gun

Straight version, ideal for bench use. Same specifications as HL1910E, except no cooling stage.

Part No.	Description
HG 2000E	Straight heat gun

STEINEL NOZZLES



Part No.	Figure	Description
070519	1	Large reflector nozzle
074616	2	Reflector nozzle
070618	3	Reduction nozzle 9mm
070717	4	Reduction nozzle 14mm
074715	5	Wide slit nozzle (mounts on 070717)

LEISTER HOT AIR GUN



Part No.	Description
L100 854	Leister Hot Jet S
L107 144	Reduction nozzle

Panasonic Tools

Lithium Ion rechargeable tools

RECHARGEABLE 3.6V LITHIUM SCREWDRIVER



Panasonic EY7410LA2S 3.6V Drill & Driver

- 1.5Ah Li-ion battery
- Compact size and lightweight
- Powerful: 1.5N-m
- Auto shut-off clutch
- 30 min. charging system
- Variable speed control/reversible
- 21 stage clutch control
- 1/4" Hex quick connect chuck
- LED light for support
- With an extra battery pack as standard equipment

The EY7410LA2S easily converts from a straight form to pistol form .



Part No.	Description
EY 7410LA2S	Panasonic Driver 3.6V
EY 9L10B	Replacement battery

CORDLESS DRILL & DRIVER 14.4V DUAL VOLTAGE

Panasonic EY74A1LS2F57 14.4V Drill & Driver

- * IP56 rated for the ultimate in toughness
- * Dual voltage for use with either a 14.4V or 18V battery
- * Overheat Protection System (OPS)
- * 2 x 14.4V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- High power: 37.5Nm
- 50min. charging system
- Variable speed control, reversible
- 18-stage clutch plus drill position
- 13mm heavy duty keyless chuck
- LED light for support
- Belt hook
- Electric brake
- With an extra battery pack as standard equipment



Part No.	Description
EY74A1LS2F57	Panasonic Drill 14.4V
EY9L45B57	Replacement 14.4V battery 4.2Ah

RECHARGEABLE 2.4V NICAD SCREWDRIVER



Panasonic EY6220NQ Driver

- The EY6220NQ, unmatched in performance, is the perfect tool for production line and service work.
- Easily converts from straight to pistol form. Has a multistage clutch, two-speed gear box, 2.4V battery and one hour charger.
- 1/4" Hex drive.
- MAX Torque: Low RPM 2.9Nm, High RPM 1.5Nm

Part No.	Description
EY6220NQ	Panasonic EY6220NQ Driver
EY921B	Replacement battery

CORDLESS DRILL & DRIVER 18V DUAL VOLTAGE

Panasonic EY74A1LS2G57 Drill & Driver

- High power: 42Nm
- Light weight: 1.95kg
- Compact body: Length 203mm
- Variable speed control/reversible
- IP56 rated for the ultimate in toughness
- Dual voltage for use with either a 14.4V or 18V battery
- Overheat Protection System (OPS)
- 2 x 18V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- 18-stage clutch plus drill position
- 13mm heavy-duty keyless chuck
- 2 Speed gear box
- Electric brake
- New ergonomic design
- With an extra battery pack as standard equipment



Part No.	Description
EY74A1LS2G57	Panasonic Drill & Driver
EY74A1X57	Panasonic 18/14.4V Skin (ie: no battery)
EY9L51B57	Replacement 18V battery 4.2Ah

14.4V DUAL VOLTAGE IMPACT DRIVER

Panasonic EY75A1LS2F57 14.4V Impact Driver

- IP56 rated for the ultimate in toughness
- Dual voltage for use with either a 14.4V or 18V battery
- Brushless motor and hybrid switch for long tool life
- Adjustable torque levels for a clean finish
- 2 x 14.4V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- Compact body: length 143mm
- Light weight: 1.55kg
- High power: 150Nm
- LED light for support
- Belt hook
- Electric brake
- With an extra battery pack as standard equipment



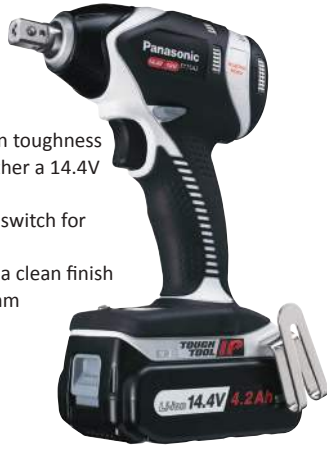
Part No.	Description
EY75A1LS2F57	Panasonic Impact Driver 14.4V
EY9L45B57	Replacement 14.4V battery 4.2Ah

14.4V DUAL VOLTAGE IMPACT WRENCH

Panasonic EY75A2LS2F57

14.4V Impact Wrench

- IP56 rated for the ultimate in toughness
- Dual voltage for use with either a 14.4V or 18V battery
- Brushless motor and hybrid switch for long tool life
- Adjustable torque levels for a clean finish
- Compact body: length 143mm
- Light weight: 1.55kg
- High power: 150Nm
- LED light for support
- Belt hook
- Electric brake
- With an extra battery pack as standard equipment
- 2 x 14.4V 4.2Ah Li-Ion batteries, 1 x charger and hard case



Part No.	Description
EY75A2LS2F57	Panasonic Impact Driver 14.4V
EY9L45B57	Replacement 14.4V battery 4.2Ah

14.4V CORDLESS MULTI-IMPACT & DRILL DRIVER

Panasonic EY7549LS2S57

14.4V Multi-Impact and Drill Driver

- IP56 rated for the ultimate in toughness
- Multi-function impact mode
- 2 x 14.4V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- 14.4V cordless multi-impact and drill driver is four great tools in one
- With an extra battery pack as standard equipment



Part No.	Description
EY7549LS2S57	14.4V cordless multi-impact and drill driver
EY9L42B	Replacement battery 14.4V 4.2Ah

18V DUAL VOLTAGE IMPACT DRIVER

Panasonic EY75A1LS2G57

18V Impact Driver

- IP56 rated for the ultimate in toughness
- Dual voltage for use with either a 14.4V or 18V battery
- Brushless motor and hybrid switch for long tool life
- Adjustable torque levels for a clean finish
- 2 x 18V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- Compact body: length 143mm
- Light weight: 1.65kg
- High power: 155Nm
- LED light for support
- Belt hook
- Electric brake
- With an extra battery pack as standard equipment



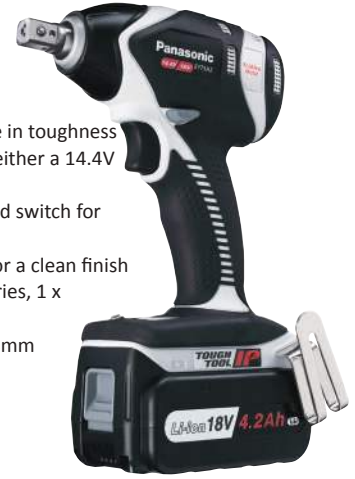
Part No.	Description
EY75A1LS2G57	Panasonic Impact Driver 18V
EY75A1X57	Panasonic 18/14.4V Skin (ie: no battery)
EY9L51B57	Replacement 18V battery 4.2Ah

18V DUAL VOLTAGE IMPACT DRIVER WRENCH

Panasonic EY75A2LS2G57

18V Impact Wrench

- IP56 rated for the ultimate in toughness
- Dual voltage for use with either a 14.4V or 18V battery
- Brushless motor and hybrid switch for long tool life
- Adjustable torque levels for a clean finish
- 2 x 18V 4.2Ah Li-Ion batteries, 1 x charger and hard case
- Compact body: length 143mm
- Light weight: 1.65kg
- High power: 155Nm
- LED light for support
- Belt hook
- Electric brake
- With an extra battery pack as standard equipment



Part No.	Description
EY75A2LS2G57	Panasonic Impact Driver 18V
EY75A2X57	Panasonic 18/14.4V Skin (ie: no battery)
EY9L51B57	Replacement 18V battery 4.2Ah

18V CORDLESS HAMMER DRILL & DRIVER

Panasonic EY7950LS2S57

14.4V Hammer Drill and Driver

- IP56 rated for the ultimate in toughness
- 57Nm Instant Torque for high torque requirements
- High power drilling in masonry, wood and metal
- Side handle included for greater control
- 2 x 4.2Ah Li-Ion battery, 1 x charger and hard case
- With an extra battery pack as standard equipment



Part No.	Description
EY7950LS2S57	Panasonic 18V Cordless Hammer Drill and Driver
EY9L42B	Replacement battery 14.4V 4.2Ah

14.4V CORDLESS CAULKING GUN

Panasonic EY3641LS1S57

14.4V Cordless Caulking Gun

- 4410N (450Kgf) ejection pressure
- One hand operation on/off
- 5 speed electric speed control for correct material dosage
- 600ml metal barrel and full metal gearbox for high reliability
- 1 x 4.2Ah Li-Ion battery, 1 x charger and hard case



Part No.	Description
EY3641LS1S57	Panasonic Cordless Caulking Gun
EY9L42B	Replacement battery 14.4V 4.2Ah

DREMEL 300 SERIES KITS



This kit includes the Dremel® 300 Series Multi-Tool and 25 accessories in a convenient case for storage of accessories and attachments. 10,000-37,000 RPM variable speed, 125W motor

Part No.	Description
DRM 300-25	Dremel Kit



This kit comes with a clip on accessory set of 55 pcs and a flexible shaft for the more demanding user.

Part No.	Description
DRM 300-1/55	Dremel Kit

BOSCH DRILL - PROFESSIONAL



2 speed, 800W, impact drill

reversible, with electronic control. Supplied with 13mm chuck, optional - keyed or keyless

Part No.	Description
GSB20-2RE1	Bosch Drill, keyed chuck
GSB20-2RE2	Bosch Drill, keyless chuck

BOSCH DRILL - CONSUMER



2 speed, 650W impact drill

reversible with electronic control and 13mm keyless chuck

Part No.	Description
PSB700-2RE	Bosch Drill

BOSCH ROTARY DRILL - PROFESSIONAL



Rotary hammer drill

800W for SDS plus drill bits. Supplied in carry case with 7 drill bits.

Part No.	Description
GBH2-26RF	Bosch Rotary Drill

BOSCH ANGLE GRINDER - PROFESSIONAL



5" angle grinder

850W. Supplied in a carry case with 9 promotional cutting discs

Part No.	Description
GWS8-125C SET	Bosch Angle Grinder 5"

BOSCH ANGLE GRINDER



5" angle grinder

720W economy model.

Part No.	Description
PWS7-125	Bosch Angle Grinder 5"

BOSCH LITHIUM-ION SCREWDRIVER



Economical 3.6V screwdriver

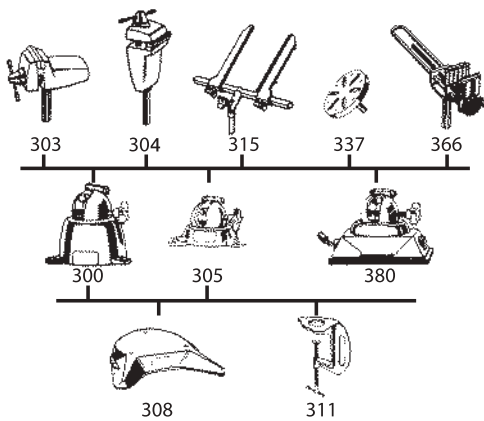
for screws up to 5mm

Part No.	Description
IXO	Bosch Screwdriver

Warranty: Bosch Professional/Blue Series are warranted for 1 year. Consumer/Green Series are warranted for two years (disallowed for tradesmen)

PanaVise

The world's most innovative work holding tool



- PanaVise tilts, turns and rotates requiring only one turn of the control knob to securely position your work exactly where you want it.
- Ideal for general work in electronics and instruments.

PANAVISE SETS



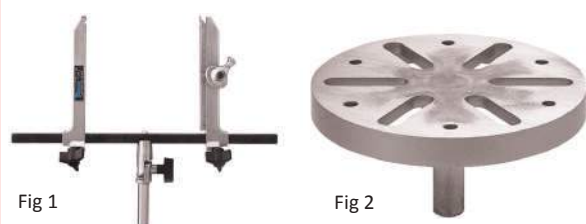
Part No.	Description	Fig
PAN 201	PanaVise Junior Set	1
PAN 301	PanaVise Standard Set	2

PANAVISE INTERCHANGEABLE HEADS



Part No.	Description	Fig
PAN 303	Standard Head	1
PAN 304	Low Profile Head	2
PAN 366	Wide Opening Head	3

PANAVISE SPECIALTY HEADS



Part No.	Description	Fig
PAN 315	Circuit Board Holder	1
PAN 337	Fixturing Head	2

PANAVISE BASE OPTIONS



Part No.	Description	Fig
PAN 300	Standard Base	1
PAN 305	Low Profile Base	2
PAN 380	Vacuum Base	3
PAN 308	Weighted Base 2-3kg	4

PANAVISE BENCH CLAMP MOUNT



Part No.	Description
PAN 311	Bench Clamp Mount

ENGINEERS VICE

- Tough cast iron construction
- General purpose vice with provision for fixed mounting to workbench



Part No.	Jaw Width	Jaw Opening	Jaw Depth
REC-EV1	75mm	95mm	50mm
REC-EV3	100mm	120mm	70mm
REC-EV4	115mm	140mm	80mm
REC-EV5	125mm	165mm	85mm
REC-EV6	150mm	205mm	90mm
REC-EV8	205mm	235mm	100mm

BALL JOINT VICE

- German constructed vice with ball and socket joint for easy rotation in any direction. With the flip of one lever, the head can be securely locked in any desired position.
- Ideal for heavy duty work in electronics or more precision industrial applications



Part No.	Description	Jaw Size
9-205	Ball Joint Vice	100mm



ACC-U-SOL

Accu-Care®

Remover
ericlean®

GB: Danger
H222 Extremely flammable aerosol
H400 Very toxic to aquatic life
P210 Keep away from heat, open flames/hot surfaces - No smoking
P211 Do not spray on an open flame or other ignition source
P251 Pressurized container. Do not puncture, even after use.
P261 Avoid breathing dusts/aerosols/vapors/mists
P273 Avoid release to the environment
RCH002 Restricted to professional users
RCH005a This product is not for use in conditions of poor ventilation

CZ: Nebezpečí
H222 Extrémně hořlavý aerosol
H400 Vysoce toxický pro vodní organismy
P210 Chraňte před teplem, otevřenými plamenem/horkými povrchy. Nekuřte.
P211 Nestríkejte do otevřeného ohně nebo jiných zdrojů zápalu.
P251 Přetlakovaný obal. Nepropíchněte, ani po použití.
P261 Vyvarujte se dýchání prachu/aerosolů/vapůrek/mist.
P273 Evizujte uvolnění do prostředí.
RCH002 Omezeno na profesionální uživatele.
RCH005a Tento výrobek není určen k použití v podmínkách s nedostatečnou ventilací.

DK: Fare
H222 Udsigteligt brændbart aerosol
H400 Meget giftigt for vandlevende organismer
P210 Hold væk fra varme, åben ild og røg. Ingen rygning.
P211 Skal ikke sprøjtes på en åben ild eller anden tændkilde.
P251 Trykfast beholder. Gør ikke huller, selv efter brug.
P261 Undgå indåndning af støv/aerosoler/damp/tåge.
P273 Undgå udledning til miljøet.
RCH002 Begrænset til professionelle brugere.
RCH005a Dette produkt er ikke til brug i dårligt ventilerede rum.

PAGE, Inc. 6090-0209

Consumables

Screwdriver Bits	270-272
Holesaws.....	273
Drill Bits	273-274
Aerosols, various.....	275-283
Gloves	283
Wipes.....	284
Lubricants	285

Wiha Standard Bits

- The Wiha Standard Bits offers impressive quality and they are available in a versatile range.
- The optimum cost/performance ratio of the Wiha Standard Bits is partly attributed to the process-controlled heat-treatment and process supported production. Wiha thus guarantees a uniformly high product quality.
- Wiha Standard Bits are the ideal multi- purpose tool to meet high requirements in terms of both quality and performance.



Bits are imported in packed quantities of 5. When ordering, it would preferable if they were ordered in multiples of 5 wherever possible

PHILLIPS INSERT BITS



Part No.		
7011 Z025	PH0	25
7011 Z125	PH1	25
7011 Z225	PH2	25
7011 Z325	PH3	25

SLOTTED INSERT BITS



Part No.			
7010 Z4525	4.5	25	0.6
7010 Z5525	5.5	25	0.8
7010 Z6525	6.5	25	1.2
7010 Z8525	8.0	25	1.6

PHILLIPS ACR INSERT BITS



Part No.		
7011 A125	PH1	25
7011 A225	PH2	25
7011 A325	PH3	25

TORX® INSERT BITS



Part No.		
7015 005	T5	25
7015 006	T6	25
7015 007	T7	25
7015 008	T8	25
7015 009	T9	25
7015 010	T10	25
7015 015	T15	25
7015 020	T20	25
7015 025	T25	25
7015 027	T27	25
7015 030	T30	25
7015 040	T40	25

POZIDRIV INSERT BITS



Part No.		
7012 Z025	PZ0	25
7012 Z125	PZ1	25
7012 Z225	PZ2	25
7012 Z325	PZ3	25

SECURITY TORX® INSERT BITS



Part No.		
7015 TR007	T7H	25
7015 TR008	T8H	25
7015 TR009	T9H	25
7015 TR010	T10H	25
7015 TR015	T15H	25
7015 TR020	T20H	25
7015 TR025	T25H	25
7015 TR027	T27H	25
7015 TR030	T30H	25
7015 TR040	T40H	25

POZIDRIV ACR INSERT BITS



Part No.		
7012 A125	PZ1	25
7012 A225	PZ2	25
7012 A325	PZ3	25



Bits are imported in packed quantities of 5. When ordering, it would be preferable if they were ordered in multiples of 5 wherever possible

HEX INSERT BITS



Part No.	⊙	↔
7013 15	1.5	25
7013 20	2.0	25
7013 25	2.5	25
7013 30	3.0	25
7013 40	4.0	25
7013 50	5.0	25
7013 60	6.0	25
7013 80	8.0	25

TRI-WING® INSERT BITS



Part No.	⊙	↔
7019 TW0	0	25
7019 TW1	1	25
7019 TW2	2	25
7019 TW3	3	25
7019 TW4	4	25
7019 TW5	5	25

TORQ-SET® INSERT BITS



Part No.	⊙	↔
7019 TS0	0	25
7019 TS1	1	25
7019 TS2	2	25
7019 TS3	3	25
7019 TS4	4	25
7019 TS5	5	25
7019 TS6	6	25
7019 TS8	8	25
7019 TS10	10	25
7019 TS1/4	1/4	32

X-SELECTOR INSERT BITS

Wiha X-Selector Standard, 11pcs

Housing: Box made of high quality plastic

Bits: 25mm standard bits

Holder: Universal Holder, magnetic

Application: Fits in every pocket and couldn't be smaller

• Contains:

- 7010 Z 1 x 5.5
- 1 x 6.5
- 7011 Z 1 x PH1
- 2 x PH2
- 1 x PH3
- 7012 Z 1 x PZ1
- 2 x PZ2
- 1 x PZ3
- 7713 S Universal holder 1/4"



Part No.	Description
7944-005	XSelector Insert Bits

PHILLIPS POWERDRIVE BITS



Part No.	⊕	↔
7041 150	PH1	50
7041 250	PH2	50
7041 350	PH3	50



Part No.	⊕	↔
7041 170	PH1	70
7041 190	PH1	90
7041 1127	PH1	127
7041 1150	PH1	150
7041 270	PH2	70
7041 290	PH2	90
7041 2127	PH2	127
7041 2150	PH2	150
7041 370	PH3	70
7041 390	PH3	90

POZI POWERDRIVE BITS



Part No.	⊕	↔
7042 150	PZ1	50
7042 250	PZ2	50
7042 350	PZ3	50



Part No.	⊕	↔
7042 170	PZ1	70
7042 190	PZ1	90
7042 1127	PZ1	127
7042 1150	PZ1	150
7042 270	PZ2	70
7042 290	PZ2	90
7042 2127	PZ2	127
7042 2150	PZ2	150
7042 370	PZ3	70
7042 390	PZ3	90

SLOTTED POWERDRIVE BITS



Part No.	⊙	↔	⊕
7040 30	3.0	50	0.5
7040 35	3.5	50	0.6
7040 40	4.0	50	0.5
7040 45	4.5	50	0.6
7040 55	5.5	50	0.8
7040 65	6.5	50	1.2
7040 80	8.0	50	1.2

TORX® POWERDRIVE BITS



Part No.		
7045 T5	T5	50
7045 T6	T6	50
7045 T7	T7	50
7045 T8	T8	50
7045 T9	T9	50
7045 T10	T10	50
7045 T15	T15	50
7045 T20	T20	50
7045 T25	T25	50
7045 T27	T27	50
7045 T30	T30	50
7045 T40	T40	50

SECURITY TORX® POWERDRIVE BITS



Part No.		
7045 TR7	T7H	50
7045 TR8	T8H	50
7045 TR9	T9H	50
7045 TR10	T10H	50
7045 TR15	T15H	50
7045 TR20	T20H	50
7045 TR25	T25H	50
7045 TR30	T30H	50
7045 TR35	T35H	50
7045 TR40	T40H	50

HEX POWERDRIVE BITS



Part No.		
7043 Z15	1.5	50
7043 Z20	2.0	50
7043 Z25	2.5	50
7043 Z30	3.0	50
7043 Z40	4.0	50
7043 Z50	5.0	50
7043 Z60	6.0	50
7043 Z80	8.0	50

TRI-WING® POWERDRIVE BITS



Part No.		
7049 TW3	3	50
7049 TW4	4	50
7049 TW5	5	50
7049 TW6	6	50

UNIVERSAL BIT HOLDER



Part No.		
7113S	60	(with magnet)
7140	60	(with retaining ring)

TORQ-SET® POWERDRIVE BITS



Part No.		
7049 TS4	4	50
7049 TS5	5	50
7049 TS6	6	50
7049 TS8	8	50
7049 TS10	10	50

NUTDRIVER POWERBITS



Part No.		
704450	5.0	55
704455	5.5	55
704460	6.0	55
704470	7.0	55
704480	8.0	55
704410	10.0	55
704413	13.0	55
7044140	1/4	55
7044516	5/16	55
7044380	3/8	55

NUTDRIVER BITS WITH MAGNETS



Part No.		
7044 M50	5.0	55
7044 M55	5.5	55
7044 M60	6.0	55
7044 M70	7.0	55
7044 M80	8.0	55
7044 M10	10.0	55
7044 M13	13.0	55
7044 M140	1/4	55
7044 M516	5/16	55
7044 M380	3/8	55

1/4" HEX-SQUARE DRIVE ADAPTERS



Part No.			
724014050	1/4	1/4	50
724038	3/8	1/4	50

1/4" BIT SOCKETS WITH RETAINING RING



Part No.			
720114	1/4	1/4	25
720138	1/4	3/8	30
720112	1/4	1/2	35



Bits are imported in packed quantities of 5. When ordering, it would be preferable if they were ordered in multiples of 5 wherever possible

Alpha Bits

HOLESAWS - BI-METAL



4/6 variable tooth
35mm
(1-3/8") cutting depth

Part No.	Holesaw Diameter	Holesaw Diameter
HSV14	14 mm	9/16"
HSV16	16 mm	5/8"
HSV17	17 mm	11/16"
HSV19	19 mm	3/4"
HSV20	20 mm	-
HSV21	21 mm	13/16"
HSV22	22 mm	7/8"
HSV24	24 mm	15/16"
HSV25	25 mm	1"
HSV27	27 mm	1-1/16"
HSV29	29 mm	1-1/8"
HSV30	30 mm	1-3/16"
HSV32	32 mm	1-1/4"
HSV33	33 mm	1-5/16"
HSV35	35 mm	1-3/8"
HSV37	37 mm	1-7/16"
HSV38	38 mm	1-1/2"
HSV40	40 mm	1-9/16"
HSV41	41 mm	1-5/8"
HSV43	43 mm	1-11/16"
HSV44	44 mm	1-3/4"
HSV45	45 mm	1-25/32"
HSV46	46 mm	1-13/16"
HSV48	48 mm	1-7/8"
HSV50	50 mm	1-31/32"
HSV51	51 mm	2"
HSV52	52 mm	2-1/16"
HSV54	54 mm	2-1/8"
HSV55	55 mm	2-5/32"
HSV57	57 mm	2-1/4"
HSV59	59 mm	2-5/16"
HSV60	60 mm	2-3/8"
HSV64	64 mm	2-1/2"
HSV65	65 mm	2-9/16"
HSV67	67 mm	2-5/8"
HSV68	68 mm	2-21/32"
HSV70	70 mm	2-3/4"
HSV73	73 mm	2-7/8"
HSV75	75 mm	2-15/16"
HSV76	76 mm	3"
HSV79	79 mm	3-1/8"
HSV83	83 mm	3-1/4"
HSV86	86 mm	3-3/8"
HSV89	89 mm	3-1/2"
HSV92	92 mm	3-5/8"
HSV95	95 mm	3-3/4"
HSV98	98 mm	3-7/8"
HSV100	100 mm	3-15/16"
HSV102	102 mm	4"
HSV105	105 mm	4-1/8"
HSV108	108 mm	4-1/4"
HSV114	114 mm	4-1/2"
HSV121	121 mm	4-3/4"
HSV127	127 mm	5"
HSV140	140 mm	5-1/2"
HSV146	146 mm	5-3/4"
HSV152	152 mm	6"

ALPHA ARBORS - UNIVERSAL SIZING

Arbors to suit all holesaws



Part No.	Description	Suits holesaws
ARB-1	Hex Shank Arbor- Hex	14-30mm
ARB-2	Hex Shank Arbor- Hex	32-198mm
ARB-SP2	Large Shank Arbor -SDS	32-198mm
PLD-1	3-1/4" Pilot Drill (ARB-1)	14-30mm
PLD-2	4-1/4" Pilot Drill (ARB-2)	32-198mm

HSS DRILL BITS



• HSS Titanium Nitride coated

Part No.	Drill Diameter	OAL	FL
9LM003	0.3	19mm	4
9LM004	0.4	20mm	5
9LM005	0.5	22mm	6
9LM006	0.6	24mm	7
9LM007	0.7	28mm	9
9LM008	0.8	30mm	10
9LM009	0.9	32mm	11
9LM010	1.0	34mm	12
9LM011	1.1	36mm	14
9LM012	1.2	38mm	16
9LM013	1.3mm	38mm	16mm
9LM014	1.4mm	40mm	18mm
9LM015	1.5mm	40mm	18mm
9LM016	1.6mm	43mm	20mm
9LM017	1.7mm	43mm	20mm
9LM018	1.8mm	46mm	22mm
9LM019	1.9mm	46mm	22mm
9LM020	2.0mm	49mm	24mm
9LM025	2.5mm	57mm	30mm
9LM030	3.0mm	61mm	36mm
9LM035	3.5mm	70mm	39mm
9LM040	4.0mm	75mm	43mm
9LM045	4.5mm	80mm	47mm
9LM050	5.0mm	86mm	52mm
9LM055	5.5mm	93mm	57mm
9LM060	6.0mm	93mm	57mm
9LM065	6.5mm	101mm	63mm
9LM070	7.0mm	109mm	69mm
9LM075	7.5mm	109mm	69mm
9LM080	8.0mm	117mm	75mm
9LM085	8.5mm	117mm	75mm
9LM090	9.0mm	125mm	81mm
9LM095	9.5mm	125mm	81mm
9LM100	10.0mm	133mm	87mm
9LM105	10.5mm	133mm	87mm
9LM110	11.0mm	142mm	94mm
9LM115	11.5mm	142mm	94mm
9LM120	12.0mm	151mm	101mm
9LM125	12.5mm	151mm	101mm
9LM130	13.0mm	151mm	101mm

DRILL SETS - GOLD SERIES

HSS Titanium Nitride coated with 135° split points.

Strong, rugged metal case:

SM13 -13pc Metric Drill Set



SM19 -19pc Metric Drill Set



SI13 -13pc Imperial Drill Set



SI19 - 19pc Imperial Drill Set



SM25 - 25pc Metric Drill Set



SM25R - 25pc Reduced Shank Metric Drill Set



SI25 - 25pc Imperial Drill Set



SI25R - 25pc Reduced Shank Imperial Drill Set



Metric Drill Sets

Part No.	No. of Drills	Size Range
SM13	13pce	1.5 - 6.5mm
SM19	19pce	1.0 - 10.0mm
SM25	25pce	1.0 - 13.0mm Straight Shank
SM25R	25pce	1.0 - 13.0mm Reduced Shank

Imperial Drill Sets

Part No.	No. of Drills	Size Range
SI13	13pce	1/16 - 1/4"
SI21	21pce	1/16 - 3/8"
SI29	29pce	1/16 - 1/2" Straight Shank
SI29R	29pce	1/16 - 1/2" Reduced Shank

STEP DRILLS, TITANIUM COATED



- HSS Titanium Nitride coated
- Self-start points
- Automatically deburs holes
- Individual drills supplied in sealed plastic tube

Part No.	No. of Steps	Size Range
9STM4-12	9 steps	4-12mm
9STM4-20	9 steps	4-20mm
9STM6-30	13 steps	6-30mm
9STI14-34	9 steps	1/4" - 3/4"

HAND TAPER REAMER

Made of SK3 steel for reaming holes in sheet metal, aluminium and similar materials.



Part No.	No. of Steps	FL	OAL
TR-01	ø 3.0 - 12	85mm	115mm
TR-02	ø 4.0 - 16	85mm	120mm
TR-03	ø 5.0 - 20	92mm	127mm
TR-04	ø 6.0 - 30	105mm	145mm

STEP DRILLS - GOLD SERIES

Step Drill Set

- HSS Titanium Nitride coated
- Self-start points
- Automatically deburs holes
- Individual drills supplied in sealed plastic tube
- 3 Piece set supplied in robust metal case



Part No.	No. of Drills	Size Range
STPSET3	3 Piece Set	4-12, 4-20, 6-30mm

CHASSIS PUNCH AND REAMER SET

- Cut round holes in sheet metal and aluminium by turning cap screw
- Sheet aluminium: up to 1.6mm
- Sheet metal: 0.8mm



Part No.	Contents
TR-05	Punches: 16, 18, 20, 25 & 30mm, 1 reamer (12mm)

MicroCare® Cleaning



Discover Perfectly Clean

When it comes to precision cleaning electronics during manufacturing, rework or repair, MicroCare is the industry leader. The MicroCare family of quality products, combined with our innovative chemistries, unique packaging and superior customer service, have earned the trust of companies around the globe.

- Reduce manufacturing costs
- Improve production efficiencies
- Maximize throughput
- Minimize defects and waste
- Enhance product stewardship and safety
- Improve quality and reliability

MICROCARE® TRIGGERGRIP™

NEW



- Enhanced Cleaning Performance: Delivers better cleaning because each TriggerGrip™ combines the mechanical scrubbing action of a brush with a fresh, pure solvent.
- Cost Savings: Saves money by reducing solvent consumption an average of 66% or more. The aerosol cans are guaranteed to empty completely, eliminating waste.
- Simple: Allows the operator to easily rinse after cleaning — a critical step in board cleaning which is often missed.
- Fast: Speeds cleaning, improving throughput.

Part No.	Description
MCC-ESD	TriggerGrip™ Cleaning System

MICROCARE® CLEANING TOOLS



Easily attaches to all MicroCare® aerosols.

Scrubbing action enhances cleaning.

Rinsing the board perfects the cleaning.

A range of replaceable tips for Microcare system

Part No.	Description	Pack
MCC-RBNB	TriggerGrip™ Brush, Standard Replacement, Natural Bristle	Pk5
MCC-SMB	TriggerGrip™ Brush, Surface Mount, Natural Bristle	Pk5
MCC-SQB	TriggerGrip™ Brush, Surface Mount, Soft Bristle Camel Hair	Pk5
MCC-RBNB2	TriggerGrip™ Brush, Slo-Flo, Natural Bristle	Pk5
MCC-SR35	TriggerGrip™ Brush Spray-Thru Syringe (.035 O.D.)	Pk5
MCC-LNB	TriggerGrip™ Brush, Long-Nose Brush	Pk5



TriggerGrip™ Standard Replacement Brush Natural Bristle



TriggerGrip™ Surface Mount Brush



TriggerGrip™ Surface Mount, Soft Bristle Brush (Camel Hair)



TriggerGrip™ Slo-Flo Brush Natural Bristle



TriggerGrip™ Spray-Thru Syringe Brush for cleaning under tight stand-off



TriggerGrip™ Long-Nose Brush for connectors

CONSUMABLES

MICROCARE® CIRCUIT BOARD CLEANING STATION

NEW



- Enhanced Cleaning Performance: All the MicroCare® cleaning tools work together for faster, safer and more convenient bench top cleaning.
- Includes: TriggerGrip™, Heavy Duty Flux Remover, Bench Mounting Kit, High Performance Lint-Free Dry Wipes.

Part No.	Description
MCC-CBSK-EU	MicroCare® Circuit Board Cleaning Station

POWERCLEAN™ LEAD-FREE FLUX REMOVER

Technical Details

Chemical Family: HFC & Trans Blend
 Cleaning Strength (Kb): 115
 Evaporation (Ether=1): >1
 Safety Rating: Nonflammable
 VOC Content (g/L): 1,080



- eliminates white residues.
- Nonflammable and fast-drying.
- Strong defluxing of high-temperature lead-free solder residues. Cleans oils, inks and some conformal coatings.
- Safe on most components, testing on plastics is recommended.
- The most affordable cleaner in its class.
- Not suitable for use in heated cleaning systems.
- Trigger Grip compatible.

Part No.	Description
MCC-PW2101	PowerClean™ 300g Aerosol
MCC-PW2P	PowerClean™ 20 Litre
MCC-PW2D	PowerClean™ 220 Litre

MICROCARE® BENCH MOUNTING KIT

NEW



- Organises work bench
- Keeps aerosol can from tipping and falling
- ESD-safe
- Use with Trigger Grip™ cleaning system
- Attaches to wall, work bench or post

Part No.	Description
MCC-BK3	Bench Mounting Kit

FLUX REMOVER C™ GENERAL PURPOSE FLUX REMOVER

Technical Details

Chemical Family: HFC Solvent Azeotrope
 Cleaning Strength (Kb): 50 (Estimate)
 Evaporation (Ether = 1): >1
 Safety Rating: Nonflammable
 Organic Content (g/L): 590



- Excellent general-purpose flux remover.
- Ideal for "no-clean" and traditional rosin based flux residues.
- Nonflammable and fast drying.
- Non-corrosive, low odour and ultra-pure.
- Safe on most components and plastics.
- Suitable for use in heated cleaning systems.
- Trigger Grip compatible.

Part No.	Description
MCC-FRC101	Flux Remover C™ 300g Aerosol
MCC-FRCP	Flux Remover C™ 20 Litre
MCC-FRCD	Flux Remover C™ 220 Litre

SUPRCLEAN™ HEAVY DUTY FLUX REMOVER

Technical Details

Chemical Family: HFC & Trans Blend
 Cleaning Strength (Kb): 110
 Evaporation Rate (Ether = 1): >1
 Safety Rating: Nonflammable
 Organic Content (g/L): 939

- Best option for rosin fluxes.
- Suitable for removing acrylic conformal coatings.
- Nonflammable, fast drying.
- Minimal odour.
- Safe on most components but testing on soft plastics is recommended.
- Trigger Grip compatible.



Part No.	Description
MCC-SPR101	PowerClean™ 300g Aerosol
MCC-SPRP	PowerClean™ 20 Litre
MCC-SPRD	PowerClean™ 220 Litre

VERICLEAN™ NO-CLEAN FLUX REMOVER

Technical Details

Chemical Family: Methyl Siloxane
 Cleaning Strength (Kb Value): 50 (Estimate)
 Evaporation Rate (Ether = 1): >1
 Safety Rating: Flammable
 Organic Content (g/L): 87

- Effective on “no-clean” fluxes and pastes, light oils, grease and many adhesives.
- Dissolves silicone oils, coatings and adhesives quickly and safely.
- Safe for operators and the environment.
- Plastic safe.
- Low odour, medium strength and drying speed.
- Low global warming potential and VOC.
- Trigger Grip compatible.



Part No.	Description
MCC-DC1107	VeriClean™ 284g Aerosol
MCC-DC1P	VeriClean™ 20 Litre
MCC-DC1D	VeriClean™ 220 Litre

ULTRACLEAN™ VOC-FREE FLUX REMOVER

Technical Details

Chemical Family: Siloxanes
 Cleaning Strength (Kb): 56
 Safety Rating: Flammable
 Evaporation Rate: Medium
 VOC Content (g/L): 0

- VOC-Exempt formula.
- Highly-effective on no-clean fluxes.
- Removes rosin-based fluxes, pastes, and silicone residues on circuit boards.
- Medium drying speed.
- Strongest non-chlorinated/halogen-free cleaner.
- Plastic-safe.
- TriggerGrip™ cleaning system compatible.



Part No.	Description
MCC-VOC10A	UltraClean™ 284g Aerosol
MCC-VOCP	UltraClean™ 20 Litre
MCC-VOCD	UltraClean™ 220 Litre

FLUX REMOVER C™ GENERAL PURPOSE FLUX REMOVER

Technical Details

Cleaning Strength (Kb Value) n/a
 Evaporation Rate (Ether = 1): <1
 Safety Rating: Flammable
 Organic Content (g/L): 785

- A high purity cleaner that is static-safe, well-suited to water based, “no clean” fluxes and pastes.
- A mild cleaner made from ultra-pure anhydrous isopropanol.
- Double filtered to .2 microns.
- Slow drying, maximising cleaning time.
- Trigger Grip compatible.



Part No.	Description
MCC-BAC101	IsoClean™ 340g Aerosol

PROCLEAN™ ALCOHOL-ENHANCED FLUX REMOVER

Technical Details

Chemical Family: Traditional Alcohols
 Cleaning Strength (Kb): 45
 Evaporation Rate (Ether = 1): <1
 Safety Rating: Flammable
 Non-Exempt Organic Content (g/L): 785

- Cost effective choice for rosin, water based and “no-clean” fluxes.
- Use on solder pastes, fluxes and fresh chip bonder.
- Affordable cleaning and plastic safe (testing recommended).
- Slow drying solvent increases cleaning time when working with baked-on flux residues.
- Low global warming potential.
- Alcohol blend ensures increased cleaning strength over traditional Isopropanol.
- Trigger Grip compatible.



Part No.	Description
MCC-PRO127	ProClean™ 340g Aerosol
MCC-PROP	ProClean™ 20 Litre
MCC-PROD	ProClean™ 220 Litre

GENERAL PURPOSE DUST REMOVER

Chemical Family:

MCC-DST = HFC
 MCC-DSTZ = HFC
 MCC-DST107 = HFO



- Dry circuit cleaner that blows dust and grit from keyboards, machinery and circuitry.
- High pressure.
- Nonflammable.
- High purity, leaves no residue.
- Multiple package types available.

Technical Details

Safety Rating: Nonflammable
 Evaporation: Instant
 Organic Content (g/L): 0
 NSN: 6850-01-483-4104

Part No.	Description
MCC-DST	GP Dust Remover Aerosol 280g
MCC-DST14A	GP Dust Remover Aerosol 392G
MCC-DSTZ14	GP Dust Remover - StatZap™ Compatible Aerosol 392G
MCC-DST107	GP - Low Global Warming Potential Aerosol 300G

ELECTRICAL CONTACT CLEANER

Technical Details

Chemical Family: HFC
 Cleaning Strength (Kb): 18
 Safety Rating: Nonflammable
 Evaporation: Fast
 Organic Content (g/L): 0

- Nonconductive, plastic safe cleaner and circuit rinse.
- Rinses light oils, dust, lint and grit from connectors, switches, electromechanical parts, PCBs and motor windings.
- Dries almost instantly with little odour.
- Safe on circuit boards, cable harnesses, motors and keyboards.
- Nonflammable.
- Trigger Grip compatible.



Part No.	Description
MCC-CCC101	Electrical Contact Cleaner 300g Aerosol
MCC-CCCP	Electrical Contact Cleaner 20 Litre
MCC-CCCD	Electrical Contact Cleaner 220 Litre

FREEZER SPRAY

Chemical Family:

MCC-FRZ = HFC
 MCC-FRZA = HFC
 MCC-FRZ107 = HFO



- Used to find intermittent faults in circuit boards.
- Chills to lower than -45°C in seconds.
- Nonflammable.
- Ultra-pure.
- Multiple package types available.

Technical Details

Safety Rating: Nonflammable
 Evaporation: Instant
 Organic Content (g/L):
 MCC-FRZ = 0
 MCC-FRZA = 12
 MCC-FRZ107 = 0

Part No.	Description
MCC-FRZ	General Purpose Circuit Chiller Aerosol 280g
MCC-FRZA	Anti-Static Circuit Chiller Aerosol 280g
MCC-FRZ107	Circuit Chiller - Low Global Warming Potential Aerosol 300G

AQUEOUS STENCIL CLEANER

Technical Details

Chemical Family: Water-Based
 Safety Rating: Nonflammable
 VOC Content (g/L): 209

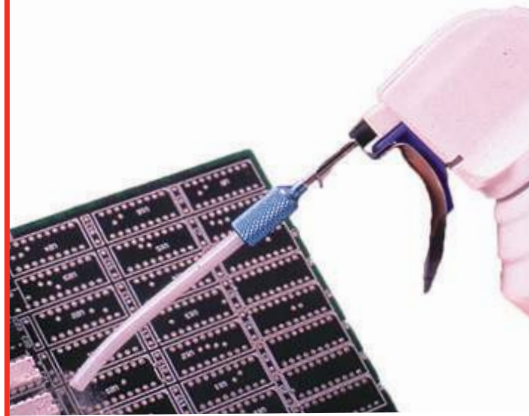


- A powerful cleaner, removes all types of solder paste, uncured chip bonders and inks.
- Safe for stencils, webbing, frames and misprinted boards.
- Fast and thorough cleaning, even inside stencil apertures.
- Nonflammable.
- Slow drying for longer cleaning time.
- Non-foaming with low odour.
- Suitable for use in ultrasonic cleaning tanks.

Part No.	Description
MCC-BGA	Aqueous Stencil Cleaner Refillable Pump Bottle 340G
MCC-BCAP	Aqueous Stencil Cleaner -20L
MCC-BCADC	Aqueous Stencil Cleaner -220L

STATZAP™ ESD ELIMINATOR

NEW



- Durable, stainless steel dispensing nozzle eliminates ESD static.
- Connects to selected MicroCare® precision dusters and freeze sprays Eliminates ESD damage caused by the friction of solvent racing down plastic spray tubes and reduces those voltages to a harmless 50 volts or less.
- The CoronaTip™ feature dissipates harmful ESD from the tip of the nozzle.
- Unique ShockShield™ prevents inadvertent contact with energised circuits.

Part No.	Description
MCC-ZAP	StatZap™ ESD Eliminator

REFLOW OVEN CLEANER

Technical Details

Chemical Family: Water Based
 Safety Rating: Nonflammable
 Organic Content: (g/L) 495



- Melts away burned-on flux residues from wave solder machines and reflow ovens.
- Works up to four times faster than isopropanol.
- Fast and safe cleaning of pallets, baffles, heating elements, clamps, chains, drive gears and housings.
- Aggressive cleaner, with almost no odour.
- Activated by the heat of the oven.
- Can be used in dip tanks and ultrasonic cleaners.
- Nonflammable and non foaming.

Part No.	Description
MCC-ROC	Reflow Oven Cleaner Refillable Pump Bottle -340G
MCC-ROCP	Reflow Oven Cleaner Refillable Pump 20L
MCC-ROCD	Reflow Oven Cleaner Refillable Pump 220L

LABEL REMOVER

NEW

Technical Details

Chemical Family: Terpene Hydrocarbons
 Cleaning Strength: 67
 Safety Rating: Combustible
 Organic Content (g/L): 890

- Excellent for removing adhesive tape residues, pressure sensitive marking tags, paper labels, stickers, EPROM labels and Kapton® residues.
- Highly portable cleaning with almost unlimited uses.
- Simple to use, fast and convenient.
- Removes corrosion from gold fingers on PCB's.
- ESD safe packaging.
- Cost effective.



Pocket-sized cleaning with almost unlimited uses

Part No.	Description
MCC-PO1	TidyPen® Adhesive & Label Remover 14ml -Pk10
MCC-P40C	Chisel Point Nibs -Pk25
MCC-P40P	Pen Point Nibs -Pk25

With Electrolube's expansive product range of formulated chemical products, we supply leading manufacturers of electronic, industrial and domestic devices for a variety of industries, thus offering the 'complete solution' at all levels of production.

There are a vast array of products available including: Thermal management materials, conformal coatings, encapsulation resins, electronic cleaning solutions and general maintenance products.

All manufactured by Electrolube at their factories in the UK and China, and all available in a versatile range of packaging.

LABEL REMOVER



- Paper label remover
- Suitable for EPROMS, also useful around the office
- Aerosol with brush enables mechanical scrubbing action to aid removal
- Handy pen version available
- Harmless to most plastics

Part No.	Description
LRM200DB	Label remover 200ml Aerosol with Brush

FREEZER



- Standard freezer for non-sensitive, electronic fault finding
- Can aid mechanical shrink fitting
- Non-flammable, cools down to -55°C
- Prevents damage to components during soldering

Part No.	Description
FRE400	Freezer 400ml Aerosol

MINIMAL CHARGING FREEZER



- Unique additive minimises static build up whilst still allowing frost formation
- Fast fault finding in electronics
- Suitable for static sensitive devices
- Protection from overheating
- Cools to -55°C

Part No.	Description
MCF400	Minimal Charging Freezer

SCREEN & STENCIL WIPES



- Superb cleaning power that removes pastes and adhesives
- Leaves screens and stencils clean and dries with no staining
- Large size (20x28cm)
- Convenient 100 wipe tub dispenser
- Low odour

Part No.	Description
SSW100	Screen & Stencil Wipes Paste/Adhesive

RUBBER ROLLER RESTORER



- Restores texture to rubber rollers in office equipment
- Prolongs the lifetime of rubber rollers, preventing costly replacement
- Supplied in pump spray
- Leaves no residue
- Dissolves ink, oil, grease and will remove general office dirt

Part No.	Description
RRR250	Rubber Roller Restorer

AIRDUSTER



- Inert, pure compressed gas for dust removal
- Available in standard and invertible versions
- Ideal for removing particulates from inaccessible areas on delicate equipment
- Non-flammable

Part No.	Description
EAD400D	Air Duster 400ml Aerosol
EGDP400	High power 400 ml Aerosol

CONTACT CLEANER LUBRICANT



- Cleans and lubricates switches and connectors
- Removes dirt and protects from further contamination
- Reduces contact resistance
- Improves conductivity
- known as switch cleaner

Part No.	Description
EML200F	Contact Clean Lubricant 200ml

ANTI-STATIC SPRAY



- Powerful non-foaming cleaner which also prevents static build-up
- Long term effect
- Non-flammable
- Suitable for use on screens and bench tops
- Also suitable for use on fabrics

Part No.	Description
ASA250ML	Antistatic Spray 250ml

SAFESHASH & SAFERINSE



- SWAJ in an aerosol formulation for bench cleaning of PCBs
- Removes fluxes from PCBs. May also be used to clean grease and general dirt
- Fast, effective foaming action
- Use Saferinse (SRI) after cleaning to give final polish
- Biodegradable and 100% ozone friendly

Part No.	Description
SWA400H	Safewash Aerosol
SWAS05L	Safewash S (higher strength cleaner) 5L Bulk
SWAS25L	Safewash S (higher strength cleaner) 25L Bulk

SCC3 CONFORMAL COATING



- High specification flexible modified silicone resin conformal coating
- Transparent version (DCA) is UL approved
- Red version (DCR) available for camouflage
- Red version high build (DCRT) available for extreme conditions
- Excellent chemical and solvent resistance
- May be soldered through for rework

Part No.	Description
DCA200H	SCC3 Conformal Coating 200ml
DCA05L	SCC3 Conformal Coating 5L
DCR200H	SCC3 Conformal Red 200ml
DCT05L	SCC3 Thinners 5L Bulk

NICKEL SCREENING COMPOUND



- Efficient EMI/RFI screening coating with excellent attenuation levels
- Enhanced adhesion to wide variety of substrates
- Provides even coating with superior scratch resistance
- Fast drying at room temperature
- Prevents static build-up

Part No.	Description
NSC400H	Nickel Screening Compound

HPA CONFORMAL COATING



- High performance flexible acrylic coating
- Approved to US MIL-1-46058C and, meets requirements of IPC-CC-830B
- UV trace for inspection
- Excellent dielectric properties and with a wide temperature range
- Resistant to mould growth
- May be removed with solvents such as Ultrasolve (ULS)

Part No.	Description
HPA200H	HPA Conformal Coating 200ml

SPECIAL PLASTICS GREASE



- Excellent plastics compatibility
- Offers outstanding low temperature performance
- Efficient mechanical lubricant for plastic/plastic or plastic/metal friction
- Ideal to reduce wear in timers, plastic cogs and gears etc.

Part No.	Description
SPG35SL	Special Plastics Grease

NON-SILICONE HEAT TRANSFER COMPOUND



- Excellent non-creep characteristics
- Excellent thermal conductivity even at high temperatures: 0.9 W/m.K
- Wide operating temperature range: -50°C to +130°C
- Low evaporation weight loss
- Easy to handle
- Low toxicity

Part No.	Description
HTC10S	Non Silicone Heat Trans Comp 10ML

THERMALLY CONDUCTIVE RTV



- Silicone RTV with high thermal conductivity (2 W/m.K)
- Operates from -50°C to +230°C
- Cures in 24 hours at room temperature
- For ease of use, a **optional** trigger gun applicator is available

Part No.	Description
TCR700G	Thermal Conductive Rubber
TCR75S	Thermal Conductive Rubber

ELECTRONIC CLEANING SOLVENT PLUS



- Fast evaporating cleaning solvent
- Removes grease, dirt and most fluxes
- Completely residue-free
- Highly flammable - not to be used on live equipment

Part No.	Description
ECSP200DB	Elect Clean Solvent with Brush
ECSP400D	Elect Clean Solvent Plus 400ml

CLEAR PROTECTIVE LACQUER



- General purpose coating for PCBs giving high quality glossy finish
- Ideal for protecting ferrous metals from corrosion
- Good resistance to humidity
- Resolderability through the lacquer

Part No.	Description
CPL200H	Clear Protective Lacquer
CPL05L	Clear Protective Lacquer 5L Bulk

FLUXCLENE



- Fast drying solvent cleaner for efficient removal of flux residues after soldering
- Leaves a perfectly clean, dry surface
- Harmless to most plastics, rubbers and elastomers
- Aerosol versions available with or without a brush applicator

Part No.	Description
FLU400D	Fluxclene 400ml Aerosol
FLU400DB	Fluxclene 400ml Aerosol with brush
FLU05L	Fluxclene 5 L Bulk

ACRYLIC PROTECTIVE LACQUER



- Offers excellent adhesion to all substrates
- Good temperature range and dielectric properties
- May be soldered through, allowing easy repair
- UV trace for inspection
- May be removed with solvents such as Ultrasolve (ULS)

Part No.	Description
APL400H	Acrylic Conformal Coating 400ml
APL05L	Acrylic Conformal Coating 5L
UAT05L	Universal Acrylic Thinners

ELECTRONIC CLEANING SOLVENT



- High quality, electronics grade IPA
- Suitable for all electronic and PCB cleaning
- Cleans thoroughly to a perfectly dry and residue free surface
- Effective and economic in use

Part No.	Description
IPA400H	Iso Cleaning Solvent 400ml - UK

BLOC'LUBE



- Tamper evident seal for potentiometers etc
- Green or red
- Supplied with integral brush

Part No.	Description
BLR15BE	Block Lube Red 15ml
BLV15BE	Block Lube Green 15ml

SCREEN & STENCIL SOLVENT



- Non-flammable solvent for cleaning of screens and stencils
- Excellent solder paste and adhesive removal
- Non-foaming and biodegradable
- Use with ECW025

Part No.	Description
SSS500ML	Screen & Stencil Solvent Paste/Glue
ESSS25L	Screen & Stencil Solvent Paste/Glue

ULTRASOLVE



- Fast drying solvent for quick and efficient cleaning of electrical equipment
- Excellent removal of grease, oil, flux residues and acrylic conformal coatings
- Leaves clean, dry surface
- Compatible with most plastics

Part No.	Description
ULS400D	Ultrasolve 400ml Aerosol
ULS400DB	Ultrasolve 400ml Aerosol with Brush
ULS05L	Ultrasolve 5L Bulk

CARTERCLENE



- Heavy duty anti-static foaming cleaner that removes ingrained dirt and grime
- Gives long lasting anti-static properties on glass, plastic and other synthetic materials
- Shake well before use, apply and wipe with ECW025

Part No.	Description
CTC400H	Carterclene 400ml Aerosol

SCREEN-CLENE



- Screen-Clene pump spray
- Screen-Clene gel

Part No.	Description
SCS 250	Screen-Clene pump spray 250ml
SCG 000	Screen-Clene gel

HAND CLEANER



- Environmentally friendly hand cleaner for heavy and medium cleaning of industrial dirt -like grease and grime
- Contains Eucornol® to promote skin health

Part No.	Description	Size
SHC 10002	Solopol® Hand Cleaner	250ml

MAGNETIC CARD CLEANER

- Cleaning cards for magnetic card reading equipment



Part No.	Description	
CCP 20	Card Cleaner	20
CCP 100 S	Card Cleaner	100

GLOVES, DISPOSABLE



- Disposable gloves in packs of 100 pcs

Part No.	Description	Size
GLVLX 100S/SPF	Latex, Low Powder/Powder Free	S
GLVLX 100M/MPF	Latex, Low Powder/Powder Free	M
GLVLX 100L/LPF	Latex, Low Powder/Powder Free	L
GLVLX 100XL/XLPF	Latex, Low Powder/Powder Free	XL
GLVN TRPF 100S	Nitrile, Powder Free	S
GLVN TRPF 100M	Nitrile, Powder Free	M
GLVN TRPF 100L	Nitrile, Powder Free	L
GLVN TRPF 100X L	Nitrile, Powder Free	XL

COTTON GLOVES



- White, soft cotton gloves with interlock hemmed cuff

Part No.	Description	Size	
HCGL-L	cotton glove	Mens	12
HCGL-S	cotton glove	Ladies	12

SAFETY GLASSES



Fig. 1



Fig. 2

- Wrap around UV protective polycarbonate lens with splash/spray guards
- Safety glasses with adjustable arms ,soft comfortable nose piece
- Polycarbonate lens -UV400

Part No.	Description	Figure
SAFESPEC 001	Clear over spec safety glasses	1
900020	Clear safety glasses with adjustable side arms	2

MICRO CARE CLEANING WIPES -VARIOUS



- Non linting or shredding.
- Medium density cloth.
- No cellulose binders ensuring maximum absorbency.
- Available in a variety of sizes.

Part No.	Description	Sheet Size
MCC-WF44	Circuit Board Cleaning Wipes - Pk50	230mm x 230mm
MCC-W66	Lint-Free Wipes: Medium Density -Pk50	150mm x 150mm
MCC-W99	Lint-Free Wipes -Pk300	230mm x 230mm
MCC-W11	Stencil Cleaning Wipes -Pk100	300mm x 230mm
MCC-W12	Lint-Free Wipes: Medium Density -Pk50	300mm x 430mm

MULTITASK SURFACE PRESATURATED WIPES - MULTICLEAN™



- Low-cost, general-purpose presaturated wipe, features MultiClean™ ultra-pure cleaning fluid.
- High purity and lint-free, use to clean fingerprints, oil, dust and grime from any surface.
- Alcohol-Enhanced, use as a surface preparation before finishing procedures such as coating, lubricating, bonding or printing.

Part No.	Description
MCC-MLCW	ProClean™ Flux Remover -Container & Wipes
MCC-MLCWR	Refill wipes only Wipe size - 200mm x 120mm

WIPES



- Lint free, single ply paper wipes ideal for screens and filters

Part No.	Description	
KW 4103	Kim Wipes	200
STI200	Safetiss	200

SAFE CLOTHS



- High quality cloth with exceptional wet and dry tear strength
- Economical and re-useable
- Packed in a re-sealable gripper bag which protects against contamination
- 230mm x 230mm

Part No.	Description	Size	
SCH 025	Safe Cloths	340 x 340mm	50
SCH 050	Safe Cloths	340 x 340mm	50

ALCOHOL- PRESATURATED FLUX REMOVER WIPES - PROCLEAN™



- Presaturated wipe utilising the popular ProClean™ defluxing fluid, Alcohol-Enhanced.
- More aggressive than the economy wipes, use when additional cleaning strength is required.
- Will remove all types of solder paste.
- A blend of water-free alcohols with increased cleaning strength.

Part No.	Description
MCC-PROW	ProClean™ Flux Remover -Container & Wipes
MCC-PROWR	Refill wipes only Wipe size - 200mm x 120mm

STENCIL ROLLS FOR DEK PRINTERS & MPM PRINTERS



EXACT REPLACEMENT DEK STENCIL ROLLS
Same length, plastic core, with notches; all the usual specifications. But the paper is different -- and significantly better. This roll features the unique MicroCare FP fabric which is engineered for fine-pitch applications. Most importantly, selecting FP paper eliminates the need to use solvents during wiping, which saves money, speeds printing AND improves yield. Durable and absorbent, selecting FP paper reduces paper consumption and abbreviates the cleaning cycle.

EXACT REPLACEMENT MPM STENCIL ROLLS.
This features the unique MicroWipe™ FP fabric, only from MicroCare, which is engineered for fine-pitch applications. Most importantly, the MicroWipe™ FP fabric eliminates the need to use solvents during wiping, which saves money, speeds printing AND improves yield. Durable and absorbent, selecting MicroWipe™ FP fabric actually reduces paper consumption so each roll lasts longer, and it abbreviates the cleaning cycle so you print more, clean less.

NEW

Part No.	Description	Roll Details	Core Details	
MCC-105DA	DEK Stencil Roll Replacement	Approx 9.1M long by 520mm wide	530mm (Plastic notched)	10
MCC-101DA	MPM Stencil Roll Replacement	Approx 11.9M long by 450mm wide	460mm (Cardboard)	10

OILER BOTTLE



Refillable oiler bottle with extending 60mm brass stem and shut-off nozzle.

Part No.	Description	Size
418-30	Oiler bottle (empty)	30mL

TRIFLOW OIL



The ultimate lubricant for copiers and fine applications. Renowned as the best, with Teflon.

Part No.	Description	Size
TRI-2	Triflow oil	59mL

SOLVENT PUMP BOTTLE



Solvent Pump Bottle

One touch pump with air tight check valve, preventing cross contamination of solvent returning into dispenser bottle. ESD safe, 10⁹ to 10¹⁰.

Part No.	Description	Size
MA 618	Pump bottle	6 fl. oz.

BELT SOLVENT



- Professionally formulated solvent blend for specialist cleaning of drive belts ideal in the photocopier industry.

Part No.	Description	Size
043L00150	Photoklene	250ml

LEAD-FREE LABELS, SIGNS & TAPE



Part No.	Description	Quantity
441-304	Label, 50 x 50mm	500
441-305	Aisle Marking Tape, 75mm x 16.5m	1
441-911	Sign, 100mm x 250mm	10

DISPENSING BOTTLE



Liquid/Flux Dispenser

Polyethelene dispenser bottle with 0.51mm disposable needle for controlled, one drop usage.

Part No.	Description	Size
CE 121-723	Precise dispenser	202mm

REFILLABLE FLUX PEN



Flux Pen - Refillable

Convenient, refillable pen for brushing on flux.

Part No.	Description	Capacity
FRH-M	Refillable flux pen	7cc

FLUX PEN



Kester no-clean, low solids flux pens for rework applications.

Part No.	Description	Size
952-D6	Flux pen (ROHS compliant)	10mL

CONFORMAL COATING PEN



Green conformal coating pen protects against moisture and abrasion damage. Supplied in simple to use, single component acrylic.

Part No.	Description	Size
CE 119-555	Conformal coating pen	

SUPERLUBE OILER PEN



Multipurpose synthetic based oil with PTFE

Part No.	Description	Size
CE 121-464	Superlube pen	0.25oz / 0.25fl.oz

ADHESIVE



- General purpose instant adhesive for most plastics, rubber, ceramic, wood and metal. Type 401 for porous substrates.

Part No.	Description	Size
3G 401	Loctite Adhesive, 5-20sec	3g
3G 406	Loctite Adhesive, 10-20sec	3g

HEATSINK COMPOUND



Part No.	Description	Size
DOW 340	Heatsink Compound	142g

INDEX

Index A Page

Adhesive	285
Adjustable Wrenches	88
Aerosols	275-283
Air Blower	77
Air Duster	278
Air Quality Meter	178
Aisle Marking Tape	246
Allen Keys	59-61
Andilog Test Equipment	232-234
Angle Grinder	266
Angle Rack, Conductive	247
Antistatic Wrist Straps	243
APEX Bags	251
Arbors for Holesaws	273
Art Knife	85
ASA Electric Screwdriver	235
Ash Camera Inspection	230
Astro Crimp Tools	79
Atomik Case	9
Atrix Vacuums	260-261
Automatic Centre Punch	88
Automotive, Multimeter	124
Axial Bending Machine	238
Axial Component Forming	73

Index B Page

Backpack Tool Bag	13
Backpack Toolkit	25
Balancers, Overhead	235
Ball Pein Hammer	88
Ball Point Hex Keys	59-61
Battery Screwdriver	264
Beautech Milprobes	76
Belt Solvent	285
Bench Ground Point	243
Bench Matting	242
Bench Multimeter	125
Bench Power Supply	185,186
BGA Rework Station	204
Bins Storage, Conductive	247
Bins, Conductive	36, 247
Bit Holding Screwdriver	52-53
Bits & Sleeves, Wire Wrap	255
Bits Holder	272
Bits Sets	271
Bits, Screwdriver	270-272
Blower Brush	77
Bolt Cutter	84
Bomber Case	9
Bootlace Ferrule Crimp Tool	78
Bosch Power Tools	266
Boxer Case	10
Brush, Dust	77
Brushes, Conductive	250
Brushes, ESD Safe	250
Brushes, Hogs Bristle	250
Butane Gas	216
Butane Irons	216
Butt Set	254

Index C Page

Cabinet, drawers	33-36
Cable Knives	257
Cable Locator	128
Cable Shears	84
Cable Strippers	83
Cable Tie Gun	83
Cable Ties	83
Calipers	87
Camera Inspection	230
Can Wrench	254
Captive Spring Hook	76
Carbon Monoxide Meter	179
Carbon Taps	89
Carrycases, Fluke	180
Cartridges Hakko Tips	206-207
Cartridges JBC Tips	198-199
Cases, Fluke	180
Cases, Foam Filled	38-43
Cases, Transit	38-44
Cases, Waterproof	38-47
Caulking Gun, Cordless	265
C-Clip Setter	77
Centre Punches	88
Ceramic Trimming Tools	76
Ceta Form Pliers	65
Chair, ESD Safe	242
Charleswater ESD Bags	251
Chassis Punch Set	274
Chip Quick	217
Circlip Pliers	63
Circuit Board Holder	267
Clamp Adapters	136-137
Clamp, Current	131-135
Clean Room Vacuum	245
Cleaning, Ultrasonic	239
CNX Wireless Range	126-127
Coaxial Crimp Tools	78-79
Coaxial Strippers	83
Coaxial Torque Spanner	93
Coil Cords, Wristaps	243
Combination Pliers	62, 64-66
Combination Pliers, Insulated	256
Combination Spanners	98
Combination Squares	87
Combination, Pliers	62, 64-66
Common Point Ground Cord	243
Component Counter	238
Component Forming Machines	238
Component Forming Pliers	73
Conductive Brushes	250
Conductive Floor Paint	246
Conductive Parts Storage	38, 247
Conductive PCB Racks	247
Conductive Storage	247
Conductive Storage Bins	38, 247
Conductive Toolbox	247
Conductive Tote Boxes	247
Conformal Coating	281
Conformal Coating Pen	
Connector Tooling	79
Connector Wrench	79
Contact Removal	77
Continuity Tester	129
Cordless Drill	264-265
Cordless Glue Gun	262
Cordless Hot Air Gun	263
Cordless Irons	216
Corex Wire Strippers	83
Cotton Gloves	283

.....C Page

Counter, Component	238
Crevice Tool	261
Crimp Tools	78-79
Crimp Tools, Electrical	78-79
Crimp Tools, Ergonomic	79
Crimping Tools	78-79
Croc Clips	183-184
Crowsfoot Spanners/Wrench	96
Current Clamps	131-135
Custom Foam Cutting	45
Custom Stripmaster Strippers	80-81
Cut, Form Pliers	73
Cutters, Lindstrom	67
Cutters, Tsunoda	67
Cutting Mats	85

Index D Page

D Contact Tool	79
Datanet Toolkit	23
Dental Probes	76
Depanelling Tool	73
Desolder Braid	218
Desolder Pump	218
Desolder Tips Hakko	208-209
Desolder Tips JBC	201
Desoldering, Hakko	196
Desoldering, JBC	196
Desoutter Fastening Systems	235-236
Diagonal Cutters	62, 64 -70
Digital Field Meter	249
Digital Multimeters	117-126, 185
Digital Torque Screwdrivers	91
Digital Torque Wrench	93
Digital Vernier	86
Dimple Tray, PCB	247
Dispensing Bottle	285
Dispensing Fluid Equipment	226-229
Dispensing Needles	227
Dispensing Pens	227
Disposable Heel Straps	245
Dissipative Flooring	246
Dissipative Matting	242
Distance Measurement, Laser	156
Dividers	87
DMC/ Astro Tools	79
Document Storage, ESD	244
Documenting Process Calibrator	161
Dremel Tools	266
Drill Bit Set	274
Drill Bits	273-274
Drill Holster	14
Drill, Bosch	266
Drill, HSS	274-275
Drill, Step	274
Dual Layer Matting	242
Dust Brush	77
Dust Coat, ESD Safe	244

Index E	Page
Earth Ground Testers	142-143
Earth Plug Point, ESD	243
Easy Braid	218
E-Clip Setter	77
Edsyn Smoke Extraction	225
Electrical Scissors	84
Electrical Testers	128-129
Electricians Toolkit	27
Electrolube Products	280-283
Electro-Mechanical Toolkit	28-29
Electronic Series Screwdrivers	48-49
Electronic Side Cutters	66-70, 72
Electronics Tool Kits	15-17, 19, 27
Engineers Square	86
ESD Brushes	250
ESD Chairs	242
ESD Control Products	242-251
ESD Document Sleeves	244
ESD Electronic Pliers	68-69
ESD Field Service Kit	242
ESD Heel Straps	245
ESD Labels	246
ESD Parts Storage	36, 247
ESD Screwdriver	54
ESD Shielding Bags	251
ESD Shoes	244
ESD Sprays	246
ESD Survey Kit	249
ESD Test Equipment	248
ESD Tester Calibration	249
ESD Vacuum	245
ESD Vinyl Flooring	246
ESD, Aisle Marking Tape	246
ESD, Gloves	244
Europlacer Pick, Place Machines	236-237
Explorer Cases	38-43
Extension 1/4 Drive	94
Extension 3/8 Drive	96
Extensions 1/2" Drive	97
Eyeloupes	231

Index F	Page
Feeler Gauge	86
Fibre Optic Cleaning	254
Fibre Optic Kit	26
Fibre Optic Light Guides	231
Fibre Optic Stripping	254
Fibreglass Scratch Brush	77
Field Service Kit, ESD	242
Files	87
Filter Cartridges, Toner Vac	260-261
Fire Arms Cases	38-51
Fisnar Dispensing	226-229
Flare Nut Spanners	98
Flashlight	108-109
Flat Nose Pliers	63, 69, 71
Flex Head Spanners	105-107
Floor Finish, Statguard	246
Floor Paint	246
Flooring, Vinyl ESD	246
Fluid Dispensing	226-229
Fluke Accessories Test Leads	181-183
Fluke Airmeter	178
Fluke Carrycases	180
Fluke CNX Wireless Range	126-127
Fluke Current Adapters	136-137
Fluke Current Clamp	131-135

Index F	Page
Fluke Earth Ground Testers	142-143
Fluke Electrical Testers	128-129
Fluke Energy Loggers	153-154
Fluke Infrared Cameras	168, 170
Fluke Infrared Thermometers	171-175
Fluke Installation Testers	144-146
Fluke Insulation Testers	138-141
Fluke Laser Distance Measure	156
Fluke Loop Calibrators	160
Fluke Multimeters	117-126
Fluke Particle Counter	179
Fluke PAT Testers	147
Fluke Phase Rotation Tester	148
Fluke Power Quality Analyser	151-152
Fluke Power Quality Clamps	149-151
Fluke Pressure Calibrators	163-165
Fluke Process Calibrator	161
Fluke Process Clamps	158
Fluke Process Meters	159-162
Fluke ScopeMeter	112-115
Fluke Temperature Accessories	177
Fluke Temperature Calibrator	166
Fluke Test Leads	181-183
Fluke Thermometers	175
Flux Dispensing Bottle	285
Flux Gel	221
Flux Pen	220
Flux Pen, Refillable	285
Flux Removal	275-278, 282
Flux Thinners	220
Flux, Liquid	220
Foam Filled Cases	38-45
Foam Inlays	45
Foam Layered Toolkit	19, 21, 26, 31
Foam Presentation	45
Footwear Tester	248
Force Gauge	234
Forceps	75
Forming Pliers	73
Freezer Spray	278, 280
Friedrich Insulated Tools	256-259
Fume Extraction	224-225

Index G	Page
Golden Fluid	221
Gas Soldering Iron	216
GearWrench Ratchets	97
GearWrench Socketry	94-95
GearWrench Spanners	98-107
GearWrench Tap, Die Set	89
GearWrench Torque Wrenches	93
Glasses, Safety	283
Gloves ESD, Polyurethane Coated	244
Gloves, Cotton	283
Gloves, Disposable	283
Gloves, Various	283
Glue Guns	262
Gordon Brushes	250
Grounding Points, ESD	242
Ground Cords, ESD	243
GT Line Cases	8-11
Gauge, Feeler	86
Gauge, Force	234
Gun Cases	38-48

Index H	Page
Hacksaw	87
Hacksaw, Insulated	257
Hakko Desolder Tips	208
Hakko Desoldering Station	203
Hakko Handpieces	205
Hakko Hot Air Nozzles	210-211
Hakko Hot Air Station	204
Hakko Omnivise	204
Hakko Rework Station	204
Hakko Smoke Absorber	225
Hakko Solder Pots	214
Hakko Solder Stations	202
Hakko Soldering Equipment	202-121
Hakko Tips	206-212
Hakko Tweezer Tips	208
Hakko Tweezers	205
Half Moon Spanner	104
Hammer Ball Pein	88
Hammer Drill	265-266
Hand Cleaner	283
Headlamp	108
Heat Guns	263
Heatsink Compound	285
Heel Straps	245
Hemostats	75
Hepa Fume Extraction	224-225
Hex Keys, Insulated	257
Hex Keys, T Handle	59 -61
Hex L Keys	59-61
Hex Screwdrivers	48, 52
High Temperature Tape	221
Hoffbauer Cases	44
Hogs Bristle Brushes	250
Holesaws	273
Holesaws, Arbors	273
Hollow Punch	88
Holster, Drill	14
Hose, Vacuum	261
Hot Air Guns	263
Hot Air Station, Hakko	204
Hot Air Station, JBC	196-197
HSS Drill Bits	273-274
Hurricane Blower	77
HVAC Clamp	133

Index I	Page
Ideal Wire Strippers	80-81
IEC 609000 Compliant Tools	256-259
Illuminated Magnifying Glass	232-234
Impact Drill/Driver	265
Infrared Cameras	168, 170
Infrared Thermometers	171-175
Inhex Sockets	94, 96
Innova Case	10
Inspection, Camera	230
Installation Testers	144-146
Instrument Cases	38-52
Insulated Tape Measure	256
Insulated Tools	256-259
Insulated Tools Kit	27
Insulated Tools Pliers	64-65
Insulated VDE Screwdrivers	55
Insulation Testers	138-141
Intrinsically Safe Torch	108
Ion Vector System	245
Ioniser, Gun	245
Ionizer, Bench	245
Ionizer, Overhead	245
Isopropanol	239

Index J	Page
Jacket, ESD Safe	244
JBC Desolder Tips	201
JBC Desoldering Station	196
JBC Handpieces	194
JBC Hot Air Station	196-197
JBC Rework Station	196-197
JBC Solder Stations	190-192
JBC Soldering Equipment	190-201
JBC Stands	193
JBC Suction Module	193
JBC Tweezer Tips	199-200
JBC Tweezers	194
Jensen Toolkit	32

Index K	Page
K Type Thermocouples	176
Kapton Tape	221
Kester Solder Wire	219
Keys, Hex	59-61
Keys, Torx	61
Kieba Pliers	70
Kimwipes	284
Knipex Pliers	66
Knipex Shears	84
Knives, Insulated	257
Knives, Various	85
Krone Punchdown Tool	255

Index L	Page
Label Remover	278, 280
Labels, ESD	246
Labels, Lead Free	285
Lan Toolkit	24-25
Latex Gloves	283
Lead Forming	73
Lead Free Solder Paste	221
Lead Free Solder Wire	219
Lead-Free, Sign	285
Leakage Current Clamp	133, 185
Leatherman Wave Tool	85
LED Headlamp	108
LED Lenser Torch	109
LED Magifying Lamp	230
LED Ring Illuminator	231
LED Torches	108-109
Leister Hot Air Gun	263
Level, Line	87
Level, Spirit	87
Light Meter	185
Lindstrom Pliers	67
Line Level	87
Lint Free Wipes	284
Lithium Ion Driver	264
Live Line Tools	256-259
LMP Solder Wire	219
Locators, Crimp Tool	79
Loctite Glue	285
Loggers, Energy	153-154
Logic Probe	184
Long Nose Pliers	62, 64-69, 70, 71
Loop Calibrators	160
Lubricants	285
Luerlock Needles	227

Index M	Page
Maggylamp	230
Maglite Torches	109
Magnetic Nutdriver Bits	272
Magnetic Pick Up	77
Magnetizer	53
Magnifying Glass	230-231
Magnifying Lamps	230
Mantis Viewing System	231
Masking Discs	221
Masking Tape, Heat Resistant	221
Mat Cleaner	246
Mats, Sticky	246
Mechanical Toolkit	30
Medical Toolkit	22
MegaWheels Case	9
Metalized Shielding Bags	251
Metcal Handpiece	212-213
Metcal Tips	212-213
Microcare Cleaning Tools	275
Microcare wipes	284
Microscopes	231
Mil Spec Crimp Tools	79
Mil Spec Wire Strippers	80
Military Ready Toolkit	31
Milprobes Beautech	76
Mirror, Inspection	77
Mitutoya Vernier	86
Molex Contact Removal Tool	77
Monitor, Wristrap Continuous	248
MRI Toolkit	26
MultiGrips	63, 65
Multigrips, Insulated	256
Multimeter Remote Display	121
Multimeter, Automotive	124
Multimeter, Bench	125
Multimeter, Wireless CNX	126-127
Multimeters	117-126, 185
Multimeters, Fluke	117-126
Multitool	85

Index A	Page
Needle Files	87
Needle Holding Plier	75
Needles, Dispensing	227
Neon Screwdriver	52
Nickel Screening Compaound	281
Nitrile Gloves	283
No-Clean Flux	220
Non Contact AC Detector	128,185
No-Nik Strippers	254
Norbar Torque Wrench	93
Nozzles, Glue Guns	262
Nozzles, Hot Air	263
Nozzles, Hot Air Hakko	210-211
Nutdriver Bits	272
Nutdriver Bits, Magnetic	272
Nutdriver Set	52, 58
Nutdrivers	49, 51, 52, 55, 58
Nutdrivers, Insulated	55
Nutdrivers, Ratchet	?
Nutspinners	49, 51, 52, 55, 58
Nutspinners, Insulated	55

Index O	Page
Oblique Tip Cutter	67, 69
Offset Screwdrivers	53
Oiler Bottle	285
Oiler Pen	285
OKI Tips	212
Omega Vacuum	260
Omnivise, Hakko	204
Oscilloscope Probes	184
Oscilloscopes	112-115, 186-187
Outer Sheath Strippers	83
Owon Oscilloscopes	186-187

Index P	Page
Pace Handpiece	215
Pace Solder Stations	215
Pace Solder Tips	215
Padlock, Explorer Case	42
Paint, Conductive	246
Panasonic Rechargeable Tools	264-265
Panavise	267
Panel Mounts, Explorer	40
Parallel Wrench	66
Part Boxes	44
Particle Counter	179
Parts Storage	35-38
Parts Storage, Conductive	37, 247
Paste, Solder	221
PAT Testers	147, 185
PCB Racks, Conductive	247
Pens, Dispensing	227
Phase Rotation Tester	148
Phillips Bits	270-271
Phillips Screwdrivers	48, 50, 54, 55
Photocopier Tech Toolkit	20-21
Pick Up Magnetic	77
Pick, Place Machines	236-237
PicoFinish Screwdrivers	48
Piergiacomini Pliers	71-73
Piergiacomini Tweezers	74-75
Pin Extractor	77
Pin Punches	88
Pin Removal	77
Plant Engineers Kit	18
Plastic Cases	44
PLCC Extractor Tool	76
Plier Oblique Tip Cutter	67, 69
Plier, Round Nose	69
Pliers Insulated VDE	64-65
Pliers Knipex	66
Pliers Lindstrom	67
Pliers Tsunoda	67
Pliers Wiha	62-64
Pliers, Ceta Form	65
Pliers, Circlip	63
Pliers, Combination	62, 64-66
Pliers, Component Forming	73
Pliers, Long Nose	62, 64-69, 70, 71
Pliers, Snipe Nose	62, 64-69, 70
Pliers, Soft Jaw	79
Pliers, Tsunoda	67
Pliers, VDE	64-65, 256
Pliers, Wiha	62-64
Pneumatic Component Forming	238
Pneumatic Depanelling Tool	73
Pneumatic Screwdriver	235
Pneumatic Side Cutters	72

.....P	Page
Pop Riveter	87
Portable Appliance Tester	147, 185
Portable Folding Cart	34
Portable LED Floodlight	108
Portable Work Light	108, 109
Portasol Iron	216
Positioners, Crimp Tool	79
Poster, ESD	246
Poster, Lead Free	285
Power Quality Analyser	151-152
Power Quality Clamps	149-151
Power Quality Loggers	153-154
Power Supply, Bench	185, 186
Pozi Bits	270-271
Pozi Screwdrivers	48, 51
Pre-forming Tools	73
Pre-insulated Crimp Tool	78-79
Presaturated Wipes	284
Presenter, Screw	235
Pressmaster Crimp Tools	79
Pressure Calibrators	163-165
Probes, Dental	76
Probes, Oscilloscope	184
Probes, Thermocouple	176
Process Clamp	158
Process Meters	159-162
Protech Zipper Case	12
Proto Torque Wrench	93
Pull Tester	233-234
Punches, Centre	88
Punches, Pin	88
Purex Fume Extraction	224-225
Pyropen	216

Index R	Page
Radial Cropping Machines	238
Ratchet Cable Shear	84
Ratchet Crimpers	78-79
Ratchet Nutdrivers	58
Ratcheting Spanners	98-107
Ratcheting, Screwdrivers	58
Ratchets 1/4", 3/8" & 1/2" Drive	97
Ratchets, Insulated	258
Reamer, Hand Taper	274
Rechargeable Drills	264-265
Recorder, Power Quality	155
Red/Blue/Yellow Crimper	78-79
Reflow Oven Cleaner	279
Refrigerant Leak Detector	179
Remote Current Clamp	131
Remote Display Multimeter	121
Retractable Knives	85
Reversible Blades, Screwdrivers	57-57
Revo Case	11
RevoWheels Case	10
Rework Kit, Chip Quick	217
Rework Station, Hakko	204
Rework Station, JBC	196-197
Rifle Cases	38-49
Ring Binder, ESD Safe	244
Ring Illuminator, LED	231
Ring/Ring Ratcheting Spanner	105
RMA Flux	220
RMA Solder Wire	219

.....R	Page
Robotic Fluid dispensing	228
Rocket Blower	77
Roll Cabinet	33-35
Rosin Fluxed Solder Wire	219
Round Nose Plier	69, 71
Rules	86
Ruxxac Cart	34

Index S	Page
S- Spanners	104
Safe Cloths	284
Safety Glasses	283
Safety Knife	85
Safewash	239
Scalpel	85
Scissors	84
Scope Probes	184
ScopeMeters	112-115
Scotch-Lock Pliers	254
Scratch Brushes	250
Scratch Pen, Fibreglass	77
Screen, Stencil Solvent	282
Screw Presenter	235
Screwdriver Bits	270-272
Screwdriver, Battery	264
Screwdriver, Bit Holding	53-53
Screwdriver, Electric	235
Screwdriver, ESD	54
Screwdriver, Interchangeable Blades	56-57
Screwdrivers Ratcheting	58
Screwdrivers, Electronic	49-49
Screwdrivers, ESD Safe	54
Screwdrivers, Hex	48, 52
Screwdrivers, Insulated VDE	55
Screwdrivers, Offset	53
Screwdrivers, Phillips	48, 50, 54, 55
Screwdrivers, PicoFinish	48
Screwdrivers, Pneumatic	235
Screwdrivers, Pozi	48, 51
Screwdrivers, Reversible Blades	56-57
Screwdrivers, Slotted	48, 50, 54, 55
Screwdrivers, Torque	90-92
Screwdrivers, Torx	48, 49, 51, 54
Screwstarters	53
Scriber	87
Scriber, Fibre Optic	255
SDS Rotary Drill	266
Sharps Bin	255
Shears, General Purpose	84
Shercon Masking Disc	221
Shielding Bags, Metalized	251
Shifters	88
Shirt, ESD Safe	244
Shoes, ESD	244
Side Cutters	62, 64 -70, 72
Side Cutters, Lindstrom	67
Side Cutters, Pneumatic	72
Side Cutters, Tsunoda	67
Sign, Lead/ Free	285
Signage, ESD	246
Slotted Screwdrivers	48, 50, 54, 55
SMD Counting Machine	238
SMD Rework Stations	196-197, 204
SMD Tweezers	74-75
SMD Vacuum Pick Up	77
Smoke Absorbers	225

.....S	Page
SMT Pick, Place Machines	236-237
Snap Off Knife	85
Snap Studs, Grounding	242
Snipe Nose Pliers	62, 64-69, 70
Socket Sets	95-97
Socketry, GearWrench	94-95
Socketry, Insulated	258
Sockets 1/2" Drive	97
Sockets 1/4 Drive	94-95
Sockets 3/8 Drive	95-96
Soft Jaw Pliers	79
Soft Toolbags	12-14
SoftFinish Screwdrivers	50-52, 54
Solaris Remote Area Light	108
Solder Bar	219
Solder Braid	218
Solder Granules	219
Solder Paste	221
Solder Pots	214
Solder Sucker	218
Solder Wick	218
Solder Wire	219
Soldering Tips, Hakko	206-207, 209-212
Soldering Tips, JBC (Cartridges)	198-199
Soldering Tips, Metcal	212-213
Soldering Tips, Pace	215
Soldering Tips, Weller	213
Solvent Pump Bottle	285
Sound Level Meter	185
Spanner, Half Moon	104
Spanners Flex Head	105-107
Spanners, Combination	98
Spanners, Flare Nut	98
Spanners, Insulated	259
Spanners, Ratcheting	98-107
Sponges Cleaning, JBC	195
Spring Hooks	76
Spudger Tool	76
Square, Combination	87
Square, Engineers	86
Statguard Floor Finish	246
Steel Rules	86
Steinel Glue Guns	262
Steinel Hot Air Guns	263
Stencil Cleaner	279
Stencil Rolls	284
Stencil Wipes	280
Step Drills	274
Stereo Zoom Microscopes	231
Sticklers	254
Sticky Mats	246
Storage Bins, Conductive	247
Storage Cabinets	35-37
Storage Cases	44
Stripmaster Strippers	80-81
Strippers, Coaxial	83
Strippers, Fibre Optic	254
Strippers, Ideal	80-81
Strippers, Outer Sheath	83
Strippers, Wire	80-83
Superlube	285
Surface resistance Tester	249
Syringes Barrel, Dispensing	227

Index T	Page
T - Bar 1/2, drive VDE	258
T Handle Hex Keys	60 -61
T Handle Torque Screwdrivers	92
T Strippers	82
Tacky Mats	246
Tap & Die Set	89
Tap Wrench	89
Tape Measures	86, 256
Tape, Foil Masking	221
Telecoms Crimp Tools	78
Telecoms Toolkit	24
Telecoms Tools	254
Telephone Test Set	254
Telescopic Magnet	77
Telescopic Mirror	77
Temperature Adapters	177
Temperature Calibrator	166
Temperature Humidity Meter	179
Temperature Probes, K Type	176
Teng Socket Set	95
Terminal Crimper	78-79
Test Leads	181-183
Test Set	254
Thermocouple Probes	176
Thermometer, Digital	175
Thermometer, Tip Measure	214
Tie Gun, Cable	83
Tip Cleaning Paste	214
Tip Extraction, Fumes	224-225
Tip Polisher	214
Tip Thermometer	214
Tip Tinner	214
Tips, Dispensing	227
Tips, Hakko	206-207, 209-212
Tips, JBC (Cartridges)	198-199
Tips, Metcal/OKI	212-213
Tips, Pace	215
Tips, Weller	213
Titanium Drill Bits	273-274
Titanium Tools	26
Toe Straps	245
Tone, Probe Set	254
Toner Vacuums	260-261
Tool Box	33
Tool Box, Conductive	247
Tool Cabinet	33-34
Tool Cases	8-9
Tool Chest	33
Tool Jacket	27
Tool Pouch	14
Tool Roll	14
Toolkit Selection Guide	6-7
Toolkits	15-32
Topical Antistatic Spray	246
Torches	108-109
Torpedo Level	87
Torq-Set Bits	271-272
Torque Controlled Tightening	235
Torque Screwdrivers	90-92
Torque Spanner, Coaxial	93
Torque Tester	232
Torque Wrench	93
Torque Wrench, Digital	93
Torque Wrench, Insulated	257
Torqueleader Screwdriver	92
Torx "L" Keys	61
Torx Bits	270
Torx Screwdrivers	48, 49, 51, 54
Torx Sockets	95-96

.....T	Page
Tote Boxes, Conductive	247
Transit Cases	38-46
Treston Cabinets	35-37
Treston Turntable	37
Triflow Oil	285
Trimming Tools	76
Tri-Wing Bits	271-272
Trolley	34, 37
Tsunoda Pliers	67
Tuning Tools, Ceramic	76
Turret, Crimp Tool	79
Turtle Case	8
Tweezer Hakko	205
Tweezer Tips Hakko	208, 212
Tweezer Tips JBC	199-200
Tweezer, Insulated	256
Tweezers	74-75
Tweezers, JBC	194-195

Index U	Page
Ultrasonic Cleaning Machines	239
Utility Knives	85

Index V	Page
Vacuum Cleaner	260-261
Vacuum Pick Up, SMD	77
Vacuum, Clean Room	245
Vacuum, Toner	260
Vapour Phase Fluid, Galden	221
Variable Power Supply	185-186
VDE 1000V Live Line Safety Tools	256-259
VDE Insulated Screwdrivers	55
VDE Pliers	64-65
VDE Screwdrivers	55, 257
Verniers	86
Versalight Work Light	109
Viewing System, Mantis	231
Vise Grips	88
Vises	267
Vise Grips	88
Vises	267

Index W	Page
Wafer Tweezers	74-75
Water Soluable Flux	220
Waterproof Cases	38-44
Waterproof Tool Case	10-11
Waterpump Pliers	63, 65
Wave, Leatherman	85
Weapons Cases	38-50
Weller Solder Iron	213
Weller Tips	213
Wheeled Rugged Cases	42-43
Wheeled Tool Bag	13
Wheeled Tool Cases	8-10
Wiha Electronic Pliers	68 -69
Wiha Hex Keys	59-61
Wiha MultiGrips	63
Wiha Pliers	62-64
Wiha Screwdriver Bits	270-272
Wiha Screwdrivers	48-57
Wiha Torque Screwdrivers	90-91
Wipes	284
Wipes, Stencil	284
Wire Rack Shelving	37
Wire Rack Trolley	37
Wire Strippers	80-83
Wire Strippers, Coaxial	83
Wire Strippers, Mil Spec	80
Wire Test , Pull	233
Wire Wrap Stripper	82, 255
Wire Wrap Wire	255
Wire Wrapping Gun	255
Wire Wrapping Tools	255
Wireless CNX Mutimeter	126-127
Worklight	109
Workline Bags	13
Workshop Vac, Toner	261
Wrapping Tools	255
Wrench, Adjustable	88
Wrench, Connector	79
Wrenches, Ratcheting	98-107
Wristrap Continuous Monitor	248
Wristrap Tester	248
Wristraps	243

Index U	Page
Ziplock ESD Bags	251

If you did not find what you were looking for, please call our sales team now!