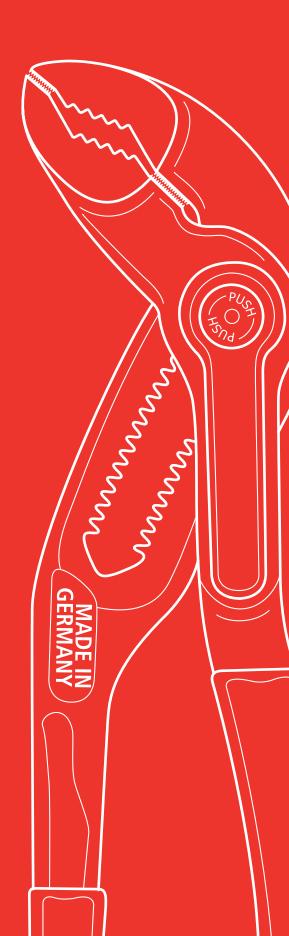
### GENERAL CATALOG

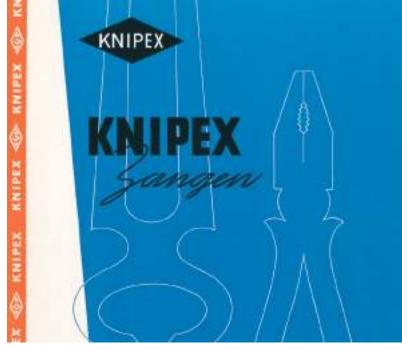


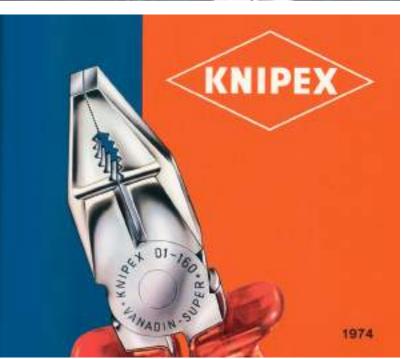
# PIECES MADE IN GERMANY SINCE 1882

















# KNIPEX — the company behind the pliers.

For over 130 years and four generations, we have been working passionately on being the best manufacturer of pliers for our customers and users — with a clear focus, high demands and a constant flow of new ideas. Throughout the world, our brand enjoys a great deal of trust, and we aim to consistently meet and rebuild this.

Success is important to us, but is not something we look for at any price. We are guided by values, orientate our actions towards sustainability, and face up to our responsibility towards society and the natural environment in which and with which we live. We invest heavily in the efficiency of our location and the qualification of our employees, working today on the success of tomorrow and the day after that — so that we can also continue to be a strong and reliable partner in the future.

Yours, Ray Putch



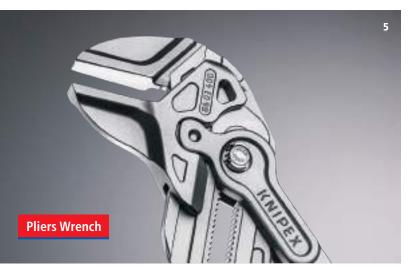
Ralf Putsch, Managing Partner.

















# KNIPEX pliers are different: ideas for improved use and performance.

Ever better pliers — that is our guiding principle to which we devote all of our expertise and creativity. We are not satisfied with standard solutions, but rather continuously develop new and improved models that are better to work with and easier to use.

Working this way means that sometimes we find unconventional solutions to situations, which then go on to set new benchmarks in the industry: novel methods of power transmission, easier and faster handling, combining various functions in a single tool and imaginative problem solvers for special applications. These new benchmarks save our users energy and time, giving them better work results with less effort.

In addition to major innovations, we work continuously on reworking our current product models to improve their function, ergonomics and service life.

- **1 Compact force:** CoBolt® XL two-hand operation for maximum cutting force.
- 2 Easy operation: Cobra® fast grip, precise adjustment, push-button, self-locking.
- 3 Multifunctional: Electrical Installation Pliers six functions in one pair of pliers.
- **4 Universal cutting force:** X-Cut® the first high leverage diagonal cutter with box joint and precision cutting edges.
- **5 Speed and versatility:** Pliers Wrench turns, holds, bends and presses without damaging materials.
- 6 High performance cutting edges: TwinForce® high strength due to unique transmission.
- 7 Redefined end cutting nippers: Bolt End Cutting Nippers light, slim, cut directly on the pivot point.
- 8 Problem-solver: Spring Hose Clamp Pliers the only pliers for all spring clamps; apply safely from all angles.

### Step by step: from idea to product.

A large number of steps lie between an initial idea and the finished product. We never lose sight of the fact that every new or redevelopment must represent a noticeable improvement for the user. We deploy the most up to date technologies and processes when putting our ideas into practice.

We begin by carefully establishing the requirements and selecting the best concepts. The tool is constructed on a computer and the function is simulated with the help of special software. This is followed by the first models made on a 3D printer and by milling and extensive tests on steel prototypes — working closely with experienced users. The first products manufactured using production processes are subjected to additional extensive tests — under conditions far more stringent than normal load.



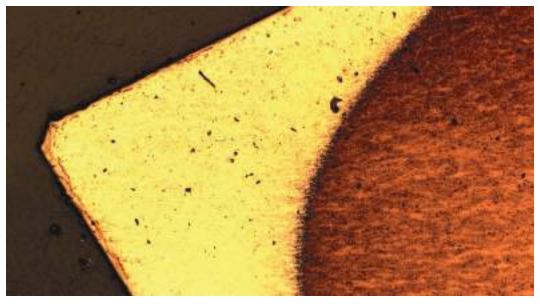
The locking mechanism on the Spring Hose Clamp Pliers permits simple and safe work, even with closed clamps. Modern CAD technology simulates the mechanism on the screen.



### Core qualities: steel — and what we make from it.

You can expect a great deal more from a pair of KNIPEX pliers. This starts with the material. The many models of pliers in our range are designed for different requirements and loads. We use steel alloys that have been specially selected for the application and rolled according to our high specifications. Long lasting cutting capability when working with very hard wires, strength when working with high torque loads, and good resistance to corrosion are examples of these targets.

The respective materials are then given their specific molecular structure in a number of coordinated heat treatment steps to produce the optimal relationship between hardness and toughness. These processes allow us to achieve the high degree of reliability, durability, and service life that are the very definition of KNIPEX pliers.



Macro image of a cutter after induction hardening. The specially hardened cutting area (light) is in sharp contrast to the softer structure of the body of the pliers (dark).









# This is how our pliers are given their shape: hot and under high pressure.

Forging as a forming process is an old cultural technique and continues to hold fascination today. With an impact of up to five and a half tons, the yellow glowing piece of steel is pounded in the upper and lower die at a temperature of 2,282°F. This gives it its basic shape and simultaneously a well-compacted structure.

The production of the forging die in our tool making requires a great deal of experience and high precision, as this raw component will be crucial to the subsequent quality of the pliers. The contours of the forged component are milled at processing centers in the hardened and high strength die block.



Forging die for the high leverage diagonal cutters with forged-in axle.

# The technology behind the pliers: machines made by KNIPEX.

Tools can only be as good as the production technology used to manufacture them. In other words, there cannot be superior products without advances in production processes.

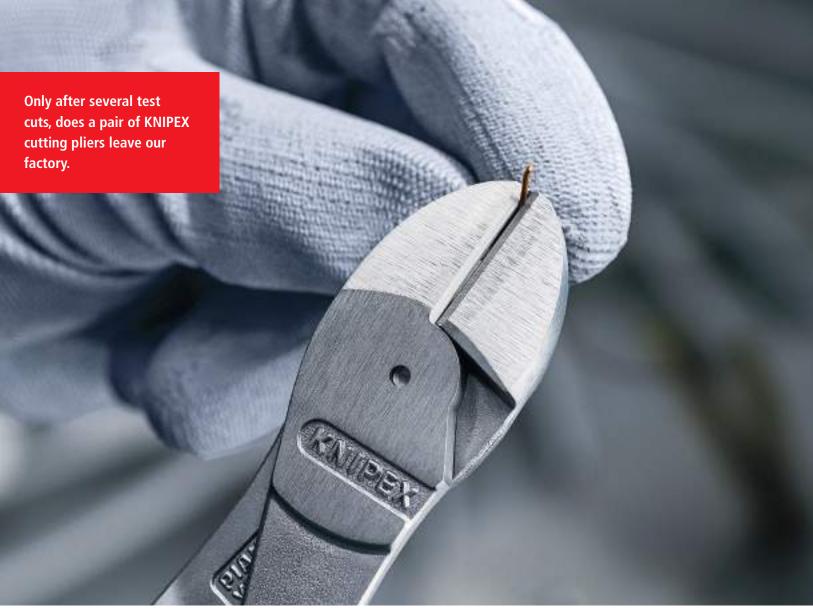
Due to our specialization, we can focus on the technologies needed to produce high quality pliers efficiently. We have more than 400 machines built with the specialized knowledge of generations. We build many of the machines ourselves or adapt machines precisely to our high standards using components we have manufactured. We even program the software for the control and operation of the machinery ourselves.

From the product idea to the dispatch of the finished pliers to our customers: everything is done under one roof. This way we can directly influence all steps of value creation ourselves in terms of quality and efficiency, and make continuous improvements. Short distances and direct contact simplify the coordination of processes and communication between employees.



We ensure our high standards by developing our own processes and machinery.







# We take it very literally: 100% reliability.

The precision of pliers is essential for their function: without accuracy there can be no reliable cutting, gripping, bending and zero backlash. The tight tolerances, which we make sure are complied with through the use of modern production technology, enable us to meet our stringent quality specifications.

We ensure compliance through strict measurements and diverse inspections — after the various production steps and at the end of the entire process. To do this we use the most up-to-date measurement technology and endurance tests — as well as the practical component test by hand.



Shape and roughness of the diagonal cutter's cutting edge are precisely measured with an optical 3D measuring system.

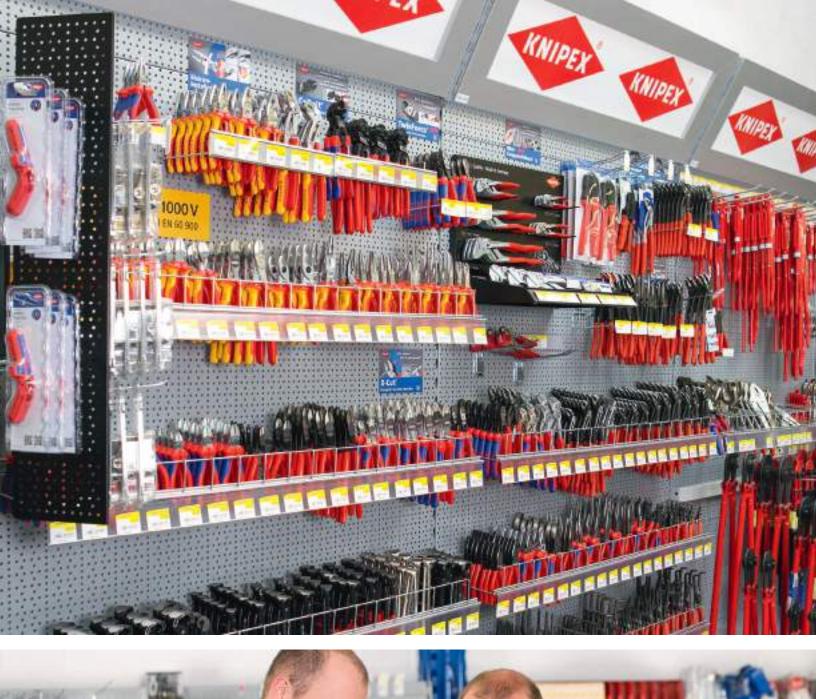
# More than excellent pliers: what else you can expect from us.

Quality does not stop with the product. Trust, reliability and a collaborative approach define our business relationships — with consistent customer focus, good service and competent field staff. We provide advice and training, and supply you with extensive digital product data adapted to your specific requirements. Added to this are diverse possibilities for sales support.

You will not find the breadth and depth of our range with any other manufacturer worldwide — that's how we ensure that your customers can always find the tool they are looking for.



We present the breadth and depth of our range at in-house exhibitions and open house days.













# At home in the world: locations in more than 100 countries for you.

KNIPEX is the global pliers brand. We are present in all continents, with a dense network of customers, representatives, and branches. In order to be closer to our retailers and be able to give them even better support, we are further extending our international activities all the time.

There is no substitute for direct contact, which is why we are there for you personally at more than 100 trade shows each year. With the help of the most varied media — classic and digital — we provide comprehensive information about our range and application opportunities in over 30 languages. We reach users and fans throughout the world via social media and hundreds of KNIPEX online videos.



We make up-to-date information available digitally in several languages.

# The key factor: our employees.

The most important basis of our success is our employees. Their knowledge and skills, their dedication and their ideas are crucial to our efficiency and thus to our future.

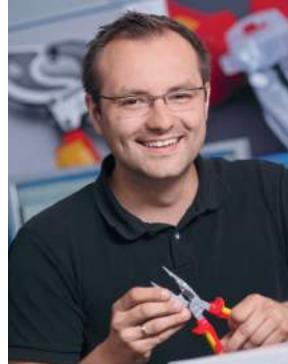
As a company, we are a social community. We want to shape our culture in such a way that allows our employees to participate and create identity through their work but also as individuals. We create good conditions for our employees to develop their potential, to obtain further qualifications and to stay healthy. It is also important to us that our employees are able to successfully balance family and career.

We invest a significant amount of both expense and care in the training of young people, but also impart a wide spectrum of professional and personal skills to other employees.



Our junior staff obtain their qualifications in our own modern training workshop.















### Acting responsibly – sustainable management.



As a company, we believe we share responsibility for our natural environment and the well-being of society. We interact with both in various ways. We consume resources, but take care to use them as carefully as possible, and want to make a contribution to ensuring that they are available to future generations in the same — or wherever possible — a better form.

Our ecological objectives include a continuous reduction in our energy consumption, reduction in the volumes of waste and caring for the biodiversity at our site. In addition, we participate in major climate protection projects.

Companies should also be good citizens. We support numerous institutions and organizations in the areas of education and culture. We maintain a close exchange with schools and universities, and strengthen civic engagement in our region in diverse ways.



We support the Bergische music school in the "Singpause" project which, with the help of specially trained teachers, communicates the foundations of music and pleasure by singing together in schools.

### **Combination and Lineman's Pliers** 27-31 Combination Pliers | Needle –Nose Combo Pliers | Lineman's Pliers 32 **Ear Clamp Pliers** Single Jaw | Dual Jaw Ear Clamp Pliers **Wire Strippers and Dismantling Tools** 33-50 Installation Strippers | Self-Adjusting / MultiStrip 10 | Automatic | Electrician's Installation Pliers | Dismantling Tools | ErgoStrip® **Long Nose Pliers** 51-61 Round Nose Pliers | Flat Nose Pliers | Snip Nose Pliers | Long Reach Needle Nose Pliers 62-67 **Electronics Gripping Pliers** Precision Electronics Gripping Pliers | Mounting Pliers 68-72 **Gripping and Mechanics Pliers** Universal Grip Pliers | Welding Grip Pliers 73-81 **Circlip Pliers** Circlip Pliers | Precision Circlip Pliers 82-87 **Pincers and Nippers** Carpenters' Pincers | Concreters' Nippers | End Cutting Nippers 88-92 **Bolt Cutters** CoBolt® Compact Bolt Cutters | CoBolt XL | Bolt Cutters | Concrete Mesh Cutter





Electronics Diagonal Cutters

End Cutting Nippers | Diagonal Cutters | Carbide Tip Diagonal Cutters |

Super Knips® | Super Knips XL

103-121



122-141	Pipe Wrenches and Water Pump Pliers Pipe Wrenches   Hose Clamp Pliers   Pliers Wrenches   Cobra®   Alligator®
142-148	Specialty Pliers End Cutting Nippers   Diagonal Cutters   Carbide Tip Diagonal Cutters   Super Knips®   Super Knips XL
149-154	Tweezers Precision   Insulated   Plastic   Crossover
155-158	Pipe Cutters and Special Shears Mitre Shears   Anvil Shears   Kevlar® Fibers Shears   Electricians' Shears
158-169	Cable Cutters and Wire Rope Cutters Twin Cutting Edge   Ratcheting   ACSR   Wire Rope Shears and Cutters
170-191	Crimping Pliers  MultiCrimp®   PreciForce®   Four-Mandrel   Twistor 16
192-195	Control Cabinet Keys and LED Light  TinwKey®   Profi-Key   Universal Key
196-205	Tool Sets and Carriers Tool Rolls with Tools   Top Selling Tool Sets   Electronics Pliers Sets
206-211	Tether Tool System
212-249	Insulated Tools and Sets 会 1000 V
250-264	Index / Article Number   Index   Pliers-ABC   Symbols



### 35% less effort required than with conventional combination pliers Cutting edge hardness (approx. 63 HRC) for heavy-duty cutting

- > easier work due to high leverage design
- > easier cutting, powerful gripping, bending and pulling
- > long cutting edges for thicker cables
- > gripping zones for flat and round material for a variety of uses
- > high-grade special tool steel; forged, multi stage oil-hardened

### 02 02 225 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system









								Cutting of	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	mm²	∆∆ Ibs
02 01 180		7 1/4 180					3/32 2.5	5/64 2.0	29/64 11.5	16.0	0.45
02 01 200	X	8 200		black atramentized	polished	plastic coated	7/64 2.8	3/32 2.2	1/2 13.0	25.0	0.66
02 01 225	X	9 225					1/8 3.0	3/32 2.5	35/64 14.0	25.0	0.79
02 02 180	X	7 1/4 180		black atramentized			3/32 2.5	5/64 2.0	29/64 11.5	16.0	0.53
02 02 200	X	8 200			polished	multi-component grips	7/64 2.8	3/32 2.2	1/2 13.0	25.0	0.75
02 02 225	X	9 225					1/8 3.0	3/32 2.5	35/64 14.0	25.0	0.90
02 02 225 T BKA	X	<mark>9</mark> 225		black atramentized	polished	multi-component grips, integrated tether attachment point	1/8 3.0	3/32 2.5	35/64 14.0	25.0	0.95
02 08 200 US	Х	8 200	A 1000V ASTM milli	black atramentized	nolichod	insulated, multi-component grips,	7/64 2.8	3/32 2.2	1/2 13.0	25.0	0.82
02 08 225 US	X	9 225	½ 1000 V ASTM	black atramentized	polished	ASTM-tested	1/8 3.0	3/32 2.5	35/64 14.0	25.0	0.95

- > gripping zones for flat and round material for a variety of uses
- > cutting edges for soft and hard wire
- > long cutting edges for thicker cables
- > cutting edge hardness (approx. 60 HRC)
- > special tool steel; forged, multi stage oil-hardened



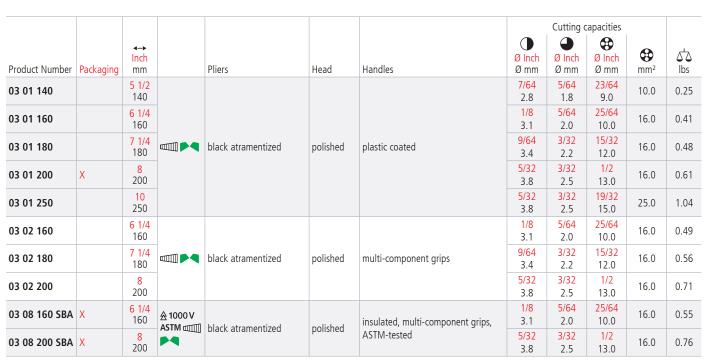












### Small high leverage combination pliers with pointed jaws For all common installation and repair work

Handy for use when working in confined areas due to slim head design and pointed jaws (anti-twist)

Gripping surfaces with special convex contour on one side for secure gripping of flat parts

Milled groove in the gripping area permits small parts such as nails, pins and bolts to be held and pulled

- > easy cutting due to the high leverage joint
- > cutting edges for soft, medium hard and hard wire
- > long service life and stable tips
- > high-grade special tool steel; forged, multi stage oil-hardened

### 08 22 145 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system





Milled groove in the gripping area



Firm grip on flat material due to three-point contact



Easy cutting thanks to the high leverage joint



Anti-twist tips remain stable even under high strain





							Cutting capacities				
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	mm <sup>2</sup>	∆'∆ Ibs
08 21 145	Х	5 3/4 145		black atramentized	polished	plastic coated	1/8 3.0	5/64 2.0	5/16 8.0	16.0	0.26
08 22 145	Х	5 3/4 145		black atramentized	polished	multi-component grips	1/8 3.0	5/64 2.0	5/16 8.0	16.0	0.32
08 22 145 T BKA	X	<b>5 3/4</b> 145		black atramentized	polished	multi-component grips, integrated tether attachment point	1/8 3.0	<b>5/64</b> 2.0	5/16 8.0	16.0	0.39
08 28 145 US	X	5 3/4 145	À 1000 V ASTM □□□□	black atramentized	polished	insulated, multi-component grips, ASTM-tested	1/8 3.0	5/64 2.0	5/16 8.0	16.0	0.39

### High transmission ratio for easy cutting.

High leverage design requires 50% less effort compared to conventional combination pliers due to an optimized transmission ratio.

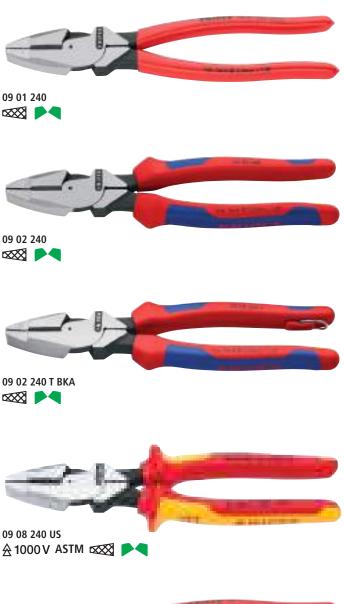
- > heavy-duty
- > ergonomically optimized handle shape for firm contact to the hand and fatigue reducing operation
- > effective cross-hatched knurled gripping zone in the jaws for strong gripping and pulling
- > serrated gripping zone below the joint for powerful leverage
- > cutting edges for soft and hard wire, nails, ACSR and piano wire
- > cutting edge hardness (approx. 64 HRC)
- > vanadium steel, forged, multi stage oil-hardened

### 09 11 240 / 09 12 240 / 09 12 240 T BKA\*

With fish tape puller in the joint gap; with universal crimping point below the joint

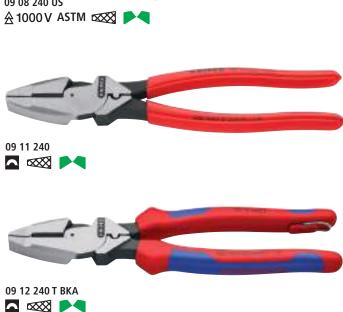
### 09 02 240 T BKA / 09 12 240 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system





Gripping zone below the joint for powerful leverage





09 11/12 240: Universal crimping area below the joint



09 11/12 240: Fish tape puller in the joint gap



Cross-hatched, knurled gripping zone for firm gripping and pulling, e. g. for fence construction



Long cutting edges for cutting flat cables

							Cutting of	apacities	
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ Ibs
09 01 240	X	9 1/2 240		black atramentized	polished	plastic coated	3/16 4.6	1/8 3.0	0.96
09 02 240	X	9 1/2 240		black atramentized	polished	multi-component grips	3/16 4.6	1/8 3.0	1.01
09 02 240 T BKA	X	9 <mark>1/2</mark> 240		black atramentized	polished	multi-component grips, integrated tether attachment point	3/16 4.6	1/8 3.0	1.08
09 08 240 US	X	9 1/2 240	À 1000 V ASTM	black atramentized	polished	insulated, multi-component handles, ASTM-tested	3/16 4.6	1/8 3.0	1.02
09 11 240	X	9 1/2 240		black atramentized	polished	plastic coated	3/16 4.6	1/8 3.0	0.91
09 12 240	X	9 1/2 240		black atramentized	polished	multi-component grips	3/16 4.6	1/8 3.0	1.04
09 12 240 T BKA	X	9 1/2 240		black atramentized	polished	multi-component grips, integrated tether attachment point	3/16 4.6	1/8 3.0	1.07



### Suitable for universal use, for 1-ear and 2-ear clamps

- > for the simple and reliable mounting of 1-ear and 2-ear clamps (Oetiker® system or similar)
- > no damage to press points on the ear clamps
- > the slim head permits good accessibility in confined areas
- > versatile use for clamps on CV boots, cooler and fuel lines, air pressure systems, compressors
- > durable and strong
- > high-grade special tool steel; forged, oil-hardened

### 10 99 1220

Suitable for universal use due to the additional side jaw









10 98 1220



Front press jaw



Sealing the fluid hose on the connecting piece



Sealing the pneumatic hose on the quick action coupling



Sealing the hose connection on central lubrication

### 10 99 1220



Using the front press jaw



Sealing the pneumatic hose on the quick action coupling using the side press jaw



Using the side press jaw

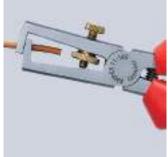


Sealing the fluid hose on the connecting piece using the side press jaw

Product Number	Packaging	<b>4−►</b> Inch mm	Pliers	Head	Handles	∆¹∆ lbs
10 98 1220		8 3/4 220	black atramentized	polished	plastic coated	0.78
10 99 1220		8 3/4 220	black atramentized	polished	plastic coated	0.75

- > for single, multi and fine-stranded conductors with plastic or rubber insulation max.13/64" (5.0 mm) dia., suitable up to 8 AWG wire
- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > special tool steel; forged, oil-hardened













WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

### Prismatic blade

The red area is cut over four surfaces. Works with highlyelastic materials also.



Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Stripping capacities Ø Inch Ø mm	Stripping capacities mm²	AWG	∆¹∆ Ibs
11 01 160		6 1/4 160	MM	black atramentized	polished	non-slip plastic coated	13/64 5.0	10.0	up to 8	0.32
11 02 160		6 1/4 160	MM	black atramentized	polished	multi-component grips	13/64 5.0	10.0	up to 8	0.38
11 08 160 SBA	X	6 1/4 160	ASTM ////	black atramentized	polished	insulated, multi-component grips, ASTM tested	13/64 5.0	10.0	up to 8	0.40

### **Electronics Wire Stripping Shears**





- > for cutting and stripping solid, multi and fine-stranded conductors with a diameter up to 3/64" (18-32 AWG)
- > pointed head of shears above the wire stripping hole for the accurate cutting of fine wire in confined places
- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > opening spring for easy repetitive work
- > special tool steel; oil-hardened



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	4→ Inch mm		Head	Handles	Stripping capacities Ø Inch Ø mm	Stripping capacities AWG mm²	∆ ∆ Ibs
11 82 130		<b>5 1/4</b> 130	<b>№ WW</b>	polished	multi-component grips	up to 3/64 0.03-1.19	<mark>32-18</mark> 0.01-0.75	0.20

### **Electronics Wire Stripper**

11

- > for single, multi and fine stranded cables having a diameter up to 1/32" (0.1 up to 0.8 mm), with plastic or rubber insulation
- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > opening spring for easy repetitive work
- > the mirror polish and fine film of oil offer effective rust protection no circuit faults caused by peeling chrome from plated tools
- > special tool steel, forged, oil-hardened







WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Stripping capacities AWG mm²	∆ ∆ lbs
11 92 140		5 1/2 140	<b></b>	mirror polished	multi-component grips	38 - 20 0.1 - 0.8	0.22

- > leaves wire undamaged due to precision-ground blade shapes, even multi-stranded conductors are stripped gently
- > during stripping, the wire is held firmly by clamping jaws
- > with adjustable length stop for consistent stripping length during repetitive work
- > a spring leads the stripper back to the starting position
- > pliers body: aluminum
- > blade: special tool steel; oil-hardened



Adjustable length stop for repetitive work



12 11 180: wire cross-sections in inches

12 21 180: wire cross-sections in mm<sup>2</sup>

		<b>←→</b> Inch				Stripping capacities						
Product Number	Packaging	mm		Pliers	Handles	mm	mm²	\( \sigma \)				
12 11 180		<b>7 1/4</b> 180	MM	black lacquered	with plastic grips	0.5 / 1.2 / 1.6 / 2.0	-	0.80				
12 21 180		<b>7 1/4</b> 180	MM	black lacquered	with plastic grips	-	0.5-0.75 / 1.0 / 1.5 / 2.5 / 4.0 / 6.0	0.81				
12 19 180	1 pair of spar	e blades	for 12 1	1 180								
12 29 180	1 pair of spar	pair of spare blades for 12 11 180 pair of spare blades for 12 21 180										

- > form-fit stripping of both standard and difficult-to-remove insulating materials made of PTFE, silicone, Radox®, Kapton® and rubber including multi-layer insulations
- > a second pair of blades holds the remaining insulation reliably in place
- > replaceable shaped blade adapted precisely to the respective conductor diameter
- > includes length stop for consistent stripping length during repetitive work
- > pliers body: steel
- > blade: special tool steel; oil-hardened



12 12 02 is the only Precision Installation Strippers that has the cable guide



Precise, complete clean cut of the insulation







Quality stripping due to precise shape of the blades

#### 12 12 02

The only tool with the cable guide for exact positioning of the cable in the stripping area of the blade

#### 12 12 11

For solar cables; specially adapted to multi-layered and RADOX® insulations; with additional cable support for a better centering in the stripping profiles

#### 12 12 13 / 12 12 14

For cables according to US specifications (AWG)

### Maximum cable cross-section (in mm<sup>2</sup>) per profile:



12 12 02



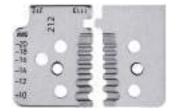
12 12 06



12 12 10



12 12 11



**12 12 13** - AWG Version



**12 12 14** - AWG Version

Radox® is a registered trademark of Huber & Suhner AG Kapton® is a registered trademark of E. I. du Pont de Nemours and Company

### Principle of operation with shaped blades

Proper and precise stripping with an annular cut through the complete insulation. This is particularly important with conductors, which must be stripped precisely.

This works without any problem even with difficult insulating materials

made of PTFE, Radox® and multi-layer insulations.



### **Precise and Reliable**

Two pairs of blades (1) completely cut the insulation.

Then the blade pairs move apart, and the insulation is removed (2). The pliers opens automatically after the stripping procedure.



Product Number	Packaging	<b>Inch</b> mm		Pliers	Handles	Stripping capacities mm²	AWG	∆ ∆ lbs
12 12 02		<mark>7 3/4</mark> 195				0.03-0.09 / 0.14 / 0.38 / 0.57 / 1.0 / 1.5 / 2.08	-	0.99
12 12 06		7 3/4 195	MM	burnished	multi-component grips	0.14-0.25 / 0.75 / 1.5 / 2.5 / 4.0 / 6.0	-	0.98
12 12 10		7 3/4 195				2.5 / 4.0 / 6.0 / 10.0	-	0.98
12 12 11		7 3/4 195	MM	burnished	multi-component grips	1.5 / 2.5 / 4.0 / 6.0	-	0.99
12 12 13		7 3/4 195			100	-	10 / 12 / 14 / 16 / 18 / 20	0.99
12 12 14		7 3/4 195	MM	burnished	multi-component grips	-	16 / 18 / 20 / 22 / 24 / 26	0.99



- > for single, multi and fine-stranded wire cables with plastic or rubber insulation; especially useful with THHN coated wire
- > adapts automatically to the respective cable diameter preventing damage to the conductor
- > cutting depth can be adjusted for different insulation by turning the red wheel
- > includes wire cutter for copper and aluminum wires, multi-stranded up to 8 AWG (10 mm<sup>2</sup>) and single stranded up to 10 AWG (6 mm<sup>2</sup>)
- > smooth operating mechanism
- > replaceable blade and plastic clamping jaws
- > the body is constructed of lightweight fiberglass-reinforced plastic
- > blade: special tool steel; oil-hardened



### 12 40 200

For thin ribbon cables up to 10 mm width in a single pass



12 40 200: Adjustable length stop



12 40 200: Precise stripping prevents damage to the conductor



Wire cutter for multi-stranded wire cables up to 8 AWG (10 mm<sup>2</sup>)



Product Number	Packaging	d→► Inch mm		Stripping capacities mm²	AWG	Length stop Inch mm	∆ <b>'</b> ∆ Ibs
12 40 200	X	8 200	MM	0.03 - 10.0	32 - 8	1/8 - 11/16 3.0 - 18.0	0.45
12 50 200		8 200	MM	2.5 - 16.0	14 - 6	-	0.44

12 49 01	1 pair of spare blades for 12 40 200
12 49 02	1 pair of spare clamping jaws for 12 40 200
12 49 03	Spare length stop for 12 40 200
12 59 01	1 pair of spare blades for 12 50 200
12 59 02	1 pair of spare clamping jaws for 12 50 200

Stripping without readjustment from 32–8 AWG Universal blade geometry – tough and robust Ideal grip design with excellent control Recessed wire cutter

- > automatic adjustment to all single-, multi and fine-stranded conductors with standard PVC insulation. Range of 32 AWG (0.03 mm²) to 8 AWG (10.0 mm²)
- > no manual fine adjustment necessary
- > no damage to the conductors
- > steel clamping jaws with integrated cutting edges hold the cable and prevent slipping
- > includes recessed wire cutter for Cu and Al conductors, stranded up to 8 AWG and single wire up to 10 AWG
- > particularly smooth running mechanics and very low weight
- > replaceable blades block and length stop
- > handle with soft-plastic zone for a steady grip
- > the body is constructed of lightweight fiberglass-reinforced plastic
- > blade: special tool steel; oil-hardened
- > NOT FOR THHN CABLE



Wire cutter for multi-stranded wire cables up to 8 AWG (10  $\mbox{mm}^2\mbox{)}$ 



Steel clamping jaws avoid slipping of the cable



Precise stripping from 32–8 AWG without readjustment





# MultiStrip

### **Patented Mechanics**

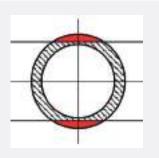
The incision depth of the stripping blade adjusts automatically to the diameter of the wire and to the thickness of all standard insulating materials.

There is no need for any of the manual adjustment still necessary when other conventional pliers with a wide wire-stripping range are used.

### Mode of operation of straight cutters

An incision is made in the red area only.

Not suitable for highly-flexible or armored insulation materials or multi-layered insulation such as THHN.



Product Number	Packaging	<b>←→</b> Inch mm		Stripping capacities mm²	AWG	∆ ∆ Ibs						
12 42 195	X	<b>7 1/2</b> 190	MM	0.03 - 10.0	32 - 8	0.31						
12 49 21	Spare blades block for	or 12 42 195										
12 49 23	Spare length stop for	pare length stop for 12 42 195										

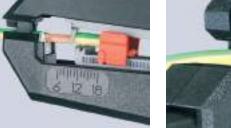
- > compact standard tool at a favorable price for common cable diameters and insulating materials
- > for single, multi and fine stranded cables of 24 AWG (0.2 mm<sup>2</sup>) up to 10 AWG (6 mm<sup>2</sup>) with standard PVC insulation
- > adapts automatically to the respective cable diameter preventing damage to the conductor
- > comfortable and lightweight for easy operation
- > narrow head style for use in confined areas
- > with wire cutter for copper and aluminum wires up to 14 AWG
- $\rightarrow$  with adjustable length stop from 1/4" -11/16" (6.0 -18.0 mm) for stripping the same lengths during repetitive work
- > the body is constructed of lightweight fiberglass-reinforced plastic
- > blades: special tool steel; oil-hardened, interchangeable















Precise stripping from 24 AWG to 10 AWG (0.2 up to 6.0 mm²)

Wire cutter up to 14 AWG (2.5 mm<sup>2</sup>)

Stripping in confined areas

Product Number	Packaging	<b>d→</b> Inch mm		Stripping capacities mm <sup>2</sup>	AWG	∆¹∆ lbs						
12 62 180	X	<b>7 1/4</b> 180	MM	0.2 - 6.0	24 - 10	0.35						
12 69 21	1 pair of spare blades	for 12 62 180										
12 69 23	Spare length stop for	Spare length stop for 12 62 180										

### **Automatic Flat Cable Stripping Pliers**

- > for PVC-insulated flat cables up to a max. 15/32" (12 mm) width and 18 AWG - 14 AWG (0.75 to 2.5 mm<sup>2</sup>)
- > adapts automatically to the various conductor heights which prevents damage to the conductor
- > allows long stripping lengths
- > replaceable blades
- > smooth operating mechanism
- > the body is constructed of lightweight fiberglass-reinforced plastic
- > blade: special tool steel; oil-hardened



Product Number	Packaging	<b>←→</b> Inch mm		Stripping capacities in square inch mm²	۵۵ Ibs						
12 64 180		<mark>7 1/4</mark> 180	••••••••••••••••••••••••••••••••••••••	0.75 - 2.5	0.27						
12 69 31	Spare blades for	Spare blades for 12 64 180									

For control and sensor cables / actuator cables, also for stripping flexible 3-core feed cables and extension cable

Automatic adjustment to cable diameters between 4.4 and 7.5 mm No damage to the inner conductor or shield braid

- > allows cable to pass through center of pliers for mid-line strip or stripping longer lengths
- > suitable for highly flexible PUR and PVC cable sheathing and rubber leads such as H05, etc.
- > long stripping lengths possible
- > body: plastic, fiberglass-reinforced
- > exchangeable blades: special tool steel, oil-hardened





Sectional view of an extension lead



12 74 180 SB





Required stripping length easy to read

Complex cutter design for precise and damage-free stripping of round cables

Product Number	Packaging	<b>←→</b> mm	Stripping capacities Ø mm	∆ ∆ lbs				
12 74 180 SB	X	175	4.4 - 7.5	0.26				
12 79 31		1 pair o	air of spare blades for 12 74 180 SB					

### **Mini Wire Stripper**

**12** 





- $\bf 12~80~040~SB$  For thin copper conductors dia. 36 26 AWG (0.12 to 0.4 mm)
- 12 80 100 SB

For thin copper conductors dia. 28 – 18 AWG (0.3 – 1.0 mm)

- > precise stripping due to the tool's gradual adjustment to the conductor's diameter
- > includes wire cutter
- > adjustable length stop from 5/32" 19/32" (4.0 15.0 mm)
- > includes locking device
- > housing: plastic, impact-resistant



12 80 100 SB /////

Product Number	Packaging	<b>d→</b> Inch mm		Stripping capacities Ø mm	AWG	∆†∆ lbs
12 80 040 SB	X	4 100	4444	0.12 - 0.4	36 - 26	0.08
12 80 100 SB	X	<mark>4</mark> 100	MM	0.30 - 1.0	28 - 18	0.08

- > the ideal 4-in-1 pliers for cable and wire work
- > for gripping and bending wire
- > for cutting medium and hard wire
- > precision cutting edges induction hardened, cutting edge hardness (approx. 60 HRC)
- > with precision stripping holes
- > for crimping ferrules (end sleeves)
- > vanadium steel; forged, multi-stage oil-hardened

### 13 02 614 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system







Cutting





Crimping 20-14 AWG (0.5 to 2.5 mm<sup>2</sup>)



















						Cutting	apacities			
Product Number	Packaging	<b>d→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Stripping capacities mm²	AWG	∆¹∆ Ibs
13 01 160	Х	6 1/4 160	black	polished	non-slip plastic coated	3/32 2.5	1/16 1.6	0.5 - 0.75 / 1.5 / 2.5		0.24
13 02 160	X	6 1/4 160	atramentized	polistied	multi-component grips	3/32 2.5	1/16 1.6	0.3 - 0.737 1.37 2.3	-	0.31
13 01 614	X	6 1/4 160			non-slip plastic coated	3/32 2.5	1/16 1.6	-		0.25
13 02 614 T BKA	X	6 1/4 160	black atramentized	polished	multi-component grips, integrated tether attachment point	3/32 2.5	1/16 1.6	-	10 / 12 / 14	0.32

Multifunctional – dismantling, stripping and cutting with one pair of pliers

For time-saving dismantling and stripping of all common round and damp-proof installation cables (e.g. NYM cable)

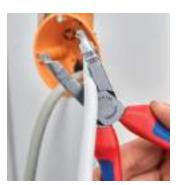
Simplified access especially to deeply mounted flush sockets due to slim head design and optimally angled cable sheath cutter Strip cables easily and without damage thanks to circular cutting edge with depth limit

- > dismantles outer sheath of cable easily and without damage due to the circular cutting edge with depth limit
- > precision wire stripping holes for 1.5 and 2.5 mm<sup>2</sup> conductors
- > integrated diagonal cutters for cutting and trimming conductors, wires, small screws and nails
- > cutting blades induction hardened to (approx. 61 HRC)
- > 30% lighter in weight than comparable pliers
- > slim head design allows for easy access into deeply mounted sockets









Cutting cable up to  $\emptyset$  13 mm



Cutting when shortening single conductors

Product Number	Packaging	<b>4→</b> Inch mm	Pliers	Head	Handles	Dismantling capacities Ø mm	Stripping capacities Ø mm²	Ø mm	Ø mm	∆¹∆ Ibs
		6 1/2	black			'				
13 42 165		165	atramentized	polished	with multi-component grips	8 - 13	1.5 / 2.5	3.2	2.2	0.39

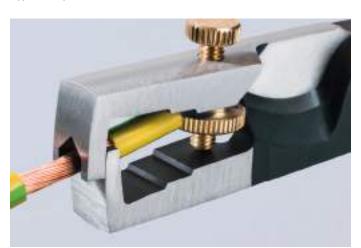
### Insulation strippers with Cable Shears – two essential electrical installation tools in one pair of pliers

- > integrated cable shears for clean cutting of copper and aluminum cables without crushing
- > universal adjustment of the wire stripping blades with knurled screw
- > slim design allows for easy access into confined areas
- > for stripping single, multiple and fine stranded conductors with plastic and rubber insulation up to a max. Ø 5 mm or 10 mm<sup>2</sup> conductor cross-section
- > Graduated jaw is a visual guide when stripping wire in standard lengths 7/16" (11 mm) and 5/8" (16 mm)

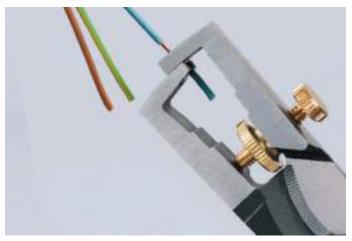


Induction hardened shear blade with precisely ground cutting edges for crushing-free cutting of copper cables up to 9/16" (15 mm Ø) (5 x 2.5 mm²)





Lock nut prevents any unintentional adjustment



Visual length markings (steps) provide support during repeated stripping of wire in standard lengths 7/16" (11 mm) and 5/8" (16 mm)

					Cutting capacities	Stripping	pping capacities		
Product Number	Packaging	<b>d→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	AWG	Ømm	∆∆ lbs
13 62 180		<b>7 1/4</b> 180	black atramentized	polished	with multi-component grips	<mark>9/16</mark> 15	8	5.0	0.44

- > multifunctional pliers for electrical installation with 6 functions; to grip flat and round material, for bending, deburring, cutting cable, stripping and crimping ferrules (end sleeves)
- > smooth surfaces near the tips grip single conductors without damaging them; serrated gripping surfaces and pipe grip for gripping flat and round material
- > clear-cut outside edge on the jaw for working on flush-mounted junction boxes and deburring feed-through holes
- > stripping holes for 12 and 14 AWG (0.75 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>)
- > crimp die for ferrules (end sleeves) 12–20 AWG (0.5–2.5 mm<sup>2</sup>)
- > cable shears with induction hardened precision cutting edges for copper and aluminum cables up to 19/32" dia. (5 x 2.5 mm² / dia. 5 mm)
- > slim dimensions for easy access in confined areas
- > bolted joint: precise, zero-backlash operation of pliers
- > high-grade special tool steel; forged, multi stage oil-hardened

### 13 82 8 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system

















							Cutt capad				
Product Number	Packaging	Inch mm		Pliers	Head	Handles	Ø Inch	& AWG	Stripping capacities for cross-sections AWG	Crimping capacities AWG	
13 81 8	X	<mark>8</mark> 200		black atramentized	polished	non-slip plastic coated	9/16	0	12 and 14	12 - 20	0.52
13 82 8	Х	8 200		black	nolishod	multi component avinc	9/16	0	12 and 14	12 - 20	0.59
13 82 8 T BKA	Х	<mark>8</mark> 200		atramentized	polished	multi-component grips	9/16	0	12 and 14	12 - 20	0.60
13 88 8 US	X	8 200	<b>≜</b> 1000 V ASTM	black atramentized	polished	insulated, multi-component grips, ASTM-tested	9/16	0	12 and 14	12 - 20	0.60

### Wire Stripping Tweezers – Coated

### 15 11

- ${\scriptstyle >}$  for stripping off varnished insulation on copper wires
- > blades for other wire diameters available as spare parts
- > tweezers body: spring steel, oil-hardened
- > plastic handles







15 11 120

Product Number	Packaging	<b>←→</b> Inch mm	Stripping capacities  Ø Inch Ø mm	∆ ∆ lbs
15 11 120		4 3/4 120	1/64 0.6	0.08
15 19 005	1 pair of spare blades f	or 15 11 120 Ø 0.5 mm 1/64	4"	
15 19 006	1 pair of spare blades f	or 15 11 120 Ø 0.6 mm 1/64	1"	
15 19 008	1 pair of spare blades f	or 15 11 120 Ø 0.8 mm 1/3	2"	
15 19 010	1 pair of spare blades f	or 15 11 120 Ø 1.0 mm 3/64	1"	

### **Insulation Strippers**

- > for stripping thin cables
- > accurate boring to match diameter of wire, precise stripping prism; non-adjustable
- > includes opening spring for easy repetitive work
- > chrome vanadium electric steel; forged, oil-hardened





Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Stripping capacities  Ø Inch Ø mm	∆ ∆ Ibs
15 51 160		6 1/4 160				1/64 0.5	0.24
15 61 160		6 1/4 160	MM	polished	non-slip plastic coated	1/64 0.6	0.24
15 81 160		6 1/4 160				1/32 0.8	0.24

- > for stripping all common round cables
- > self-tightening holding lever
- > with adjusting screw for cutting depth adjustment
- > turnable blade for circular and longitudinal cutting
- > spare blade inside the handle
- > secure grip due to soft component material on handle and holding lever to avoid slipping
- > housing: plastic, impact-resistant



With knife and hook blade, protective cap included







16 20 16 SB /////



16 20 165 SB ////

Product Number	Packaging	<b>←→</b> Inch mm		Stripping capacities  Ø Inch Ø mm	∆¹∆ Ibs
16 20 16 SB	X	<b>5 1/8</b> 130	MM	3/16 - 5/8 4.0 - 16.0	0.17
16 20 165 SB	X	6 1/2 165		5/16 - 1 1/8 8.0 - 28.0	0.18
16 29 165	Spare blade for 16 20	16 SB / 16 20 165 SB			

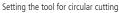
### **Dismantling Tool**

- > for dismantling round cable sheaths made of PVC, rubber, silicone or PTFE from 6.0 29.0 mm dia.
- > self-tightening holding lever
- > with knurled nut for cutting depth adjustment
- > changing from circular to longitudinal cutting by turning the tool body
- > spiral cutting for removing intermediate pieces
- > replaceable blade
- > housing: plastic, impact-resistant



16 30 135 SB /////







Longitudinal cut



Spiral cutting

Product Number	Packaging	d→ Inch mm		Stripping capacities Ø Inch Ø mm	∆ <sup>™</sup> ∆ Ibs
16 30 135 SB	X	<b>5</b> 1/4 133	MM	1/4 - 1 1/8 6.0 - 29.0	0.22
16 39 135	Spare blade for 16 30	135 SB			

- > for dismantling round cables exceeding 1" (25.0 mm) dia.
- > removes all kinds of insulation layers
- > suitable for longitudinal and circular cutting
- > cutting depth can be adjusted up to 13/64" (5.0 mm)
- > replaceable blade (both sides can be used)
- > tool body: plastic, fiberglass-reinforced



Adjustable cutting depth







Longitudinal cut



Turning the tool for circumferential cut



Circular cut

Product Number	Packaging	←→ Inch mm	Stripping capacities  Ø Inch Ø mm	∆ lbs
16 40 150	X	<mark>6</mark> 150	>1 >25	0.36
16 49 150	Spare blade for 16 40 1	150		

### **Stripping Tool** for coaxial cables

- > for stripping coaxial cables (RG 58, RG 59 and RG 62)
- > for stripping outer sheath, shield and insulation in a single process
- > with three built-in blades
- > the cutting depth of each blade can be adjusted individually with hexagonal key (Allen key)
- > the blade spacing remains constant
- > housing: plastic, impact-resistant



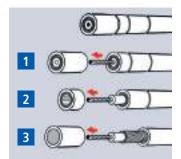
16 60 05 SB WW



3 stripping steps in one operation



Interior layers uncovered individually



Dismantling of coaxial cable in three steps



		<b>←→</b> Inch			ర్గా
Product Number	Packaging	mm		Cable type	lbs
16 60 05 SB	X	4 1/8 105	MM	RG 58, RG 59 and RG 62	0.12

### **Dismantling tool**

for data cables

16 65

- > for stripping UTP and STP data cables with diameters of 11/64" to 25/64" (4.5 to 10.0 mm)
- > stripping device for 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4.0 mm<sup>2</sup>
- > double shell, folding back stripping tool
- > with opening spring and locking lever
- > clip for safe transport

> body: plastic, fiberglass-reinforced

> blades: special tool steel; oil-hardened, TiN-coated





Product Number	Packaging	<b>d→</b> Inch mm		Cable type	Stripping capacities Ø Inch Ø mm	Stripping capacities mm²	∆ ∆ lbs
16 65 125 SB	X	5 125	MM	CAT 5, CAT 6, CAT 7, Twisted-Pair (UTP/STP)	11/16 - 25/64 4.5 - 10.0	0.2 - 4.0	0.11

### **Universal Dismantling Tools**

16

- > for dismantling and stripping all common round and damp-proof installation cables between 3 x 1.5 mm $^2$  up to 5 x 2.5 mm $^2$
- > for use in conduit and distribution boxes
- > double shell, folding back stripping tool
- > with opening spring and locking lever
- > clip for safe transport
- > body: plastic, fiberglass-reinforced

### 16 85 125 SB

With additional blade for longitudinal cuts; telescopic blade inside; stripping device for  $0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4.0 \ mm^2$ ; with integrated cable guide for longitudinal cut. This enables rigid insulation (e.g. halogen-free) to be stripped easily









16 85 125 SB /////

Product Number	Packaging	<b>d</b> → Inch mm		Stripping capacities Ø mm	Stripping capacities mm²	Cable type	∆¹∆ Ibs
16 80 125 SB	X	5 125	MM	8.0 - 13.0		round cable. e.g.: 3 x 1.5 mm² up to 5 x 2.5 mm²	0.12
16 85 125 SB	X	5 125	MM	8.0 - 13.0	0.2 - 4.0	round cable. e.g.: 3 x 1.5 mm² up to 5 x 2.5 mm²	0.1

For fast and precise dismantling and stripping of all common round and damp-proof installation cables (e.g. NYM cable 3 x 1.5 mm $^2$  up to 5 x 2.5 mm $^2$ ), data cable and coax cable.

Innovative, ergonomic pistol grip design for easy cutting, stripping and longitudinal cutting of the sheath.

- > conical, slim tool ends for better access in confined areas
- > stripping holes for 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4 mm<sup>2</sup>
- > location ridges between stripping holes make for easy alignment of wire
- > opening spring and locking device make the tool easy to open and secure
- > easy insertion of coax and data cable
- > multi-component design with a soft plastic zone for comfortable use and a secure grip
- > housing: plastic, fiberglass-reinforced



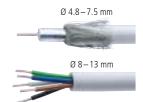
**16 95 01 SB** version for right-handers

PAT. PEND.

**16 95 02 SB** version for left-handers

### 16 95 02 SB

ErgoStrip® L for left-handers









Stripping of NYM cable



Concealed cutting blade for stripping the outside cable sheath



Stripping single conductor wire



Stripping data cable



Stripping coax cable sheath



Stripping the internal portion of the coax cable

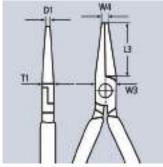
Product Number	Packaging	<b>←►</b> Inch mm	Version		Wire stripping for round cable Ø mm	Wire stripping for conductors and strands mm²	Wire stripping for data cable	Wire stripping for coax cable Ø mm	∆∆ lbs
16 95 01 SB	X	5 1/4 135	Right-handed	MM	8 - 13	0.2 - 4.0	CAT 5 - 7 Twisted pair (UTP/STP)	4.8 - 7.5	0.21
16 95 02 SB	X	5 1/4 135	Left-handed	MM	8 - 13	0.2 - 4.0	CAT 5 - 7 Twisted pair (UTP/STP)	4.8 - 7.5	0.21

### **Round pliers**

with cutting edge
Jewelers Pliers, DIN ISO 5743

19





- > for fine wire and working with jewelry
- > ideal for cutting and bending work, also in electronics
- > bending wire loops
- > precision ground round jaws with fine, pointed tips
- > cutting edges induction hardened (approx. 60 HRC)
- > vanadium steel; forged, multi stage oil-hardened

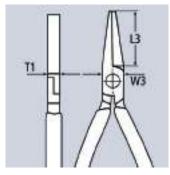


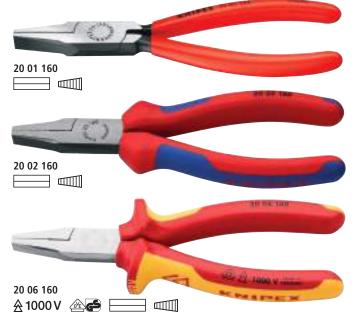
							Cutting o	apacities						
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	D1 Inch mm	L3 Inch mm	T1 Inch mm	W3 Inch mm	W4 Inch mm	∆¹∆ Ibs
19 01 130		5 1/4 130	8	black atramentized	polished	non-slip plastic coated	3/32 2.2	1/16 1.6	3/64 1.0	1 1/4 32.0	5/16 8.0	17/32 13.5	5/64 2.0	0.16

### Flat Nose Pliers DIN ISO 5745

- > flat, short, wide jaws
- > knurled gripping surfaces
- > special tool steel; forged, oil-hardened



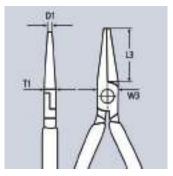


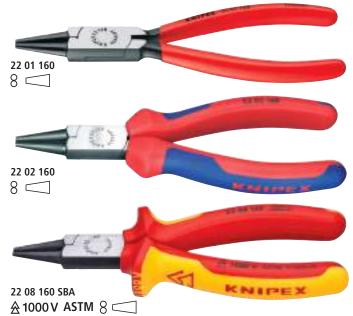


							D	imensior	ıs	
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	W3 Inch mm	T1 Inch mm	∆¹∆ Ibs
20 01 125		5 125					1 1/16 27.0	37/64 14.5	5/16 8.0	0.18
20 01 140		5 1/2 140		black atramentized	P. I. I.	non elip plastic sontod	1 7/64 28.0	39/64 15.5	3/8 9.5	0.24
20 01 160		6 1/4 160		DIACK Attamentized	polished	non-slip plastic coated	1 3/16 30.0	43/64 17.0	3/8 9.5	0.32
20 01 180		7 1/4 180					1 3/8 35.0	3/4 19.0	25/64 10.0	0.41
20 02 140		6 1/4 140			12.1	let	1 3/32 28.0	39/64 15.5	3/8 9.5	0.30
20 02 160		6 1/4 160		black atramentized	polished	multi-component grips	1 3/16 30.0	43/64 17.0	3/8 9.5	0.38
20 06 160		6 1/2 165	<b>≙</b> 1000 V <b>△€</b>	chrome plated	polished	insulated, multi-component grips, VDE-tested	1 3/16 30.0	43/64 17.0	3/8 9.5	0.41

- > for bending wire loops
- > round, short jaws; smooth ground
- > smooth tips
- > special tool steel; forged, oil-hardened





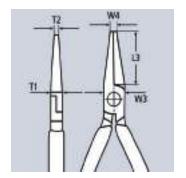


								Dimer	nsions		
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	W3 Inch mm	D1 Inch mm	T1 Inch mm	∆¹∆ Ibs
22 01 125		<mark>5</mark> 125					1 1/16 27.0	<b>37/64</b> 14.5	5/64 2.0	<b>5/16</b> 8.0	0.16
22 01 140		5 1/2 140	8	black atramentized	polished	non-slip plastic coated	1 7/64 28.0	21/32 16.5	3/32 2.5	3/8 9.5	0.22
22 01 160	X	6 1/4 160					1 3/16 30.0	<b>45/64</b> 18.0	1/8 3.0	3/8 9.5	0.30
22 02 140		5 1/2 140	8	black atramantizad	nalishad	multi component avins	1 7/64 28.0	21/32 16.5	3/32 2.5	3/8 9.5	0.29
22 02 160		6 1/4 160	8	black atramentized	polisned	multi-component grips	1 3/16 30.0	<b>45/64</b> 18.0	1/8 3.0	3/8 9.5	0.37
22 08 160 SBA	X	6 1/4 160	<b>≙1000 V ASTM</b> 8 □	black atramentized	polished	insulated with multi-component grips, ASTM-tested	1 3/16 30.0	<b>45/64</b> 18.0	1/8 3.0	3/8 9.5	0.40

### Flat Nose Pliers with cutting edges

Precision Mechanics Pliers
DIN ISO 5745

- > suitable for gripping and cutting work in fine mechanics
- > flat, long and tapered jaws
- > cutting edge hardness (approx. 60 HRC)
- > high-grade special tool steel; forged, multi stage oil-hardened



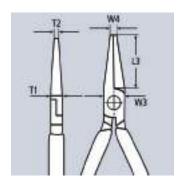


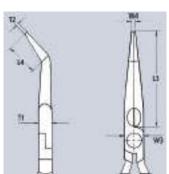
					Cutting of	apacities			Dimension	S		
Product Number	Packaging	<b>4→</b> Inch mm	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	T1 Inch mm	L3 Inch mm	W3 Inch mm	W4 Inch mm	T2 Inch mm	∆ ∆ lbs
23 01 140		5 1/2 140	polished	plastic coated	3/32 2.5	1/16 1.6	<mark>9/32</mark> 7.0	1 3/8 35.0	31/64 12.5	1/8 3.0	11/64 4.5	0.17

- > suitable for fine gripping and cutting work
- > pointed, half-round jaws
- > serrated gripping surfaces
- > cutting edges for soft, medium hard and hard wire
- > cutting edges induction hardened, cutting edge hardness (approx. 61 HRC)
- > vanadium steel; forged, multi-stage oil-hardened











							Cutting of	apacities			Dimen	sions			
Product Number	Packaging	Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	L3 Inch mm	L4 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆¹∆ Ibs
25 01 125		5 125					3/32 2.2	1/16 1.6	1 1/16 27.0	-	1/2 13.0	9/32 7.0	3/32 2.5	5/64 1.8	0.16
25 01 140		5 1/2 140	0 -	black atramentized	polished	plastic coated	3/32 2.5	1/16 1.6	1 21/32 42.0	-	19/32 15.0	5/16 8.0	3/32 2.5	5/64 2.0	0.20
25 01 160	Х	6 1/4 160					3/32 2.5	1/16 1.6	1 31/32 50.0	-	21/32 16.5	23/64 9.0	1/8 3.0	3/32 2.5	0.25
25 02 140	X	5 1/2 140	0	black	polished	multi-	3/32 2.5	1/16 1.6	1 21/32 42.0	-	19/32 15.0	5/16 8.0	3/32 2.5	5/64 2.0	0.24
25 02 160	X	6 1/4 160		atramentized	polistieu	component grips	3/32 2.5	1/16 1.6	1 31/32 50.0	-	21/32 16.5	2 <mark>3/64</mark> 9.0	1/8 3.0	3/32 2.5	0.32
25 08 160 SBA	X	6 1/4 160	≙ 1000 V ASTM	black atramentized	polished	insulated, multi-component grips, ASTM-tested	3/32 2.5	1/16 1.6	1 31/32 50.0	-	21/32 16.5	23/64 9.0	1/8 3.0	3/32 2.5	0.34
25 21 160	X	6 1/4 160	<b>∠</b> 40° ⊖ <b>□</b> □□ <b>▶</b> ◀	black atramentized	polished	plastic coated	3/32 2.5	1/16 1.6	1 31/32 50.0	29/32 23.0	21/32 16.5	23/64 9.0	1/8 3.0	3/32 2.5	0.25

### Elastic tips: stable even when twisted

- > distortion-tolerant, flexible precision tips
- > half-round, long, pointed jaws
- > hardened cutting edges (approx. 61 HRC) for soft, medium hard and hard wire
- > vanadium steel; forged, multi-stage oil-hardened

TI

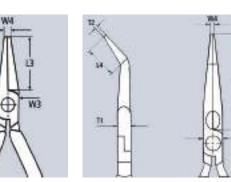
Integrated stripping hole in cutting blade. Strips 12 AWG wire

### 26 12 200 T BKA / 26 22 200 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system









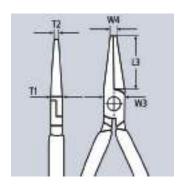


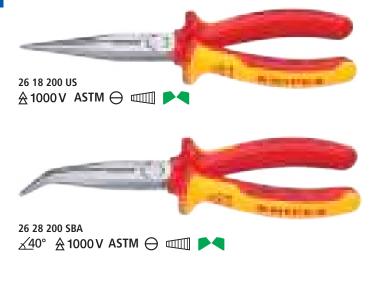
								ting cities			Dime	nsions			
Product Number	Packaging	Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	L3 Inch mm	L4 Inch mm	T1 Inch mm	W3 Inch mm	W4 Inch mm	T2 Inch mm	۵Ż
26 11 200	X	8 200	0	black atramentized	polished	plastic coated	1/8 3.2	3/32 2.2	2 7/8 73.0	-	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.3
26 11 200 S1	X	<mark>8</mark> 200		DIACK AUGINETILIZED	polistieu	piastic coated	1/8 3.2	3/32 2.2	2 7/8 73.0	-	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.3
26 12 200	X	<mark>8</mark> 200	$\Theta \blacksquare \blacksquare \blacksquare \blacksquare$	black atramentized	polished	multi-component grips	1/8 3.2	3/32 2.2	2 7/8 73.0	-	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.44
26 12 200 T BKA	X	<mark>8</mark> 200	0 1	black atramentized	polished	multi-component grips, integrated tether attachment point	1/8 3.2	3/32 2.2	2 7/8 73.0	-	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.4
26 21 200	Х	<mark>8</mark> 200	<b>∠</b> 40° ⊖ □□□	black atramentized	polished	plastic coated	1/8 3.2	3/32 2.2	2 7/8 73.0	29/32 23.0	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.38
26 22 200	X	8 200	<u>√40°</u> ⊖ □□□	black atramentized	polished	multi-component grips	1/8 3.2	3/32 2.2	2 7/8 73.0	29/32 23.0	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.43
26 22 200 T BKA	X	8 200	<u>√</u> 40° ⊖ □□□	black atramentized	polished	multi-component grips, integrated tether attachment point	1/8 3.2	3/32 2.2	2 7/8 73.0	29/32 23.0	3/8 9.5	45/64 18.0	1/8 3.0	3/32 2.5	0.4

> distortion-tolerant, flexible precision tips

DIN ISO 5745 IEC 60900 DIN EN 60900

- > half-round, long, pointed jaws
- > hardened cutting edges (approx. 61 HRC) for soft, medium hard and hard wire
- > vanadium steel; forged, multi-stage oil-hardened





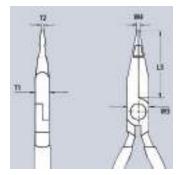
							Cutting o	apacities		Di	mension:	S		
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	L3 Inch mm	T1 Inch mm	W3 Inch mm	W4 Inch mm	T2 Inch mm	∆†∆ Ibs
26 18 200 US	X	<mark>8</mark> 200	≙ 1000 V ASTM	black atramentized	polished	insulated, multi- component handles, ASTM-tested	1/8 3.2	3/32 2.2	2 7/8 73.0	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.45
26 28 200 SBA	X	8 200	∡40° № 1000 V ASTM ← □□□□□	black atramentized	polished	insulated, multi- component handles, ASTM-tested	1/8 3.2	3/32 2.2	2 7/8 73.0	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.46



### **Snipe Nose Pliers with Center Cutter**

Telephone Pliers **DIN ISO 5743** 

27





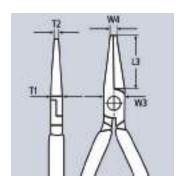
- > grips and separates single wires in harnesses
- > center cutter for soft wire
- > half-round jaws
- > serrated gripping surfaces
- > chrome vanadium electric steel; forged, oil-hardened

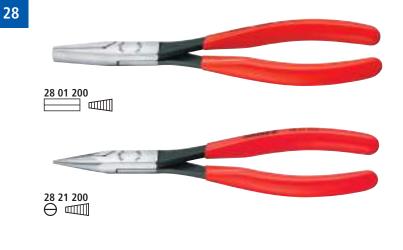


							Dimensions			
Product Number	Packaging	<b>←→</b> Inch mm	Head	Handles	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆ ∆ lbs
27 01 160		6 1/4 160	polished	plastic coated	1 27/32 47.0	21/32 16.5	3/8 9.5	1/8 3.0	5/64 2.0	0.27

## Long Reach Needle Nose Pliers DIN ISO 5743

- > suitable for gripping and assembly work
- > serrated gripping surfaces
- > high-grade special tool steel; forged, oil-hardened





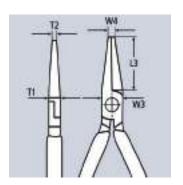
								[	Dimension	S		
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆'∆ Ibs
28 01 200		8 200		black atramentized	polished	plastic coated	1 19/64 33.0	17/32 13.5	13/32 10.5	5/32 4.0	13/32 10.5	0.43
28 21 200		<mark>8</mark> 200	$\Theta$	black atramentized	polished	plastic coated	1 11/32 34.0	17/32 13.5	13/32 10.5	1/8 3.0	1/8 3.0	0.41

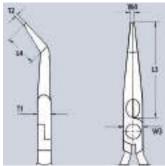
### Long assembly pliers with wave profile

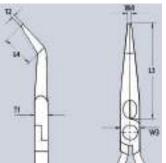
Long slim design is perfect for gripping and assembly work in hard

Deep parts can be easily reached using the slim, half-round tips Grips up to 2 1/4"

- > careful yet reliable gripping, holding and guiding of small copper pipes, screws and cables as well as other round parts due to milled grooves with smooth surfaces
- > four small pulling grooves in jaws will grab tightly when holding and pulling round objects
- > serrated gripping area for holding on to round parts near base of jaws
- > particularly suitable for work in the automotive trade and in mechanical engineering
- > slim yet robust tool
- > forged from special tool steel; oil-hardened and tempered





















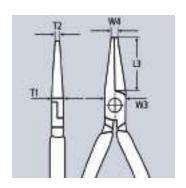
	311 31		, 11 3, 3	3 3					Dimei	nsions			
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	L4 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆ ∆ lbs
28 71 280	X	11 280	0	black atramentized	polished	non-slip plastic coated	3 76.5	-	25/32 20.0	23/64 9.0	1/8 3.0	3/32 2.5	0.52
28 81 280	Х	11 280	<b>∠</b> 45° ⊖ □□□	black atramentized	polished	non-slip plastic coated	2 3/4 70.0	25/32 20.0	25/32 20.0	23/64 9.0	3/32 2.5	3/32 2.5	0.52

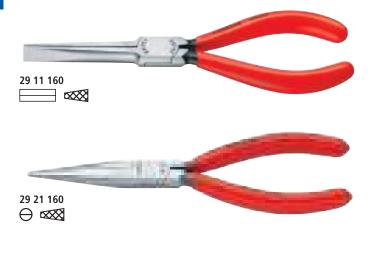


## Telephone Pliers DIN ISO 5745

- > cross-hatched gripping surfaces, knurled > chrome vanadium electric steel; forged, oil-hardened

29 21 160 Extra slim fine tips; suitable for soldering work





								Dii	mensions			
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆ ∆ lbs
29 11 160	ruckaging	6 1/4			polished	plastic coated	2 11/64	35/64	5/16	3/32	21/64	0.23
29 11 100		160	XXX	black atramentized	polistied	piastic coated	55.0	14.0	8.0	2.5	8.5	0.23
29 21 160		6 1/4	$\Theta$	black atramentized	polished	plastic coated	2 1/8	35/64	23/64	5/64	5/64	0.25
		160			P	ļ	54.0	14.0	9.0	2.0	2.0	

30 11 160 

- > heavy-duty gripping pliers
- > different jaw styles for a wide range of applications
- > chrome vanadium electric steel; forged, oil-hardened

**Style 1** Long, trapezoidal jaws; serrated gripping surfaces

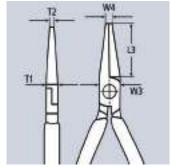
### Style 2

Long, half-round jaws; serrated gripping surfaces

### Style 3

Long, round jaws; smooth gripping surfaces









										imensio	ns		
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Style	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆∆ Ibs
30 11 140		5 1/2 140					1	1 21/32 42.0	19/32 15.0	5/16 8.0	3/32 2.5	5/32 4.0	0.19
30 11 160		6 1/4 160		black atramentized	polished	plastic coated	1	1 53/64 46.5	21/32 16.5	3/8 9.5	1/8 3.0	13/64 5.0	0.27
30 11 190		7 1/2 190					1	1 31/32 50.0	47/64 18.5	3/8 9.5	1/8 3.0	<mark>9/32</mark> 7.0	0.31
30 16 160		6 1/4 160	À 1000 V △ ←	chrome plated	chrome plated	insulated, multi-component grips, VDE-tested	1	1 53/64 46.5	21/32 16.5	3/8 9.5	1/8 3.0	13/64 5.0	0.33
30 21 140		5 1/2 140					2	1 21/32 42.0	19/32 15.0	5/16 8.0	3/32 2.5	5/64 2.0	0.21
30 21 160		6 1/4 160	$\Theta$	black atramentized	polished	plastic coated	2	1 31/32 50.0	21/32 16.5	3/8 9.5	1/8 3.0	3/32 2.5	0.27
30 21 190		7 1/2 190					2	1 31/32 50.0	47/64 18.5	5/16 8.0	1/8 3.0	3/32 2.4	0.30
30 31 160		6 1/4 160	8	black atramentized	polished	plastic coated	3	1 19/32 41.0	21/32 16.5	3/8 9.5	13/64 5.0	3/32 2.5	0.24
30 36 160		<mark>6 1/4</mark> 160	<b>≙ 1000 V △€</b>	chrome plated	chrome plated	insulated, multi-component grips, VDE-tested	3	1 19/32 41.0	21/32 16.5	3/8 9.5	13/64 5.0	3/32 2.5	0.31

- for the installation of wedge bulb lamps plastic coated gripping surfaces
- > chrome vanadium electric steel; forged, oil-hardened

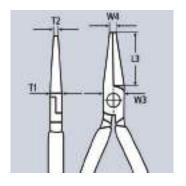


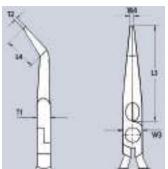


Product Number	Packaging	<b>4→</b> Inch mm	Pliers	Head	Handles	∆ Ibs
30 41 160		6 1/4 160	black atramentized	polished	plastic coated	0.29

## **Gripping Pliers**Needle Nose Pliers, DIN ISO 5743

- > precision pliers for assembly, bending and adjusting work > with extra-long jaws: length of jaws 2 11/64" (55.0 mm)
- > smooth gripping surfaces and edges
- > chrome vanadium electric steel; forged, oil-hardened



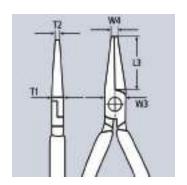


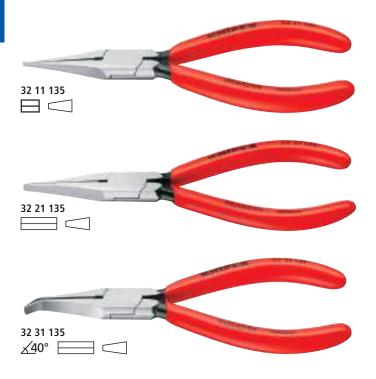




									Dimens	sions			
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	L4 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆ <sup>1</sup> ∆ lbs
31 11 160	rackaging	6 1/4 160		black atramentized	polished	plastic coated	2 11/64 55.0	-	5/8 16.0	1 <mark>9/64</mark> 7.5	5/64 1.8	3/32 2.5	0.22
31 21 160		6 1/4 160	<u>∡4</u> 5° ⊟ □	black atramentized	polished	plastic coated	2 11/64 55.0	1 1/16 27.0	5/8 16.0	19/64 7.5	5/64 1.8	3/32 2.5	0.21

- > perfect for gripping small wires and bending contact and relay springs
- > polished gripping surfaces
- > smooth edges
- > high-grade special tool steel; forged, oil-hardened



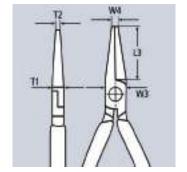


							Dimensions					
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆¹∆ Ibs
32 11 135		5 1/4 135		black atramentized	polished	plastic coated	1 11/32 34.0	31/64 12.5	9/32 7.0	1/16 1.4	1/16 1.5	0.17
32 21 135		5 1/4 135		black atramentized	polished	plastic coated	1 11/32 34.0	31/64 12.5	9/32 7.0	1/16 1.4	9/64 3.5	0.16
32 31 135		5 1/4 135	<u>∡40°</u>	black atramentized	polished	plastic coated	1 1/4 32.0	31/64 12.5	9/32 7.0	1/16 1.4	9/64 3.5	0.16

## Duckbill Pliers DIN ISO 5743



- > duckbill shaped jaws 23/64" (9.0 mm) wide at the tip and tapering to 1/16" (1.5 mm) thickness
- > smooth gripping surfaces
- > chrome vanadium electric steel; forged, oil-hardened





						Dimensions					
Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Head	Handles	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆'∆ Ibs
33 01 160	Х	6 1/4 160	black atramentized	polished	plastic coated	2 11/64 55.0	19/32 15.0	19/64 7.5	1/8 3.0	23/64 9.0	0.23

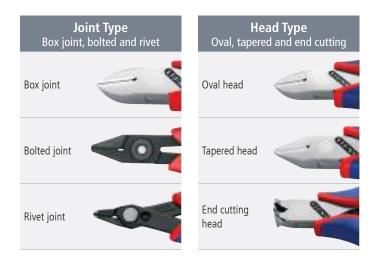


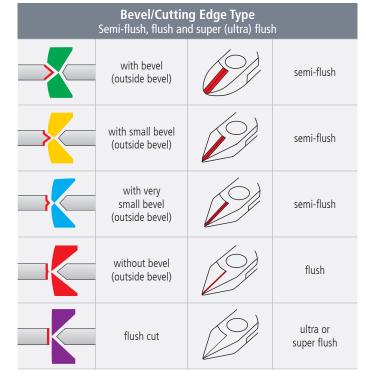
# Which Electronics Pliers is right for you?

KNIPEX has a full line of gripping and cutting electronics pliers. They are available in a variety of jaw types, joint and head styles, bevel types and can have additional features to make working with our products simple and easy

The gripping line is available in multiple jaw types and gripping surfaces, giving you options for choosing the pliers suited for your work. The cutting line is more expansive and has multiple products lines and pliers available to find the one best fit for you.







# Handle Type KNIPEX has multiple handle styles available (plastic dipped, single-component, multi-component, etc.) that can be broken down into two main categories for electronic pliers - ESD or Non-ESD

	iam categories for electronic	p	200 01 11011 200
	Non-ESD		ESD
Plastic Dipped			
Single- component		ESD	THE PARTY OF THE P
Multi- component			

### Joint Type

There are three joint types available: Box joint, Bolted joint and Rivet joint.

- > Box joint is used in some of our most popular product lines including our water pump pliers and is proven for precision and durability with its high torsion resistance.
- > Bolted joint provides the most precision and a permanently even cutting movement making it a perfect fit for repetitive type applications.
- > Rivet joint offers the most economical pick of the joint types.

### Head Type

There are three head styles available in our cutting pliers: Oval, Tapered and End Cutting.

- > Oval style is the most durable due to the additional material close to the cutting edges.
- > Tapered has a narrowed head which allows for easier access into tight places.
- > End Cutting head style is best for hard-to reach areas and for working on components from above.

### **Bevel Type**

A bevel is a slopping surface on the outer side of the cutting edge.

- > A small bevel leads to an easier and more flush cut while the risk of damaging the cutting edges rises (overloading).
- > A larger bevel allows hard materials to be cut without the risk of damage to the cutting edges.
- > Depending on the size of the bevel, you will get either a semi-flush, flush or ultra-flush cut finish. The choice of bevel depends on the material being cut and the desired flush cut end result. A flush cutting edge is only suitable for soft materials such as copper or plastics.

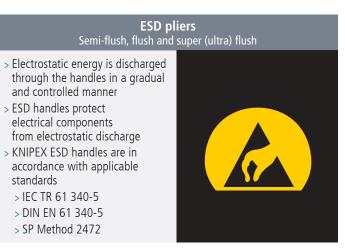
### **Handle Type**

Our four handle styles are plastic dipped, single-component, multicomponent and ESD.

- > ESD stands for Electrostatic Discharge. The handles themselves discharge electrostatic energy in a gradual and controlled manner to protect electrical components.
- > Plastic dipped is our most basic handle and is easy to maintain and clean of oils and residues.
- > Our component handles offer comfort and ease of use making them great for repetitive work where comfort is a key need.

### **Additional Features**

Other features include lead catcher, double springs and carbide cutting edges.



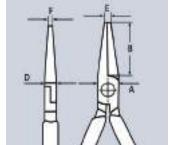
- > for very precise assembly work, e.g. in electronics and fine mechanics
- > for gripping, holding and bending
- > smoothly ground gripping surfaces
- > approx. 20% lighter than conventional electronics pliers
- > bolted joint and carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > double spring for a gentle and even opening
- > ergonomically optimized handles
- > ball bearing chrome steel; forged, manifold oil-hardened

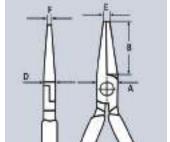
Style 1 Flat, wide jaws

Style 2 Half-round jaws

Style 3

Round, pointed jaws









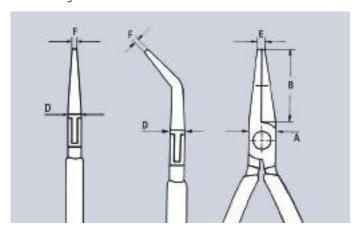
### ESD pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



							Dimensions					
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Style	A Inch mm	B Inch mm	D Inch mm	E Inch mm	F Inch mm	∆¹∆ Ibs
34 12 130		5 1/4 130	*====	polished	multi-component grips	1	<mark>7/16</mark> 11.2	55/64 21.9	1/4 6.5	1/16 1.4	9/64 3.5	0.14
34 12 130 ESD		<b>5 1/4</b> 130	<b>▲</b> *□□ <b>!</b>	polished	ESD multi-component grips	1	7/16 11.2	<b>55/64</b> 21.9	1/4 6.5	1/16 1.4	9/64 3.5	0.14
34 22 130		<b>5 1/4</b> 130	*OCIEM	polished	multi-component grips	2	7/16 11.2	<b>57/64</b> 22.7	1/4 6.5	1/16 1.6	1/16 1.6	0.14
34 22 130 ESD		5 1/4 130		polished	ESD multi-component grips	2	7/16 11.2	57/64 22.7	1/4 6.5	1/16 1.6	1/16 1.6	0.14
34 32 130		<b>5 1/4</b> 130	*8 = 1 = 1 MM	polished	multi-component grips	3	7/16 11.2	15/16 23.7	1/4 6.5	5/64 2.0	3/64 1.0	0.14
34 32 130 ESD		<b>5 1/4</b> 130	<b>▲</b> \$8 <b>□™</b>	polished	ESD multi-component grips	3	7/16 11.2	15/16 23.7	1/4 6.5	5/64 2.0	3/64 1.0	0.14
34 42 130		5 1/4 130	* -	polished	multi-component grips	4	7/16 11.2	55/64 21.9	1/4 6.5	1/16 1.6	9/64 3.5	0.14
34 42 130 ESD		<b>5 1/4</b> 130	<u>^</u> *= <u></u> ∞ • • • • • • • • • • • • • • • • • •	polished	ESD multi-component grips	4	7/16 11.2	<b>55/64</b> 21.9	1/4 6.5	1/16 1.6	9/64 3.5	0.14
34 52 130		<b>5 1/4</b> 130	<b>*</b> ⊖ <b>■ ■ M</b>	polished	multi-component grips	5	7/16 11.2	<b>55/64</b> 21.9	1/4 6.5	1/16 1.6	1/16 1.6	0.14
34 52 130 ESD		5 1/4 130	<b>▲</b> *8 <b>■ ■ ■ ■ ■ ■ ■ ■ ■ ■</b>	polished	ESD multi-component grips	5	7/16 11.2	55/64 21.9	1/4 6.5	1/16 1.6	1/16 1.6	0.14

- > precision pliers for ultra fine assembly work in electronics and fine mechanics
- > designed for gripping, holding and bending small components
- > sturdy, zero backlash
- > smooth gripping surfaces and rounded edges prevent damage to components
- > low-friction double spring for gentle and even opening
- > the mirror polish, together with a fine film of oil, offer effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > ball bearing chrome steel

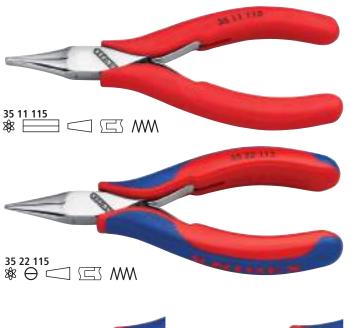




















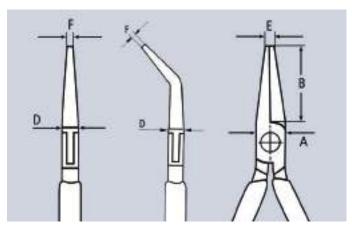


**\$** <u>∠45°</u> ⊖ □ □ MM

35 42 115

							Dir	mensions			
Product Number	Packaging	<b>4→</b> Inch mm		Head	Handles	A Inch mm	B Inch mm	D Inch mm	E Inch mm	F Inch mm	∆'∆ Ibs
35 11 115		4 1/2 115	*====	mirror polished	slim plastic grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	5/32 4.0	0.13
35 12 115	Х	4 1/2 115	*====	mirror polished	multi-component grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	5/32 4.0	0.16
35 21 115		4 1/2 115	*⊖□□MM	mirror polished	slim plastic grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	1/16 1.5	0.13
35 22 115		4 1/2 115	*OCIEM	mirror polished	multi-component grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	1/16 1.5	0.16
35 31 115		4 1/2 115	<b>№8</b> □□MM	mirror polished	slim plastic grips	3/8 9.5	<b>57/64</b> 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	3/64 1.0	0.13
35 32 115		4 1/2 115	<b>*</b> 8□□MM	mirror polished	multi-component grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	3/64 1.0	0.16
35 41 115		4 1/2 115	<b>*</b> 45° ⊖ □ □ MM	mirror polished	single-component grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	1/16 1.5	0.16
35 42 115		4 1/2 115	<b>\$ 4</b> 45° ⊖ □ □ MM	mirror polished	multi-component grips	3/8 9.5	57/64 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	1/16 1.5	0.16
35 52 145		5 3/4 145	*====	mirror polished	multi-component grips	15/32 12.0	1 37/64 40.0	19/64 7.5	1/16 1.5	5/32 4.0	0.23
35 62 145		5 3/4 145	<b>*</b> ⊖□□MM	mirror polished	multi-component grips	15/32 12.0	1 37/64 40.0	19/64 7.5	3/32 2.5	1/16 1.5	0.23
35 72 145		5 3/4 145	<b>№8</b> □□ <b>M</b> M	mirror polished	multi-component grips	15/32 12.0	1 37/64 40.0	19/64 7.5	3/32 2.5	3/64 1.3	0.23
35 82 145		5 3/4 145	<b></b> \$ ∠45° ⊖ □ □ MM	mirror polished	multi-component grips	15/32 12.0	1 3/8 35.0	19/64 7.5	3/32 2.5	3/64 1.0	0.23

- > precision pliers for ultra fine assembly work in electronics and fine mechanics
- > designed for gripping, holding and bending small components
- > electrically discharging handles dissipative
- > precision box joint
- > smooth gripping surfaces and rounded edges prevent damage to components
- > low-friction double spring for gentle and even opening
- > the mirror polish, together with a fine film of oil, offer the best possible rust protection — no circuit faults caused by peeling chrome from plated tools
- > ball bearing chrome steel



### ESD pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472





						Dimensions					
Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	A Inch mm	B Inch mm	D Inch mm	E Inch mm	F Inch mm	∆¹∆ Ibs
35 12 115 ESD		4 1/2 115	<b>▲</b> *□□⊑M	mirror polished	ESD multi-component grips	3/8 9.5	<b>57/64</b> 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	5/32 4.0	0.16
35 22 115 ESD		4 1/2 115	<b>▲</b> *⊖□□M	mirror polished	ESD multi-component grips	3/8 9.5	<b>57/64</b> 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	1/16 1.5	0.16
35 32 115 ESD		4 1/2 115	<b>▲</b> \$8□□ <b>™</b>	mirror polished	ESD multi-component grips	3/8 9.5	<b>57/64</b> 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	3/64 1.0	0.15
35 42 115 ESD		4 1/2 115	<b>▲ * ∠</b> 45° ⊖ □ □ <b>M</b>	mirror polished	ESD multi-component grips	3/8 9.5	<b>57/64</b> 22.5	1 <mark>7/64</mark> 6.7	5/64 2.0	1/16 1.5	0.16

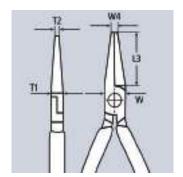
35 42 115 ESD

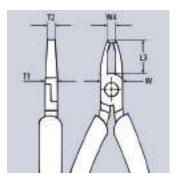
**▲ \* 45° ⊖** □ □ **M** 

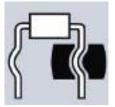
- > precision pliers for very fine assembly and repair work in electronics
- > for bending and cutting off wire ends on components
- > precision box-joint for greater strength
- > smooth gripping surfaces
- > smooth edges
- > low-friction double spring for gentle and even opening
- > the mirror polish, together with a fine film of oil, offer the best possible rust protection no circuit faults caused by peeling chrome from plated tools
- > special tool steel, forged, oil-hardened



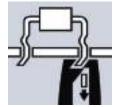




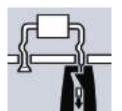




36 12 130 to bend wire in shape for the distance to the board



36 22 125 to bend and cut wire at 1/16" (1.6 mm) length below the board



36 32 125 to crunch and cut wire at 1/16" (1.6 mm) length below the board



						Cutting capacities	Dimensions					
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	L3 Inch mm	W Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆ ∆ lbs
36 12 130		5 1/4 130	<b>*</b> □ <b>M</b>	mirror polished	multi-component grips	-	29/32 23.0	15/32 12.0	3/8 9.5	7/32 5.5	15/64 6.0	0.21
36 22 125		5 125	<b>*</b> □ <b>M</b>	mirror polished	multi-component grips	3/64 1.2	23/32 18.25	29/64 11.5	19/64 7.5	19/64 7.5	7/64 2.6	0.21
36 32 125		5 125	<b>*</b> □ <b>M</b>	mirror polished	multi-component grips	3/64 1.2	23/32 18.25	29/64 11.5	19/64 7.5	19/64 7.5	5/32 4.0	0.21

### for precision mechanics **DIN ISO 9655**

- > precision pliers for ultra fine assembly work, e.g. in electronics and fine mechanics
- > for gripping, holding, bending and adjusting
- > smooth gripping surfaces and edges
- > lap joint
- > high-grade special tool steel; forged, oil-hardened

### Style 1

Flat, wide jaws

### Style 2

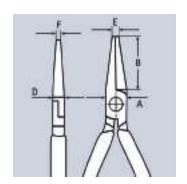
Flat, concave and pointed jaws

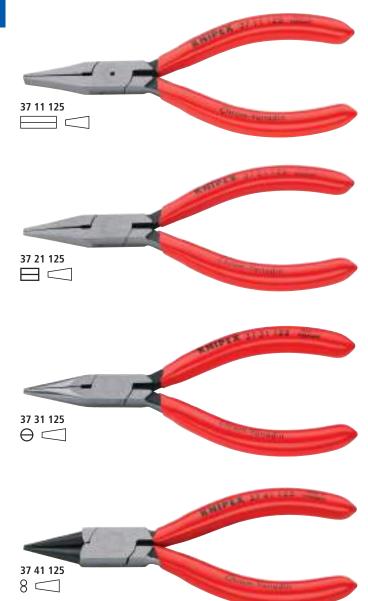
### Style 3

Half-round jaws

### Style 4

Round, pointed jaws to bend wire loops





									Dimensions				
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Style	B Inch mm	A Inch mm	D Inch mm	E Inch mm	F Inch mm	∆¹∆ Ibs
37 11 125		5 125		black atramentized	polished	plastic coated	1	1 1/16 27.0	31/64 12.5	9/32 7.0	5/64 2.0	7/32 5.5	0.17
37 21 125		5 125		black atramentized	polished	plastic coated	2	1 1/16 27.0	31/64 12.5	9/32 7.0	5/64 2.0	5/64 2.0	0.16
37 31 125		5 125	0 🗆	black atramentized	polished	plastic coated	3	1 1/16 27.0	31/64 12.5	9/32 7.0	5/64 2.0	1/16 1.6	0.16
37 41 125		5 125	8	black atramentized	polished	plastic coated	4	1 1/16 27.0	37/64 14.5	5/16 8.0	5/64 2.0	3/64 1.0	0.17

- > high-strength jaws and tips bend and snap back into place
- > cross-hatched gripping surfaces, knurled
- > vanadium electric steel; forged, oil-hardened

### Style 1

Long, half-round jaws; serrated gripping surfaces

### Style 2

40° angled jaws

### Style 3

Curved tips

### Style 4

Long, trapezoidal jaws; serrated gripping surfaces

### Style 5

70° angled jaws; suitable for pulling cotter pins and for hard to reach areas

### Style 6

Double bent jaws

### Style 7

45° angled, half-round jaws; suitable for gripping spark plugs and round components





38 11 200

 $\Theta$ 

















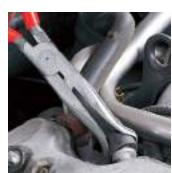


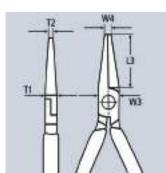




38 71 200

<u>√</u>70° ⊖ ∞







38 81 200 A  $\Theta$ 



38 81 200 B  $\Theta$ 



								Dimensions					
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Style	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆ ∆ lbs
38 11 200		<mark>8</mark> 200	$\Theta$	black atramentized	polished	plastic coated	1	2 7/8 73.0	11/16 17.5	3/8 9.5	1/8 3.0	3/32 2.5	0.40
38 21 200		8 200	<u> </u>	black atramentized	polished	plastic coated	2	2 7/8 73.0	11/16 17.5	3/8 9.5	1/8 3.0	3/32 2.5	0.39
38 31 200		8 200	$\Theta$	black atramentized	polished	plastic coated	3	2 7/8 73.0	11/16 17.5	3/8 9.5	1/8 3.0	3/32 2.5	0.39
38 41 190		7 1/2 190		black atramentized	polished	plastic coated	4	1 31/32 50.0	<b>45/64</b> 18.0	5/16 8.0	5/32 4.0	5/16 8.0	0.33
38 71 200		8 200	<b>∠</b> 70° ⊖ <b>∞</b>	black atramentized	polished	plastic coated	5	2 7/8 73.0	11/16 17.5	3/8 9.5	1/8 3.0	5/64 2.0	0.40
38 81 200 A		8 200	⊖⋘	black atramentized	polished	plastic coated	6	2 3/4 69.0	45/64 18.0	3/8 9.5	1/8 3.0	3/32 2.5	0.39
38 81 200 B		<mark>8</mark> 200	O ****	DIACK ALIAMENTIZEO	polistied	plastic coated	6	2 3/64 62.0	<b>45/64</b> 18.0	3/8 9.5	1/8 3.0	3/32 2.5	0.39
38 91 200		8 200	<u> </u>	black atramentized	polished	plastic coated	7	2 7/8 73.0	11/16 17.5	3/8 9.5	-	3/32 2.5	0.39

- > tightly holds round or flat material
- > heavy-duty
- > adjustment screw and release lever for easy use
- > one-handed operation
- > high clamping pressure due to toggle lever action
- > pliers body: rolled steel, high-strength
- > gripping jaws: chrome vanadium electric steel; forged

With pivoting bottom jaw that automatically adjusts to the workpiece no matter the shape





WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov









Product Number	Packaging	←→ Inch mm		Inch mm	Inch mm	∆†∆ Ibs
40 04 180		<b>7 1/4</b> 180	erriii	1 3/8 35	1 1/4 32	0.82
40 04 250		10 250		1 3/8 35	1 1/4 32	1.22
40 14 250		10 250		1 11/16 43	1 25/32 45	1.35



- > tightly holds round or flat material
- > heavy-duty
- > adjustment screw and release lever for easy use
- > one-handed operation
- > high clamping pressure due to toggle lever action
- > pliers body: rolled steel, high-strength
- > gripping jaws: chrome vanadium electric steel; forged

Jaws for round workpieces, with wire cutter

Jaws with double prism for round, section and flat material

## Style 2

Straight jaws for flat material

## Style 3

Long Nose Grip Pliers, narrow, long jaws

Long Nose Grip Pliers, narrow long jaws very suitable for areas that are difficult to reach. Non-serrated gripping area for pinching off hoses





















41 44 200 **√70°** ■

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>↓</b> →► Inch mm		Pliers	Style	Inch mm	Inch mm	∆'∆ Ibs
41 04 180		7 1/4 180			0	1 3/16 30	1 3/16 30	0.82
41 04 250		10 250		bright zinc plated	0	1 37/64 40	1 3/16 30	1.23
41 04 300		12 300			0	2 9/16 65	1 11/32 34	2.08
41 14 250		10 250		bright zinc plated	1	1 27/64 36	1 27/64 36	1.29
41 24 225		9 225		bright zinc plated	2	1 25	1 3/16 30	1.16
41 34 165		6 1/2 165		bright zinc plated	3	13/16 20	15/16 24	0.42
41 44 200		<mark>8</mark> 200	<u> </u>	bright zinc plated	4	13/16 20	1 3/16 30	0.88

- > for gripping, clamping and holding of diverse profiles
- > heavy-duty
- > with adjustment screw and release lever
- > one-handed operation
- > high clamping pressure due to toggle lever action
- > pliers body: rolled steel, high-strength

## 42 14 280

Heat resistant malleable cast iron jaws; section or flat material items lying side by side are held securely during welding; also for section material with vertical webs up to 1" (25 mm) height

#### 42 24 280

Heat resistant malleable cast iron jaws; round or tubular material items lying centrally side by side are held securely during welding

## 42 34 280

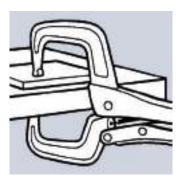
Gripping jaws made of chrome vanadium steel, drop forged; clamp cumbersome workpieces and sections with high webs up to 1 37/64" (40 mm)

#### 42 44 280

Pivoting jaws; gripping jaws made of chrome vanadium steel, drop forged; clamp and balance bulky work components and profiles with high ridges up to 1 37/64" (40 mm)











42 14 280



42 24 280



42 34 280



42 44 280

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Inch mm	Inch mm	∆ ∆ Ibs
42 14 280		11 280	bright zinc plated	1 3/16 - 2 9/16 30-65	-	2.04
42 24 280		11 280	bright zinc plated	25/64 - 2 3/4 10-70	-	2.02
42 34 280		11 280	bright zinc plated	-	3 1/2 90	1.53
42 44 280		11 280	bright zinc plated	-	3 1/2 90	1.65

# **Circlip Pliers**

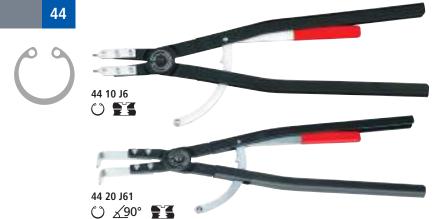
for large internal circlips

- > for assembling snap rings into bores within the range of 4 51/64" 16" (122-400 mm) dia.
- > with locking device, can be released without completing cycle
- > with replaceable tips made of tempered steel
- > pliers body: rolled steel, high-strength
- > tips: special tool steel; oil-hardened

# **Style 1** Straight tips

# Style 2

90° angled tips



Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Style	Size of bore  Ø Inch Ø mm	Tips <mark>Ø Inch</mark> Ø mm	∆ <b>'</b> ∆ Ibs
44 10 J5		22 29/64 570	63 <b>5</b> 7	black a souden seeks d	1	<b>4 51/64 - 12</b> 122 - 300	9/64 3.5	3.88
44 10 J6		22 3/4 580	om	black powder-coated	1	9 59/64 - 16 252 - 400	11/64 4.5	3.88
44 20 J51		23 1/4 590	63 (00° <b>5</b> 4	black powder-coated	2	4 51/64 - 12 122 - 300	9/64 3.5	4.00
44 20 J61		23 1/2 600	OX90 FE	black powder-coated	2	9 59/64 - 16 252 - 400	11/64 4.5	4.02

44 19 J5	1 pair of spare tips for 44 10 J5
44 19 J6	1 pair of spare tips for 44 10 J6
44 29 J51	1 pair of spare tips for 44 20 J51
44 29 J61	1 pair of spare tips for 44 20 J61

# **Circlip Pliers**

for large external circlips

- > for assembling snap rings on shafts, ranging from 4 51/64" 16" (122 400 mm) dia.
- > with locking device, can be released without completing cycle
- > with replaceable tips made of tempered steel

22 3/4

580

- > pliers body: rolled steel; high-strength
- > tips: special tool steel; oil-hardened

# **Style 1** Straight tips

# Style 2

90° angled tips

46 20 A61



46



9 59/64 - 16

252 - 400

11/64

4.5

46 20 A61

○ <u>√</u>90° **}** 

2

Product Number	Packaging	Inch mm		Pliers	Style	Size of shaft Ø Inch Ø mm	Tips <mark>Ø Inch</mark> Ø mm	∆¹∆ Ibs
46 10 A5		22 560	om	black powder-coated	1	4 51/64 - 12 122 - 300	9/64 3.5	3.91
46 10 A6		22 29/64 570		black powder-coated	1	9 59/64 - 16 252 - 400	11/64 4.5	3.96
46 20 A51		22 29/64 570		black powder-coated	2	4 51/64 - 12 122 - 300	9/64 3.5	4.06
		22.274		black powder-coated		0.00/04 10	11101	

46 19 A5	1 pair of spare tips for 46 10 A5
46 19 A6	1 pair of spare tips for 46 10 A6
46 29 A51	1 pair of spare tips for 46 20 A51
46 29 A61	1 pair of spare tips for 46 20 A61

4.11

- > for fitting snap rings into bores, ranging from  $5/16\,"$  to  $5\ 1/2\,"$  (8 140 mm) dia.
- > solid style, forged
- > non-slip, solid tips
- > pliers body and tips: chrome vanadium steel; forged, oil-hardened











**Style 1** Straight tips

**Style 2** 90° angled tips

**Style 3** 45° angled tips

Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Style	Size of bore  Ø Inch Ø mm	Tips Ø Inch Ø mm	∆¹∆ Ibs	
44 11 J0	Х	5 1/2 140					1	5/16 - 1/2 8 - 13	1/32 0.9	0.20	
44 11 J1	X	5 1/2 140		black atramentized			1	15/32 - 1 12 - 25	3/64 1.3	0.20	
44 11 J2	X	7 1/4 180	O		polished	plastic coated	1	3/4 - 3/64 19 - 60	5/64 1.8	0.30	
44 11 J3	X	9 225					1	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.43	
44 11 J4	X	12 1/2 320					1	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.03	
44 21 J01	Х	5 1/8 130					2	5/16 - 1/2 8 - 13	1/32 0.9	0.19	
44 21 J11	X	5 1/8 130					2	15/32 - 1 12 - 25	3/64 1.3	0.19	
44 21 J21	X	6 3/4 170	⊜ <u>⊀9</u> 0°	⊜ <u>⊀</u> 90°	black atramentized	polished	plastic coated	2	3/4 - 2 3/64 19 - 60	5/64 1.8	0.31
44 21 J31	X	8 1/2 215					2	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.43	
44 21 J41	X	12 300					2	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.02	
44 31 J02	X	5 1/2 140					3	5/16 - 1/2 8 - 13	1/32 0.9	0.20	
44 31 J12	X	5 1/2 140					3	15/32 - 1 12 - 25	3/64 1.3	0.20	
44 31 J22	Х	7 180	○ <u>∡4</u> 5°	black atramentized	polished	plastic coated	3	3/4 - 2 3/64 19 - 60	5/64 1.8	0.31	
44 31 J32	Х	<mark>9</mark> 225					3	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.43	
44 31 J42	X	12 11/32 310					3	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.03	

- > for fitting snap rings on shafts, ranging from  $1/8"-5\ 1/2"$  (3-140 mm) dia.
- > solid style, forged
- > non-slip, solid tips
- > pliers body and tips: chrome vanadium steel;













Style 1 Straight tips

Style 2 90° angled tips

Style 3 45° angled tips

Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Style	Size of shaft  Ø Inch Ø mm	Tips Ø Inch Ø mm	∆ ∆ Ibs
46 11 A0	Х	5 1/2 140					1	1/8 - 25/64 3 - 10	1/32 0.9	0.19
46 11 A1	Х	5 1/2 140		black atramentized			1	25/64 - 1 10 - 25	3/64 1.3	0.19
46 11 A2	X	<b>7 1/4</b> 180	OWW		polished	plastic coated	1	3/4 - 2 3/64 19 - 60	5/64 1.8	0.30
46 11 A3	X	8 1/4 210					1	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.49
46 11 A4	X	1 <mark>2 1/2</mark> 320					1	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.11
46 21 A01	X	<mark>5</mark> 125					2	1/8 - 25/64 3 - 10	1/32 0.9	0.19
46 21 A11	X	<mark>5</mark> 125					2	25/64 - 1 10 - 25	3/64 1.3	0.19
46 21 A21	X	6 3/4 170	© <u>⊀</u> 90° MM	black atramentized	polished	plastic coated	2	3/4 - 2 3/64 19 - 60	5/64 1.8	0.29
46 21 A31	X	<mark>8</mark> 200					2	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.48
46 21 A41	Х	1 <mark>2</mark> 300					2	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.12
46 31 A02	Х	5 1/2 140					3	1/8 - 25/64 3 - 10	1/32 0.9	0.19
46 31 A12	Х	5 1/2 140					3	25/64 - 1 10 - 25	3/64 1.3	0.19
46 31 A22	Х	7 1/4 180	∆ <u>4</u> 5° MM	black atramentized	polished	plastic coated	3	3/4 - 2 3/64 19 - 60	5/64 1.8	0.30
46 31 A32	Х	8 1/4 210					3	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.47
46 31 A42	Х	12 11/32 310					3	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.13

With inserted tips for reliable work

Heavy-duty in continuous operation: up to 10 times longer service life than turned tips

- > for fitting snap rings into bores, ranging from 5/16" to 5 1/2" (8 – 140 mm) dia.
- > bolted joint: precise, zero-backlash operation of pliers
- > pliers body: chrome vanadium electric steel; forged, oil-hardened
- > inserted tips: spring steel wire, drawn

Style 1 Straight tips

Style 2

90° angled tips



# **High Precision Quality**

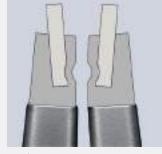
Easy and reliable assembly: form-fitting inserted and pressed-in tips made of high-density spring steel offer a high level of protection against excessive stress and strain, e.g. when removing stuck rings. The large supporting surfaces and the position of the tips make it more difficult for the rings to fly off.



# Precision and durability

High-density spring steel with a score-free surface is used for the tips. This increases the tips' resistance to dynamic and static strain. The tips are 30% more stable than conventional pliers when subjected to one-off overloading while still allowing good accessibility during assembly. Subjected to dynamic strain, the tips' resistance capacity is up to 10 times greater! The tips on the precision circlip pliers are non-detachable!





Sturdy, inserted tips: made from high-density Tight fit through compression

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Style	Size of bore  Ø Inch Ø mm	Tips <mark>Ø Inch</mark> Ø mm	∆ ∆ lbs
48 11 J0	X	5 1/2 140				1	5/16 - 1/2 8 - 13	1/32 0.9	0.23
48 11 J1	X	5 1/2 140				1	15/32 - 1 12 - 25	3/64 1.3	0.23
48 11 J2	X	7 1/4 180	om	grey atramentized	non-slip plastic coated	1	3/4 - 2 3/64 19 - 60	5/64 1.8	0.39
48 11 J3	X	9 225				1	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.59
48 11 J4	Х	12 1/2 320				1	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.24
48 21 J01	Х	<b>5 1/8</b> 130				2	5/16 - 1/2 8 - 13	1/32 0.9	0.23
48 21 J11	Х	5 1/8 130				2	15/32 - 1 12 - 25	3/64 1.3	0.23
48 21 J21	X	6 1/2 165	⊜ <u>₹</u> 90° <b>€</b> ₹	grey atramentized	non-slip plastic coated	2	3/4 - 2 3/64 19 - 60	5/64 1.8	0.39
48 21 J31	Х	8 1/4 210				2	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.59
48 21 J41	X	12 305				2	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.24

# NEW

# NOW with overstretching limiter For all circlips with a diameter of 5/16" – 3 15/16"

- > overexpansion limiter with screw stop prevents overexpansion of circlips
- > adjustment using Allen Wrench

# Style 3

Straight tips with overstretching limiter (adjustable using end stop)

#### Style 4

90° angled tips with overstretching limiter (adjustable using end stop)



# KNIPEX Precision Circlip Pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with an overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and offer a superior durability.









Product Number Pa	ickaging	<b>4→</b> Inch mm		Pliers	Handles	Style	Size of bore Ø Inch Ø mm	Tips Ø Inch Ø mm	∆¹∆ Ibs
48 31 J0		5 1/2 140				3	5/16 - 1/2 8 - 13	1/32 0.9	0.23
48 31 J1		5 1/2 140	C 9 5-7			3	15/32 - 1 12 - 25	3/64 1.3	0.23
48 31 J2		7 1/4 180	OES	grey atramentized	non-slip plastic coated	3	3/4 - 2 3/64 19 - 60	5/64 1.8	0.39
48 31 J3		9 225				3	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.59
48 41 J01		5 1/8 130				4	5/16 - 1/2 8 - 13	1/32 0.9	0.23
48 41 J11	5 1/8 130	69 /00° <b>5</b> 7	arou atromonticod	non elim plastic control	4	15/32 - 1 12 - 25	3/64 1.3	0.23	
48 41 J21		6 1/2 165	<b>⊘</b> <u>∕</u> 90° <b>§</b> ¶ gr	grey attamentized	non-slip plastic coated	4	3/4 - 2 3/64 19 - 60	5/64 1.8	0.39
48 41 J31	8 1//			4	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.59		

# to assemble external circlips on shafts

# With inserted tips for reliable work Heavy-duty in continuous operation: up to 10 times longer service life compared to turned tips

- > for fitting snap rings on shafts, ranging from 1/8" - 51/2" (3 - 140 mm) dia.
- > large contact faces on the tips: no distortion of circlips, easy fitting
- > bolted joint: precise, zero-backlash operation of pliers
- > internal opening spring, protected and captive
- > pliers body: chrome vanadium electric steel; forged, oil-hardened
- > inserted tips: spring steel wire, drawn

Style 1 Straight tips

Style 2 90° angled tips

# **High Precision Quality**

Easy and reliable assembly: form-fitting inserted and pressed-in tips made of high-density spring steel offer a high level of protection against excessive stress and strain, e.g. when removing stuck rings. The large supporting surfaces and the position of the tips make it more difficult for the rings to fly off.



Spring inside the joint: the spring is protected inside the precision bolted joint. It does not hinder work and cannot get dirty or lost



Circlips are held securely: large contact faces and the position of the tips make it difficult for the circlip to fly off

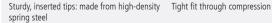




## Precision and durability

High-density spring steel with a score-free surface is used for the tips. This increases the tips' resistance to dynamic and static strain. The tips are 30% more stable than conventional pliers when subjected to one-off overloading while still allowing good accessibility during assembly. Subjected to dynamic strain, the tips' resistance capacity is up to 10 times greater! The tips on the precision circlip pliers are non-detachable!







Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Style	Size of shaft  Ø Inch Ø mm	Tips <mark>Ø Inch</mark> Ø mm	∆ ∆ Ibs
49 11 A0	X	5 1/2		rileis	Handles	3tyle	1/8 - 25/64	1/32	0.22
75 11 70	<b>X</b>	140	_			'	3 - 10	0.9	0.22
49 11 A1	X	5 1/2 140				1	25/64 - 1 10 - 25	3/64 1.3	0.22
49 11 A2	X	7 1/4 180	OSSIM	grey atramentized	non-slip plastic coated	1	3/4 - 2 3/64 19 - 60	5/64 1.8	0.38
49 11 A3	X	9 225				1	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.60
49 11 A4	X	12 5/8 320				1	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.32
49 21 A01	X	<b>5 1/8</b> 130				2	1/8 - 25/64 3 - 10	1/32 0.9	0.22
49 21 A11	X	5 1/8 130				2	25/64 - 1 10 - 25	3/64 1.3	0.22
49 21 A21	X	6 1/2 165	° ≥3 MM	grey atramentized	non-slip plastic coated	2	3/4 - 2 3/64 19 - 60	5/64 1.8	0.38
49 21 A31	X	8 1/4 210				2	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.60
49 21 A41	X	12 305				2	3 11/32 - 5 1/2 85 - 140	1/8 3.2	1.32

# NEW

# NOW with overstretching limiter For all circlips with a diameter of 5/16" – 3 15/16"

- > overexpansion limiter with screw stop prevents overexpansion of circlips
- > adjustment using Allen Wrench

# Style 3

Straight tips with overexpansion limiter (adjustable using end stop)

#### Style 4

90° angled tips with overexpansion limiter (adjustable using end stop)



Style 3 / style 4: with adjustable restricted opening



# KNIPEX Precision Circlip Pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with an overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and offer a superior durability.







Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Handles	Style	Size of shaft  Ø Inch Ø mm	Tips <mark>Ø Inch</mark> Ø mm	∆ ∆ lbs
49 31 A0		5 <mark>1/2</mark> 140				3	1/8 - 25/64 3 - 10	1/32 0.9	0.23
49 31 A1		5 1/2 140	23 <b>5-7</b> AAAA			3	25/64 - 1 10 - 25	3/64 1.3	0.22
49 31 A2		7 1/4 180	O <b>F S</b> MM	grey atramentized	non-slip plastic coated	3	3/4 - 2 3/64 19 - 60	5/64 1.8	0.38
49 31 A3		9 225				3	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.60
49 41 A01		5 1/8 130				4	1/8 - 25/64 3 - 10	1/32 0.9	0.23
49 41 A11		5 1/8 130	63 (000 <b>5-7</b> AAAA		P. L.C. A. I.	4	25/64 - 1 10 - 25	3/64 1.3	0.22
49 41 A21		6 1/2 165	O X 30. <b>3 2</b> \\\\\	grey atramentized	non-slip plastic coated	4	3/4 - 2 3/64 19 - 60	5/64 1.8	0.38
49 41 A31		8 1/4 210				4	1 37/64 - 3 15/16 40 - 100	3/32 2.3	0.60

# **Special Retaining Ring Pliers**

for retaining rings on shafts DIN ISO 5743

45

- > for fitting horseshoe-shaped spring retaining rings and circlips without grip holes
- > for shaft retaining devices
- > with opening spring
- > chrome vanadium electric steel; forged, oil-hardened

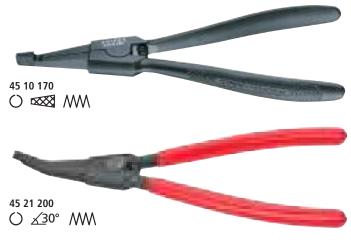


## 45 10 170

For retaining rings with a minimum ring split gap of 9/64" (3.6 mm)

#### 45 21 200

Angled jaws with centering hole; for snap rings larger than 15/32" (12.0 mm) dia., e. g. for securing drive shaft in the gearbox of a motor vehicle; minimum ring split gap of the rings 3/32" (2.2 mm)









45 10 170

45 21 200

45 21 200

Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Handles	∆¹∆ Ibs
45 10 170		6 3/4 170	O∞M	burnished	burnished	0.34
45 21 200		8 200	○ ₹30° WW	burnished	plastic coated	0.41

# Circlip Pliers for grip rings on shafts

**DIN ISO 5743** 

46

- > for fitting grip rings on shafts ranging from 1/16" 1 3/16" (1.5 30 mm) dia.
- > includes opening spring for easy repetitive work
- > solid style, forged
- > non-slip, solid tips
- > pliers body and tips: chrome vanadium steel; forged, oil-hardened





#### 46 11 G0

Adjustable stop screw to prevent overstretching, for rings from 1/16" - 1 5/32" (1.5 - 4.0 mm) dia.

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Size of shaft Ø Inch Ø mm	Tips <mark>Ø Inch</mark> Ø mm	∆ ∆ lbs
46 11 G0		<b>5 1/2</b> 140	oww	black atramentized	polished	non-slip plastic coated	1/16 - 5/32 1.5 - 4.0	1/32 0.9	0.19
46 11 G1		5 1/2 140					5/32 - 9/32 4.0 - 7.0	3/64 1.3	0.19
46 11 G2		5 1/2 140		black atramentized			13/64 - 1/2 5.0 - 13.0	5/64 1.8	0.19
46 11 G3		<b>5 1/2</b> 140	O.WW		polished	non-slip plastic coated	35/64 - 45/64 14.0 - 18.0	3/32 2.3	0.19
46 11 G4		7 1/4 180					25/32 - 1 3/16 20.0 - 30.0	1/8 3.2	0.30

- > universal usage for large circlips with nominal diameters of  $16"-39\ 3/8"\ (400-1000\ mm)$
- > reliable opening and closing of the circlips and holding by self-locking precision spindle drive
- > for fitting and removing circlips in one operation
- > circlips are securely held due to short, direct attachment
- > replaceable tips with 15/64" (6 mm) and 23/64" (9 mm) diameters, for perfect adaption to the actuation bores in the circlips
- > optional operation with hexagonal key, ratchet wrench or cordless screwdriver
- > areas of application e.g. wind turbines, tidal power stations, generator construction, hydropower stations, large machine construction (rolling mills, presses), shipbuilding, aerospace — wherever very high forces and torques are transmitted with large shafts and bearings
- > tip material: chrome vanadium electric steel



46 10 100









Machine operable



Replaceable inserts for internal and external circlips



Product Number	Packaging		Size of bore  Ø Inch Ø mm	Size of shaft Ø Inch Ø mm	∆¹∆ Ibs
46 10 100	Plastic case with foam insert	00	16 - 39 3/8 400 - 1000	16 - 39 3/8 400 - 1000	4.75

- > heavy-duty > preferred by tradespeople
- > wear-resistant
- > cutting edge hardness (approx. 60 HRC) > special tool steel; forged, oil-hardened





50 00 210





50 01 225

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Cutting capacities  Ø Inch Ø mm	∆ ∆ lbs
50 00 160		6 1/4 160					5/64 1.8	0.49
50 00 180		<mark>7</mark> 180					5/64 2.0	0.70
50 00 210		8 1/4 210	<b>▶</b> ∢ b	black atramentized	polished	black atramentized	3/32 2.2	0.94
50 00 250		10 250					3/32 2.2	1.27
50 00 300		1 <mark>2</mark> 300					3/32 2.4	1.87
50 01 160		6 1/4 160					5/64 1.8	0.53
50 01 180		7 1/4 180					5/64 2.0	0.73
50 01 210		8 1/4 210			P. L. L		3/32 2.2	0.98
50 01 225		<mark>9</mark> 225	black atramentized	polished	plastic coated	3/32 2.2	1.34	
50 01 250		10 250					3/32 2.2	1.29
50 01 300		12 300					3/32 2.4	1.99

- > with striking face for driving in nails
- > cutting edge hardness (approx. 60 HRC)
- > special tool steel; forged, multi stage oil-hardened







Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	∆ Ibs
51 01 210		8 1/4 210	<b>P</b> 4	black atramentized	polished	plastic coated	1.00

# **Farriers' Pincers**Break-off Pliers for vehicle bodywork DIN ISO 5743

55

- > the ideal pliers for the farrier
- > with small head and reversing groove
- > suitable for dismantling work in vehicle body workshops
- > cutting edge hardness (approx. 59 HRC)
- > special tool steel; forged, multi stage oil-hardened







Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Head	Head width Inch mm	∆ ∆ Ibs
55 00 300		1 <mark>2</mark> 300	black atramentized	polished	25/32 20.0	1.73

99 00 200

- > to twist and cut wire in one operation: fast, reliable and economical
- > precision and long service life make these the most widely purchased concreters' nippers in the world
- > induction hardened cutting edges, cutting edge hardness (approx. 61 HRC)
- > high-grade special tool steel; forged, multi stage oil-hardened

99 00 220 K12

With 15/32" (12 mm) head, particularly suitable for tile paving work









							Cutting c	apacities	
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	∆∆ Ibs
99 00 200		<mark>8</mark> 200		black atromantized	nalishad		5/64 1.8	1/16 1.4	0.51
99 00 220		8 3/4 220		black atramentized	polished		3/32 2.4	1/16 1.6	0.69
99 00 220 K12		8 3/4 220	<b>P</b> 4	black atramentized	polished		3/32 2.4	1/16 1.6	0.69
99 00 250	X	10 250					3/32 2.4	1/16 1.6	0.88
99 00 280		11 280	<b>P4</b>	black atramentized	polished		7/64 2.8	5/64 1.8	1.00
99 00 300		12 300					1/8 3.1	5/64 1.8	1.12
99 01 200	Х	8 200					5/64 1.8	1/16 1.4	0.55
99 01 220	Х	8 3/4 220					3/32 2.4	1/16 1.6	0.74
99 01 250	Х	10 250	<b>P</b> 4	black atramentized	polished	plastic coated	3/32 2.4	1/16 1.6	0.95
99 01 280		11 280					7/64 2.8	5/64 1.8	1.10
99 01 300		1 <mark>2</mark> 300					1/8 3.1	5/64 1.8	1.21

99 01 220

# **High Leverage Concreters' Nippers**

with high lever transmission **DIN ISO 9242** 

99 1

99 10 250

# 25% less effort required compared to conventional concreters' nippers of the same size

# Extra-slim form for tying deep mounted steel rods

- > for use when working with concrete steel and binding wire
- > twists and cuts wire in one operation
- > high leverage joint minimizes strain when working with thick binding wires
- > high leverage design reduces strain on tendons and muscles
- > cutting edge hardness (approx. 61 HRC)
- > high-grade special tool steel; forged, multi stage oil-hardened







						Cutting o	apacities		
Product Number	Packaging	<b>4→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Head width Inch mm	∆'∆ Ibs
99 10 250		10 250	hl- d	1:		1/8 3.3	5/64 1.8	1 25.0	0.77
99 10 300	X	12 300	black atramentized	polished	-	5/32 3.8	5/64 2.0	1 25.0	1.11
99 11 250		10 250	black atramentized	nalishad	plastic control	1/8 3.3	5/64 1.8	1 25.0	0.77
99 11 300		12 300	DIACK ATTAMENTIZED	polished	plastic coated	5/32 3.8	5/64 2.0	1 25.0	1.18
99 14 250		10 250	h.:			1/8 3.3	5/64 1.8	1 25.0	0.77
99 14 300		12 300	bright zinc plated	-	-	5/32 3.8	5/64 2.0	1 25.0	1.10

# **Bolt End Cutting Nippers**

high lever transmission DIN ISO 5743

# 61

# Powerful, compact, comfortable

- > features a greater cutting capacity and requires less effort than conventional end cutting nippers
- > cuts nails, small bolts and all wires including piano wire
- > exceptional cutting capacity due to high leverage joint
- > cutting edge hardness (approx. 64 HRC)
- > vanadium steel; forged, multi stage oil-hardened

## 61 02 200

Slim two-color multi-component sleeves for better handling and easier transport; large contact surface on the handles for better allotment of pressure and more comfort at work



High cutting performance: also for piano wire



61 01 200 \$\langle 5^c \rightarrow\$





Perfect for working with fencing



Almost flush cutting of bolts, nails, etc.

							Cutting capacities				
		<b>←→</b> Inch					Ø Inch	Ø Inch	Ø Inch	Ø Inch	7,7
Product Number	Packaging	mm		Pliers	Head	Handles	Ø mm	Ø mm	Ø mm	Ø mm	lbs
61 01 200	X	<mark>8</mark> 200	<b>∡</b> 5° ▶◀	black atramentized	polished	plastic coated	3/64 - 15/64 1.0 - 6.0	5/32 4.0	9/64 3.5	1/8 3.0	0.96
61 02 200		<mark>8</mark> 200	<b>∠</b> 5° ▶◀	black atramentized	polished	slim multi-component grips	3/64 - 15/64 1.0 - 6.0	5/32 4.0	9/64 3.5	1/8 3.0	1.03

# High Leverage End Cutting Nippers DIN ISO 5748



- > cutting edges for soft, hard and piano wire
- > high cutting capacity with minimal effort due to optimum coordination of cutting edge angle and transmission ratio
- > cutting edge hardness (approx. 64 HRC)
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened





Product Number	Packaging	<b>d→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆'∆ Ibs
67 01 140		5 1/2 140				5/32 4.0	1/8 3.1	5/64 2.0	1/16 1.5	0.34
67 01 160		6 1/4 160	black atramentized	polished	plastic coated	11/64 4.5	9/16 3.4	3/32 2.5	5/64 2.0	0.52
67 01 200	Х	<mark>8</mark> 200				13/64 5.0	5/32 3.8	1/8 3.0	3/32 2.5	0.70

# Head shape provides optimized movement when tightening steel mesh knots during reinforced concrete work

- > cutting edges for soft and hard wire
- > also suitable for twisting and cutting binding wire
- > cutting edges are induction hardened; cutting edge hardness (approx. 61 HRC)
- > high-grade special tool steel; forged, multi stage oil-hardened









						Cutting capacities				
Product Number	Packaging	<b>d→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆'∆ Ibs	
68 01 160		6 1/4 160				5/32 4.0	7/64 2.8	3/32 2.3	0.45	
68 01 180		7 1/4 180	hila di sancara material	polished	-14:41	5/32 4.0	1/8 3.2	3/32 2.5	0.66	
68 01 200	Х	8 200	d black atramentized		plastic coated	5/32 4.0	9/64 3.5	7/64 2.8	0.74	
68 01 280	Х	11 280				11/64 4.5	5/32 4.0	1/8 3.2	1.03	

# **End Cutting Nippers**

for mechanics DIN ISO 5748

69

- > cutting edges for soft, hard and piano wire; also suitable for thin copper wires
- > lap joint
- > cutting edge hardness (approx. 64 HRC)
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened



							Cutting capacities								
		<b>←→</b> Inch					Ø Inch	Ø Inch	Ø Inch	Ø Inch	A Inch	B Inch	D Inch	C	7,7
Product Number	Packaging	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	mm	mm	mm	mm	lbs
69 01 130		5 1/8 130	<b>P</b> 4	black atramentized	polished	plastic coated	1/64 - 5/64 0.4 - 2.0	3/64 1.3	3/64 1.0	1/32 0.8	5/8 16	19/64 7.5	25/64 10	25/32 20	0.25
69 03 130		5 1/8 130	<b>P</b> 4	chrome plated	chrome	plastic coated	1/64 - 5/64 0.4 - 2.0	3/64 1.3	3/64 1.0	1/32 0.8	5/8 16	19/64 7.5	25/64 10	25/32 20	0.25

# CoBolt®

# **Exceptional cutting performance**

- > induction hardened edges cut soft, hard and piano wire
- > cuts material like bolts, nails, rivets, etc. up to 1/4" (6.0 mm) dia.
- > exceptional cutting performance with minimum effort because of new lever action design
- > cutting edge hardness (approx. 64 HRC)
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened

# Micro-structured cutting edges allow easy cutting of large cross-sections

Gripping surface below the joint for gripping and pulling wires with a diameter from 3/64" (1 mm)

#### 71 12 200

Opening spring and locking device are integrated in the handles for comfortable work and protected transport

#### 71 02 200 T BKA\*

Pliers with tether attachment point for tool drop protection system



Micro-structured cutting edges allow easy cutting of large cross-sections



With gripping surface below the joint for gripping and pulling wires with a diameter from 3/64"



Opening spring and locking device are integrated in the handles for comfortable work and protected transport



71 01 160: High cutting force with a length of just 6 1/4" – ideal for small hands

# 60% less effort required

compared to conventional high leverage diagonal cutters. The lever-action mechanism ensures an extremely favorable lever ratio with very little friction. The cutting force is about 20 times higher than the handforce applied.









							Cutting of	apacities		
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆¹∆ Ibs
71 01 160	X	6 1/4 160	<b>P4</b>	black atramentized	plastic coated	13/64 5.3	11/64 4.4	1/8 3.2	1/8 3.0	0.43
71 01 200	Х	8 200	<b>Þ</b> 4	black atramentized	plastic coated	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.74
71 02 200	X	8 200	M	black atramentized	slim multi-component grips	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.81
71 02 200 T BKA	X	<mark>8</mark> 200	<b>&gt;</b> 4	black atramentized	slim multi-component grips, integrated tether attachment point	1/4 6.0	13/64 5.2	5/32 4.0	<mark>9/64</mark> 3.6	0.83
71 12 200	X	<mark>8</mark> 200	<b>▶</b>	black atramentized	slim multi-component grips	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.84

The recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings

Gripping surface below the joint for gripping and pulling wires with a diameter from 3/64" (1 mm)

# 71 32 200 / 71 32 200 T BKA\*

Opening spring and locking device are integrated in the handles for comfortable work and protected transport

## 71 32 200 T BKA\*

Pliers with tether attachment point for tool drop protection system









						Cutting capacities				
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆'∆ Ibs
71 31 200	X	8 200	<b>M</b>	black atramentized	plastic coated	1/4 6.0	1 <mark>3/64</mark> 5.2	5/32 4.0	9/64 3.6	0.73
71 32 200		8 200	<b>▶</b>	black atramentized	slim multi-component grips	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.82
71 32 200 T BKA	X	8 200	<b>▶</b>	black atramentized	slim multi-component grips, integrated tether attachment point	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.84

20° angled head with singlesided joint bar and diagonal cutting edge for flush cutting; with space for gripping

# 71 22 200 / 71 22 200 T BKA\*

Opening spring and locking device are integrated in the handles for comfortable work and protected transport

# 71 22 200 T BKA\*

Pliers with tether attachment point for tool drop protection system

# 71 41 200

The recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings





						Cutting capacities				
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	۵۵
71 21 200	Х	8 200	<u>√2</u> 0° ▶◀	black atramentized	plastic coated	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.73
71 22 200	Х	<mark>8</mark> 200	<u>√2</u> 0°	black atramentized	slim multi-component grips	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.82
71 22 200 T BKA	X	<mark>8</mark> 200	<u>√2</u> 0° ▶ <b>◀</b> ₩₩	black atramentized	slim multi-component grips, integrated tether attachment point	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.83
71 41 200	Х	<mark>8</mark> 200	<u>√2</u> 0° ▶◀	black atramentized	plastic coated	1/4 6.0	13/64 5.2	5/32 4.0	9/64 3.6	0.73

7

Compact Bolt Cutter

The compact bolt cutters from KNIPEX are now available with longer handles for one and two-handed operation.

Up to a 40-fold increase of manual force

For powerful cutting of larger diameters as well as very hard materials Two-handed operation for maximum cutting force

- > 60% less effort required compared to high leverage diagonal cutters of the same size
- > 40-fold increase of manual force due to special joint design
- > gripping surface below the joint for gripping and pulling wires with a diameter from 3/64" (1 mm)
- > induction hardened precision blades: cutting edge hardness (approx. 64 HRC)
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened

# **71 01 250** Straight blades

#### 71 31 250

Blades with notch for easier cutting of larger diameters due to a better leverage close to the fulcrum









/13125

						(	Cutting capacities		
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ lbs
71 01 250	Х	10 250	<b>Þ4</b>	black atramentized	plastic coated	7/32 5.6	5/32 4.0	5/32 3.8	1.03
71 31 250	Х	10 250	M	black atramentized	plastic coated	1/4 6.0	11/64 4.3	11/64 4.2	1.03

# KNIPEX CoBolt® "Fencing" Compact Bolt Cutter

71

- > the CoBolt® with reduced cutting edge hardness to allow more pressure on the sides of the cutting edges (e.g. for making fences)
- > with precision cutting edges for soft and hard wire
- > cutting capacity: max. Ø 5/32" for hard wire (up to 1900 n/mm² / 48 HRC)
- > cuts material like bolts, nails, rivets, etc. up to 13/64" (5.2 mm) dia.
- > exceptional cutting performance with minimum effort because of new lever action design
- > induction hardened cutting edges (approx. 62 HRC)
- > chrome vanadium heavy-duty steel; forged, oil-hardened

## 71 31 200 R

The recess in the blade allows easier cutting of thicker wires, e.g. for false ceilings





							Cutting capacities	S	
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ Ibs
71 01 200 R	X	8 200	<b>Þ</b> 4	black atramentized	plastic coated	15/64 6.0	13/64 5.2	5/32 4.0	0.74
71 31 200 R	X	8 200	<b>Þ</b> 4	black atramentized	plastic coated	15/64 6.0	13/64 5.2	5/32 4.0	0.74

- > cutting capacity of steel up to 48 HRC
- > robust cutting edges with a hardness of (approx. 62 HRC)
- > forged-on stopper with comfortable shock absorber
- > good access due to very flat construction of head and joint area
- > ergonomically angled handles to minimize effort
- > sturdy, two-color dual component handles won't slip
- > precise adjustment (12 positions) by cam bolt
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > bolted cutter head, replaceable
- > blade: chrome vanadium heavy-duty steel; forged, multi stage oil-hardened
- > joint: special tool steel; forged
- > handle: steel tube, powder-coated







71 72 610











Forged-on stopper with absorbing inserts: cushions the cutting stroke

							Cutting capacities		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	19 HRC <mark>Ø Inch</mark> Ø mm	40 HRC Ø Inch Ø mm	48 HRC <mark>Ø Inch</mark> Ø mm	∆ ∆ Ibs
71 72 460		18 1/4 460	<b>M</b>	grey atramentized	multi-component grips	5 /16 8	15/64 6	13/64 5	4.59
71 72 610		24 610	MES	grey atramentized	multi-component grips	23/64 9	5 /16 8	9/32 7	5.57
71 72 760		<mark>30</mark> 760	MES	grey atramentized	multi-component grips	7/16 11	23/64 9	5 /16 8	9.40
71 72 910		35 3/4 910	<b>M</b>	grey atramentized	multi-component grips	1/2 13	25/64 10	23/64 9	10.91

71 79 460	Spare cutter head for 71 72 460 complete with screws
71 79 610	Spare cutter head for 71 72 610 complete with screws
71 79 760	Spare cutter head for 71 72 760 complete with screws
71 79 910	Spare cutter head for 71 72 910 complete with screws

# The special shape of the mesh cutter head, 71 82 950, enable it to cut structural steel that is lying down flat

- > cutting capacity of steel up to 48 HRC hardness
- > robust cutting edges are induction hardened, cutting edge hardness (approx. 62 HRC)
- > forged-in stopper with comfortable shock-absorber
- > good access due to very flat construction of head and joint area
- > ergonomically angled handles to minimize effort
- > sturdy non-slip two-color dual component handle sleeves
- > precise adjustment (12 positions) by eccentric bolt
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > bolted cutter head, replaceable
- > blade: chrome vanadium heavy-duty steel; forged, multi stage oil-hardened
- > joint: special tool steel, forged
- > handle: steel tube, powder-coated











						Cutting capacities			
Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	19 HRC <mark>Ø Inch</mark> Ø mm	40 HRC <mark>Ø Inch</mark> Ø mm	48 HRC <mark>Ø Inch</mark> Ø mm	∆ ∆ Ibs
71 82 950		41 13/32 950	<b>M</b>	grey atramentized	multi-component grips	7/16 11	<b>23/64</b> 9	15/64 6	8.95

71 89 950 Spare cutter head for 71 82 950 complete with screws

- > the essential cutting tool for all-around use
- > high-quality material and precise workmanship for long service life
- > precision cutting edges for soft and hard wire
- > clean cutting of thin copper wires, even at the cutting edge tips
- > induction hardened cutting edges (approx. 62 HRC)
- > narrow head style for use in confined areas
- > vanadium steel; forged, multi stage oil-hardened



Clean cutting of thin copper wires, also at the cutting edge tips









							Cut	ting capac	ties	
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆¹∆ Ibs
70 01 110		4 1/4 110		black atramentized			1/8 3.0	5/64 2.0	3/64 1.2	0.18
70 01 125		5 125			n aliah ad 2	plactic contod	1/8 3.0	3/32 2.3	1/16 1.5	0.18
70 01 140		5 1/2 140	•		polished3	plastic coated	5/32 4.0	3/32 2.5	5/64 1.8	0.28
70 01 180		7 1/4 180					5/32 4.0	1/8 3.0	3/32 2.5	0.44
70 02 125		5 125					1/8 3.0	3/32 2.3	1/16 1.5	0.26
70 02 140		5 1/2 140	<b>P4</b>	black atramentized	polished	multi-component grips	5/32 4.0	3/32 2.5	5/64 1.8	0.35
70 02 180		7 1/4 180					5/32 4.0	1/8 3.0	3/32 2.5	0.57
70 08 180 SBA	X	7 1/4 180	会 1000 V ASTM	black atramentized	polished	insulated, multi-component handles, ASTM-tested	5/32 4.0	1/8 3.0	3/32 2.5	0.58
70 11 110		4 1/4 110	<b>~~</b> /////	black atramentized	polished	plastic coated	1/8 3.0	5/64 2.0	3/64 1.2	0.20

# The next generation of the KNIPEX classic, with even better features

20% higher cutting force than the previous model, plus longer cutting edges

High cutting force due to optimum cutting geometry and transmission ratio

- > strong precision rivet for even movement and long service life
- > induction hardened cutting edges (approx. 62 HRC)
- > narrow head with long cutting edges: good access in confined areas
- > long tool life and high loading capacity
- > the essential diagonal cutters for diverse use
- > vanadium steel; forged, multi stage oil-hardened in multiple steps























							Cut	ting capac	ities	
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ Ibs
70 01 160	X	6 1/4 160	<b>P4</b>	black atramentized	polished	plastic coated	5/32 4.0	1/8 3.0	5/64 2.0	0.40
70 02 160		6 1/4 160	<b>P4</b>	black atramentized	polished	multi-component grips	5/32 4.0	1/8 3.0	5/64 2.0	0.47
70 08 160 SBA	X	6 1/4 160	▶ <b>4</b> ≙ 1000 V ASTM	black atramentized	polished	insulated, multi-component handles, ASTM-tested	5/32 4.0	1/8 3.2	5/64 2.0	0.49
70 26 160		6 1/4 160	<b>≙</b> 1000 V <b>△€</b>	chrome plated	chrome plated	insulated multi-component grips, VDE-tested	5/32 4.0	1/8 3.0	5/64 2.0	0.51

# Flush Cutting Diagonal Pliers for Plastics

DIN ISO 5743

72

- > provides a fully flush cut when cutting tie-wraps, plastic and soft metals
- > for nearly flush cutting of molded plastic components from sprues
- > includes opening spring for easy repetitive work
- > vanadium electric steel; forged, oil-hardened

# 72 01 160

With elongated cutting edges; improved transmission ratio for 25% better cutting performance  $\,$ 







Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	∆ ∆ Ibs
72 01 140		5 1/2 140				0.28
72 01 160	X	6 1/4 160	M	polished	plastic coated	0.39
72 01 180		7 1/4 180				0.43
72 02 125		5 125	M	polished	multi-component grips	0.24
72 11 160	X	6 1/4 160	<u>∡4</u> 5°	polished	plastic coated	0.38
72 21 160		6 1/4 160	<u> </u>	polished	plastic coated	0.39



- > specially developed for cutting fiber optics (glass fiber cables)
- > with elongated cutting edges
- > cutting edges induction hardened
- > includes opening spring for easy repetitive work
- > vanadium steel; forged, multi stage oil-hardened

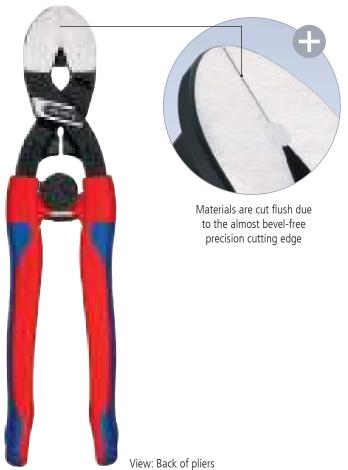


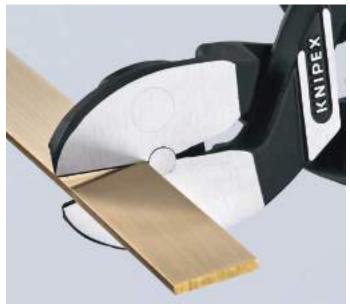
Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	∆¹∆ Ibs
72 51 160		6 1/4 160	<b>M</b> M	polished	plastic coated	0.38

# For easy flush cutting of plastic components and soft metal

- > less effort for cutting thicker workpieces due to high leverage design
- > space for hands and flush cutting due to  $20\ensuremath{^\circ}$  angled head with joint bar on one side
- > opening spring and locking device are integrated in the handles
- > precision cutting edges, induction hardened (approx. 59 HRC) for soft materials
- > chrome vanadium electric steel, forged, multi stage oil-hardened











Ideal for the flush cutting of plastic sprues with large diameters

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	∆∆ lbs
72 62 200	X	<mark>8</mark> 200	<u>√2</u> 0°	black atramentized	with slim multi-component grips	<mark>1/4</mark> 6.0	0.83



# **73**

# Powerful, light and universal

# Cuts fine strands as well as multi-stranded cables and piano wires

- > box-joint design: high stability and lightweight
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > large opening width for thicker cables
- > cuts all wires precisely, even fine copper wires
- > compact, low weight construction
- > double supported joint axis for heavy-duty work
- > universal usage in the assembly, maintenance and production
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened











Box-joint design: high stability and lightweight









# 40 % less effort required

compared with standard diagonal cutters of the same length. With double mounted hinged joint.

							Cutting capacities					
		<b>←→</b> Inch		211			Ø Inch	Ø Inch	Ø Inch		Ø Inch	۵۵
Product Number	Packaging	mm		Pliers	Head	Handles	Ømm	Ømm	Ømm	Ømm	Ømm	lbs
73 02 160	X	6 1/4 160		black atramentized	polished	multi-component grips	3/16 4.8	5/32 3.8	7/64 2.7	3/32 2.2	15/32 12.0	0.39
73 06 160		6 1/4 160	<u>A</u> 1000 V <u>A</u> €	chrome plated	chrome plated	insulated, multi-component grips, VDE-tested	3/16 4.8	5/32 3.8	7/64 2.7	3/32 2.2	15/32 12.0	0.41

# Superior high leverage diagonal cutter with patented double joint

- > ideal transmission of force due to double-hinged design
- > reliably cuts all types of wire, including steel tape
- > for rough or very fine cutting
- > for comfortable cutting, repetitive cutting or extremely hard cutting jobs
- > high degree of stability and zero backlash due to precisely milled forged-in axle
- > chrome vanadium heavy-duty steel; forged, oil-hardened







# NEW for diagonal cutters:

The option to reapply the tool. The KNIPEX TwinForce® cuts even 5/32" (4 mm) thick wire without great effort when reapplied two or three times. Conventional high leverage diagonal cutters either cannot cut these diameters or only with very great effort.

# Extremely easy cutting with little strain:

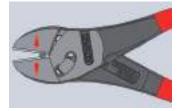
cuts 50% easier than KNIPEX high leverage diagonal cutters of the same size



Insert the wires as close to the hinge as possible. In case of cutters with very high transmission, the width of the gap between the cutting edges close to the fulcrum may be less than the thickness of the wire. Wires may slip forward when the cutting starts.



Continue cutting in the same location along the wire. Now cutting is much easier because the wire remains in place closer to the fulcrum.



First make a notch in the wire using the KNIPEX TwinForce<sup>®</sup> until the required hand force increases considerably. Now open the pliers and slide the wire backwards towards the joint.



You can repeat this process if necessary.

# **TwinForce**®

								Cutting o	apacities		
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆'∆ Ibs
73 71 180	Х	7 1/4 180	<b>P4</b>	black atramentized	polished	plastic coated	7/32 5.5	3/16 4.6	1/8 3.2	1/8 3.0	0.56
73 72 180 BK	Х	7 1/4 180	<b>P</b> 4	black atramentized	polished	multi-component grips	7/32 5.5	3/16 4.6	1/8 3.2	1/8 3.0	0.62

- > forged-on axle for heavy-duty work
- > for very tough, continuous use
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > precision cutting edges induction hardened (approx. 64 HRC) cut several types of wire including piano wire
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened

## Style 1

With opening spring; can be activated if required

#### Stvle 2

Angled head offers clearance for gripping

## 10" Length (250 mm)

Suitable for copper conductors up to 16 mm<sup>2</sup> and aluminum conductors up to 35 mm<sup>2</sup>

**74 02 200 T BKA / 74 02 250 T BKA / 74 22 200 T BKA / 74 22 250 T BKA\*** Pliers with integrated tether attachment point for tool drop protection system

# 20% less effort required

compared to conventional diagonal cutters of the same length. With forged-on joint axle.



74 12: Opening spring in deactivated position



74 12: Activated opening spring by pressing down with your thumb

















74 21 200 12°

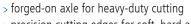


With integrated forged joint axle for very tough, continuous use

								_	ing capac	ities	
		<b>4→</b> Inch						Ø Inch	Ø Inch	Ø Inch	7.7
Product Number	Packaging	mm		Pliers	Head	Handles	Style	Ømm	Ømm	Ømm	lbs
74 01 140		5 1/2 140					-	1/8 3.1	5/64 2.0	1/16 1.5	0.29
74 01 160	X	6 1/4 160					-	9/64 3.4	3/32 2.5	5/64 2.0	0.42
74 01 180	X	<b>7</b> 1/4 180		black atramentized	polished	plastic coated	-	5/32 3.8	7/64 2.7	3/32 2.2	0.53
74 01 200	X	8 200					-	11/64 4.2	1/8 3.0	3/32 2.5	0.58
74 01 250	Х	10 250					-	3/16 4.6	9/64 3.5	1/8 3.0	0.90
74 02 140		5 1/2 140					-	1/8 3.1	5/64 2.0	1/16 1.5	0.35
74 02 160		6 1/4 160		hla d +		d multi-component grips		9/64 3.4	3/32 2.5	5/64 2.0	0.49
74 02 180		7 1/4 180		black atramentized	polished			5/32 3.8	7/64 2.7	3/32 2.2	0.60
74 02 200	X	8 200					-	11/64 4.2	1/8 3.0	3/32 2.5	0.66
74 02 200 T BKA	Х	8 200	<b>P4</b>	black atramentized	polished	multi-component grips, integrated tether attachment point	-	11/64 4.2	1/8 3.0	3/32 2.5	0.67
74 02 250	Х	10 250	<b>P</b> 4	black atramentized	polished	multi-component grips	-	3/16 4.6	9/64 3.5	1/8 3.0	1.00
74 02 250 T BKA	X	10 250	<b>P4</b>	black atramentized	polished	multi-component grips, integrated tether attachment point	-	3/16 4.6	9/64 3.5	1/8 3.0	1.01
74 08 200 US	X	8 200	<b>P</b> 4			insulated, multi-component handles,	-	11/64 4.2	1/8 3.0	3/32 2.5	0.68
74 08 250 US	X	10 250	ASTM	black atramentized	polished	ASTM-tested	-	3/16 4.6	9/64 3.5	1/8 3.0	1.04
74 12 160		6 1/4 160			1: 1 1	10.	1	9/64 3.4	3/32 2.5	5/64 2.0	0.48
74 12 180		7 1/4 180	MM	black atramentized	polished	multi-component grips	1	5/32 3.8	7/64 2.7	3/32 2.2	0.60
74 21 180		7 1/4 180					2	5/32 3.8	7/64 2.7	3/32 2.2	0.52
74 21 200	Х	<mark>8</mark> 200	<u>√1</u> 2° ▶◀	black atramentized	polished	plastic coated	2	11/64 4.2	1/8 3.0	3/32 2.5	0.59
74 21 250	Х	10 250					2	3/16 4.6	9/64 3.5	1/8 3.0	0.89
74 22 200	Х	8 200	<u>√12°</u>	black atramentized	polished	multi-component grips	2	11/64 4.2	1/8 3.0	3/32 2.5	0.67
74 22 200 T BKA	X	8 200	<b>₹12°</b>	black atramentized	polished	integrated tether attachment point		11/64 4.2	1/8 3.0	3/32 2.5	0.68
74 22 250	X	10 250	<u>√1</u> 2° ▶◀	black atramentized	polished			3/16 4.6	9/64 3.5	1/8 3.0	1.00
74 22 250 T BKA	X	10 250	<u>√12°</u>	black atramentized	polished	multi-component grips, integrated tether attachment point	2	3/16 4.6	9/64 3.5	1/8 3.0	1.01

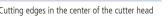
# High Leverage Center Cutters DIN ISO 5743





- > precision cutting edges for soft, hard and piano wire
- > cuts thick wires with less effort than other diagonal cutters of the same length
- > cutting edges are in the center of the cutter head
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > cutting edge hardness (approx. 64 HRC)
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened





Culling	eages	Ш	tne	center	ΟI	me	cutter	neau

								Cutting capacities				
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ Ibs	
74 91 250	X	10 250	1	black atramentized	polished	plastic coated	13/64 5.0	13/64 5.0	5/32 3.8	9/64 3.5	0.87	

# **Diagonal Cutters** for electromechanics DIN ISO 5749

76

- > with sharp, precisely aligned cutting edges for soft, hard wire and piano wire
- > cutting edge hardness (approx. 63 HRC)
- > lap ioint
- > vanadium steel; forged, multi stage oil-hardened in multiple steps

#### 76 12 125

Low-friction double spring for gentle and even opening

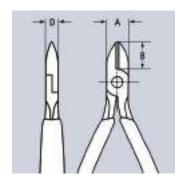
# 76 22 125

Without bevel for flush cutting of soft wires;

low-friction double spring for gentle and even opening

## 76 81 125

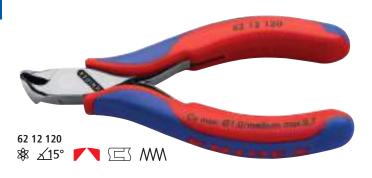
Particularly tapered head with small bevel for work in confined areas (cable harnesses, multi-stranded wires)





							Cutting capacities				Di	ns		
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆ ∆ Ibs
76 01 125	3 3	5 125	x8x 🚩 🤻	black atramentized	polished	plastic coated	1/64 - 1/8 0.4 - 3.0	3/32 2.3	1/16 1.5	1/32 0.6	37/64 14.5	5/8 16.0	23/64 9.0	0.20
76 12 125		5 125	<b>*</b> ►¶\\\\	black atramentized	polished	multi-component grips	1/64 - 3/32 0.4 - 2.5	5/64 1.8	3/64 1.0	1/32 0.6	37/64 14.5	5/8 16.0	23/64 9.0	0.25
76 22 125		5 125	<b>₩ /</b> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	black atramentized	polished	multi-component grips	1/64 - 3/32 0.4 - 2.5	-	-	-	37/64 14.5	5/8 16.0	23/64 9.0	0.24
76 81 125		5 125	<b>8</b> /	black atramentized	polished	plastic coated	1/64 - 1/16 0.4 - 1.7	3/64 1.3	1/32 0.8	-	37/64 14.5	5/8 16.0	23/64 9.0	0.19

- > cutting edges for soft and medium hard wire
- > without bevel; for flush cutting
- > cutting edge hardness (approx. 60 HRC)
- > low-friction double spring for gentle and even opening
- > precision box-joint
- > the polish and a fine film of oil offers effective rust protection no circuit faults caused by peeling chrome from plated tools
- > ball bearing steel



						Cutting c						
		<b>4</b> →				(C) In all		A	В	D	C	47
Product Number	Packaging	Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Inch mm	Inch mm	Inch mm	Inch mm	lbs
62 12 120		4 3/4 120	<b>№</b> 1/25° <b>/</b> □ □ MM	polished	multi-component grips	1/64 - 3/64 0.3 - 1.0	1/32 0.7	7/16 11	25/64 10	19/64 7.5	43/64 17	0.21



- > precision pliers for ultra fine cutting work, e.g. in electronics and fine mechanics
- > precision box-joint
- > low-friction double spring for gentle and even opening
- > the mirror polish and fine film of oil offers effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > cutting edge hardness (at least 60 HRC)
- > ball bearing steel, laser-hardened cutting edges

## Style 0

End Cutter, with bevel

## Style 2

End Cutter, mini-blade with small bevel

#### Style 3

Oblique End Cutter, short head, with small bevel, 15° angle

## Style 4

Oblique End Cutter, short head, with small bevel, 27° angle

#### Style 5

Oblique End Cutter, short head, without bevel, for flush cutting, 27° angle

## Style 6

Oblique End Cutter, mini-blade with small bevel, 65° angle, made of special tool steel, forged, oil-hardened

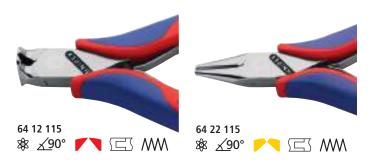
## Style 7

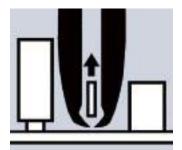
Oblique End Cutter, mini-blade with small bevel, head with recess, 35° angle, made of special tool steel, forged, oil-hardened

# Style 1 / 64 11 115

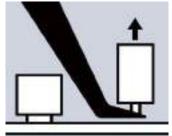
End Cutter, without bevel











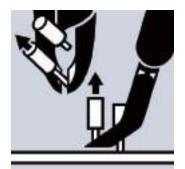
64 62 120



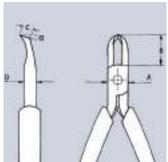






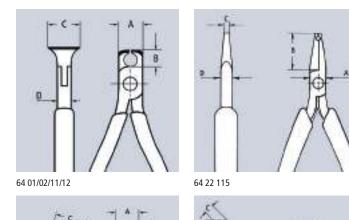


64 72 120

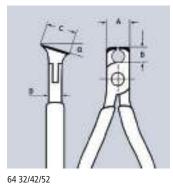


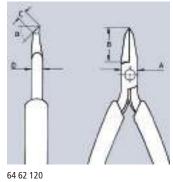
64 72 120















							Cutting capacities		ties		Dime	nsions		
Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	Style	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	C Inch mm	D Inch mm	۵Z
64 01 115	, actuaging	4 1/2 115	\$ <u>₹</u> 90° <u>►</u>	mirror polished	plastic coated	0	5/64 2.0	3/64 1.0	1/64 0.5	7/16 11.0	15/64 6.0	5/8 16.0	19/64 7.5	0.1
64 02 115		4 1/2 115	\$ <u>₹</u> 90° <del> </del>	mirror polished	multi-component grips	0	<mark>5/64</mark> 2.0	3/64 1.0	1/64 0.5	<b>7/16</b> 11.0	1 <mark>5/64</mark> 6.0	<mark>5/8</mark> 16.0	19/64 7.5	0.2
64 11 115		4 1/2 115	₩ <b>₹</b> 90° <b>•</b>	mirror polished	plastic coated	1	1/16 1.4	1/32 0.8	-	<b>7/16</b> 11.0	15/64 6.0	5/8 16.0	9/32 7.0	0.16
64 12 115		4 1/2 115	₩ ₹30.	mirror polished	multi-component grips	1	1/16 1.4	1/32 0.8	-	7/16 11.0	15/64 6.0	5/8 16.0	9/32 7.0	0.2
64 22 115		4 1/2 115	₩ <b>₹</b> 30° <b>►</b>	mirror polished	multi-component grips	2	1/32 0.8	-	-	25/64 10.0	<b>51/64</b> 20.2	1/8 3.0	15/64 6.0	0.14
64 32 120		4 3/4 120	\$ <u>₹</u> 15° <b>/</b>	mirror polished	multi-component grips	3	1/16 1.5	3/64 1.0	1/64 0.5	<b>7/16</b> 11.0	25/64 10.0	43/64 17.0	9/32 7.0	0.20
64 42 115		4 1/2 115	\$ <u>₹</u> 27°	mirror polished	multi-component grips	4	1/16 1.5	3/64 1.0	1/64 0.5	13/32 10.5	25/64 10.0	15/32 12.0	9/32 7.0	0.1
64 52 115		4 1/2 115	\$ <u>√</u> 27° <b>/</b> □ MM	mirror polished	multi-component grips	5	3/64 1.3	-	-	13/32 10.5	25/64 10.0	15/32 12.0	9/32 7.0	0.15
64 62 120		4 3/4 120	\$ <u>∡65°</u>	mirror polished	multi-component grips	6	1/64 0.5	-	-	3/8 9.5	47/64 18.5	13/64 5.0	15/64 6.0	0.15
64 72 120		4 3/4 120	\$ <u>√</u> 35° <u></u> ✓	mirror polished	multi-component grips	7	1/16 1.5	-	-	15/32 12.0	13/64 5.1	13/64 5.0	9/32 7.0	0.2

- > precision pliers for ultra fine cutting work, e.g. in electronics and fine mechanics
- > electrically discharging handles dissipative
- > precision box-joint
- > low-friction double spring for gentle and even opening
- > the mirror polish and a fine film of oil offers effective rust protection no circuit faults caused by peeling chrome from plated tools
- > cutting edge hardness (at least 60 HRC)
- > with two-color dual component handles, black/grey
- > ball bearing chrome steel

# Style 1

End Cutter, with small bevel

#### Style 3

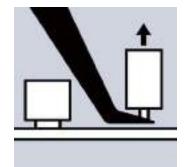
Oblique End Cutter, short head, with small bevel, 15° angle

#### Style 6

Oblique End Cutter, mini-blade with small bevel, 65° angle

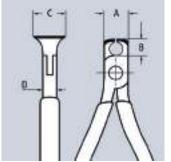






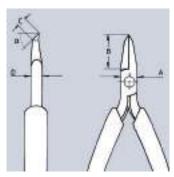


64 32 120 ESD



64 12 115 ESD





64 62 120 ESD

# ESD Pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



							Cutting capacities				Dime	ensions		
		<b>←→</b> Inch					Ø Inch	Ø Inch	Ø Inch	A Inch	B Inch	C Inch	D Inch	△△
Product Number	Packaging	mm		Head	Handles	Style	Ømm	Ømm	Ømm	mm	mm	mm	mm	lbs
64 02 115 ESD		4 1/2 115	<b>▲ * * * 90° ▶ □</b>	mirror polished	ESD multi-component grips	0	<b>5/64</b> 2.0	3/64 1.0	1/64 0.5	<b>7/16</b> 11.0	15/64 6.0	5/8 16.0	19/64 7.5	0.21
64 12 115 ESD		4 1/2 115	<b>₩ ½</b> 90° <b>&gt; □</b>	mirror polished	ESD multi-component grips	1	1/16 1.5	3/64 1.0	1/64 0.5	<b>7/16</b> 11.0	15/64 6.0	5/8 16.0	9/32 7.0	0.21
64 32 120 ESD		4 3/4 120	<b>▲ * 1</b> 5° <b>▶</b> □ □ <b>MM</b>	mirror polished	ESD multi-component grips	3	1/16 1.5	3/64 1.0	1/64 0.5	<b>7/16</b> 11.0	25/64 10.0	43/64 17.0	9/32 7.0	0.20
64 62 120 ESD		4 3/4 120	<b>▲</b> \$ <u>∕</u> 65° <b>/</b> □	mirror polished	ESD multi-component grips	6	1/64 0.5	-	-	3/8 9.5	47/64 18.5	13/64 5.0	15/64 6.0	0.15

- > bolted joint for high precision and stress tolerance
- > for ultra fine cutting work, e.g. in electronics and fine mechanics
- > sharp, ground cutting edges for soft, hard wire and piano wire
- > cutting edge hardness (approx. 64 HRC)
- > low-friction double spring for gentle and even opening
- > high-grade special tool steel; forged, multi stage oil-hardened

**Style 0** With bevel

Style 1

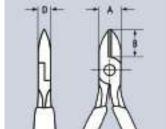
With bevel and lead catcher, no uncontrolled loss of cut wire ends

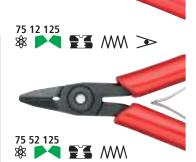
**Style 2** With small bevel

Style 3

Particularly narrow head, with bevel









WARNING: This product can expose you warning: This product can expect to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Bolted joint

							(	utting ca	pacities		D	imensior	ıs	
Product Number	Packaging	<b>←→</b> Inch mm		Style	Pliers	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆¹∆ Ibs
75 02 125		5 125	<b>№ ▶</b> ■ ■ MM	0	burnished	plastic grips	1/64 - 3/64 0.2 - 1.3	3/64 1.0	1/32 0.6	1/64 0.4	13/32 10.5	35/64 14	1/4 6.5	0.18
75 12 125		5 125	<b>*▶■■■■■■</b>	1	burnished	plastic grips	1/64 - 3/64 0.2 - 1.3	3/64 1.0	1/32 0.6	1/64 0.4	13/32 10.5	35/64 14	1/4 6.5	0.18
75 22 125		5 125	<b>№ / • • • • • • • • • •</b>	2	burnished	plastic grips	1/64 - 3/64 0.2 - 1.3	1/32 0.9	1/64 0.4	1/64 0.3	13/32 10.5	35/64 14	1/4 6.5	0.18
75 52 125		5 125	* <b>&gt; 1 3 3 3 3 3 3 3 3 3 3</b>	3	burnished	plastic grips	1/64 - 1/32 0.2 - 0.8	1/64 0.5	1/64 0.3	-	13/32 10.5	35/64 14	1/4 6.5	0.18

- > for fine cutting work in electronics and fine mechanics
- > sturdy, zero backlash box-joint
- > low-friction double spring for gentle and even opening
- mirror polish, with a fine film of oil, offers effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > cutting edges induction hardened (approx. 60 HRC)
- > ball bearing steel

#### 77 01 115 / 77 02 130 / 77 01 130

Round head, with bevel; cutting edge hardness approx. 62 HRC

#### 77 02 115 / 77 22 130

Round head, with small bevel; cutting edge hardness approx. 60 HRC

#### 77 12 115

Round head, with bevel and lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 62 HRC

#### 77 21 115

Pointed head, without bevel; cutting edge hardness approx. 57 HRC

#### 77 22 115

Round head, without bevel; cutting edge hardness approx. 57 HRC

#### 77 32 115

Pointed head, with small bevel; cutting edge hardness approx. 60 HRC

#### 77 42 115 / 77 42 130

Pointed head, without bevel; cutting edge hardness approx. 57 HRC

#### 77 52 115

Pointed, flat head, with small bevel; cutting edge hardness approx. 60 HRC

#### 77 72 115

Pointed mini-head, with small bevel; cutting edge hardness approx. 60 HRC

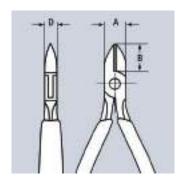


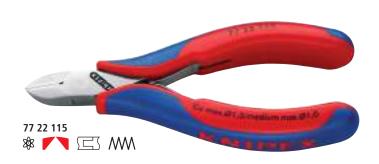


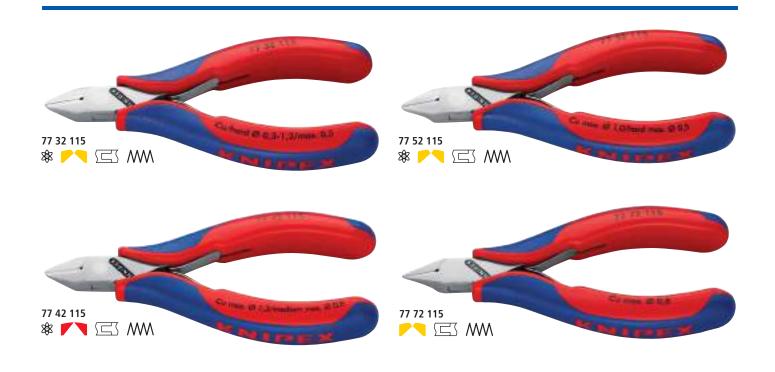












						Cuttin	g capaciti	es	D	imensio	ns	
Product Number	Packaging	<b>4→</b> Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆ ∆ Ibs
77 01 115		4 1/2 115	<b>*</b> ▶ <b>\</b> □ <b>\</b>	mirror polished	plastic coated	1/64 - 1/16 0.3 - 1.6	3/64 1.2	1/64 0.3	7/16 11.0	35/64 14.0	19/64 7.5	0.15
77 01 130		5 1/4 130	<b>*</b> ▶ <b>□</b> SMM	mirror polished	plastic coated	1/64 - 5/64 0.3 - 2.0	1/16 1.5	1/32 0.8	19/32 15.0	23/32 18.3	3/8 9.5	0.24
77 02 115		4 1/2 115	<b>*</b> ▶ <b>™</b> □ <b>W</b>	mirror polished	multi-component grips	1/64 - 1/16 0.3 - 1.6	3/64 1.2	1/64 0.3	7/16 11.0	35/64 14.0	19/64 7.5	0.18
77 02 130		5 1/4 130	<b>*</b> ▶ <b>□ ™</b>	mirror polished	multi-component grips	1/64 - 5/64 0.3 - 2.0	1/16 1.5	1/32 0.8	19/32 15.0	23/32 18.3	3/8 9.5	0.30
77 11 115		4 1/2 115	<b>*▶</b> ¶□ <b>M</b> >>	mirror polished	single-component grips	1/64 - 1/16 0.3 - 1.6	3/64 1.2	1/64 0.3	7/16 11.0	35/64 14.0	19/64 7.5	0.18
77 12 115		4 1/2 115	<b>*™</b> >	mirror polished	multi-component grips	1/64 - 1/16 0.3 - 1.6	3/64 1.2	1/64 0.3	35/64 14.0	7/16 11.0	19/64 7.5	0.18
77 21 115 N		4 1/2 115	<b>*</b> ▶▼□MM	mirror polished	single-component grips	1/64 - 3/64 0.3 - 1.3	3/64 1.0	-	7/16 11.0	33/64	9/32 7.0	0.11
77 21 130		5 1/4 130	<b>*</b> ✓\⊆M	mirror polished	single-component grips	1/64 - 1/16 0.3 - 1.6	3/64 1.2	-	19/32 15.0	23/32 18.3	3/8 9.5	0.30
77 22 115		4 1/2 115	<b>*✓</b> \⊆\\	mirror polished	multi-component grips	1/64 - 3/64 0.3 - 1.3	3/64 1.0	-	7/16 11.0	35/64 14.0	9/32 7.0	0.18
77 22 130		5 1/4 130	<b>*</b> ▶ <b>\</b> □ <b>\</b>	mirror polished	multi-component grips	1/64 - 5/64 0.3 - 2.0	1/16 1.5	-	19/32 15.0	23/32 18.3	23/64 9.0	0.27
77 32 115		4 1/2 115	<b>*</b> ▶ <b>™</b>	mirror polished	multi-component grips	1/64 - 3/64 0.3 - 1.3	3/64 1.0	1/64 0.5	7/16 11.0	35/64 14.0	19/64 7.5	0.18
77 41 115		4 1/2 115	<b>*</b> ▶▼□MM	mirror polished	plastic coated	1/64 - 3/64 0.3 - 1.3	1/32 0.8	-	35/64 14.0	1/2 13.0	19/64 7.5	0.18
77 42 115		4 1/2 115	<b>*</b> ✓\⊆\\\\	mirror poliched	multi component grips	1/64 - 3/64 0.3 - 1.3	1/32 0.8	-	7/16 11.0	35/64 14.0	19/64 7.5	0.18
77 42 130		5 1/4 130	45 ▼ <b> </b> \\ /VVV\	mirror polished	multi-component grips	1/64 - 1/16 0.3 - 1.6	3/64 1.3	-	19/32 15.0	23/32 18.3	3/8 9.5	0.18
77 52 115		4 1/2 115	<b>*/</b> □□ <b>/</b> M	mirror polished	multi-component grips	1/64 - 3/64 0.3 - 1.0	1/32 0.8	1/64 0.5	7/16 11.0	35/64 14.0	19/64 7.5	0.17
77 72 115		4 1/2 115	<b>*</b> ▶ <b>™</b>	mirror polished	multi-component grips	1/64 - 1/32 0.3 - 0.8	-	-	3/8 9.5	13/32 10.5	15/64 6.0	0.15

## Electronics Diagonal Cutters ESD DIN ISO 9654

77

- > for fine cutting work in electronics and fine mechanics
- > electrically discharging handles dissipative
- > sturdy, zero backlash box-joint
- > low-friction double spring for gentle and even opening
- > the mirror polish with a fine film of oil, offers effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > induction hardened cutting edges (approx. 60 HRC)
- > ball bearing steel

#### 77 02 115 ESD

Round head, with small bevel; cutting edge hardness approx. 60 HRC

#### 77 12 115 FSF

Round head, with bevel and lead catcher - no uncontrolled loss of cut wire ends; cutting edge hardness approx. 62 HRC

#### 77 22 115 ESD

Round head, without bevel; cutting edge hardness approx. 57 HRC

#### 77 32 115 ESD

Pointed head, with small bevel; cutting edge hardness approx. 60 HRC 77 42 115 ESD

Pointed head, without bevel; cutting edge hardness approx. 57 HRC

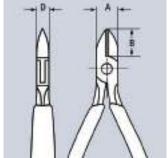
#### 77 52 115 ESD

Pointed, flat head, with small bevel; cutting edge hardness approx. 60 HRC

#### 77 72 115 FSD

Pointed mini-head, with small bevel; cutting edge hardness approx. 60 HRC





#### ESD Pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472

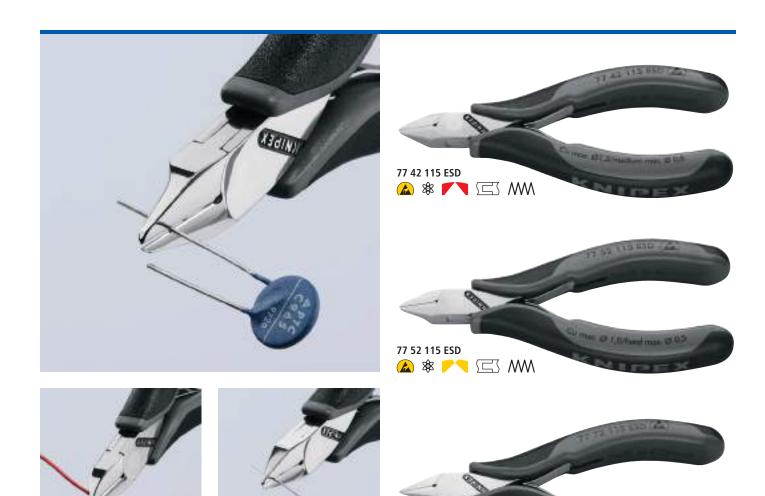














77 72 115 ESD

**▲ \* >** □ **□ M** 

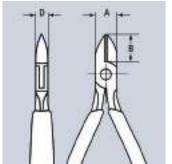
Gy max. 23 0,8

- > for extreme demands on cutting pliers caused by hard or tough materials, e.g. piano, nickel, tungsten and diode wire, which are used more frequently in the electronics and aerospace industries
- > precision carbide metal cutting edges soldered into forged blanks
- > sturdy, zero backlash box-joint
- > hardness of the carbide cutting edges (approx. 80 83 HRC)
- > pliers with carbide metal cutting edges have a substantially longer service life than with conventional cutting edges
- > constantly reliable cutting results due to the avoidance of cutter deformations
- > high cost savings due to longer service life of the pliers

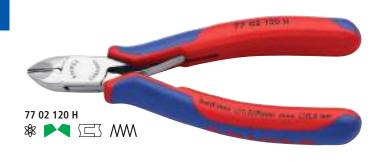
#### 77 32 120 H

Pointed head with chamfer; with small bevel

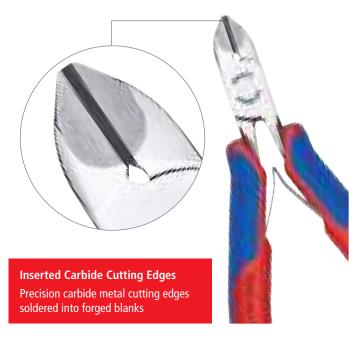












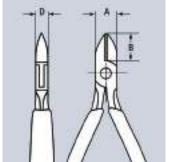
						Cutting capacities			D	imensio	ns		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆¹∆ Ibs
77 02 120 H		4 3/4 120	SHOW THE ANALY	mirror polichod	multi component ssins	5/64 2.0	3/64 1.0	1/32 0.6	1/64 0.2	7/16 11	9/16 14.3	19/64 7.5	0.19
77 02 135 H		5 1/4 135	<b>*</b> ▶ <b>□</b> □ M	mirror polished	multi-component grips	5/64 2.0	1/16 1.6	3/64 1.2	1/32 0.8	19/32 15	45/64 18	3/8 9.5	0.26
77 32 120 H		4 3/4 120	<b>*</b> ▶ <b>*</b> □ MM	mirror polished	multi-component grips	1/16 1.6	1/32 0.6	1/64 0.2	1/64 0.2	7/16 11	9/16 14.3	19/64 7.5	0.17

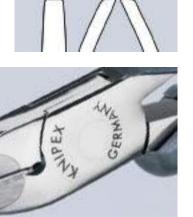
- > for extreme demands on cutting pliers caused by hard or tough materials, e.g. piano, nickel, tungsten and diode wire, which are used more frequently in the electronics and aerospace industries
- > precision carbide metal cutting edges soldered into forged blanks
- > sturdy, zero backlash box-joint
- > hardness of the carbide cutting edges (approx. 80 83 HRC)
- > pliers with carbide metal cutting edges have a substantially longer service life than those with conventional cutting edges
- > constantly reliable cutting results due to the avoidance of cutter deformations
- > high cost savings due to longer service life of the pliers
- > electrically discharging handles dissipative (ESD version only)

#### 77 32 120 H ESD

Pointed head with chamfer; with small bevel











#### ESD Pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



							Cutting o	apacities	5	D	imensio	ns	
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆¹∆ Ibs
77 02 120 H ESD		4 3/4 120		mirror poliched	CCD multi component avinc	5/64 2.0	3/64 1.0	1/32 0.6	1/64 0.2	7/16 11.0	9/16 14.3	19/64 7.5	0.19
77 02 135 H ESD		5 1/4 135	<b>(</b>	mirror polisned	ESD multi-component grips	5/64 2.0	1/16 1.6	3/64 1.2	1/32 0.8	19/32 15.0	<b>45/64</b> 18.0	3/8 9.5	0.26
77 32 120 H ESD		4 3/4 120	<b>▲</b> * <b>&gt;</b> □ MM	mirror polished	ESD multi-component grips	1/16 1.6	1/32 0.6	1/64 0.2	1/64 0.2	7/16 11.0	9/16 14.3	19/64 7.5	0.17

## Electronic Super Knips® DIN ISO 9654

78

- > precision pliers for ultra fine cutting work in electronics and fine mechanics
- > ground, very sharp cutting edges without bevel for flush cutting
- > precision shaped tips cut wires resting on a board from 1/64" (0.2 mm) dia.
- > joint with stainless steel rivet
- > extremely smooth movement for minimum operator fatigue
- > includes opening spring for easy repetitive work

#### 78 03 125 / 78 23 125

Cutting edge hardness approx. 54 HRC; INOX – stainless steel

#### 78 13 125

With lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 54 HRC; INOX – stainless steel

#### 78 31 125

With narrow head; cutting edge hardness approx. 60 HRC; special tool steel, burnished

#### 78 41 125

With lead catcher – no uncontrolled loss of cut wire ends; with narrow head; cutting edge hardness approx. 60 HRC; special tool steel, burnished

#### 78 61 125

Suitable for cutting glass fiber cables (fiber optics); cutting edge hardness approx. 64 HRC; special tool steel, multi stage oil-hardened

#### 78 71 125

With lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 64 HRC; special tool steel, burnished





#### Models for hard wire

#### 78 81 125

Precision ground cutting edges with very small bevel suitable for hard wire; cutting edge hardness approx. 64 HRC; special tool steel, burnished

#### 78 91 125

Precision ground cutting edges with very small bevel suitable for hard wire; with lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 64 HRC; special tool steel, burnished

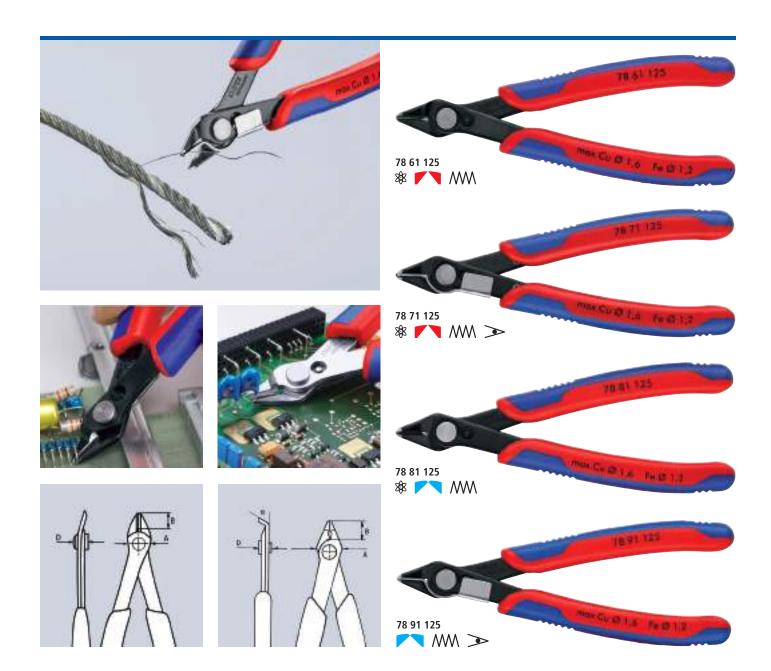












							Cutting	g capacit	ies	D	imensio	ns	
Product Number	Packaging	←→ Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆¹∆ Ibs
78 03 125		5 125	<b>₩ /</b> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		polished	multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.0	-	17/32 13.5	23/64 9.0	19/64 7.5	0.13
78 13 125		5 125	* MM>		polished	multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.0	-	17/32 13.5	23/64 9.0	19/64 7.5	0.14
78 23 125	X	5 125	\$ ∡60° <b>/</b> \\		polished	multi-component grips	1/64 - 3/64 0.2 - 1.0	1/64 0.2	-	17/32 13.5	7/32 5.5	19/64 7.5	0.12
78 31 125		5 125	<b>№ /</b> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	burnished		multi-component grips	1/64 - 3/64 0.2 - 1.0	-	-	17/32 13.5	23/64 9.0	19/64 7.5	0.13
78 41 125		5 125	* MM>	burnished		multi-component grips	1/64 - 3/64 0.2 - 1.0	-	-	17/32 13.5	23/64 9.0	1 <mark>9/64</mark> 7.5	0.14
78 61 125	X	5 125	x88 <b>/</b> ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑	burnished		multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.2	-	17/32 13.5	23/64 9.0	19/64 7.5	0.13
78 71 125		5 125	* / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	burnished		multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.2	-	17/32 13.5	23/64 9.0	19/64 7.5	0.14
78 81 125		5 125	<b>№</b> / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	burnished		multi-component grips	5/64 - 1/16 1.2 - 1.6	3/64 1.2	1/64 0.2	17/32 13.5	23/64 9.0	19/64 7.5	0.14
78 91 125		5 125	* / \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	burnished		multi-component grips	5/64 - 1/16 1.2 - 1.6	3/64 1.2	1/64 0.2	17/32 13.5	23/64 9.0	19/64 7.5	0.14

- > precision pliers for ultra fine cutting work in electronics and fine mechanics
- > electrically discharging handles dissipative (ESD versions only)
- > ground, very sharp cutting edges without bevel for flush cutting
- > precision shaped tips cut wires resting on a board from 1/64" (0.2 mm) dia.
- > joint with stainless steel rivet
- > extremely smooth movement for minimum operator fatigue
- > includes opening spring for easy repetitive work

#### 78 03 125 ESD

Cutting edge hardness approx. 54 HRC; INOX – stainless steel

#### 78 13 125 ESD

With lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 54 HRC; INOX – stainless steel

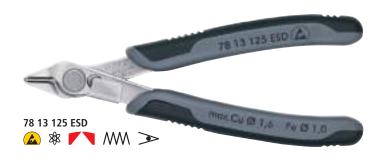
#### 78 61 125 ESD

Cutting edge hardness approx. 64 HRC; special tool steel, burnished

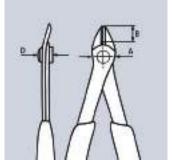
#### 78 71 125 ESD

With lead catcher – no uncontrolled loss of cut wire ends; cutting edge hardness approx. 64 HRC; special tool steel, burnished











#### ESD Pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472





						Cutting cap	acities	D	imension	ıs	
Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆¹∆ Ibs
78 03 125 ESD		5 125	<b>▲ ※ / \ \ \ \ \ \ \ \ \</b>	polished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.0	17/32 13.5	23/64 9.0	19/64 7.5	0.13
78 13 125 ESD		5 125	<b>▲*™&gt;</b>	polished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.0	17/32 13.5	23/64 9.0	19/64 7.5	0.14
78 61 125 ESD		5 125	<b>△※/\</b>	burnished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.2	17/32 13.5	23/64 9.0	19/64 7.5	0.12
78 71 125 ESD		5 125	<b>▲</b> * ► MM >>	burnished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.6	3/64 1.2	17/32 13.5	23/64 9.0	19/64 7.5	0.14

### Now available in a 5 1/2" version. The added 1/2" length is for greater stability and cutting performance.

- > precision ground cutting edges without bevel for flush cutting the finest of wires e.g. in electronics and precision engineering
- > precisely shaped tips also cut adjacent wires from 1/64" (0.20 mm) diameter
- > opening spring and opening limiter user-friendly handle width
- > extremely smooth movement for minimum operator fatigue

#### 78 03 140 / 78 03 140 ESD

Durable and stainless, made from INOX surgical steel, cutting edges hardened to 54 HRC

#### 78 61 140 / 78 61 140 ESD

Heavy-duty, made from burnished special tool steel, cutting edges induction hardened (approx. 64 HRC)

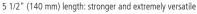
#### 78 03 140 ESD / 78 61 140 ESD

Allows electrostatic energy to discharge through the handles protecting components from electrostatic discharge











For flush cutting, e.g. to shorten cable ties



Shear cut blade design for precise cutting

Product Number	Packaging	<b>4→</b> Inch mm	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆ <b>'</b> ∆ Ibs
78 03 140		5 1/2 140	polished	multi-component grips	1/64 - 1/8 0.2 - 2.1	1/16 1.2	39/64 15.5	31/64 12.5	23/64 13.5	0.17
78 03 140 ESD		5 1/2 140	polished	ESD multi-component grips	1/64 - 1/8 0.2 - 2.1	1/16 1.2	39/64 15.5	31/64 12.5	23/64 13.5	0.17
78 61 140		<b>5 1/2</b> 140		multi-component grips	1/64 - 1/8 0.2 - 2.1	1/16 1.2	39/64 15.5	31/64 12.5	23/64 13.5	0.17
78 61 140 ESD		5 1/2 140		ESD multi-component grips	1/64 - 1/8 0.2 - 2.1	1/16 1.2	39/64 15.5	31/64 12.5	23/64 13.5	0.17

#### **Precision Electronics Diagonal Cutters** DIN ISO 9654

79

- > precision pliers for ultra fine cutting work in electronics and fine mechanics
- > very precisely ground and sharp cutting edges with very small bevels for precise cutting work on small electronic components
- > cutting edge hardness (approx. 64 HRC)
- > approx. 20% lighter than conventional electronics pliers
- > bolted joint with carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > double spring for a gentle and even opening
- > ergonomically optimized handle covers
- > ball bearing chrome steel; forged, multi stage oil-hardened



Mini-head

79 02 125

Round head

79 12 125

Specifically for cutting through hard wire and piano wire

79 22 120

Mini-head

79 22 125

Round head

79 32 125 Pointed head

79 42 125

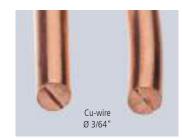
Pointed head

#### 79 52 125

Pointed head; with lead catcher - no uncontrolled loss of cut wire ends

#### 79 62 125

Pointed head; with lead catcher - no uncontrolled loss of cut wire ends



Cut with 79 42 125 (without bevel)

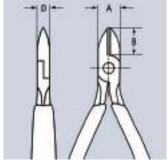
Cut with 79 42 125 Z (flush cut)

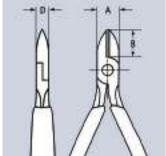












#### The Subtle Difference

KNIPEX precision electronics pliers are made of high-quality ball bearing steel and processed with the highest degree of care. Each opening movement is gentle and even without backlash. Each work step proceeds reliably and precisely. This makes work much easier for professionals.





Sets of pliers can be found on page 203











							Cu	tting cap	acities		D	imensio	าร	
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	ƠZ Ibs
79 02 120		4 3/4 120	* <b>&gt; \$</b>	burnished	polished	multi-component grips	1/64 - 1/16 0.2 - 1.4	3/64 1.0	1/64 0.2	-	23/64 9.0	1/4 6.5	1/4 6.5	0.1
79 02 125		5 125	* <b>&gt; \$ \$</b> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	burnished	polished	multi-component grips	1/64 - 5/64 0.2 - 1.2	3/64 1.3	1/32 0.7	-	7/16 11.0	25/64 10.0	1/4 6.5	0.1
79 12 125		5 125	* <b>* * * *</b> * * * * * * * * * * * * * *	burnished	polished	multi-component grips	1/64 - 5/64 0.3 - 1.2	3/64 1.3	3/64 1.0	1/64 0.2	7/16 11.0	25/64 10.0	1/4 6.5	0.13
79 22 120		4 3/4 120	® <b>₹</b> ¶	burnished	polished	multi-component grips	1/64 - 3/64 0.1 - 1.3	1/32 0.8	-	-	23/64 9.0	1/4 6.5	1/4 6.5	0.1
79 22 125		5 125	* <b>* * * *</b> * * * * * * * * * * * * * *	burnished	polished	multi-component grips	1/64 - 5/64 0.1 - 1.2	3/64 1.0	-	-	7/16 11.0	25/64 10.0	1/4 6.5	0.1
79 32 125		5 125	<b>№ ▶ ■ ■ </b>	burnished	polished	multi-component grips	1/64 - 1/16 0.2 - 1.5	3/64 1.1	1/64 0.2	-	7/16 11.0	<b>7/16</b> 11.0	1/4 6.5	0.1
79 42 125		5 125	<b>№ ▶ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </b>	burnished	polished	multi-component grips	1/64 - 1/16 0.1 - 1.5	1/32 0.8	-	-	<b>7/16</b> 11.0	<b>7/16</b> 11.0	1/4 6.5	0.13
79 42 125 Z		5 125	* <b> </b>	burnished	polished	multi-component grips	up to 1/64 up to 0.2	-	-	-	7/16 11.0	<b>7/16</b> 11.0	1/4 6.5	0.13
79 52 125		5 125	* <b>~</b> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	burnished	polished	multi-component grips	1/64 - 1/16 0.2 - 1.7	1/32 0.9	1/64 0.5	-	<b>7/16</b> 11.0	<b>7/16</b> 11.0	1/4 6.5	0.13
79 62 125		5 125	* <b>/\</b> \$	burnished	polished	multi-component grips	1/64 - 1/16 0.1 - 1.7	1/32 0.8	-	-	7/16 11.0	<b>7/16</b> 11.0	1/4 6.5	0.13

## Precision Electronics Diagonal Cutters ESD

DIN ISO 9654 79

#### Electrically discharging handles – dissipative

- > precision pliers for ultra fine cutting work in electronics and fine mechanics
- > very precisely ground and sharp cutting edges with very small bevels for precise cutting work on small electronic components
- > cutting edge hardness (approx. 64 HRC)
- > approx. 20% lighter than conventional electronics pliers
- > bolted joint with particularly carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > double spring for a gentle and even opening
- > ergonomically optimized handle covers
- > ball bearing chrome steel; forged, multi stage oil-hardened

79 02 120 ESD

Mini-head

79 02 125 ESD

Round head

79 12 125 ESD

Specifically for cutting through hard wire and piano wire

79 22 120 ESD

Mini-head

79 22 125 ESD

Round head

79 32 125 ESD

Pointed head 79 42 125 ESD

Pointed head

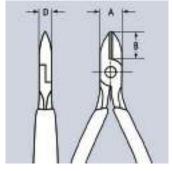
79 52 125 ESD

Pointed head; with lead catcher – no uncontrolled loss of cut wire ends

79 62 125 ESD

Pointed head; with lead catcher – no uncontrolled loss of cut wire ends

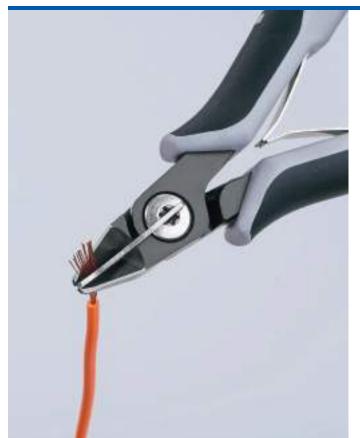






**▲ ※ / ■ ■ M** 

Sets of pliers can be found on page 203







#### ESD Pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



							Cu	tting cap	acities		Di	imensio	าร	
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	A Inch mm	B Inch mm	D Inch mm	∆ d lb:
79 02 120 ESD		4 3/4 120	<b>▲</b> * <b>&gt;</b> ■ <b>3</b> MM	burnished	polished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.4	3/64 1.0	1/32 0.6	-	23/64 9.0	1/4 6.5	1/4 6.5	0.1
79 02 125 ESD		5 125	<b>▲</b> * <b>&gt;</b> ₹	burnished	polished	ESD multi-component grips	1/64 - 5/64 0.2 - 2.0	3/64 1.3	1/32 0.7	-	7/16 11.0	25/64 10.0	1/4 6.5	0.1
79 12 125 ESD		5 125	<b>* * * * *</b>	burnished	polished	ESD multi-component grips	1/64 - 5/64 0.3 - 2.0	3/64 1.3	3/64 1.0	1/64 0.2	<b>7/16</b> 11.0	25/64 10.0	1/4 6.5	0.1
79 22 120 ESD		4 3/4 120	<b>*</b> * * * * * * * * * * * * * * * * * *	burnished	polished	ESD multi-component grips	1/64 - 3/64 0.1 - 1.3	1/32 0.8	-	-	23/64 9.0	1/4 6.5	1/4 6.5	0.1
79 22 125 ESD		5 125	<b>***</b> *********************************	burnished	polished	ESD multi-component grips	1/64 - 5/64 0.1 - 2.0	3/64 1.0	-	-	<b>7/16</b> 11.0	25/64 10.0	1/4 6.5	0.1
79 32 125 ESD		5 125	<b>▲</b> * <b>&gt;</b> ■ <b>3 M</b> M	burnished	polished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.5	3/64 1.1	1/64 0.2	-	<b>7/16</b> 11.0	<b>7/16</b> 11.0	1/4 6.5	0.1
79 42 125 ESD		5 125	<b>▲</b> * <b>/</b> 1 <b>: : : : : : : : : :</b>	burnished	polished	ESD multi-component grips	1/64 - 1/16 0.1 - 1.5	1/32 0.8	-	-	<b>7/16</b> 11.0	<b>7/16</b> 11.0	1/4 6.5	0.1
79 42 125 Z ESD		5 125		burnished	polished	ESD multi-component grips	up to 1/64 up to 0.2	-	-	-	7/16 11.0	<b>7/16</b> 11.0	1/4 6.5	0.1
79 52 125 ESD		5 125	<b>▲ ※ ※ ※ ※ ※ ※ ※</b>	burnished	polished	ESD multi-component grips	1/64 - 1/16 0.2 - 1.7	1/32 0.9	1/64 0.5	-	7/16 11.0	<b>7/16</b> 11.0	1/4 6.5	0.1
79 62 125 ESD		5 125	<b>▲</b> * <b>/</b> 1 <b>:</b> 3 <b>//// /// //// //// //// ///// ///// ///// /////// ////////</b>	burnished	polished	ESD multi-component grips	1/64 - 1/16 0.1 - 1.7	1/32 0.8	-	-	<b>7/16</b> 11.0	<b>7/16</b> 11.0	1/4 6.5	0.1

#### for traps, tube fittings and connectors

#### For pipes, and connectors up to 3 5/32" (80 mm) diameter Fine push-button adjustment for the perfect fit on different sized workpieces

- > ideal for tightening and loosening screw connections, plastic pipe fittings and round nuts
- > soft jaw version is an ideal tool for cannon plugs in aviation and electrical connections in high performance automotive, truck and trailer applications
- > for gentle loosening of hoses on nozzles
- > 25 adjustment positions
- > robust, heavy-duty box-joint design
- > ergonomic handle geometry
- > chrome vanadium electric steel; forged, oil-hardened

#### 81 01 250

With serrated gripping jaws; up to 3 5/32" (80 mm) dia.

#### 81 11 250

With exchangeable plastic jaws for sensitive surfaces; up to 3  $^{\circ}$  (75 mm) dia.







81 11 250









Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Handles	Capacity <mark>Ø Inch</mark> Ø mm	Adjustment positions	∆¹∆ Ibs
81 01 250	X	10 250	black atramentized	non-slip plastic coated	1 - 3 5/32 25 - 80	25	0.76
81 11 250	X	10 250	black atramentized	non-slip plastic coated	3/8 - 3 10 - 75	25	0.76

**81 19 250** 1 pair of plastic jaws for 81 11 250

## Pipe Wrenches 90°

83

- > Swedish pattern
- > 90° angled jaws
- > jaws with offset teeth in opposite directions for a strong grip
- > induction hardened teeth for long life
- > i-beam handle design
- > captive adjusting nut
- > red powder-coated, jaws bright ground
- > chrome vanadium electric steel; forged, multi stage oil-hardened



83 10 015 <del>1</del>90°

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Ø Inch Ø mm	(C):	∆†∆ Ibs
83 10 010		12 1/4 310			1 21/32 42	1	1.74
83 10 015		16 1/2 420			2 3/64 60	1 1/2	3.08
83 10 020		22 560	<b>√</b> 90° □□□	red powder-coated	2 3/4 70	2	5.37
83 10 030		25 1/2 650			4 3/8 110	3	7.44
83 10 040		29 1/2 750			5 1/8 130	4	10.56

## Pipe Wrenches 45°



- > Swedish pattern
- > 45° angled jaws
- > jaws with offset teeth in opposite directions for a strong grip
- > induction hardened teeth for long life
- > i-beam handle design
- > captive adjusting nut
- > red powder-coated, jaws bright ground
- > chrome vanadium electric steel; forged, multi stage oil-hardened







83 20 015 <u>4</u>5°

Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Ø Inch Ø mm	O: Inch	∆ ∆ lbs
83 20 010		12 1/2 320			1 21/32 42	1	1.74
83 20 015		17 430	<b>∡45° □□□</b> re	red powder-coated	2 3/64 60	1 1/2	3.13
83 20 020		22 1/2 570			2 3/4 70	2	5.5

## Pipe Wrenches S-Type

83

- > jaws with offset teeth in opposite directions for a strong grip
- > induction hardened teeth for long life
- > three-point gripping on pipes, self-locking
- > i-beam handle design

> slim, s-type jaw

- > captive adjusting nut
- > red powder-coated, jaws bright ground
- > chrome vanadium electric steel; forged, multi stage oil-hardened







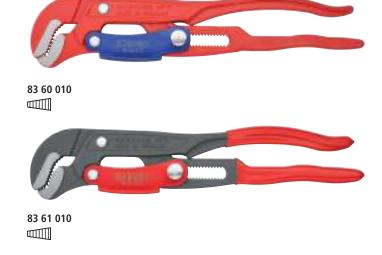
Product Number	Packaging	4→► Inch mm	Pliers	Ø Inch Ø mm	O:Inch	∆ ∆ Ibs
83 30 005		9 1/2 245		1 3/8 35	1/2	1.04
83 30 010		12 1/2 320		1 21/32 42	1	1.86
83 30 015		16 1/2 420	red powder-coated	2 3/64 60	1 1/2	3.31
83 30 020		<b>21 1/4</b> 540		2 3/4 70	2	5.68
83 30 030		26 3/4 680		4 3/4 120	3	9.33

## Pipe Wrenches S-Type with rapid adjustment

**83** 

- > time-saving, precise adjustment of the opening width at the press of a button directly on the workpiece
- > less effort required due to self-locking action
- > no unintentional shifting of the pliers
- > pinch guard prevents operators' fingers being pinched
- > maximum load capacity due to completely hardened handles
- > high-wear resistance due to the induction hardened teeth
- > chrome vanadium electric steel; forged, multi stage oil-hardened





Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Handles	Ø Inch Ø mm	<b>O</b> I Inch	∆ ∆ lbs
83 60 010		13 330		red powder-coated	_	1 21/32 42	1	1.96
83 60 015		16 1/2 420	шш	reu powder-coateu	-	2 3/64 60	1 1/2	3.30
83 61 010		1 <mark>3</mark> 330				1 21/32 42	1	2.11
83 61 015		16 1/2 420		grey powder-coated	plastic coated	2 3/64 60	1 1/2	3.24
83 61 020		22 560				2 3/4 70	2	5.47

- > for very narrow screw connections
- > special tool steel; forged, oil-hardened

**84 11 200** Straight head

84 21 200

20° angled head





Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Recess Ø Inch Ø mm	Head thickness Inch mm	∆'∆ Ibs
84 11 200		<mark>8</mark> 200		black atramentized	polished	plastic coated	15/64 / 25/64 6 / 10	9/64 3.5	0.39
84 21 200		<mark>8</mark> 200	<u>√2</u> 0° □□□	black atramentized	polished	plastic coated	15/64 / 25/64 6 / 10	9/64 3.5	0.40

#### KNIPEX SmartGrip®

Water Pump Pliers with automatic adjustment DIN ISO 8976

85

- > ideal for frequent changeovers to workpieces of different sizes
- > automatic adjustment for one-hand operation both for right-handed and left-handed use
- > good access to the workpiece due to the slim dimensions in the head and joint area and flush joint bolt
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > pinch guard prevents operators' fingers being pinched
- > locking lever for space saving transport with reliable closed handles
- > chrome vanadium electric steel; forged, multi stage oil-hardened



Adjustment to the workpiece is automatic with the KNIPEX SmartGrip®! Just grip the pliers handles and squeeze — it's that easy!



		<b>4</b> →						٧-,
		Inch				Ø Inch	Inch	
Product Number	Packaging	mm	Pliers	Head	Handles	Ø mm	mm	lbs
85 01 250 US		10	arey stromentined	polished	non clin plactic control	1 1/4	1 13/32	0.82
85 01 250 05		250	grey atramentized	polistied	non-slip plastic coated	32	36	0.82

51

Removing spring hose clamps has never been easier. These Hose Clamp Pliers have rotatable tips, making them maneuverable from different angles and easier to use in confined areas.

7 1/4" version is perfect for smaller engines up to 2"

#### 10" version can be used on a variety of clamps up to 2 3/4"

- > rotatable tips for securely gripping the clamps in all positions
- > jaw inserts can also be rotated under load
- > extremely good leverage which allows clamps to be opened and moved easily without great effort
- > slim head design, narrow head width, and rotatable grip inserts make this an ideal tool especially in confined areas
- > detach hoses gently using the serrated jaw behind the tips
- > chrome vanadium electric steel; forged, oil-hardened

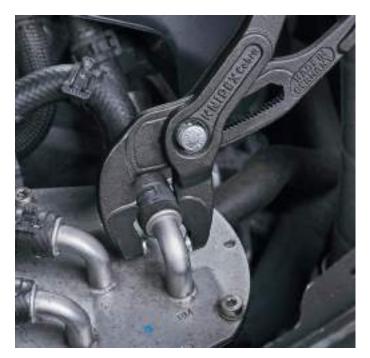


85 51 180 A [二]



85 51 250 A





A single pair of pliers for various sizes of clamps up to 2 3/4" diameter. Rotating jaw inserts enable them to adapt to any position while still guaranteeing that clamps are securely positioned in the

#### APPLICATION AREAS CARS/TRUCKS

Air suction, cooling, charge air, water return, thermostat, fuel, heating











Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Gripping capacity Ø Inch	Adjustment positions	∆ ∆ lbs
85 51 180 A	X	7 1/4 180	S	aray atramantinad	non elimplostic contod	2	15	0.39
85 51 250 A	X	1 <mark>0</mark> 250	ركر	grey atramentized	non-slip plastic coated	2 3/4	25	0.75

85 59 250 A Spare part grip insert assortment for 85 51 180 A / 85 51 250 A / 85 51 250 AF with locking device

The locking device keeps the clamp open and stays locked in position without the need to grip and hold onto the pliers until the user is ready to move the clamp.

#### One-hand release

- > rotatable tips for securely gripping the clamps in all positions
- > jaw inserts can also be rotated under load
- > extremely good leverage which allows clamps to be opened and moved easily without great effort
- > slim head design, narrow head width, and rotatable grip inserts make this an ideal tool especially in confined areas
- > detach hoses gently using the serrated jaw behind the tips
- > chrome vanadium electric steel; forged, oil-hardened





Product Number	Packaging	d→ Inch mm		Pliers	Handles	Gripping capacity Ø lnch	Adjustment positions	∆ ∆ lbs
85 51 250 AF	Х	10 250	G	grey atramentized	non-slip plastic coated	2 3/4	19	0.77

**85 59 250 A** Spare part grip insert assortment for 85 51 250 A / 85 51 250 AF

## Hose Clamp Pliers for Click Clamps

**85** 51

Opening and closing Click Clamps does not require a special skill; it requires a special tool. No need to replace the OEM clamp with a screw clamp, these pliers will not harm the clamps they're compressing, allowing them to be reused over and over again.

- > rotating tips for reliably gripping of clamps in any position
- > high leverage allows clamps to be opened and closed again comfortably and easily without a great deal of effort
- > for easy working on fuel hoses, vacuum pipes with suction nozzles and many other applications
- > detach hoses gently using the serrated jaw behind the tips
- > slim head design, narrow head width, and rotatable grip inserts make this an ideal tool especially in confined areas
- > chrome vanadium electric steel; forged, oil-hardened



85 51 180 C



85 51 250 C



Hose clamp without limit stop



Hose clamp with limit stop



Serrated gripping jaws for easy loosening of tight hoses



Rotating tips

Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Handles	Diameter Ø inch Ø mm	Adjustment positions	∆ ∆ Ibs
85 51 180 C	X	7 1/4 180	S	avay atvamantinad	non elin plastic contod	1 3/4 45	12	0.38
85 51 250 C	X	1 <mark>0</mark> 250	15)	grey atramentized	non-slip plastic coated	2 3/4 70	15	0.75

**85 59 250 C** Spare part grip insert assortment for 85 51 180 C / 85 51 250 C

#### **Pliers Wrenches**

Pliers and a wrench in a single tool DIN ISO 5743

86

Replaces a full set of inch and metric open end wrenches Smooth jaws for damage free installation of plated fittings – working directly on chrome!

- > adjustable tightening tool
- > excellent for gripping, holding, pressing and bending applications
- > zero backlash jaw surface pressure prevents damage to edges of sensitive components
- > adjustment at the touch of a button directly on the workpiece
- > parallel jaws allow infinitely variable gripping of all widths to the specified maximum size
- > reliable catching of the hinge bolt: no unintentional shifting
- > the action of the jaws allows bolted connections to be tightened and released quickly using the ratchet principle
- > lever transmission greater than 10 1 for strong gripping power
- > chrome vanadium electric steel; forged, oil-hardened

#### Length 5'

Mini pliers wrench for precision mechanics; particularly suitable for working on small bolted connections; very good access in very confined spaces

#### Length 6"

Ideal multipurpose wrench in pocket size; indispensable companion in emergency tool kit

#### Length 7 1/4"

With narrow gripping jaws – for fastening/loosening situations requiring a slim tool

#### Length 10"

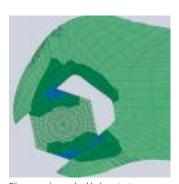
NOW with 2" capacity, lightweight, thinner head and adjustment scale for presetting the adjustment point

#### 86 05 180 T BKA / 86 05 250 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system

#### 86 43 250 US

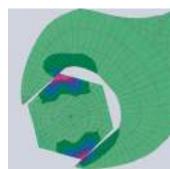
15° angled pliers handle provides space for counter screw connections or bolted fittings on surfaces



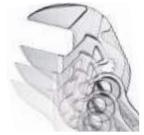
Pliers wrench: zero backlash contact pressure, no damage to edges



10" Version: opening width lasered onto the pliers head (metric on the front and imperial on the back)



Conventional open end wrench: edge pressure causes surface damage on edges of nuts and bolts



Fast adjustment by pushing a button



86 03 125



86 03 150



86 03 180



86 05 250



86 05 250 T



86 03 300

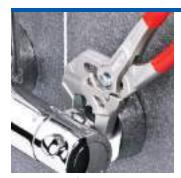


86 01 250









Working on plated fittings without damaging the surface



Replaces a full set of inch and metric open end wrenches

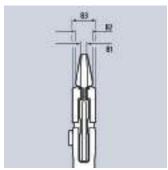


Ideal for bending work



Opening width lasered onto the pliers head (metric on the front and imperial on the back)





The smooth jaws grip all parallel surfaces in the capacity range with a high degree of pressure if necessary and open up almost unlimited application possibilities for the pliers wrench: e.g. for tightening locknuts, exerting pressure to activate the adhesive power of contact adhesives, edge breaking in tile work, snapping cable ties, utilization as a small vice.

								D	imensior	S	
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Inch mm	Adjustment positions	B1 Inch mm	B2 Inch mm	B3 Inch mm	∆¹∆ Ibs
86 01 250	X	1 <mark>0</mark> 250		black atramentized	non-slip plastic coating	<mark>2</mark> 52	19	5/16 8.0	5/16 8.0	35/64 14.0	1.00
86 02 250	X	1 <mark>0</mark> 250		black atramentized	multi-component grips	<mark>2</mark> 52	19	5/16 8.0	5/16 8.0	35/64 14.0	1.03
86 03 125	X	5 125				7/8 23	11	1/8 3.0	13/64 5.0	3/8 9.5	0.23
86 03 150	X	6 150				1 27	14	3/16 4.7	9/32 7.0	13/32 10.5	0.39
86 03 180	X	7 1/4 180		chrome plated	plastic coated	1 3/8 35	13	13/64 5.0	5/16 8.0	15/32 12.0	0.56
86 03 250	X	1 <mark>0</mark> 250				<mark>2</mark> 52	19	5/16 8.0	5/16 8.0	35/64 14.0	1.18
86 03 300	X	12 300				2 3/8 60	22	3/8 9.5	3/8 9.5	19/32 15.0	1.61
86 05 150		6 150			multi-component grips	1 27	14	3/16 4.7	<mark>9/32</mark> 7.0	13/32 10.5	0.43
86 05 180	X	7 1/4 180			multi-component grips	1 3/8 35	13	13/64 5.0	5/16 8.0	15/32 12.0	0.61
86 05 180 T BKA	X	7 1/4 180		chrome plated	multi-component grips, integrated tether attachment point	1 3/8 35	13	1 <mark>3/64</mark> 5.0	5/16 8.0	15/32 12.0	0.66
86 05 250	X	1 <mark>0</mark> 250			slim multi-component grips	<mark>2</mark> 52	19	5/16 8.0	5/16 8.0	35/64 14.0	1.26
86 05 250 T BKA	X	1 <mark>0</mark> 250			multi-component grips, integrated tether attachment point	<mark>2</mark> 52	19	<mark>5/16</mark> 8.0	5/16 8.0	35/64 14.0	1.35
86 06 250 US	X	1 <mark>0</mark> 250	<b>≙1000 V</b>	chrome plated	insulated with multi-component grips, VDE-tested	<mark>2</mark> 52	19	<mark>5/16</mark> 8.0	5/16 8.0	35/64 14.0	1.14
86 43 250 US	X	1 <mark>0</mark> 250	☐ <b>☐ △</b> 15°	chrome plated	plastic coated	1 3/4 46	19	5/16 8.0	5/16 8.0	35/64 14.0	1.19

#### Pliers Wrench XL

Pliers and a wrench in a single tool DIN ISO 5743

**86** 

## The unique installation tool now in 16" (400 mm) length For opening widths up to 3 3/8" (85 mm)

- > excellent for gripping, holding, pressing and bending applications
- > optimized adjustment to the workpiece with hand-friendly position of grips
- > reliable catching of the hinge bolt: no unintentional shifting
- > lever transmission greater than 10 1 for strong gripping power
- > adjustable tightening tool
- > replaces diverse, expensive, large open end wrenches up to 3 3/8"
- > parallel jaws allow infinitely variable gripping of all widths to the specified maximum size
- > smooth jaws, for gentle installation of quality union joints made from brass, red brass or stainless steel
- > zero backlash jaw surface pressure prevents damage to edges of sensitive components
- > the action of the jaws allows bolted connections to be tightened and released quickly using the ratchet principle
- > adjustment at the touch of a button directly on the workpiece
- > chrome vanadium electric steel; forged, oil-hardened

Open end wrenches with fixed opening widths are expensive, especially when used for large union joints. The KNIPEX Pliers Wrench XL, with its' adjustable jaw opening up to AF 3 3/8" (85 mm), offers enormous savings potential.

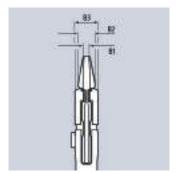


86 03 400 US









							[	Dimension	S	
Product Number	Packaging	<b>4→</b> Inch mm	Pliers	Handles	Inch mm	Adjustment positions	B1 Inch mm	B2 Inch mm	B3 Inch mm	∆'∆ Ibs
86 03 400 US		16 400	chrome plated	plastic coated	3 3/8 85	25	31/64 12.5	5/8 16	25/32 20	3.22

adjustable tightening tool — replaces diverse, expensive, large open end wrenches

parallel jaws give a more solid grip; its design allows flexible adjustment up to a maximum size of  $3\,3/8$ "

smooth jaws, for damage free installation of quality union joints made from brass, red brass, stainless steel or chrome plated material

zero backlash jaw pressure prevents damage to edges of sensitive components

the ratchet type principle allows quick and easy tightening and release of bolted connections

push-button for adjustment on the workpiece





#### KNIPEX Cobra®

High-Tech Water Pump Pliers DIN ISO 8976

87

- > adjustment at the touch of a button directly on the workpiece
- > fine adjustment for optimum adaptation to different size workpieces and a comfortable gripping position
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > reliable catching of the hinge bolt: no unintentional shifting
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened

#### 87 02 250 / 87 02 250 T BKA

With slim, two-color multi-component sleeves for better handling and easier transport

#### 87 02 180 T BKA / 87 02 250 T BKA / 87 02 300 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system



Fine adjustment by pushing a button: fast and comfortable



Fast and firm adjustment directly on the workpiece



Square



Hex



Round



Flat

#### KNIPEX Cobra® – the High-Tech Water Pump Pliers

No more time-consuming test-adjusting of the correct opening size. Just position the upper jaw to the workpiece, push button and slide close the lower jaw, ingeniously simple.

# Cobra®



87 01 125



87 01 150



87 01 180



87 01 250



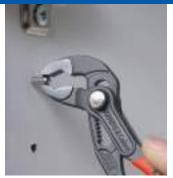
87 01 300 G





87 02 250 T BKA













Teeth set against the direction of rotation have a self-clamping effect and prevent slipping off the workpiece

## The Original Push-Button Pliers

Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Adjustment positions	∆ ∆ Ibs
87 01 125	X	5 125	grey atramentized	polished	non-slip plastic coated	1 1/16 27	1 1/16 27	13	0.19
87 01 150	X	6 150				1 1/4 32	1 3/16 30	11	0.32
87 01 180	X	7 1/4 180	grey atramentized	polished	non-slip plastic coated	1 <mark>1/2</mark> 42	1 27/64 36	18	0.40
87 01 250	X	10 250				<mark>2</mark> 50	1 3/4 46	25	0.74
87 01 300	X	12 300	grey atramentized	polished	non-slip plastic coated	2 3/4 70	2 3/64 60	30	1.22
87 02 180	Х	7 1/4 180	grey atramentized	polished	multi-component grips	1 <mark>1/2</mark> 42	1 27/64 36	18	0.43
87 02 180 T BKA	X	7 1/4 180	grey atramentized	polished	multi-component grips, integrated tether attachment point	1 <mark>1/2</mark> 42	1 27/64 36	18	0.48
87 02 250	X	10 250	grey atramentized	polished	slim multi-component grips	<mark>2</mark> 50	1 3/4 46	25	0.81
87 02 250 T BKA	X	10 250	grey atramentized	polished	slim multi-component grips, integrated tether attachment point	<mark>2</mark> 50	1 3/4 46	25	0.81
87 02 300	X	12 300	grey atramentized	polished	multi-component grips	2 3/4 70	2 3/64 60	30	1.33
87 02 300 T BKA	X	12 300	grey atramentized	polished	multi-component grips, integrated tether attachment point	2 3/4 70	2 3/64 60	30	1.40

- > greater gripping capacity and lighter weight than comparable pipe gripping wrenches
- > fast push-button adjustment directly on the workpiece, no unintentional slipping of the joint
- > fine adjustment for optimum adaptation to different size workpieces and a comfortable gripping position
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened

# Cobra®

The KNIPEX Cobra® XL and XXL offer the power and comfort of water pump pliers while being lighter in weight and having a greater gripping capacity than comparable pipe wrenches. The Cobra® XL can grip a 3 1/2" pipe coupling and weighs 50% less than 2" pipe wrenches, which have a much lower gripping capacity. With its compact length of 16" (400 mm), the Cobra XL is perfect for the plumber's toolbox.

The Cobra® XXL with its capacity of up to 4 1/2 only weighs as much a 2" pipe wrench. It's 22" size makes it the biggest pliers around!



Fine adjustment by pushing a button: fast and comfortable







Fast and firm adjustment directly on the workpiece

Product Number	Packaging	<b>d→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Adjustment positions	∆¹∆ Ibs
87 01 400 US	X	1 <mark>6</mark> 400	grey atramentized	polished	plastic coated	3 1/2 90	3 3/4 95	27	2.62
87 01 560 US	X	22 560	grey atramentized	polished	plastic coated	4 1/2 115	4 3/4 120	20	6.06

### All features of the KNIPEX Cobra® 87 01 250 along with these special features:

- > automatic adjustment at the touch of a button directly on the workpiece
- > the securely positioned spring ensures that the pliers close automatically once the push-button is activated (one-hand operation!)
- > chrome vanadium electric steel; forged, multi stage oil-hardened



Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	O] Ø Inch Ø mm	Inch mm	Adjustment positions	∆¹∆ Ibs
87 11 250	X	10 250	■IEI MM	grey atramentized	polished	non-slip plastic coated	<mark>2</mark> 50	1 13/16 46	25	0.75
87 19 250	Spare spring f	or 87 1	1 250							

#### KNIPEX Cobra® QuickSet High-Tech Water Pump Pliers DIN ISO 8976

87

#### Fully open, push, grab!

#### Fast adjustment on the workpiece by sliding the pliers handle

- > combines the proven, reliable locking of the hinge bolt with an additional push function which makes it easier to work in very confined and inaccessible areas
- > adjustment directly on the workpiece by sliding the pliers handle
- > reliable locking of the hinge bolt with the first workload. The gripping width of the pliers is then fixed and can only be adjusted by pressing the button
- > the pliers stay locked in place and can only be readjusted by pressing the button and resetting
- > chrome vanadium electric steel; forged, multi stage oil-hardened





Press the button – open pliers completely



Position top jaw and simply slide and close



The push-button stays locked in place once the handles are squeezed

#### Proven Cobra® functions

- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > fine adjustment for optimum adaptation to different size workpieces and a comfortable handle width

Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Adjustment positions	∆ ∆ lbs
87 21 250	X	10 250		arou atramanticad	nalishad	non elin plastic sontod	2 50	1 3/4 46	25	0.74
87 21 300	X	12 300	72)	grey atramentized	polisnea	non-slip plastic coated	2 3/4 70	2 3/64 60	25	1.20
87 22 250	X	10 250		grey atramentized	polished	slim multi-component grips	2 50	1 3/4 46	25	0.81

#### KNIPEX Cobra® Insulated

High-Tech Water Pump Pliers, Insulated DIN ISO 8976 IEC 60900 DIN EN 60900

**87** 26

- > adjustment by shifting the jaw directly on to the workpiece: fast, secure and comfortable handling
- > opening at the touch of a button apart from the workpiece
- > fine adjustment for optimum adaptation to different workpiece sizes and comfortable gripping position
- > good access to the workpiece due to slim size in the head and joint area
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened

The adjustment action to adapt to the workpiece is easy and reliable with the KNIPEX Cobra® Insulated: place the upper gripping jaw of the opened pliers on the workpiece, push pliers to close, done!



87 28 250 US

★ 1000 V ASTM □□□□ □□□□





Quick adjustment to the workpiece without using a push-button

Just push the pliers handle to adjust

Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Adjustment positions	∆∆ lbs
87 28 250 US	X	10 250	<b>☆ 1000 V ASTM</b> □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	grey atramentized	polished	insulated multi-component grips, ASTM-tested	<mark>2</mark> 50	1 3/4 46	24	0.88

## KNIPEX Raptor™ Pliers DIN ISO 5743

- > for inch and metric nuts and screws with widths across flats from 3/8" - 1 1/4" (10 - 32 mm); self-locking in the range from 11/16" (17 mm): no slipping off the workpiece
- > reliable and tight gripping of rounded, rusty or overly painted nuts and screws
- > ideal for work on vehicle brake systems
- > quick tightening of nuts and bolts using ratchet action
- > adjustment at the touch of a button directly on the workpiece, one-hand operation
- > fine adjustment for optimum adaptation to different size workpieces and a comfortable gripping position
- > box-joint design: high stability because of double guide
- > reliable catching of the hinge bolt: no unintentional shifting
- > favorable lever action: optimum transmission of force
- > pinch guard prevents operators' fingers being pinched
- > replaces a set of wrenches, ideal for tightening locknuts
- > chrome vanadium electric steel; forged, multi stage oil-hardened



67 41 230

The Raptor Pliers combines the convenience of the comfortable push-button adjustment on the workpiece and the function of an all-purpose tightening tool. Jaw gripping with zero backlash prevents slipping on the bolt head or rounding edges.

Even rusty or thick coated bolted connections which have no surfaces capable of being gripped reliably by a conventional wrench can be managed by the exceptionally powerful closing gripping jaws of this wrench.



Grips rusted nuts with rounded edges



Self-locking: no slipping off workpieces; less effort required



Raptor  $^{\text{TM}}$  Pliers as the second spanner for tightening locknuts



Fine adjustment by pushing a button: fast and comfortable

Product Number	Packaging	Inch mm	Pliers	Head	Handles	Inch mm	Adjustment positions	∆¹∆ Ibs
87 41 250	X	10 250	grey atramentized	polished	non-slip plastic coated	3/8 - 1 1/4 10 - 32	15	0.72

#### **KNIPEX Cobra® ES**

High-Tech Water Pump Pliers, extra-slim DIN ISO 8976

87

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Fine adjustment by pushing a button: fast and comfortable

Slim head and joint area (compared to conventional water pump pliers)

- > ideal for service and maintenance, equipment repair, automotive and general industry
- > long, narrow jaws
- > good access to the workpiece due to very slim construction of head and joint area
- > grips flat material due to three-point rest
- > adjustment at the touch of a button directly on the workpiece
- > fine adjustment for optimum adaptation to different size workpieces and a comfortable gripping position
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > box-joint design: high stability because of double guide
- > reliable catching of the hinge bolt: no unintentional shifting
- > favorable lever action: optimum transmission of force
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened



Optimum access to the workpiece. Ideal for service and maintenance, equipment repair, automotive and general industry



Grips nuts up to 1 3/8" (34 mm) across flats

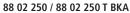


87 51 250

Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Max. parallel opening width Inch mm	Max. gripping depth Inch mm	Adjustment positions	∆¹∆ Ibs
87 51 250	Х	1 <mark>0</mark> 250	grey atramentized	polished	non-slip plastic coated	1 1/4 32	1 3/8 34	1 1/2 37	1 5/8 42	19	0.72

More output and comfort compared to conventional water pump pliers of the same length: offers 9 adjustment positions for 30% more gripping capacity

- > good access to the workpiece due to slim size in the head and joint area
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > robust construction; particularly suitable for outdoor work
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened



Slim, two-color multi-component sleeves for better handling and easier transport

#### 88 02 250 T BKA / 88 02 300 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system









Self-clamping on pipes and nuts: no slipping off the workpiece. Less handforce is required since handles do not need to be squeezed. Simply put pressure on the upper handle for a powerful grip.



88 01 180



88 01 250



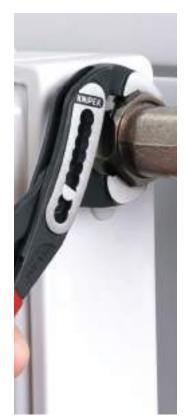
88 02 250



88 02 250 T BKA



















Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Adjustment positions	∆¹∆ Ibs
88 01 180	X	7 1/4 180					1 1/2 42	1 27/64 36	9	0.40
88 01 250	X	10 250		black atramentized	polished	non-slip plastic coated	2 50	1 13/16 46	9	0.75
88 01 300	Х	12 300					2 3/4 70	2 3/64 60	9	1.19
88 02 180	Х	7 1/4 180		black atramentized	polished	multi-component grips	1 1/2 42	1 27/64 36	9	0.47
88 02 250	X	10 250		black atramentized	polished	slim multi-component grips	2 50	1 13/16 46	9	0.83
88 02 250 T BKA	X	10 250		black atramentized	polished	slim multi-component grips, integrated tether attachment point	<mark>2</mark> 50	1 13/16 46	9	0.88
88 02 300	X	12 300		black atramentized	polished	multi-component grips	2 3/4 70	2 3/64 60	9	1.30
88 02 300 T BKA	X	12 300		black atramentized	polished	multi-component grips, integrated tether attachment point	2 3/4 70	2 3/64 60	9	1.39
88 07 300		12 300	<b>≙</b> 1000 V <b>△€</b>	chrome plated	polished	plastic dipped insulated, VDE-tested	2 3/4 70	2 3/64 60	9	1.46
88 08 250 US	X	10 250	<b>★ 1000 V ASTM</b>	black atramentized	polished	insulated, multi-component handles, ASTM-tested	1 31/32 50	1 13/16 46	9	0.87

#### The classic model in 16" (400 mm) length Robust construction; particularly suitable for outdoor work

- > good access to the workpiece due to slim size in the head and joint area
- > pinch guard prevents operators' fingers being pinched
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > box-joint design: high stability because of double guide
- > robust adjustment mechanism, dirt resistant, easy to clean; particularly suitable for outdoor work
- > 11-notch adjustment positioning with optimized adjustment to the workpiece and user-friendly handle position
- > gripping capacity up to 3 1/2"
- > chrome vanadium electric steel; forged, multi stage oil-hardened







The KNIPEX Alligator® XL offers the performance and comfort of a water pump pliers while being 50% lighter in weight and having a greater gripping capacity (3 1/2") than comparable pipe wrenches.

With their handy length of 16" there is a place for KNIPEX Alligator® XL in every tool box.

#### Robust pliers for very hard applications

gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and stable gripping

self-locking on pipes and nuts: no slipping off the workpiece and low handforce required

box-joint design: high stability because of the double guide

robust adjustment mechanism, dirt resistant, easy to clean; particularly suitable for outdoor work

11-notch adjustment for optimized adjustment to the workpiece and a comfortable handle position



					A .	100	4 4		
		<b>←→</b> Inch				○] Ø Inch	Inch	Adjustment	7,7
Product Number	Packaging	mm	Pliers	Head	Handles	Ømm	mm	positions	lbs
88 01 400	X	1 <mark>6</mark> 400	black atramentized	polished	non-slip plastic coated	3 1/2 90	3 3/4 95	11	2.62



- > easy, convenient engagement in 5 different positions
- > tongue and groove slip joint, self-locking on pipes and nuts
- > pinch guard prevents operators' fingers being pinched
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 62 HRC): low wear for secure grip
- > chrome vanadium electric steel; forged, multi stage oil-hardened



Product Number	Packaging	<b>4→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	∆ ∆ Ibs
89 01 250		10 250	black atramentized	polished	non-slip plastic coated	1 5/16 34	1 27/64 36	0.75

## Mini Water Pump Pliers Slip joint DIN ISO 8976

90

- > easy, convenient engagement in 4 different positions
- > tongue and groove slip joint
- > all strain removed from the joint screw, hence no wear on the pivot
- > chrome vanadium electric steel; forged, oil-hardened



Product Number	Packaging	<b>d→</b> Inch mm	Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	∆'∆ Ibs
90 01 125		5 125	black atramentized	polished	non-slip plastic coated	11/16 17	35/64 14	0.23

## **Pipe Cutter** for flexible pipes and flexible hoses

**90** 20

- > for cutting thin walled pipes (conduit plastic pipes) and flexible hoses with fabric reinforcement of plastic and rubber up to 1" (25 mm) exterior dia. (not suitable for cutting cables)
- > with opening spring and locking lever
- > tool body: plastic, fiberglass-reinforced
- > blades: special tool steel, oil-hardened, interchangeable











With replaceable blade

Product Number	Packaging	<b>←→</b> Inch mm		Handles	Cutting capacities Ø Inch Ø mm	∆¹∆ Ibs
90 20 185		<b>7 1/4</b> 185	MM	tough fiberglass reinforced plastic	1 25	0.40
90 29 185	Spare blade for 90 20 185					



Composite pipes of 1/2"-1" (12-25 mm) dia. are cut cleanly and without deformation

90 29 02



Clean cut of corrugated conduit 3/4"-13/8" (18-35 mm) dia.

- > for cutting composite pipes with a diameter of 1/2" 1" (12 - 25 mm) and for cutting corrugated conduit pipes with a diameter of 3/4" – 1 3/8" (18 - 35 mm)
- > a calibration arbor can be fitted for Geberit composite pipes with 29/64" and 38/64" (11.5 and 15.0 mm) dia.
- > tool body: high-grade chrome vanadium electric steel, oil-hardened
- > blades: special tool steel, oil-hardened, interchangeable



(PATENTED)

Product Number	Packaging	<b>←→</b> Inch mm		Tool	Handles	Cutting capacities composite pipes Ø Inch Ø mm	Cutting capacities protective pipes  Ø Inch Ø mm	Blade length Inch mm	∆¹∆ Ibs	
90 25 20		8 1/4 210	MM	galvanized	multi-component grips	1/2 - 1 12 - 25	3/4 - 1 3/8 18 - 35	1 25	0.73	
90 29 01	<b>90 29 01</b> Spare blade for 90 25 20									

94

10

90 29 15	Calibration arbor for 90 25 20

# **Pipe Cutter** for plastic conduit pipes (electrical installation work)

1 pair of spare blades for 90 25 20





- > for clean cutting of plastic pipes (e.g. plastic clad pipes) with a 15/64"-13/8" (6-35 mm) dia.
- > not suitable for cutting cables
- > blade is replaceable and can be retracted in any position
- > low force requirement due to special blade geometry and optimum transmission
- > minimum operator fatigue due to ergonomic handle design and ratchet blade feed in stages
- > housing: die-cast aluminum, red lacquered
- > blade: special tool steel; oil-hardened



Product Number	Packaging	<b>d→</b> Inch mm		Body	Cutting capacities Ø Inch Ø mm	Cutting edge length Inch mm	∆¹∆ Ibs
94 10 185		7 1/4 185	MM	die-cast aluminum body, red lacquered	15/64 - 1 3/8 6.0 - 35.0	1 3/8 35	1.29

94 19 185	Spare blade for 94 10 185
94 19 185 02	Torsion spring for 94 10 185



Clean cut of thick-walled plastic and composite pipes



Not suitable for thin-walled conduit pipes. Please use article number 90 20 185 for these

- > for cutting thick walled plastic and composite pipes from 1 1 37/64" (26 40 mm) dia.
- > cuts pipes according to the ratchet principle in several strokes
- > self-adapting pipe support positions pipes of various diameters correctly for a rectangular cut
- > tool body: high-grade chrome vanadium electric steel, oil-hardened
- > blades: special tool steel, oil-hardened, interchangeable



Product Number	Packaging	<b>4→</b> Inch mm		tool	Handles	Cutting capacities Ø Inch Ø mm	Cutting edge length Inch mm	∆¹∆ Ibs
90 25 40		8 1/4 210	MM	galvanized	multi-component grips	1 - 1 37/64 26 - 40	1 37/64 40	1.10

**90 29 40** Spare blade for 90 25 40

# **Punch Lock Riveters**

90

Setting the pliers for connection of two metal section sheets



The punching tool is pressed through the metal section sheets

- > to join metal section sheets used in dry walling with a lock seam
- > for U- and C-shaped sections with max 3/64" (5/64 x 1/64) metal (1.2 mm; 2 x 0.6 mm)
- > minimal handforce required due to optimum lever transmission
- > pliers body: special tool steel, rolled, oil-hardened

**90 42 250** For one-hand operation



90 42 340

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Max. Capacity Inch mm	∆ ∆ Ibs
90 42 250		10 250	MM	burnished	multi-component grips	3/64 (5/64 x 1/64) 1.2 (2 x 0.6)	1.49
90 42 340		13 25/64 340		burnished	multi-component grips	3/64 (5/64 x 1/64) 1.2 (2 x 0.6)	1.96

90 49 340	Spare punch for 90 42 340
90 49 340 M	Spare die for 90 42 340

# **Sheet Metal Nibbler**

90 55







Notching without chip breaking

- > for cutting iron, copper or aluminum plate up to max. 3/64" (1.2 mm) thickness, plastic up to max. 5/64" (2.0 mm) thickness
- > materials are cut without deformation
- > clean cut edges
- > with chip breaker
- > easy handling
- > cutting width: 7/64" (2.7 mm)
- > tool body: special tool steel, rolled, oil-hardened
- > blades: special tool steel, oil-hardened, interchangeable



Product Number	Packaging	Inch mm		Tool	Handles	∆¹∆ Ibs			
90 55 280		11 280	W <b>5</b>	nickel plated	multi-component grips	1.02			
90 59 280	Spare blade fo	Spare blade for 90 55 280							

# **Notching Pliers**

90 61

- > special pliers for notching out recesses in plastic ledges and plastic casing boxes for electric and sanitary installation
- > notches can be enlarged by initial and final cut
- > clean cut edges
- > easy handling
- > with opening spring, opening limiter and locking lever
- > pliers body: special tool steel, rolled, oil-hardened







The KNIPEX Notching Pliers produce the most common notches in plastic ledges and cable ducts in a simple, fast and clean way. No time-consuming sawing out or nibbling and no additional work required.

Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Handles	Capacity	∆ ∆ lbs
90 61 16		1 <mark>0</mark> 250	A A A A	humishad	plastic wine	5/8 x 1 1/4 Inch 16 x 32 mm	0.89
90 61 20		1 <mark>0</mark> 250	MM	burnished	plastic grips	25/32 x 1 9/64 Inch 20 x 29 mm	0.91

# **Revolving Punch Pliers**

90





Interchangeable punches

- > for punching holes in leather, textiles and plastic material
- > with six rotating punches: 5/64", 3/32", 1/8", 9/64", 5/32", 13/64" (2.0/2.5/3.0/3.5/4.0/5.0 mm) dia.
- > with opening spring and locking lever
- > powder-coated for reliable protection against rust
- > pliers body and punches: special tool steel, oil-hardened



WW

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Finish	∆¹∆ Ibs
90 70 220	X	8 3/4 220	MM	red powder-coated	powder-coated	0.55

# Tile Nibbling Pincer Parrot beak pincer

91

- > enlarges holes in tiles and forms tile edges
- > special tool steel; forged, oil-hardened





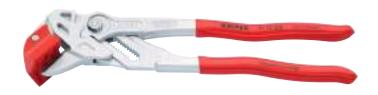
91 00 200

Product Number	Packaging	<b>4−►</b> Inch mm	Pliers	Head	∆¹∆ Ibs
91 00 200		<mark>8</mark> 200	black atramentized	polished	0.35

Work without cutting-off machine, particularly for fine strips. For less mess, dust, noise and effort.

For the precise cutting (breaking) of tiles and porcelain stoneware after scoring with a tile cutter Ideal for long and thick tiles

- > parallel jaws evenly distribute force that is 10x your strength
- > a precise cut of floor or wall tiles after scoring with a tile cutter
- > replaceable plastic positioning jaw tilts for a clean break line and optimum protection of the tiles against damage
- > chrome vanadium electric steel, forged, oil-hardened



91 13 250









Product Number 91 13 250	Packaging	4-► Inch mm 10 250	Pliers chrome plated	Handles plastic coated	Adjustment positions	∆∆ lbs 1.29
91 19 250 01	Spare jaw for 91	13 250				

## Glass Breaking Pincer DIN ISO 5743

91 3

- > for breaking glass on a scored line
- > special tool steel; forged, oil-hardened



Product Number	Packaging	<b>←►</b> Inch mm	Pliers	Head	Handles	Jaw width Inch mm	∆ ∆ lbs
91 31 180		7 1/4 180	black atramentized	polished	plastic coated	15/16 24	0.52

# Glass Nibbling Pincers

91

- > for breaking off narrow strips of glass to a scored line
- > for finishing off glass edges to required profile
- > special tool steel; forged, oil-hardened

#### 91 71 160

Narrow version, with opening spring



Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Head	Handles	Jaw width Inch mm	∆ ∆ lbs
91 51 160		6 1/4 160	black atramentized	polished	plastic coated	3/8 9.5	0.33
91 71 160		6 1/4 160	 black atramentized	polished	plastic coated	5/32 4.0	0.31

# Flat Nose Grozing Pliers DIN ISO 5743

91

- > with soft gripping jaws
- > for trimming glass edges, e. g. when making leaded glass windows
- > special tool steel; forged, oil-hardened



Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Head	Handles	Jaw width Inch mm	∆ ∆ Ibs
91 61 160		6 1/4 160	black atramentized	polished	plastic coated	3/8 9.5	0.31

# **Hog Ring Pliers**

91 92

- > for the professional replacement of automotive upholstery to the seat frame compatible with all popular upholstery rings or hog rings
- > recessed groove located in the jaws securely hold the hog rings in the proper position before they are crimped
- > closing spring holds the pliers closed which allows for the ring to be securely positioned before being compressed
- > high transmission ratio allows for easy compression of the hog rings
- > multi-component grips for added hand comfort
- > durable and strong
- > special tool steel; forged, oil-hardened

Reliable use for repairs to car seats, e.g. to renew seat cover, replace sensor or seat heating mats





Product Number	Packaging	<b>←→</b> Inch mm	Pliers	Handles	∆ ∆ lbs
91 92 180		<b>7 1/4</b> 185	mirror-polished	multi-component grips	0.43

- > smooth gripping surfaces
- > non-reflective matte finish

#### 92 02 53

For SMD-technology\*; angled tips, width approx. 3/64" (1 mm); gripping surfaces matte finish for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

#### 92 02 54

For SMD-technology\*; angled tips, width approx. 3/64" (1 mm) dia.; with integrated profile for reliable gripping of cylindrical components of approx. 1/32" (0.6 mm) dia.; gripping surfaces matte finished for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

#### 92 02 55

Gripping jaws 9/64" (3.5 mm) wide, for cylindrical components of 1/8" (0.8 mm) dia.; serrated handles; stainless, anti-magnetic and acid-proof

#### 92 12 52

Bent tips; extra strong tips; stainless, anti-magnetic



92 02 53

**№** <u>√45°</u> □



92 02 54



92 02 55

**\***  $\square$ 



92 12 52

**8**8 <u>√</u>85° □

Product Number	Packaging	<b>d→</b> Inch mm		Finish	∆¹∆ Ibs
92 02 53		4 3/4 120	\$ <u>₹45°</u> □	stainless, anti-magnetic	0.04
92 02 54		4 3/4 120	<b>\$</b> <u>₹4</u> 5° □	stainless, anti-magnetic	0.03
92 02 55		4 1/2 115	*	stainless, anti-magnetic, acid-proof	0.04
92 12 52		4 3/4 120	\$\$ <b>₹</b> 85° □	stainless, anti-magnetic	0.04

<sup>\*</sup> SMD-Technology: technique for soldering surface mounted components on printed circuit boards without using holes

- 92
- > chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality
- > ESD coating: non-reflective black, with a surface resistance of approx. 10<sup>5</sup> Ohm
- > tips non-reflective brushed
- > gripping surfaces matte finish for optimum grip

#### 92 08 78 ESD

For SMD-technology\*; bent tips; smooth gripping surfaces

#### 92 08 79 ESD

Shaped to grip horizontal cylindrical components of 3/64" (1 mm) dia.; Smooth gripping surfaces; serrated handles

#### 92 28 69 ESD

Straight tips; strong tip; smooth gripping surfaces

#### 92 28 70 ESD

Straight tips; fine tip; smooth gripping surfaces

#### 92 28 71 ESD

Needle-pointed tips; straight tips; smooth gripping surfaces

#### 92 28 72 ESD

Solid; long tips; straight tips; smooth gripping surfaces

#### 92 38 75 ESD

Sickle-shaped tips; smooth gripping surfaces

#### 92 58 74 ESD

Round tips, approx. 5/64" (2 mm) wide; straight tips; smooth gripping surfaces

#### 92 78 77 ESD

Round tips, approx. 9/64" (3.5 mm) wide; straight tips; serrated gripping surfaces; serrated handles

#### 92 88 73 ESD

Rectangular tips, approx. 1/32" (0.9 mm) wide; gripping surfaces with fine transverse serration



92 08 78 ESD







92 08 79 ESD









92 28 70 ESD



















92 58 74 ESD







92 88 74 ESD





Product Number	Packaging	<b>←→</b> Inch mm		Finish	∆¹∆ Ibs
92 08 78 ESD		4 3/4 120	<b>№</b> <u> </u>	stainless, anti-magnetic, electrically dissipative	0.04
92 08 79 ESD		4 3/4 120	* 🖾 🗆	stainless, anti-magnetic, electrically dissipative	0.04
92 28 69 ESD		5 1/8 130	※ ▲ □	stainless, anti-magnetic, electrically dissipative	0.04
92 28 70 ESD		4 1/4 110	※ ▲ □	stainless, anti-magnetic, electrically dissipative	0.03
92 28 71 ESD		4 1/4 110	* ▲ □	stainless, anti-magnetic, electrically dissipative	0.04
92 28 72 ESD		5 1/4 135	※ ▲ □	stainless, anti-magnetic, electrically dissipative	0.05
92 38 75 ESD		4 3/4 120	<b>№ △ △</b> 45° <b>□</b>	stainless, anti-magnetic, electrically dissipative	0.04
92 58 74 ESD		4 3/4 120	※ ▲ □	stainless, anti-magnetic, electrically dissipative	0.04
92 78 77 ESD		5 3/4 145	※ ▲ □□□	stainless, anti-magnetic, electrically dissipative	0.06
92 88 73 ESD		5 1/8 130	※ ▲ □□□	stainless, anti-magnetic, electrically dissipative	0.04

<sup>\*</sup> SMD-Technology: technique for soldering surface mounted components on printed circuit boards without using holes

# **Precision Tweezers**

with pointed shape

92

- > for fine mounting work
- > straight tips
- > smooth gripping surfaces
- > particularly slim tips

#### 92 22 04

Non-reflective matte finish; gripping surfaces matte finish for optimum grip; Chrome nickel steel: stainless, antimagnetic (18/10), very popular electronics quality

#### 92 22 06

Non-reflective matte finish; gripping surfaces matte finish for optimum grip; Chrome nickel steel: stainless, antimagnetic (18/10), very popular electronics quality

#### 92 22 07

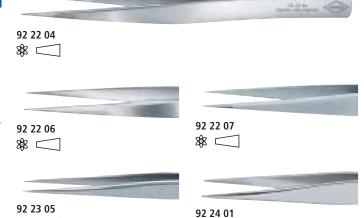
Non-reflective matte finish; stainless, antimagnetic and acid-proof

#### 92 23 05

TITANIUM; electrically conductive; lightweight; non-reflective matte finish; stainless, anti-magnetic and acid-proof

#### 92 24 01

Mirror finish nickel plated and polished



₩ <

Product Number	Packaging	d→ Inch mm		Finish	∆¹∆ Ibs
92 22 04		<b>5 1/8</b> 130	<b>8</b> 8 C	stainless, anti-magnetic	0.04
92 22 06		4 3/4 120	<b>8</b> 8 C	stainless, anti-magnetic	0.04
92 22 07		4 1/2 115	**	stainless, anti-magnetic, acid-proof	0.03
92 23 05		4 3/4 120	<b>8</b> 8 C	TITANIUM, anti-magnetic, acid-proof, stainless	0.02
92 24 01		4 3/4 120	*	chrome plated	0.04

**\*** <

# **Precision Tweezers** with needle-pointed shape

- > for ultra fine mounting work
- > extra fine tips
- > smooth gripping surfaces
- > stainless, anti-magnetic
- > non-reflective matte finish

#### 92 22 12 Straight tips

### 92 22 13

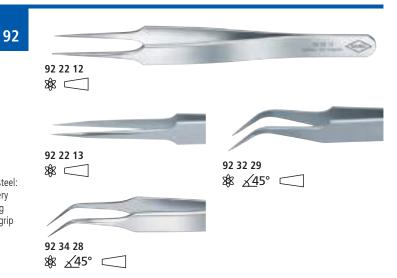
Solid; straight tips; stainless, anti-magnetic and acid-proof

#### 92 32 29

Sickle-shaped tips; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality; gripping surfaces matte finish for optimum grip

#### 92 34 28

Bent tips



Product Number	Packaging	<b>←→</b> Inch mm		Finish	∆¹∆ Ibs
92 22 12		4 105	₩ □	stainless, anti-magnetic	0.03
92 22 13		4 3/4 120	*	stainless, anti-magnetic, acid-proof	0.06
92 32 29		4 3/4 120	<b>¾</b> <u>√45°</u> □	stainless, anti-magnetic	0.04
92 34 28		4 105	8≹ <u>∡4</u> 5° □	stainless, anti-magnetic	0.03

### **Precision Tweezers**

with dowel pin, pointed shape

> universal application

- > narrow tips
- > gripping surfaces with fine transverse serration
- > serrated handles

#### 92 22 35

Straight tips; non-reflective matte finish; stainless, anti-magnetic and acid-proof

#### 92 24 34

Straight tips; chrome plated

#### 92 34 36

Bent tips; chrome plated

#### 92 34 37

Bent tips; black non-reflective lacquered









92 34 37 **№ ∠45° □** 

Product Number	Packaging	<b>←→</b> Inch mm		Finish	∆†∆ Ibs
92 22 35		<mark>6</mark> 155	* ====	stainless, anti-magnetic, acid-proof	0.05
92 24 34		<mark>6</mark> 155	*	chrome plated	0.05
92 34 36		<mark>6</mark> 155	<b></b>	chrome plated	0.05
92 34 37		<mark>6</mark> 155	<b> 8 4</b> 5° <b>□</b>	black lacquered	0.05

92

92

### **Precision Tweezers Insulated** IEC 60900 DIN EN 60900

- > insulated and tested according to IEC 60900 : ASTM F1505
- > plastic dipped insulated
- > nickel plated
- > spring steel, high-strength

#### 92 27 61

For ultra fine mounting work; extra fine tips; straight tips; gripping surfaces matte finish for optimum grip

#### 92 27 62

Straight tips; gripping surfaces with fine transverse serration

#### 92 37 64

Bent tips; gripping surfaces with fine transverse serration

#### 92 67 63

Straight tips; serrated gripping surfaces







92 27 62

**☆1000V ※ □□□** 

**☆1000V ※ ∡45° □□□** 



92 67 63 **☆1000V ※ □□□** 

Product Number	Packaging	d→ Inch mm		Finish	∆¹∆ Ibs
92 27 61		5 1/8 130	<b>≙</b> 1000 V <b>寒</b> □	plastic dipped insulated, VDE-tested	0.07
92 27 62		<mark>6</mark> 150	<u>A</u> 1000 V № □□□□	plastic dipped insulated, VDE-tested	0.08
92 37 64		<mark>6</mark> 150	<u>A</u> 1000 V № <u>४</u> 45° □□□	plastic dipped insulated, VDE-tested	0.08
92 67 63		5 3/4 145	<b>☆ 1000 V ※ □□□</b>	plastic dipped insulated, VDE-tested	0.10

# **Precision Tweezers**

with blunt shape

92

- > universal application
- > straight tips
- > wide, round tips
- > serrated handles

#### 92 44 42

Jewelers tweezer; round tips, approx. 5/64" (2 mm) wide; gripping jaws with fine cross-hatched serration (cross cut); nickel plated

#### 92 64 43

Round tips, approx. 1/8" (3 mm) wide; gripping surfaces with fine transverse serration; chrome plated

#### 92 64 44

Round tips, approx. 9/64" (3.5 mm) wide; gripping surfaces with fine transverse serration; chrome plated

#### 92 70 46

Round tips, approx. 9/64" (3.5 mm) wide; gripping surfaces with fine transverse serration; black non-reflective lacquered

#### 92 72 45

Round tips, approx. 9/64" (3.5 mm) wide; serrated gripping surfaces; non-reflective matte finish; stainless, anti-magnetic and acid-proof





92 64 43

**8** IIII



92 64 44

**8** IIII



92 70 46

**\*** IIII



92 72 45

Product Number	Packaging	d→ Inch mm		Finish	∆¹∆ Ibs
92 44 42		5 1/2 140	<b> ₩</b>	nickel plated	0.05
92 64 43		4 3/4 120	* ====	chrome plated	0.04
92 64 44		5 3/4 145	*	chrome plated	0.06
92 70 46		5 3/4 145	* ====	black lacquered	0.06
92 72 45		5 3/4 1/15	<b>8</b> 8 <b>===</b>	stainless, anti-magnetic, acid-proof	0.06

# **Precision Tweezers**

round slim shape

92

- > round tips, approx. 5/64" (2 mm) wide
- > smooth gripping surfaces
- > chrome nickel steel: stainless, anti-magnetic and acid-proof



92 52 23

₩ □

Product Number	Packaging	<b>←→</b> Inch mm		Finish	∆¹∆ Ibs
92 52 23		4 3/4 120	*	stainless, anti-magnetic, acid-proof	0.04

# **Plastic Tweezers**

> trapezoid shaped tips, approx. 9/64" (3.5 mm) wide

- > serrated gripping surfaces
- > serrated handles
- > tweezers body: solid plastic, temperature-resistant up to 266° F



92 69 84

**88** 

Product Number	Packaging	<b>4−►</b> Inch mm		Finish	∆¹∆ Ibs
92 69 84		<b>5</b> 1/4 130	<b>88 </b>	plastic	0.02

## **Precision Tweezers**

rectangular blunt

92

92

- > mounting tweezer
- > rectangular tips, approx. 1/32" (0.9 mm) wide
- > gripping surfaces with fine transverse serration
- > chrome plated
- > spring steel, high-strength



92 84 18

**8** 

Product Number	Packaging	<b>←→</b> Inch mm		Finish	∆¹∆ Ibs
92 84 18		5 125	* ===	chrome plated	0.04

92

# **Crossover Tweezers**

- > for holding small parts without finger pressure
- > for efficient clamping
- > chrome plated
- > spring steel, high-strength

#### 92 94 91

Trapezoid shaped, straight tips; gripping surfaces with fine transverse serration; serrated handles

#### 92 95 89

Narrow, straight tips; gripping surfaces with fine transverse serration; handles with plastic attachment

#### 92 95 90

Narrow, bent tips; gripping surfaces with fine transverse serration; handles with plastic attachment



92 94 91

**88** 



₩ .....



92 95 90

**№** <u>√45</u>° □□□

Product Number	Packaging	<b>←→</b> Inch mm		Finish	∆ <sup>†</sup> ∆ Ibs
92 94 91		6 1/4 160	<b>%</b>	chrome plated	0.08
92 95 89		6 1/4 160	**	chrome plated	0.07
92 95 90		<mark>6 1/4</mark> 160	<b>¾</b> <u>√</u> 45° □□□	chrome plated	0.07

### Cutter for ribbon cable

94 15

- > for crush-free cutting of ribbon cable up to 2 13/64" (56 mm) width
- > exchangeable cutting base with fence angle for rectangular cuts
- > with opening spring and locking lever
- > tool body: tool steel, rolled, oil-hardened
- > blade: standard trapezoidal blade, replaceable





WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>4→</b> Inch mm		Tool	Handles	Blade length Inch mm	∆¹∆ Ibs			
94 15 215		8 1/2 215		chrome plated	plastic coated	2 13/64 56	0.76			
<b>94 19 215</b> 10 spare blades for 94 15 215 / 94 35 215										

## **Mitre Shears** for plastic and rubber sections



- > for crush-free cutting of plastic, rubber and soft timber sections; also for ribbon cable up to 2 13/64" (56 mm) width
- > exchangeable cutting base with fence angle for 45°-cuts and markings for 60°-, 75°-, and
- > with opening spring and locking lever
- > tool body: special tool steel, rolled, oil-hardened
- > blade: standard trapezoid shaped blade, replaceable





WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>←→</b> Inch mm		Tool	Handles	Blade length Inch mm	∆¹∆ Ibs			
94 35 215		8 1/2 215	W <b>5</b>	chrome plated	plastic coated	2 13/64 56	0.86			
<b>94 19 215</b> 10 spare blades for 94 15 215 / 94 35 215										

- ${\scriptstyle >}$  for cutting and shortening cable ducts and for plastic material up to 5/32" (4.0 mm) thickness
- > special lever transmission
- > very effective blade geometry
- > tool body: high-grade chrome vanadium electric steel, oil-hardened
- > blade: special tool steel;oil-hardened





95 02 21: Blade length 4 1/4" (110 mm) for cutting wide cable ducts

Product Number	Packaging	<b>←→</b> Inch mm		Tool	Handles	Cutting capacities Inch mm	Blade length <mark>Inch</mark> mm	∆ ∆ Ibs
95 02 21		11 275	MM	burnished	multi-component grips	5/32 4.0	<b>4 1/4</b> 110	1.47

# **Anvil Shears**

for cutting soft material such as rubber and leather

94

- > includes opening spring and locking device
- > cutting capacity for round material up to 1" (25 mm)
- > cuts flat material up to 1.50" (40 mm) max. width
- > tool body constructed of rolled and oil-hardened tool steel





	4>					47
Part Number	inch	mm	Pliers	Handles	Cutting Capacity	lbs
94 55 200	8	200	chrome plated	plastic coated	soft material - rubber, leather and hoses	0.64
95 59 200 01	Spare blade	for 94 55 2	00	·		



- > only for cutting fibers of KEVLAR® in optical fiber cables, not recommended for other materials
- > precision ground blades with serration prevent the fibers from slipping and guarantees a clean cut
- > riveted precision joint, for low-friction movement and smooth and even cutting of the thin KEVLAR® fibers
- > hard chrome plated, ground surface
- > shears body: chrome vanadium electric steel, oil-hardened
- > user-friendly handles: plastic, impact-resistant



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

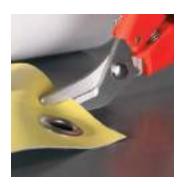
Product Number	Packaging	<b>d→</b> Inch mm	Shears	Handles	∆¹∆ Ibs
95 03 160 SB		6 1/4 160	chrome plated	plastic coated	0.15

# **Combination Shears**

95 05

- > for cutting cardboard, plastics, aluminum, brass and copper foils
- > not suitable for steel wire or iron sheets
- > precision ground, hardened blades
- > with opening spring and locking device
- > pinch quard prevents operators' fingers being pinched
- > adjustable bolted joint
- > shears body: surgical steel, stainless, air-hardened
- > handles: plastic, impact-resistant

Angled shape - for easy execution of long cuts; ergonomically shaped plastic handles









**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	∆¹∆ Ibs
95 05 140		5 1/2 140		polished	plastic coated	0.15
95 05 185		7 1/4 185	<b>∠</b> 40° <b>₽ € ₩</b>	polished	plastic coated	0.25
95 05 190		7 1/2 190		polished	plastic coated	0.26

95 05 155 SBA

WARNING: This product can expose you to chemicals including lead, which is known to

the State of California to cause cancer. For more information go

to www.P65Warnings.ca.gov

Precision ground blades with fine serration for a clean, non-slip cut Cutting edge with integrated cable cutter With plastic belt case

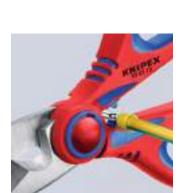
- > universal shears for electricians
- > handles with multi-component grips, fiberglass-reinforced
- > cutting edges made from stainless steel, hardness of cutting edges 56 HRC

#### 95 05 10 SB

With crimp area for end sleeves (ferrules) up to 6.0 mm<sup>2</sup>









95 05 10 SB

Product Number	Packaging	<b>4→</b> Inch mm	Head	Handles	Capacity mm <sup>2</sup>	∆¹∆ Ibs
95 05 155 SBA	X	6 1/8 155	polished	multi-component grips, fiberglass-reinforced	-	0.24
95 05 10 SB	Х	6 1/4 160	polished	multi-component grips, fiberglass-reinforced	6.0	0.31

# **Cable Shears**

95

- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > no crushing, slight deformation of the cable only
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > shears body: surgical steel, stainless, vacuum-hardened
- > handles: plastic, impact-resistant

#### 95 05 165

Cuts cables up to 25/64" diameter (10 mm, 24 mm²); with opening spring and locking device; blades made of stainless steel; oil-hardened and tempered

#### 95 06 230

For copper conductors single wire up to 5/8" ( $16~\text{mm}^2$ ), stranded up to 1/0~AWG ( $50~\text{mm}^2$ ), fine stranded up to  $2/0~\text{(}70~\text{mm}^2\text{)}$  and aluminum conductors multi wire up to  $70~\text{mm}^2$ ; easy cutting with one-hand operation due to high transmission ratio; stainless – surgical grade – steel, oil-hardened and tempered





						Cutting capacities			
Product Number	Packaging	<b>4→</b> Inch mm		Head	Handles	Ø Inch Ø mm	mm²	AWG	∆ ∆ Ibs
95 05 165		6 1/2 165	<b>***</b>	polished	plastic coated	25/64 10	24	6	0.25
95 06 230		9 1/4 230	<b>☆</b> 1000 V <b>△♠ ♦</b>	polished	plastic insulated, VDE-tested	5/8 16	50	solid - 1/0 stranded - 2/0	0.60

95 06 230

**☆1000V △★♠ ★★** 

- > for cutting copper and aluminum cables, single and multi-stranded wire
- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > easy cutting with one-hand operation
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-locking
- > high-grade special tool steel; forged, oil-hardened

#### Style 2

Internal opening spring, protected and captive

#### Style 4

Multifunctional tool for working on NYM cable from 3 x 1.5 mm<sup>2</sup> to 5 x 2.5 mm<sup>2</sup> (cutting, stripping insulation); universal stripping area for both solid conductor cross-sections; reliable alignment of the cable in the stripping area due to V-shaped blade geometry

#### 95 12 165 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system



Cut performed with a Diagonal Cutter: high effort 
Cut performed with a Cable Shear: easy, clean required, inaccurate cut, considerable deforming and crushing of the cable



cut without any deformation of the cable



The locking device keeps shears with spring inside the joint closed



the joint closed										
							Cutting o	apacities		
Product Number	Packaging	←→ Inch mm		Tool	Handles		Ø Inch Ø mm	mm²	AWG	∆ ∆ lbs
95 11 165	X	6 1/2 165	<b>*</b>	burnished	plastic coated	1	19/32 15	50	1/0	0.49
95 12 165	X	6 1/2 165	<b>*</b>	burnished	multi-component grips	1	19/32 15	50	1/0	0.55
95 12 165 T BKA	X	6 1/2 165	<b>*</b>	burnished	multi-component grips, integrated tether attachment point	1	19/32 15	50	1/0	0.56
95 18 165 US	X	6 1/2 165	<b>☆ 1000 V ASTM ☆</b>	burnished	insulated, multi-component grips, ASTM-tested	1	19/32 15	50	1/0	0.58
95 21 165	X	6 1/2 165	<b>** *** </b>	burnished	plastic coated	2	19/32 15	50	1/0	0.50
95 22 165		6 1/2 165	<b>** *** </b>	burnished	multi-component grips	2	19/32 15	50	1/0	0.56
95 41 165		6 1/2 165	<b>** ** ** ** ** ** ** **</b>	burnished	plastic coated	4	15/32 12	35	1/0	0.49

- > for cutting copper and aluminum cables
- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > by dividing the cutting actions into initial cut (insulating sheath in the front cutting area) and final cut (conductor in the back cutting area), cables up to 25/32" (20 mm) dia. can be cut in one-hand operation
- > less effort required due to favorable lever ratio and optimized cuttingedge geometry
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-locking
- > high-grade special tool steel; forged, oil-hardened



Initial cut: using the front cutting edge to cut the insulating sheath on larger cable diameters leaves an ergonomic handle opening width.



Final cut: after cutting the sheath in the front profile the conductors are cut in the rear area.







The twin cutting edge allows a comfortable handle position in all cutting situations inside the specified cutting capacity.

						Cutting o	apacities		
Product Number	Packaging	<b>d→</b> Inch mm		Tool	Handles	Ø Inch Ø mm	mm²	AWG	∆¹∆ Ibs
95 11 200	X	8 200	***	burnished	plastic coated	25/32 20	70	2/0	0.65
95 12 200	X	<mark>8</mark> 200	<b>*1</b>	burnished	multi-component grips	25/32 20	70	2/0	0.74
95 18 200 SBA	X	8 200	<b>♦ 1000 V ASTM</b>	burnished	insulated, multi-component grips, ASTM-tested	25/32 20	70	2/0	0.75

### Short design, length only 20" (500 mm) Lightweight, high leverage

- > for cutting copper and aluminum cables, single and multi-stranded wire
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > less effort required due to favorable lever ratio and special blade geometry
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > cutter head: vanadium electric steel, forged, oil-hardened
- > handle shank: aluminum tube, high-strength



Large cutting capacity: max. 1 1/16" (27 mm) dia. / 150 mm<sup>2</sup>





						Cutting o	apacities		
Product Number	Packaging	<b>4→</b> Inch mm		Head	Handles	Ø Inch Ø mm	₩ mm²	AWG	∆¹∆ lbs
95 12 500		<mark>20</mark> 500	<b>**</b>	polished	multi-component grips	1 1/16 27	150	5/0	2.49
95 17 500		<mark>20</mark> 500	<b>≙</b> 1000 V <b>△♠ ♦ ♦ ♦</b>	polished	plastic dipped insulated, VDE-tested	1 1/16 27	150	5/0	3.26

# **Cable Shears**

95

- > for cutting copper and aluminum cables, single and multi-stranded wire
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > favorable lever ratio due to toggle lever
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > bolted cutter head, replaceable
- > blade head: high-grade chrome vanadium electric steel, forged, oil-hardened
- > handle: steel tube



						Cutting c	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	₩ mm²	AWG	∆ ∆ lbs
95 27 600		23 1/2 600	<b>≙</b> 1000 V <b>△♣ ♀ ■⑤</b>	polished	plastic dipped insulated, VDE-tested	1 1/16 27	150	5/0	5.08

**95 29 600** Spare cutter head for 95 27 600

- > for cutting copper and aluminum cables, single and multi-stranded wire
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > one-hand operation using ratchet principle
- > minimal handforce required due to very high transmission ratio
- > two-stage ratchet drive for easy cutting
- > simple handling as a result of lightweight and compact design can be used even in confined areas
- > pinch guard prevents operators' fingers being pinched
- > high-grade special tool steel; forged, oil-hardened



95 31 250 SBA



95 31 280: Large cutting capacity: max. 2" (52 mm) dia. / 380 mm<sup>2</sup>



Ratchet principle and two-stage ratchet drive for easier cutting



95 31 280 SBA



 $95\ 31\ 250/280$  : Fixed handle with support area as an aid to position the pliers when cutting



						Cutting	apacities		
Product Number	Packaging	<b>d→</b> Inch mm		Tool	Handles	Ø Inch Ø mm	₩ mm²	MCM	∆¹∆ Ibs
95 31 250 SBA	X	10 250	⊕ MM <b>£</b> I	black lacquered	multi-component grips	1 1/4 32	240	500	1.49
95 31 280 SBA	X	11 280	<b>⊕</b> /// <b>€</b>	black lacquered	multi-component grips	2 3/64 52	380	750	1.70
95 36 250 SBA	X	10 250	À 1000 V ♠♠ ↔ WW 🖫	black lacquered	insulated, multi-component grips, VDE-tested	1 1/4 32	240	500	1.24
95 36 280 SBA	X	11 280	<b>☆1000∨ △♣ ♦ //// <b>* *</b></b>	black lacquered	insulated, multi-component grips, VDE-tested	2 3/64 52	380	750	1.64

95 39 250	Movable spare blade for 95 31 250 / 95 36 250	
95 39 280	Movable spare blade for 95 31 280 / 95 36 280	

95

32

#### Cable shears with adjustable telescopic handles allow angular positioning

- > for cable diameters up to 1 1/2" (38 mm), handles can be positioned at an angle to set the optimum handle width, great for work in confined areas
- > comfortable work due to ratchet action and lightweight
- > heavy-duty telescopic handles made of oval aluminum tubing; extendable up to 30" (770 mm) for maximum leverage on large cable diameters; retractable down to 22" (570 mm) for minimum space requirements during transport
- > replaceable cutting head
- > extensive cutting range up to 1 1/2" (38 mm) dia. or 550 MCM (280 mm<sup>2</sup>) in copper and aluminum cables
- > easier, neater cut due to optimized cutting edge geometry
- > adjustable bolted joint
- > cutting head: special quality, high-grade tool steel, oil-hardened
- > handles: high-strength oval aluminum tubing



Handles are adjustable in length and angular position for easier work. Set the handle length to the optimum position for powerful cutting; put the handles at an angle for a comfortable gripping position.











Thorough cut of the cable by repeat cutting and opening actions



After the first partial cut, the handles open by ratchet action

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

						Cutting o	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	₩ mm²	MCM	∆ ∆ Ibs
95 32 038		<b>22 7/16</b> 570	<b>91</b>	burnished	multi-component grips	1 1/2 38	280	550	4.49

- > for copper and aluminum cables, single and multi-stranded wire also with hard rubber, plastic sheet metal sheath
- > not suitable for steel wire and wire ropes
- > minimal handforce required for cutting due to optimum transmission ratio
- > high cutting capacity due to two-handed operation and ratchet action
- > the blade can be opened in any cutting position
- > adjust the handle length to adapt to each individual job and move it to the shorter length for easy transport
- > blade: special-quality high-grade tool steel, oil-hardened
- > handles: high-strength oval aluminum tubing

#### 95 32 060

Tool length: 23 5/8" - 31 1/2" (600 - 800 mm)

95 32 100

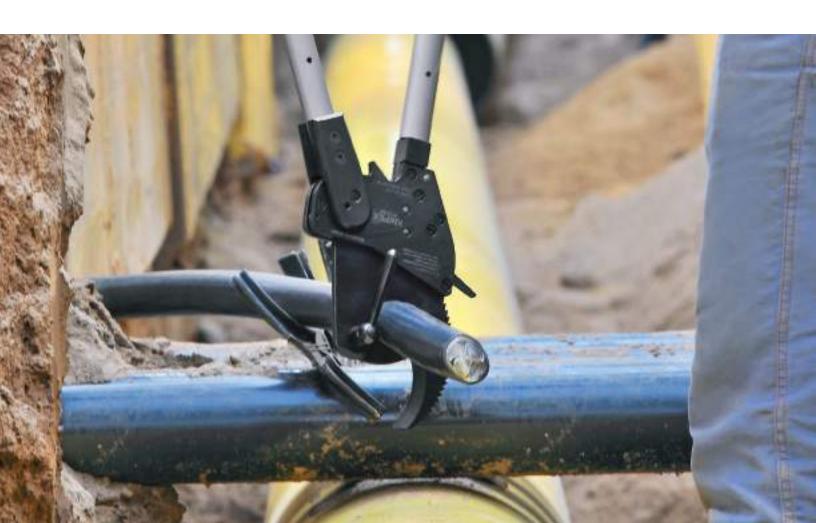
Tool length: 25 1/2" - 33 7/8" (650 - 850 mm)





WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

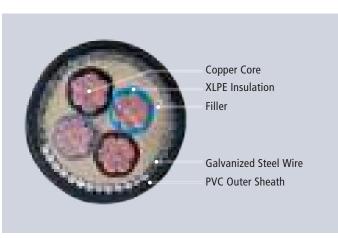
95 32 100							Cutting of	apacities		
95 32 060 600 - 800 600 - 800 600 - 800 60 740 1400 60 740 60 740 1400 60 740 6	Product Number	Packaging	Inch		Head	Handles	Ø Inch		MCM	∆ ∆ Ibs
95 32 100 25 1/2 - 33 7/8 3 15/16 960 1900 1	95 32 060			0	h			740	1400	8.47
000 - 000 111111	95 32 100		25 1/2 - 33 7/8 650 - 850 mm	•	burnished	mutti-component grips	3 15/16 100	960	1900	10.98
	95 39 870		re blade for 95 32 060 re blade for 95 32 100							



for steel wire armored cable (SWA-Cable)

# Cuts through steel wire armored cable with a diameter of up to $45\ \text{mm}$ / $380\ \text{mm}^2$ (e.g. $4\ x\ 95\ \text{mm}^2$ ) using one or two-handed operation

- > simple handling due to lightweight (1.82 lbs) and compact design (315 mm length) can also be used in confined areas
- > precision ground blades and induction hardened cutting edges cut smoothly and neatly without crushing
- > innovative high leverage three-stage ratchet-drive
- > flange on the handle can be used as a support surface when cutting larger diameters
- > high-grade special tool steel, forged, oil-hardened
- > not suitable for cutting ACSR cable and wire rope!











					Cutting	capacity		
Product Number	<b>Inch</b> mm		Tool	Handles	Ø mm	mm²	MCM	∆ ∆ lbs
95 32 315 A	12 13/32 315	MM	black lacquered	multi-component grips	45	380	750	1.80
95 36 315 A	12 13/32 315	<u>≙</u> 1000 V <u>←</u> ////	black lacquered	insulated multi-component grips, VDE-tested	45	380	750	1.80

95 39 315 A 01	Pivot cutter repair kit
95 39 315 A 02	Fixed cutter repair kit

# Sturdy, easy to use and stable Innovative ratchet drive

- > Manual ratchet-action cable cutter for one-hand and two-handed operation for cutting copper and aluminum cables with diameters of up to 2 23/64" (60 mm)
- > easy handling due to light weights (1.82 lbs) and compact construction (12 1/2" / 320 mm length) suitable for use in confined areas
- > cuts through copper and aluminum cables with diameters of up to 2 23/64" (60 mm) in one-hand and two-handed operation
- > hardened cutting edges, precisely ground, cut smoothly and neatly without crushing
- > for cutting copper and aluminum single conductors as well as multi-stranded cables (not suitable for steel wire and wire ropes)
- > innovative 3-stage ratchet-drive with high leverage for easy cutting in one-hand and two-handed operation
- > flange on the handle can be used as a support surface when cutting larger diameters
- > high-grade special tool steel; forged, oil-hardened











# The innovative three gear drive permits three operating modes

- > Fast working with full lift of handles and one-hand operation when cutting through insulation material
- > Powerfully sliding the sickle knife forward when cutting through the stranded conductor with two hands through use of the central lifting area (handle opening of between 1/3 and 2/3 of total range)
- > Powerfully pushing the sickle knife forward with one hand to cut through the stranded conductor through use of the first third of the handle lift with one or two hands

First manual ratchet-action cable cutter for one-hand and two-handed operation for cutting copper and aluminum cables with diameters of up to 2 23/64" (60 mm)!

							Cutting o	apacities		
Product Number	Packaging	<b>d→</b> Inch mm		Tool	Head	Handles	Ø Inch Ø mm	mm²	MCM	∆ ∆ lbs
95 32 320		12 1/2 320	<b>⊕</b> MM <b>£</b> €	black atramentized	polished	multi-component grips	2 3/64 60	600	1200	1.82
95 36 320		12 1/2 320	≙ 1000 V △ ← ↔ //// 1	black atramentized	polished	insulated, multi-component grips, VDE-tested	2 3/64 60	600	1200	1.83

95 39 320 01	Pivot cutter repair kit for 95 32 320 and 95 36 320
95 39 320 02	Fixed cutter repair kit for 95 32 320 and 95 36 320

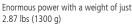
## Handy, compact and sturdy Extremely robust design





- > two-stage ratchet drive for easy cutting
- > less physical effort due to very high transmission ratio
- > fixed handle with support area for laying down the pliers when cutting
- > locking mechanism for transporting with safely closed handles
- > high-grade special tool steel; forged, multi stage oil-hardened









95 .	32 340 S	R US
	WM	

						Cutting capacities		
Product Number	Packaging	<b>←→</b> Inch mm		Tool	Handles	AAC (All Aluminum Conductor)  Ø Inch Ø mm	ACSR (Aluminum Conductor Steel Reinforced) kcmil	∆¹∆ Ibs
95 32 340 SR US	X	13 25/64 340	• MM <b>•</b>	burnished	multi-component grips	1 1/4 32	795	2.87

# **Bowden Cable Cutter**

95 6



- > for Bowden cables and soft wire rope up to 1/8" (3.0 mm) dia. (also V2A)
- > smooth and clean cutting due to special shape of the cutting edges
- > sickle shape cutting edges surround the material and prevent the wire rope fanning out
- > minimal handforce required due to very high transmission ratio
- > with opening spring and locking lever
- > induction hardened cutting edges
- > high-grade special tool steel; forged, multi stage oil-hardened



							Cutting capacities	
		<b>←→</b>						
		Inch					Ø Inch	$\Delta \Delta$
Product Number	Packaging	mm		Shears	Head	Handles	Ø mm	lbs
0F 61 1F0 HC	V	6		black atramentized	polished	plastic control	1/8	0.49
95 61 150 US	٨	150	<b>● 3 / V V V \</b>	DIACK atramentized	polistied	plastic coated	3	0.48

#### Double function: clean cutting, precise crimping

- > with two crimping dies for end caps on Bowden cable sheaths and ferrules for wire rope
- > comfortable work due to slim design and internal opening spring
- > bolted joint for precise blade guidance, readjustable
- > high leverage for reduced effort
- > cutting edge hardness (approx. 64 HRC)
- > chrome vanadium heavy-duty steel; forged, manifold oil-hardened



Crimping of the ferrules onto the traction cable



Crimping of the end caps on the Bowden cable sheath



95 61 190





> Cuts all wire ropes

without splaying,

ferrules

including those that are extremely strong > Not for electrical end

95 62 190



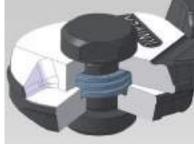




#### 95 62 190 T BKA\*

Pliers with integrated tether attachment point for tool drop protection system





Internal opening spring

Transport lock and



				9	Crimp profiles					
						Cutting capacities				
Product Number	Packaging	<b>d→</b> Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ lbs
95 61 190	Х	7 1/2 190	**************************************	polished	plastic coated	<mark>9/32</mark> 7.0	13/64 5.0	5/32 4.0	3/32 2.5	0.69
95 62 190	X	7 1/2 190		burnished	multi-component grips	9/32 7.0	1 <mark>3/64</mark> 5.0	5/32 4.0	3/32 2.5	0.69
95 62 190 T BKA	X	7 1/2 190		burnished	multi-component grips, integrated tether attachment point	<mark>9/32</mark> 7.0	13/64 5.0	5/32 4.0	3/32 2.5	0.83

95

Compact size, lightweight, high performance level High transmission joint design makes cutting 20 % easier Box joint design for greater stability

- > for cutting high-strength wire ropes up to up to 5/32" (4 mm) and cable 3/16" (6 mm)
- > at just 6 1/4" (160 mm) length this tool is considerably more powerful than many larger wire rope cutters
- > included thumb lock and opening spring
- > ball bearing steel for a long service life
- > induction hardened cutting edges
- > cuts cleanly and evenly without wire ends splaying or fanning out









Product Number	Packaging	Inch mm		Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ lbs
95 62 160	X	6 1/4 160	<b>♥</b> ◎ □ <b>™</b> MM	polished	multi-component grips	<mark>3/16</mark> 6.0	<mark>5/32</mark> 4.0	0.38

# **Cable Cutters for Wire Rope and ACSR**

95

- > for ACSR, wire ropes, steel rods, copper and aluminum cables
- > suitable for cutting overhead cables with strain relief wire
- > angular cutting blades prevent fanning out
- > optimum transmission ratio for high cutting performance
- > bolted cutter head, replaceable
- > lightweight
- > cutter head: high-grade special tool steel, multi stage oil-hardened
- > handles: aluminum, high-strength

### 95 81 600

With reinforced cutter head for higher performance, also cuts piano wire





95 77 600

**☆1000V �� ◎ ▮**▮

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

	Cutting capacities										
Product Number	Packaging	←→ Inch mm		Head	Handles	mm²	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	AWG	∆¹∆ Ibs
95 71 445		17 1/2 445	<b>* 1</b>	polished	plastic grips	95	25/64 10	9/32 7	-	3/0	2.39
95 71 600		23 5/8 600	<b>*</b> • • • • • • • • • • • • • • • • • • •	polished	plastic grips	150	35/64 14	23/64 9	-	5/0	3.84
95 77 600		23 5/8 600	<b>☆1000∨�◎€5</b>	polished	plastic dipped insulated, VDE-tested	150	35/64 14	23/64 9	-	5/0	5.02
95 81 600		23 5/8 600	<b>* 1</b>	polished	plastic grips	150	5/8 16	25/64 10	11/64 4 5	5/0	4.97

95 79 445	Spare cutter head for 95 71 445
95 79 600	Spare cutter head for 95 71 600 / 95 77 600
95 89 600	Spare cutter head for 95 81 600

- > for cutting cables, stripping wire and crimping insulated and non-insulated terminals, connectors and plug-type connectors > with threaded holes for cutting copper and brass screws threaded 7/64", 1/8", 9/64", 5/32" and 13/64" (M2.6, M3, M3.5, M4 and M5)
- > bolted joint for higher stability and smooth movement
- > special steel; high-strength







MAIRE OF IT





Product Number	Packaging	Inch mm			Pliers	Handles	Applications	Capacity mm <sup>2</sup>	Number of crimping positions	∆ ∆ Ibs
97 21 215		9 1/4 235		<b>5</b>	black lacquered	multi-component grips	Insulated terminals + cable connectors	0.75 - 6.0	3	0.63
97 21 215 B		<mark>9</mark> 230		<u>~</u>	black lacquered	multi-component grips	Non-insulated open plug- type connectors (plug width 6.3 mm)	0.5 - 2.5	3	0.63
97 21 215 C		<mark>9</mark> 230	econo Se	V	black lacquered	multi-component grips	Non-insulated terminals + cable connectors	0.5 - 6.0	3	0.63
97 21 215 SB	X	9 1/4 235			black lacquered	multi-component grips	Insulated terminals + cable connectors	0.75 - 6.0	3	0.63
97 22 240		9 1/2	<b>1</b>		hladda ann an d	and the second second	Insulated terminals + cable connectors	0.75 - 6.0		
		240	Section 1		black lacquered	multi-component grips	Non-insulated open plug- type connectors (plug width 6.3 mm)	0.5 - 2.5	3	0.67



- > just one tool for the most common crimping applications
- > crimping dies change guickly and easily without any additional tool
- > secure and protected storage of the interchangeable dies in a round magazine
- > comfortable, powerful crimping pliers
- > same reliable crimping results as with fixed crimping dies
- > repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- > chrome vanadium electric steel in special quality; oil-hardened
- > round magazine: plastic, fiberglass-reinforced



1. Changing position: service lever opens out for parallel jaw positioning



2. Changing the crimp die: unlock the magazine position, take the crimp dies out of the pliers



3. Fold in the service lever and press the pliers – ready for use again



#### 97 33 01

Crimping Pliers with round magazine and three interchangeable crimping dies for:

- > non-insulated open plug-type connectors (4.8+6.3~mm width) from 1/64-15/64" ( $0.5-6.0~\text{mm}^2$ )
- > insulated terminals, plug connectors and butt connectors from 1/64-15/64" (0.5 6.0 mm<sup>2</sup>)
- > insulated and non-insulated ferrules (end sleeves) from 1/64-15/64" (0.25 6 mm²)

Now also for insulated and non-insulated end sleeves (ferrules) 10, 16, 25 mm<sup>2</sup>

Universal indent crimping die for non-insulated connectors



#### 97 33 02

Crimping Pliers with round magazine and five interchangeable dies for;

- > non-insulated open plug-type connectors (plug width 4.8 + 6.3 mm) from 1/64-15/64" (0.5 6.0 mm²)
- > insulated terminals, plug connectors and butt connectors from 1/64-15/64" (0.5 6.0 mm²)
- > insulated and non-insulated ferrules (end sleeves) from 1/64-15/64  $^{\prime\prime}$  (0.25 6 mm²)
- > insulated and non-insulated ferrules (end sleeves) with 10 / 16 / 25  $\,$  mm  $^2$  and for non-insulated crimp terminals
- > tube and compression cable lugs in accordance with DIN 46234 and DIN 46235
- > non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267

Compact and lightweight crimping pliers for connectors. One tool does the job of five.







Magazine for crimp dies can be carried on a belt

Clearly visible marking on the crimping dies with pictograms

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>Inch</b> mm				Applications	Capacity mm <sup>2</sup>	∆ ∆ Ibs
97 33 01		10 250	Queb.	<u>/^\</u>		Non-insulated open plug-type connectors (plug width 4.8 + 6.3 mm)	0.5 - 6.0	1.33
		-		•	MM	Insulated terminals, plug connectors and butt connectors	0.5 - 6.0	-
		-	650 650			Insulated and non-insulated end sleeves (ferrules)	0.25 - 0.75 / 1 - 1.5 / 2.5 / 4 / 6	-
97 33 02		10 250	Shorts	M		Non-insulated open plug-type connectors (plug width 4.8 + 6.3 mm)	0.5 - 6.0	1.92
		-		•		Insulated terminals. plug connectors and butt connectors	0.5 - 6.0	-
		-		<b>T</b>	MM	Insulated and non-insulated end sleeves (ferrules)	0.25 - 0.75 / 1 - 1.5 / 2.5 / 4 / 6	-
		-		W	-	Insulated and non-insulated end sleeves (ferrules)	10 / 16 / 25	-
		-	9	v		Non-insulated crimp terminals, tube and compression cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	0.5 - 10.0	-

- for exchangeable crimping dies
- > just one tool for almost 1,000 crimping applications
- > parallel crimping die movement
- > repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory
- > optimum transmission of force due to lever action for fatigue-reduced operation
- > comfortable handle design
- > different locators for precise positioning of the connectors
- > additional crimp dies available upon request
- > chrome vanadium electric steel in special quality; oil-hardened



97 43 200 with crimping dies 97 49 06 for insulated terminals, plug connectors and butt



97 43 200 with crimping dies 97 49 09 for ferrules (end sleeves)



97 43 400 Crimp System Pliers with crimp dies 97 49 24 and locator 97 49 93 for D-Sub plugs



#### 97 43 200

In a plastic case; foam insert with recesses for crimping dies and locators; with service tool (hexagonal key), screws and nuts; without crimping dies

#### 97 43 200 A

Pliers without crimping dies, without case

#### 97 43 05

With attached crimping dies for non-insulated open plug-type connectors (4.8 and 6.3 mm connector width)

#### 97 43 06

With attached crimping dies for insulated terminals and plug connectors



WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>←→</b> Inch mm			Pliers	Handles	Applications	Capacity mm <sup>2</sup>	Number of crimping positions	∆∆ lbs
97 43 05		<mark>8</mark> 200	Section 1	<b>™</b> ™	burnished	multi-component grips	Crimp System Pliers for non- insulated open plug-type connectors (4.8 and 6.3 mm connector width)	0.5 - 6.0	3	1.33
97 43 06		<mark>8</mark> 200	J		burnished	multi-component grips	Crimp System Pliers for insulated terminals and plug connectors	0.5 - 6.0	3	1.35
97 43 200		<mark>8</mark> 200	-	MM	burnished	multi-component grips	See crimp die profile table	-	-	1.25
97 43 200 A		<mark>8</mark> 200	-	MM	burnished	multi-component grips	See crimp die profile table	-	-	1.26

Product Number	Packaging			Applications	Cable type	Capacity mm <sup>2</sup>	Capacity SW mm Inch mm	Sleeves Ø Inch Ø mm	Number of crimping positions	∆¹∆ Ibs
97 49 04		No. of the last of	M	Non-insulated open plug- type connectors (plug width 2.8 + 4.8 mm)	-	0.1 - 2.5	-	-	4	0.09
97 49 05		Section 1	M	Non-insulated open plug- type connectors (plug width 4.8 + 6.3 mm)	-	0.5 - 6.0	-	-	3	0.10
97 49 06		30	<b>-</b>	Insulated terminals, plug connectors + butt connectors	-	0.5 - 6.0	-	-	3	0.10
97 49 08			<b>\</b>	Insulated and non-insulated ferrules (end sleeves)	-	0.25 - 6.0	-	-	5	0.11
97 49 09			7 (	Insulated and non-insulated ferrules (end sleeves)	-	10 / 16 / 25	-	-	3	0.11
97 49 15		Service Servic	M	Lug connectors and non-insu- lated open plug-type connectors (plug width 6.3 mm)	-	1.25-2.5 + 3.0-6.0	-	-	2 + 1	0.12
97 49 16		- P. D.	^	Insulated terminals + cable connectors	-	10.0 - 16.0	-	-	2	0.10
97 49 18			W	Twin ferrules (end sleeves) for two flexible conductors	-	2x6 / 2x10 / 2x16	-	-	3	0.11
97 49 19			W	Insulated and non-insulated ferrules (end sleeves)	-	35 - 50	-	-	2	0.10
97 49 20		6	•	F-connectors for TV and satellite connections	-	-	9/32; 21/64; 5/16 7.0; 8.4; 8.1	19/64; 3/8; 3/8 7.7; 9.5; 9.5	3	0.11
97 49 23		es e	v	Non-insulated terminals + cable connections	-	16 + 25	-	-	2	0.10
97 49 24		- Will	^	D Sub; HD 20; HDE plug	-	0.03 - 0.56	-	-	3	0.09
97 49 30		SCHOOL SECTION AND ADDRESS OF THE PERSON A	•	Non-insulated crimp connectors in accordance with DIN 46267	-	1.5 - 4.0	-	-	3	0.08
97 49 35		<b>(34)</b>	M	Spark plug connectors and distributors	-	1	-	-	5	0.12
97 49 40		600	<b>•</b>	Coax connectors RG 58, 59, 62, 71, 223	RG 58, 59, 62, 71, 223		7/32; 1/4; 1/16 5.4; 6.48; 1.72	1/4; 19/64; 5/64 6.4; 7.6; 2.1	3	0.13
97 49 44		ware the	M	Rolled contacts	-	0.14 - 1.5	-	-	3	0.10

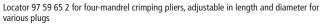
Product	Do elec = '			Applications	Cable	Capacity	Capacity SW mm	Sleeves Ø Inch	Number of crimping	∆ hs
Number	Packaging			Applications	Cable type	mm²	mm	Ø mm	positions	lbs
97 49 50		ØD.	<b>◆</b>	Coax connectors/ car phone RG 58, 74, 188, 316	RG 58, 174, 188, 316	-	1/8; 11/64; 7/32; 1/16; 3/64; 1/32 3.25; 4.52; 5.4; 1.72; 1.07; 0.72	5/32; 7/32; 1/4; 5/64; 3/64; 1/32 3.9; 5.4; 6.4; 2.1; 1.3; 0.95	6	0.11
97 49 54		on ML	M	Modular plugs	-	0.5 - 2.5	-	-	4	0.11
97 49 60			•	Turned contacts (HTS + Harting)	-	0.14 - 4.0	-	-	4	0.12
97 49 62		1252	<b>•</b>	Solar connectors (Huber + Suhner)	-	2.5 + 4.0	-	-	3	0.09
97 49 64		620000	•	ABS connectors in motor vehicles	-	1.0 - 6.0	-	-	2	0.11
97 49 69 1		Carin .	•	Solar cable connectors gesis® solar PST 40 (Wieland)	-	1.5 - 2.5	-	-	2	0.10
97 49 69 2		C. Tark	•	Solar cable connectors gesis® solar PST 40 (Wieland)	-	4.0 - 10.0	-	-	3	0.10
97 49 70		1	1	Western plugs	-	4,6,8-poles RJ 10 / 11 / 12 / 45	-	-	3	0.11
97 49 74		1		Unshielded plugs	-	4,6,8-poles RJ 10 / 11 / 12 / 45	-	-	3	0.10
97 49 76		05	1	Shielded Stewart plugs	-	-	-	-	2	0.11
97 49 81			•	Fiber optic connectors, e.g. Harting	-	-	1/8; 3/16; 1/4 3.0; 4.95; 6.5	9/64; 15/64; 19/64 3.5; 6.0; 7.5	3	0.12
97 49 82		35	•	Fiber optic connectors, e.g. Telegärtner	-	-	1/8; 9/64; 11/64 3.25; 3.65; 4.52	9/64; 5/32; 7/32 3.6; 4.0; 5.4	3	0.11
97 49 83		-30		Fiber optic connectors, e.g. FSMA-;ST-; SC- + STSC-/K- connectors	-	-	9/64; 11/64; 13/64 3.65; 4.2; 5.0	11/64; 7/32; 15/64 4.3; 5.4; 6.0	3	0.11
97 49 84		30		Fiber optic connectors, e.g. Huber/Suhner	-	-	5/32; 11/64; 3/16 3.8; 4.3; 4.95	11/16; 13/64; 15/64 4.5; 5.2; 6.0	3	0.11
97 49 87		300		Fiber optic connectors, e.g. FSMA-;ST- and MIC-connectors	-	-	11/32 8.7	3/8 9.5	1	0.10
97 49 90	Locator for S	27 /0 60	/ЦТС	Harting)						
97 49 90	Locator for S									
97 49 94	Locator for S		u کار	~ h.aga/						
97 49 95	Locator for S									

Special profiles available upon request

#### 97 59 65 2

Locator that is universally adjustable (in length and diameter) for the repeatable exact alignment of turned contacts in crimping pliers; can be set to all commercially available turned contacts in the four-mandrel crimping pliers' capacity range.







97 59 65 2

Product Number	Packaging	Applications	∆ d lbs
97 49 65 1		Locator for 97 49 65 (solar connectors MC 3)	0.19
97 49 66 1		Locator for 97 49 66 (solar connectors MC 4)	0.16
97 49 68 1		Locator for 97 49 68 (solar connectors Solarlok)	0.16
97 59 65 2		Universal Locator for 97 52 65 / 97 52 65 DG	0.35

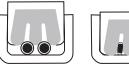
# **Crimping Pliers**

with side cutter for Scotchlok™ connectors

**97** 50

- > for crimping plastic-insulated telecommunication or signal cables using the U-contact principle in single Scotchlok connectors
- > no stripping necessary, U-shaped elements make the connection
- > induction hardened cutting edges
- > includes opening spring for easy repetitive work
- > vanadium electric steel; forged, oil-hardened





Before

After

Scotchlok $^{\text{TM}}$  is a registered trademark for 3M

Product Number	Packaging	<b>d→</b> Inch mm	Type of Connector		Head	Handles	Applications	Capacity <mark>Ø Inch</mark> Ø mm	∆ ∆ lbs
97 50 01		6 1/8 155	<b>(4)</b>	ww	polished	plastic coated	Scotchlok single connector	1/64 - 3/64 0.4 - 1.1	0.31

- > professional tool for cutting and stripping unshielded ribbon telephone cables
- $^{\cdot}$  > for crimping 6- and 8-pole Western plugs type RJ 11/12 (3/8" / 9.65 mm width) and type RJ 45 (15/32" / 11.68 mm width)
- > exact crimping process due to parallel crimping
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > length cutter and dismantling knife for ribbon cables 1/4" and 1/2" (6 and 12 mm) length
- > additional stripping device for round cables
- > chrome vanadium electric steel in special quality; oil-hardened
- $>97\,\,51\,\,12$  is for crimping 4-, 6- and 8-pole Western plugs type RJ 10 (7.65 mm width), type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)















Product Number	Packaging	<b>4→</b> Inch mm	Type of Connector		Pliers	Handles	Capacity	Number of crimping positions	∆ ∆ Ibs
97 51 10		<mark>7 1/2</mark> 190		<b>—</b> — M	burnished	multi-component grips	RJ 11/12 (6-poles) 3/8" (9.65 mm) RJ 45 (8-poles) 15/32" (11.68 mm)	2	0.67
97 51 12		<mark>8</mark> 200	<b>€ €</b>		burnished	multi-component grips	RJ 10 (4-poles) 7.65 mm RJ 11/12 (6-poles) 3/8" (9.65 mm) RJ 45 (8-poles) 15/32" (11.68 mm)	3	1.18

97 59 06	4 spare blades for 97 51 10
97 59 12	Spare set of blades for 97 51 1



for two-handed operation

> for solder-free electrical connections

- > the lever transmission reduces the handforce up to 30% compared with regular crimping pliers
- > repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory
- > two-handed operation for easy crimping of large conductor diameters
- > easy handling as a result of well-balanced center of gravity, angled head and ergonomically shaped handles
- > chrome vanadium electric steel in special quality; oil-hardened



A MM

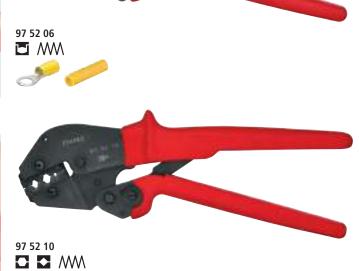


First step: place the connector into the correct crimping position. Squeeze handles slightly to secure





Second step: insert wire into connector and squeeze handles to complete crimp





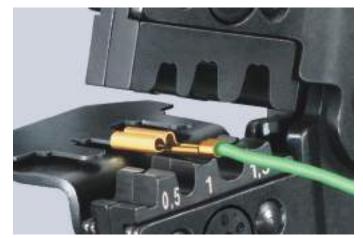
Third step: handles are long enough for two-handed operation. Handles will release automatically when the crimp is complete

Product Number	<b>←→</b> Inch mm			Pliers	Handles	Applications	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆¹∆ Ibs
97 52 04	10 250	Section 1	<b>A</b>	burnished	non-slip plastic grips	Non-insulated open plug-type connectors (plug width 2.8 + 4.8 mm)	0.1 - 2.5	26 - 14	4	1.24
97 52 05	10 250	Section 1	<b>A</b> <sub>MM</sub>	burnished	non-slip plastic grips	Non-insulated open plug-type connectors (plug width 4.8 + 6.3 mm)	0.5 - 6.0	22 - 8	3	1.26
97 52 06	10 250	- 1 CONTRACTOR OF THE PARTY OF		burnished	non-slip plastic grips	Insulated terminals. plug connectors + butt connectors	0.5 - 6.0	22 - 8	3	1.25
97 52 08	10 250	<i>₽</i>	<b>—</b> ww	burnished	non-slip plastic grips	Insulated and non-insulated ferrules (end sleeves)	0.25 - 6.0	24 - 8	5	1.25
97 52 09	10 250	<i>₽</i>	<b>—</b> ww	burnished	non-slip plastic grips	Insulated and non-insulated ferrules (end sleeves)	10 / 16 / 25	8/6/4	3	1.26
97 52 10	10 250	02		burnished	non-slip plastic grips	COAX BNC- and TNC-connectors	-	-	3	1.27
97 52 13	10 250	S com	<b>~</b>	burnished	non-slip plastic grips	Non-insulated crimp terminals, tube and compression cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	0.5 - 10.0	22 - 8	4	1.23
97 52 19	1 <mark>0</mark> 250	<i>ℯ</i>	<b>™</b>	burnished	non-slip plastic grips	Insulated and non-insulated ferrules (end sleeves)	35 - 50	2 and 0 (1/0)	2	1.25
97 52 23	10 250	OF-	<b>T</b> <sub>MM</sub>	burnished	non-slip plastic grips	Non-insulated terminals + cable connectors	16 + 25	6 and 4	2	1.25

### Crimping Pliers with short design



- > repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory
- > optimum transmission of force due to toggle lever for fatigue-reduced operation
- > 20° angled head, lightweight and compact design
- > chrome vanadium electric steel in special quality; oil-hardened



**97 59 14** > Locator for non-insulated open plug-type connectors



 $\triangle$ 

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>←→</b> Inch mm			Pliers	Handles	Applications	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆∆ lbs
97 52 14		7 1/2 195	Series	<u>~</u> <sub>₩</sub>	burnished	multi-component grips	Non-insulated open plug- type connectors (plug width 2.8 + 4.8 mm)	0.10 - 1.5	26 - 16	4	0.85
97 52 20		7 1/2 195	69	<b>◆</b> ////	burnished	multi-component grips	COAX-, BNC- and TNC-connectors RG 58/59/62/71/223	-	-	3	0.84

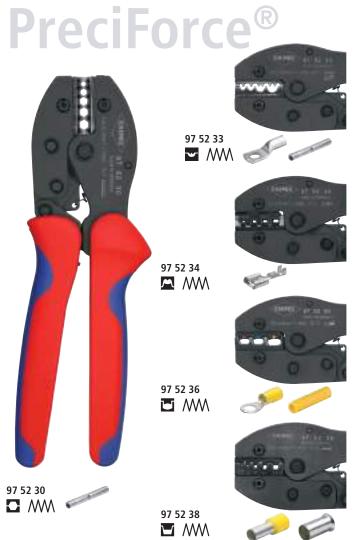
**97 59 14** Locator for 97 52 14 short design

- > repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory
- > optimum transmission of force due to toggle lever for fatigue-reduced operation
- > good handling due to favorable handle position, low weight, short design and ergonomically shaped handles
- > chrome vanadium electric steel in special quality; oil-hardened



97 52 37

WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov



Product Number	<b>←→</b> Inch mm			Pliers	Handles	Applications	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆¹∆ Ibs
97 52 30	8 3/4 220	<b>ECONOMI</b>	<b>-</b> ww	burnished	multi-component grips	Non-insulated crimp connectors in accordance with DIN 46267	1.5 - 4.0	16 - 12	3	1.06
97 52 33	8 3/4 220	OF-	<b>—</b>	burnished	multi-component grips	Non-insulated crimp terminals, tube and compression cable lugs in accordance with DIN 46234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267	0.5 - 10.0	22 - 8	4	1.06
97 52 34	8 3/4 220	1 September 1	<b>M</b>	burnished	multi-component grips	Non-insulated open plug-type connectors (plug width 2.8 + 4.8 mm)	0.1 - 2.5	26 - 14	4	1.07
97 52 35	8 3/4 220	- Carlo	<b>M</b>	burnished	multi-component grips	Non-insulated open plug-type connectors (plug width 4.8 + 6.3 mm)	0.5 - 6.0	22 - 10	3	1.08
97 52 36	8 3/4 220	350	<b>u</b> m	burnished	multi-component grips	Insulated terminals, plug connectors + butt connectors	0.5 - 6.0	22 - 10	3	1.08
97 52 37	8 3/4 220		<b>u</b> m	burnished	multi-component grips	Heat shrinkable sleeve connectors	0.5 - 6.0	22 - 10	3	1.05
97 52 38	8 3/4 220		<b>—</b> m	burnished	multi-component grips	Insulated and non-insulated ferrules (end sleeves)	0.25 - 6.0	24 - 10	5	1.09
97 52 50	8 3/4 220	0D.		burnished	multi-component grips	COAX-, BNC- and TNC-connectors for RG 58/174/188/316	-	-	6	1.10

- > for crimping turned contacts
- > four-mandrel crimping for top-quality crimping connections
- > mandrel gauge to check the basic setting
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > optimum transmission of force due to highly effective lever action for fatigue-reduced operation
- > high operation comfort due to ergonomic shape
- > chrome vanadium electric steel in special quality; oil-hardened

#### 97 52 63 DG

Crimping capacity can be adjusted in increments of .0004" (0.01 mm); with digital display of the preset crimping capacities; adjustment in mm, inches or comparable selection positions according to MIL; packaged in a plastic case with foam insert and locator for holding the contacts

Pressure adjustment depending on the conductor's diameter by means of adjusting wheel in 4 different positions; locator for positioning the contacts

Fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; locator for positioning the contacts; with table for calculating the settings; pliers in a plastic case with foam insert

#### 97 52 65 DG

Crimping capacity can be adjusted in increments of .0004" (0.01 mm); with digital display of the preset crimping capacities; adjustment in mm, inches or comparable selection positions according to MIL; with table for calculating the settings; packaged in a plastic case with foam insert and locator for holding the contacts

Turned contacts are used for particularly demanding plug-type connections, e.g. in medical industry and aviation. Extremely reliable crimping connections can be achieved only with pliers that work with absolute precision and maintain the required crimping depth in the 1/100 mm range. KNIPEX has all of the tools you need to get these jobs done.



97 59 65 2 Universal Locator



97 52 63 DG PATENTED X MM







#### 97 52 64







#### 97 52 65

PATENTED X MM







#### 97 52 65 DG

PATENTED 🔣 MM







Standard locator







Multifunctional digital indication, adjustment in mm, inches or comparable selection positions according to MIL



WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>d→</b> Inch mm			Pliers	Handles	Applications	Capacity mm <sup>2</sup>	AWG	∆¹∆ Ibs
97 52 63 DG	X	7 1/2 195	-	PATENTED X MM	chrome plated	multi-component grips	Turned contacts	0.08 - 2.5	28 - 13	1.89
97 52 64	X	7 1/4 180		<b>*</b> ////	chrome plated	multi-component grips	Turned contacts	0.08 - 2.5	28 - 13	0.94
97 52 65	X	9 1/4 235		PATENTED X MM	chrome plated	multi-component grips	Turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller)	0.14 - 6.0	25 - 10	1.5
97 52 65 DG	X	10 250		PATENTED ** WW	chrome plated	multi-component grips	Turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller)	0.14 - 6.0	25 - 10	2.8

Narrow handle width and improved ergonomics

### with side-loading mechanism for ferrules (end sleeves)

- > for crimping ferrules (end sleeves) according to DIN 46228 parts 1 + 4
- > self-adjustment to the size of ferrules (end sleeves) required
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory
- > optimum transmission of force due to toggle lever for fatigue-reduced operation
- > high operation comfort due to hand shape and low weight
- > chrome vanadium electric steel in special quality; oil-hardened

#### 97 53 04

Square compression for ferrules (end sleeves) up to 6 AWG; square compression for ideal contact surfaces in the clamp connection; particularly suitable for all twin ferrules (end sleeves) up to 2 x 6 mm<sup>2</sup> or 2 x AWG 8

#### 97 53 14

Expanded capacity of hexagonal crimping up to 1 AWG; hexagonal compression for confined connection dimensions; particularly suitable for all twin ferrules (end sleeves) up to 2 x 4 mm<sup>2</sup> or 2 x AWG 10



Crimping capacity can be switched over simply from 8 AWG (10 mm<sup>2</sup>) to 6 AWG (16 mm<sup>2</sup>)





The small crimping pliers for ferrules (end sleeves) with two major advantages for the user:

- > Automatic adjustment to the end sleeves, making work easier for the professional and offers reliable and fast crimping
- > Expanded range of applications



WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov











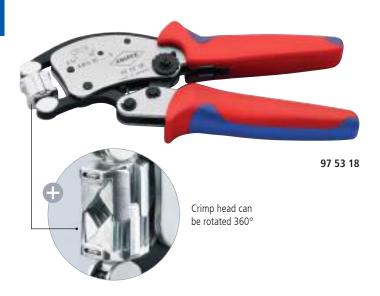


Product Number	Packaging	Inch mm					Pliers	Handles	Applications	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆ ∆ Ibs
97 53 04		7 1/4 180	•	P	,	<b>™</b>	burnished	multi-component grips	Ferrules (end sleeves)	0.08 - 10 and 16	28 - 8 and 6	1	0.94
97 53 14		7 1/4 180	600	0			burnished	multi-component grips	Ferrules (end sleeves)	0.08 - 10.0	28 - 8	1	0.90

Crimp head can be freely rotated 360°, with 8 locking positions Square crimp profile, high capacity range of 26 to 6 AWG (0.14 to 16 mm²)

End sleeves (ferrules) can be crimped from almost any working position

- > crimping pliers adjust automatically to different diameters
- > crimp opening is accessible from both sides, extra-long end sleeves can be fed in
- > crimping of twin end sleeves (ferrules) up to 2 x 6 mm<sup>2</sup> possible
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > light and handy tool, manual force reinforced by toggle lever mechanism
- > chrome vanadium electric steel in special quality; oil-hardened

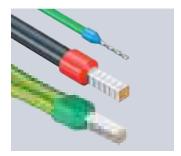




Crimp head can be rotated 360° for optimal accessibility, even in confined spaces



Twin end sleeves (ferrules) up to 2 x 6 mm<sup>2</sup> can be crimped without adjustment



Crimp end sleeves (ferrules) fully automatically within the capacity range of 26 to 6 AWG (0.14 to 16 mm)



Uniquely flexible: connectors can be inserted in the rotatable crimp head from almost any position





Product Number	Packaging	<b>4→</b> Inch mm	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆'∆ Ibs
97 53 18		8 200	0.14 - 16	26 - 6	1	1.05

- > for crimping ferrules (end sleeves) according to DIN 46228 parts  $1\,+\,4$
- > self-adjusting adaptation to the desired wire ferrule (end sleeves) size: no crimping faults caused by using the wrong die
- > front-loading of the ferrules (end sleeves) into the tool
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory
- > optimum transmission of force due to toggle lever for fatigue-reduced operation
- > high operation comfort due to handle shape and low weight
- > chrome vanadium electric steel in special quality; oil-hardened

#### 97 53 08

Crimping from 28 - 8 AWG (0.08 - 10.0 mm $^2$ ) in one profile; wire ferrules (end sleeves) up to 14 AWG (2.5 mm $^2$ ) can also be loaded parallel from the side; particularly suitable for all twin ferrules (end sleeves) up to 2 x 4 mm $^2$  or 2 x AWG 10

#### 97 53 09

Crimping from 28 - 8 and 6 AWG (0.08 - 10.0 and 16.0 mm²) in one profile; with selector lever for setting the crimping area either to 28 - 8 and 6 AWG (0.08 - 10 mm² or 16 mm²); particularly suitable for all twin ferrules (end sleeves) up to 2 x 6 mm² or 2 x AWG 8



97 53 08 MM





97 53 09







Square crimping



Front-loading of ferrules (end sleeves) e.g. in switchboards



97 53 08: Lateral loading of ferrules (end sleeves) up to 14 AWG (2.5 mm²) parallel from the side e.g. in confined areas



WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

The crimping pliers for wire ferrules (end sleeves) with three great advantages for the user:

- > Automatic self-adjustment to the wire ferrules (end sleeves): This allowing the professional to work with less strain and enables secure, reliable and quick crimping
- > Range of applications for large cross-sections: crimping 28 8 and 6 AWG (0.08 to 10.0 + 16.0 mm²)
- > Front-loading: very helpful under difficult working conditions in confined spaces

		4→									Π.
Product Number	Packaging	Inch			Pliers	Handles	Applications	Capacity mm²	AWG	Number of crimping positions	∆ ∆ Ibs
97 53 08	Х	7 1/2 190	<i>ℯ</i>	<b>™</b>	burnished	multi-component grips	Ferrules (end sleeves)	0.08 - 10	28 - 8	1	1.05
97 53 09		7 1/2 190	<i>ℯ</i>	MW	burnished	multi-component grips	Ferrules (end sleeves)	0.08 - 10 and 16	28 - 8 and 6	1	1.07

- > for crimping wire ferrules (end sleeves) according to DIN 46228 parts 1 and 4 in an area of application from 24 - 14 AWG (0.25 up to 2.5 mm²)
- > crimping in marked trapezoidal dies for tight connections between the sleeve and the conductor
- > vanadium electric steel; forged, oil-hardened







Product Number	Packaging	<b>←→</b> Inch mm			Head	Handles	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆∆ Ibs
97 61 145 A		5 3/4 145	<i>→</i>	lue	polished	plastic coated	0.25 - 2.5	24 - 14	4	0.31
97 61 145 F		5 3/4 145		<b>—</b> ////	polished	plastic coated	0.25 - 2.5	24 - 14	4	0.31
97 62 145 A		5 3/4 145	<i>ℯ</i>	$\blacksquare$	polished	multi-component grips	0.25 - 2.5	24 - 14	4	0.38
97 68 145 A		5 3/4 145	<i>ℯ</i>	<b>™</b> ≙ 1000 V <b>⊕</b> €	polished	insulated, multi-component grips, VDE-tested	0.25 - 2.5	24 - 14	4	0.41

### Crimping Pliers for wire ferrules (end sleeves)

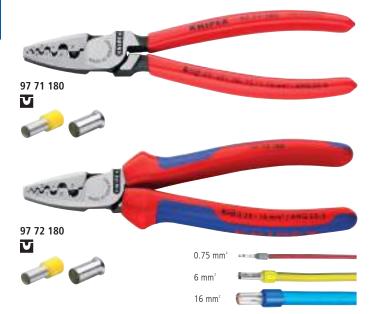
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### Easy crimping due to optimized transmission ratio Light and slim design

- > for crimping wire ferrules (end sleeves) according to DIN 46228 parts 1 and 4 from 5 to 23 AWG (0.25 to 16 mm²)
- > crimping in marked half-round dies for secure connections between the sleeve and the conductor
- > high-grade special tool steel; forged, oil-hardened







Product Number	Packaging	<b>←→</b> Inch mm			Head	Handles	Applications	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆¹∆ Ibs
97 71 180		7 1/4 180	<i>ℯ</i>	V	polished	plastic coated	ferrules (end sleeves)	0.25 - 16.0	24 - 6	9	0.45
97 72 180		7 1/4 180		V	polished	multi-component grips	ferrules (end sleeves)	0.25 - 16.0	24 - 6	9	0.53



- > for crimping ferrules (end sleeves) according to DIN 46228 parts 1  $\pm$  4 in the range 0.5 to 6  $\mbox{mm}^2$
- > ideal for work in confined areas, e.g. in narrow and deep switch boxes
- > special tool steel; forged, oil-hardened



Product Number	Packaging	<b>4→</b> Inch mm			Head	Handles	Applications	Capacity mm <sup>2</sup>	AWG	Number of crimping positions	∆ ∆ Ibs
97 81 180		7 1/4 180	40 till til	~	polished	plastic coated	ferrules (end sleeves)	0.5 - 6.0	24 - 0	1	0.45



- > in a TANOS MINI-systainer® (solid plastic box)
- > T-Loc fastener for one-hand operation: open or close the systainer® with one turn and connect to a second systainer®
- > opening when connected: fast and simple access to content without disconnecting
- > two stackable plastic inserts with 6 trays each for connectors
- > with an assortment of ferrules (end sleeves) with collar

With Crimping Pliers for ferrules 97 71 180

#### 97 90 06

With Crimping Pliers for ferrules 97 71 180

With Self-Adjusting Crimping Pliers for ferrules (end sleeves) 97 53 04

With Self-Adjusting Insulation Strippers 12 40 200; with Self-Adjusting Crimping Pliers for ferrules (end sleeves) 97 53 04

#### 97 90 12

With Self-Adjusting Insulation Strippers 12 40 200; with Self-Adjusting Crimping Pliers for ferrules (end sleeves) 97 53 08

#### 97 90 23

With Crimping Pliers "PreciForce®" for ferrules (end sleeves) 97 52 38

#### 97 90 24

With Self-Adapting Universal Insulation Stripper "Multistrip 10" 12 42 195; with Self Adjusting Crimping Pliers for ferrules (end sleeves) 97 53 08



















					C	(uantity					
Product Number	Packaging	Pliers		200 x mm²	150 x mm <sup>2</sup>	100 x mm <sup>2</sup>	75 x mm <sup>2</sup>	50 x mm <sup>2</sup>	40 x mm²	Units	∆ ∆ Ibs
97 90 05	X	Crimping assortment for ferrules (end sleeves)	0	0.5 / 0.75 / 1 / 1.5 / 2.5	4/6	-	-	10 / 16	-	1	2.05
97 90 06	X	97 71 180 Crimping Pliers for ferrules (end sleeves)	•	0.5 / 0.75 / 1 / 1.5	2.5	-	4/6	10	16	1	2.21
97 90 09	X	97 53 04 Self-Adjusting Crimping Pliers for ferrules (end sleeves)	•	0.5 / 0.75 / 1 / 1.5 / 2.5	-	4/6	-	10	-	1	3.13
97 90 10	X	97 53 04 Self-Adjusting Insulation Strippers 12 40 200 Self-Adjusting Crimping Pliers for ferrules (end sleeves)		0.5 / 0.75 / 1 / 1.5 / 2.5	-	4/6	-	10	-	1	2.98
97 90 12	X	97 53 08 Self-Adjusting Insulation Strippers 12 40 200 Self-Adjusting Crimping Pliers for ferrules (end sleeves)	•	0.5 / 0.75 / 1 / 1.5 / 2.5	-	4/6	-	10	-	1	3.15
97 90 23	X	97 52 38 Crimping Pliers "PreciForce®" for ferrules (end sleeves)	•	0.5 / 0.75 / 1 / 1.5 / 2.5	-	4/6	-		-	1	2.70
97 90 24	X	97 53 08 Self-Adapting Universal Insulation Stripper "Multistrip 10" 12 42 195 Self-Adjusting Crimping Pliers for ferrules (end sleeves)	•	0.5 / 0.75 / 1 / 1.5 / 2.5	-	4/6	-	10	-	1	2.97

- > with tools for photovoltaics
- > without crimp dies for individual equipment please order separately (see ref. 97 49 ..)
- > with service tool (Allen key) for changing crimp dies
- > shock-resistant plastic case
- > foam insert with recesses for tools, crimp dies and locators

> ext. dimension (W x H x D): 13 37/64 x 3 5/32 x 11" (345 x 80 x 280 mm)



Product Number	Packaging			Description	Units	∆ ∆ Ibs
97 91 01	X	-	-	Tool case for photovoltaics	-	4.33
		MM	12 12 11	Precision Insulation Stripper, with shaped blades	1	-
		<b>☆</b> 1000 V <b>△△◆ ♦ ♦ ♦</b>	95 16 165	Cable Shears	1	-
		MM	97 43 200	Crimp System Pliers, for exchangeable crimp profiles	1	-
97 49 62	Crimp Profi	le for solar cable connectors	s (Huber + Suhnei	7)		
97 49 63	Crimp Profi	le for solar cable connectors	s (Huber + Suhnei	r)		
97 49 65	Crimp Profi	le for solar cable connectors	s MC 3 (Multi-Cor	ntact)		
97 49 65 1	Locator for	97 49 65 (solar connectors	MC 3)			
97 49 66	Crimp Profi	le for solar cable connectors	s MC 4 (Multi-Cor	ntact)		
97 49 66 1	Locator for	97 49 66 (solar connectors	MC 4)			
97 49 67	Crimp Profi	le for solar cable connectors	s SunCon (Hirschn	nann)		
97 49 68	Crimp Profi	le for turned solar cable cor	nnectors (Tyco)			
97 49 68 1	Locator for	97 49 68 (solar connectors	Solarlok)			
97 49 69 1	Crimp Profi	le for solar cable connectors	s gesis® solar PST	Γ 40 (Wieland)		
97 49 69 2	Crimp Profi	le for solar cable connectors	s gesis® solar PS7	T 40 (Wieland)		

#### 10 Profiles, 2 crosses, 1 key For all common locking systems

- > multifunctional key for the actuation of locking systems from the areas of facilities engineering (heating and sanitation, air conditioning, electro technology), gas and water supply and shut-off systems
- > 8-arm version: 2, 4-way wheel wrenches connected in a space-saving way using magnets
- > reversible bit: slot 3/64 x 9/32" (1.0 x 7 mm) and PH2 cross slot
- > key and reversible bit joined by stable stainless steel wire
- > quality surface coating
- > lightweight-optimized zinc die-cast design

# TwinKey®



 $\Lambda$ 

WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov













		<b>←→</b>	<b>O</b> 3		<b>-O</b> =3			
		Inch	Inch	Inch	Inch	Inch	Inch	$\Delta \Delta$
Product Number	Packaging	mm	mm	mm	mm	mm	mm	lbs
00 11 01	Х	3 3/4 95	13/64, 15/64 - 9/32, 5/16 - 23/64, 25/64 - 7/16 5 / 6 - 7 / 8 - 9 / 10 - 11	9/32 - 5/16, 23/64 - 25/64, 7/16 - 15/32 7 - 8 / 9 - 10 / 11 - 12	1/8 - 13/64 3 - 5	15/64 6	15/64 - 23/64 6 - 9	0.33

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11

for all standard cabinets and shut-off systems



- > for control cabinets and shut-off systems in the supply of gas, water and electricity
- > for technical installations in buildings, e.g. air conditioning and ventilation systems, shut-off valves, main switchboards, etc.
- > with bit insert: slot 3/64 x 9/32" (1.0 x 7 mm) and cross recess PH2
- > with adapter for 1/4" bits on securing chain
- > additional bit adapter for 1/4" bits in one arm
- > zinc die-casting

O0 11 02
Short execution, total length 1 3/4" (44 mm)
O0 11 03
Long execution, total length 3" (76 mm); additional square of 13/64" (5 mm)

Product Number	Packaging	<b>←→</b> Inch mm	Inch mm	Inch mm	Inch mm	∆¹∆ Ibs
00 11 02	X	1 3/4 44	15/64, 5/16 6 / 8	23/64 9	1/8 - 13/64 3 - 5	0.11
00 11 03	X	3 76	13/64, 15/64, 5/16 5 / 6 / 8	23/64 9	1/8 - 13/64 3 - 5	0.17

### **Profi-Key** for all standard shut-off systems

00 11

- > key for heating, air conditioning, sanitary and building engineering, e.g. for door and window handles or for air bleeding heaters
- > with bit insert: slot 3/64 x 9/32" (1.0 x 7 mm) and cross recess PH2
- > with adapter for 1/4" bits on securing chain
- > additional bit adapter for 1/4" bits in one arm
- > total length: 3 1/2" (90 mm)
- > zinc die-casting





Product Number	Packaging	<b>←→</b> Inch mm	Inch mm	Inch mm	Inch mm	∆¹∆ Ibs
00 11 04	Х	3 1/2 90	13/64, 9/32, 5/16 5 / 7 / 8	23/64 - 25/64 9 - 10	15/64, 9/32, 5/16, 23/64 6 / 7 / 8 / 9	0.16

- > for locking systems in electrical engineering, the supply of gas and water, air conditioning and ventilation systems, industry, technical installations in buildings, etc.
- > 9 different die-cast zinc key profiles in 1 tool
- > with detachable chain and snap hook
- > total length: 3 1/2" (90 mm)
- > zinc die-casting





Product Number	Packaging	<b>4−</b> ► Inch mm	Inch mm	Inch mm	Inch mm	O∃ Inch mm	∆ <sup>†</sup> ∆ Ibs
00 11 06	X	3 1/2 90	13/64, 15/64, 9/32 - 5/ 16, 23/64 -25/64 5 / 6 / 7 - 8 / 9 - 10	9/32, 5/16 - 23/64, 25/ 64 - 7/16 7 / 8-9 / 10 - 11	1/8 - 13/64 3 - 5	15/64 6	0.47

### Universal Key "Construction" for all standard cabinets and shut-off systems

00 11

- > for locking systems in electrical engineering, the supply of gas and water, air conditioning and ventilation systems, industry, technical installations in buildings, etc.
- > 9 different die-cast zinc key profiles in 1 tool
- > "construction" version with plug-in, magnetically held support: catch for locks with profile cylinder hole and male square in steps
- > with bit adapter for 1/4" bits with magnet
- > with detachable chain and snap hook
- > total length: 6 1/4" (160 mm)
- > zinc die-casting



Product Number	Packaging	<b>d→</b> Inch mm	Inch mm	<b>○</b> ☐ Inch mm	Inch mm	Inch mm	Inch mm	∆ Ibs
00 11 06 V01	X	6 1/4 160	13/64, 15/64, 9/32 - 5/16, 23/64 -25/64 5 / 6 / 7 - 8 / 9 - 10	9/32, 5/16 - 23/64, 25/64 - 7/16 7 / 8 - 9 / 10 - 11	1/8 - 13/64 3 - 5	15/64 6	15/64, 9/32, 5/16, 23/64, 25/64 6 / 7 / 8 / 9 / 10	0.56

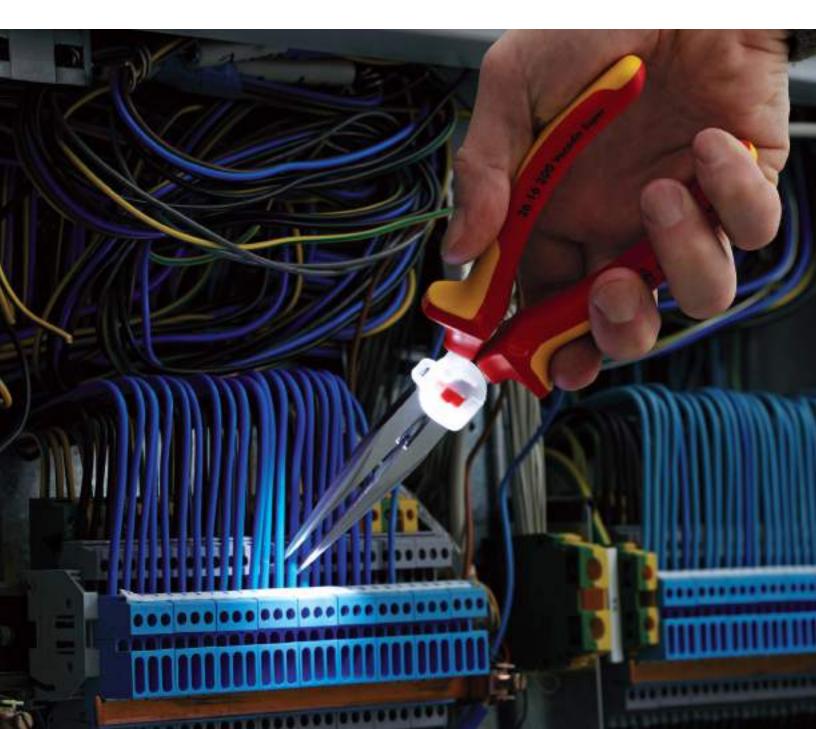
#### Strong. Bright. Compact.

- > for illuminating dark working areas
- > attachment to tool by means of strong magnets
- > very compact dimensions
- > approx. 24 hours of lighting, with 2 replaceable button cells (CR1220)
- > snap hook fastening
- > impact-resistant plastic housing



WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	∆¹∆ Ibs
00 11 V50	X	0.02



Tool Roll	00
11 parts	19

- > for telecommunications and electrical engineers
- > tool roll made of hard-wearing polyester fabric
- > with sturdy, adjustable snap closure
- > contains 8 pliers and 3 screwdrivers
- > pliers with chrome plated heads and two-color multi-component grips
- > screwdrivers VDE tested according to DIN EN/IEC 60900 1000V



00 19 41

Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 19 41		-	Tool Roll 11 parts		-	3.57
			03 05 160	Combination Pliers	1	-
		MM	11 05 160	Insulation Stripper	1	-
		$\Theta \blacksquare \triangleright \P$	25 05 160	Snipe Nose Side Cutting Pliers, (Radio Pliers)	1	-
			30 15 160	Lee Mese Diese	1	-
		8 🗆	30 35 160	Long Nose Pliers	1	-
			31 15 160	Flat Nose Pliers, (Needle Nose Pliers)	1	-
			67 05 140	High Leverage End Cutting Nippers	1	-
			70 05 140	Diagonal Cutter	1	-
		A 40001/ A 🗐 🔵	98 20 25	Screwdrivers for slotted screws	1	-
		<u>A</u> 1000 V △ <b>♣</b>	98 20 40	screwarivers for stotled screws	1	-
		£ 1000 V △ ♣ ♣	98 24 01	Screwdriver for cross recessed screws, Phillips®	1	-

Family Sets	00
5-piece	19

> tool roll made of hard-wearing polyester fabric





Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 19 55 S4		-	Set of Pliers Wrenc	hes	-	4.54
			86 03 125		1	-
			86 03 150		1	-
			86 03 180	Pliers Wrench, Pliers and Wrench in a single tool	1	-
			86 03 250	1	-	
			86 03 300		1	-
00 19 55 S5		-	Set of Cobra Water	Pump Pliers	-	3.45
			87 01 125		1	-
			87 01 150		1	-
			87 01 180	The original push-button pliers	1	-
			87 01 250		1	-
			87 01 300		1	-

- > tool roll made of hard-wearing polyester fabric
- > with sturdy, adjustable snap closure

#### 00 19 56

4 common Circlip Pliers for internal and external circlips

#### 00 19 57

4 common Precision Circlip Pliers for highest requirements

#### 00 19 58 VO

8 common Circlip Pliers for internal and external circlips

#### 00 19 58 V02

8 common Precision Circlip Pliers for highest requirements







00 19 58 V01

00	19	57
(°)	Ĉ	(۲

Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 19 56	X	-	Set of Circlip Pliers	-	-	1.58
		0	44 11 J2		1	-
		⊖ <u>⊀</u> 90°	44 21 J21	Circlip Pliers, for internal circlips in bore holes	1	-
		OMM	46 11 A2	61 11 201 1 1 1 1 1 1 1 1 1 1	1	-
		⊜ <i>x</i> 90° MM	46 21 A21	Circlip Pliers, to assemble external circlips on shafts	1	-
00 19 57	Χ	-	Set of Precision Circlip Pliers	-	-	1.62
		e 3 5-7	48 11 J1	D C. II. DI. (	1	-
		OM	48 11 J2	Precision Circlip Pliers, for internal circlips in bore holes	1	-
		23 <b>5</b> 7 AAAA	49 11 A1	Describing Circlin Disease to accomply systems of circling and the	1	-
		OSS	49 11 A2	Precision Circlip Pliers, to assemble external circlips on shafts	1	-
00 19 58 V01	Χ	-	Set of Circlip Pliers	-	-	1.48
		O	44 11 J1		1	-
		O	44 11 J2	Circlip Pliers, for internal circlips in bore holes	1	-
		⊖ <u>√9</u> 0°	44 21 J11		1	-
		⊖ <u>√9</u> 0°	44 21 J21		1	-
		OWW	46 11 A1	Circlip Pliers, to assemble external circlips on shafts	1	-
		OWW	46 11 A2		1	-
		© <u>⊀</u> 90° MM	46 21 A11		1	-
		Ů <u>∡</u> 90° MM	46 21 A21		1	-
00 19 58 V02	Χ	-	Set of Precision Circlip Pliers	-	-	1.47
		OM	48 11 J1		1	-
		OFI	48 11 J2	Circlip Pliers, for internal circlips in bore holes	1	-
		○ <u>190°</u>	48 21 J11		1	-
		○ <u>⊀</u> 90° <b>§ 3</b>	48 21 J21		1	-
		OSS	49 11 A1		1	-
		OSSMM	49 11 A2	Circlip Pliers, to assemble external circlips on shafts	1	-
		Ů <b>∡</b> 90° <b>₽≤</b> MM	49 21 A11	Circlip Fliers, to assemble external circlips on shalls	1	-
		Ů <b>∡</b> 90° <b>₽≤</b> MM	49 21 A21		1	-
00 19 56 LE	Empty tool	roll				

#### Belt pouch 00 empty 19

- > made of hard-wearing polyester fabric> for two pliers up to 6" (150 mm) length
- > with hook and loop fastener
- > with elastic side
- > with practical belt loop



Product Number	Packaging	Width Inch mm	Height I <mark>nch</mark> mm	Depth I <mark>nch</mark> mm	∆¹∆ Ibs
00 19 72 LE	X	2 9/16 65	6 7/64 155	1 25	0.17

Tool Pouch	00
empty	19

- > made of hard-wearing polyester fabric and leather
- > with pockets for up to 8 tools
- > tool loops made of leather, riveted
- > with snap hook



Product Number	Packaging	Width Inch mm	Height <mark>Inch</mark> mm	Depth Inch mm	∆ ∆ Ibs
00 19 73 LE	X	6 3/4 170	9 1/4 235	3 75	0.45

- > packaged in a foam tray for workbenches and tool trolleys> clearly organized storage of tools

- > precisely sized recesses for holding the pliers > foam insert dimensions (LxWxH): 13 3/16 x 6 1/2 x 1 19/64" (335 x 165 x 33 mm)
- > material: two-color, closed pore foam

00 20 01 V02 6 Circlip Pliers in a foam tray 00 20 01 V15

00 20 01 V16

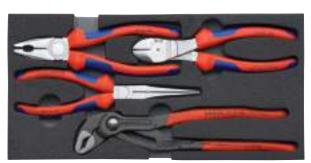
00 20 01 V17 4 pliers in a foam tray







00 20 01 V15





00 20 01 V16 00 20 01 V17

Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 20 01 V02	Χ	-	Circlip Pliers Set six precision circlip pliers i	n a foam tray	-	2.02
		053	48 11 J1		1	-
			48 11 J2	Precision Circlip Pliers, for internal circlips in bore holes	1	-
		○ <u>⊀</u> 90° <b>¶ ⑤</b>	48 21 J21		1	-
		OSSMM	49 11 A1		1	-
		<b>○ ≥ ₃ /</b> ////	49 11 A2	Precision Circlip Pliers, for external circlips on shafts	1	-
		© <b>1</b> 90° <b>₽3</b> MM	49 21 A21			-
00 20 01 V15	Χ	-	Pliers Set "Basic" four pliers in a foam tray		-	2.47
			03 02 180	Combination Pliers	1	-
		$\Theta \blacksquare \blacksquare \blacksquare \blacksquare$	26 12 200	Snipe Nose Side Cutting Pliers, (Stork Beak Pliers)	1	-
			74 02 180	High Leverage Diagonal Cutter	1	-
			87 01 250	KNIPEX Cobra, High-Tech Water Pump Pliers	1	-
00 20 01 V16	Χ	-	Pliers Set "Automotive" four pliers in a foam tray		1	1.87
			08 21 145	Needle-Nose Combination Pliers	1	-
			74 01 180	High Leverage Diagonal Cutter	1	-
		$\Theta$	28 71 280	Long Reach Needle Nose Pliers, with transverse profiles	1	-
		<b>∡</b> 45° ⊖ □□□	28 81 280	Long Reach Needle Nose Pliers, with transverse profiles	1	-
00 20 01 V17	Χ	-	Pliers Set "Basic" four pliers in a foam tray	1	-	2.41
			03 05 180	Combination Pliers	1	-
		$\Theta \blacksquare \triangleright \P$	26 15 200	Snipe Nose Side Cutting Pliers, (Stork Beak Pliers)	1	-
			74 05 180	High Leverage Diagonal Cutter	1	-
			87 05 250	KNIPEX Cobra®, High-Tech Water Pump Pliers	1	-

- > contains the most common Precision Circlip Pliers
- > form-fitted inserted and pressed-in tips made of high density spring steel
- > up to 10 times longer service life compared to turned tips
- > internal design for fitting internal circlips in bore holes
- > external design for fitting circlips on shafts

00 20 03 SB 4 parts 00 20 04 SB 8 parts



00 20 03 SB



00 20 04 SB

Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 20 03 SB	Χ	-	Precision Circlip Pliers Set	-	-	1.51
		(357	48 11 J1	Precision Circlip Pliers, for internal	1	-
		OM	48 11 J2	circlips in bore holes	1	-
		25 <b>5</b> 7 AAAA	49 11 A1	Precision Circlip Pliers, to assemble	1	-
		OF MM	49 11 A2	external circlips on shafts	1	-
00 20 04 SB	Χ	-	Precision Circlip Pliers Set	-	-	2.81
		63	48 11 J1	Precision Circlip Pliers, for internal circlips in bore holes	1	-
		OM	48 11 J2		1	-
		23 <b>5-7</b> AAAA	49 11 A1	Precision Circlip Pliers, to assemble	1	-
		O <b>e s</b> mm	49 11 A2	external circlips on shafts	1	-
		63 (00° <b>5</b> 4	48 21 J11	Precision Circlip Pliers, for internal	1	-
		⊕ ₹30. <b>₹</b> 3	48 21 J21	circlips in bore holes	1	-
		(3 (000 <b>5</b> 7 AAAA	49 21 A11	Precision Circlip Pliers, to assemble	1	-
		Ů <b>1</b> 90° <b>€ 3</b> MM	49 21 A21	external circlips on shafts	1	-

### **Circlip Pliers Sets**

**00** 20

- > contains the most common internal and external Circlip Pliers
- > internal design for fitting internal circlips in bore holes
- > external design for fitting circlips on shafts

00 20 03 V02 4 parts 00 20 04 V01 8 parts





00 20 04 V01

Product Number	Packaging			Set contents	Units	∆ ∆ Ibs
00 20 03 V02	X	-	Set of Circlip Pliers	-	-	0.99
		63	44 11 J1	Circlip Pliers, for internal circlips in bore	1	-
		0	44 11 J2	holes	1	-
		C3 AAAA	46 11 A1	Circlip Pliers, to assemble external circlips	1	-
		OMM	46 11 A2	on shafts	1	-
00 20 04 V01	Χ	-	Set of Circlip Pliers	-	-	1.96
		0	44 11 J1		1	-
			44 11 J2	Circlip Pliers, for internal circlips in bore	1	-
			44 21 J11	holes	1	-
		⊖ <u>√</u> 90°	44 21 J21		1	-
		CS AAAA	46 11 A1		1	-
		OWW	46 11 A2	Circlip Pliers, to assemble external circlips	1	-
		63 (000 AAAA	46 21 A11	on shafts	1	-
		© <u>₹</u> 90° MM	46 21 A21		1	_

> popular pliers sets in durable plastic packaging















00 20 05 US

00 20 06 US2

Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 20 05 US	X	-	Set of High Leverage Diagonal Cutters	-	-	2.15
			74 01 160		1	-
			74 01 250	High Leverage Diagonal Cutter	1	-
		∡12° ▶◀	74 21 200		1	-
00 20 06 US1	X	-	Cobra® Water Pump Pliers Set	-	-	2.69
			87 01 180	VALIDEY C. L. ®	0	-
			87 01 250	KNIPEX Cobra®  High-Tech Water Pump Pliers	0	-
			87 01 300	night-fecti water rump rhers	0	-
00 20 06 US2	X	-	Pliers Wrench Set	-	-	3.64
			86 03 180		1	-
			86 03 250	Pliers Wrench	1	-
			86 03 300		1	-
00 20 07 US1	X	-	Alligator® Water Pump Pliers Set	-	-	2.65
			88 01 180	KNIPEX Alligator® Water Pump Pliers	1	-
			88 01 250		1	-
			88 01 300		1	-
00 20 08 US1	X	-	Universal Pliers Set w/Alligator®	-	-	2.15
		0	26 11 200	Chain Nose Side Cutting Pliers, (stork beak pliers)	1	-
		<u>√1</u> 2° ▶◀	74 21 200	High Leverage Diagonal Cutter	1	-
			88 01 250	KNIPEX Alligator® Water Pump Pliers	1	-
00 20 08 US2	X	-	Universal Pliers Set w/Cobra®	-	-	2.15
		0	26 11 200	Chain Nose Side Cutting Pliers, (stork beak pliers)	1	-
		<u>√1</u> 2° ▶◀	74 21 200	High Leverage Diagonal Cutter	1	-
			87 01 250	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-

- > tools in plastic deep-drawn packaging with transparent lid
- > attractive sales packaging
- > dimensions (W x H x D): 6 3/4" x 15" x 1 1/2"

#### 00 20 09 V01

Pliers with polished heads; handles with non-slip plastic coating or with two-color multi-component grips

#### 00 20 10

Pliers with polished heads and plastic coated handles

#### 00 20 11

Pliers with two-color multi-component handles







00 20 09 V01 00 20 10 00 20 11

Product Number	Packaging			Set contents	Units	∆ ∆ lbs
00 20 09 V01	Χ	-	Bestseller Pack	-	-	2.09
			03 02 180	Combination Pliers	1	-
		Pq	70 02 160	Diagonal Cutter	1	-
			87 01 250	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-
00 20 10	Χ	-	Power Pack	-	-	2.18
			02 01 180	High Leverage Combination Pliers	1	-
		<b>P</b> 4	74 01 160	High Leverage Diagonal Cutter	1	-
			87 01 250	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-
00 20 11	Χ	-	Assembly Pack	-	-	1.79
			03 02 180	Combination Pliers	1	-
		$\Theta \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare$	26 12 200	Chain Nose Side Cutting Pliers (stork beak pliers)	1	-
		Pq	70 02 160	Diagonal Cutter	1	-

#### 00 20 16

7 parts, contains 6 electronics pliers and one pair of precision tweezers; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

#### 00 20 16 P

6 parts, contains 6 precision electronics pliers; case made of hardwearing polyester fabric, pliers are held by elastic band, zippered

#### 00 20 16 P ESD

6 parts, contains 6 ESD precision electronics pliers, electrically discharging version; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

#### 00 20 17

6 parts, contains 6 ESD electronics pliers, electrically discharging version; case made of hard-wearing polyester fabric, pliers are held by elastic band, zippered

#### 00 20 18

8 parts, contains 2 electronics pliers and 6 electronics screwdrivers; practical storage box, shock-resistant plastic, with foam insert

#### 00 20 18 ESD

8 parts, contains 2 ESD electronics pliers and 6 electronics screwdrivers, electrically discharging version; practical storage box, shock-resistant plastic, with foam insert











#### ESD Pliers (electrostatic discharge)

Electrostatic energy is discharged through the handles in a gradual and controlled manner which protects components endangered by electrostatic discharge in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472



		-	9
00 20	18	<b>ESD</b>	

Product Number	Packaging	Set contents	∆ ∆ lbs
00 20 16		35 12 115 / 35 22 115 / 35 32 115 / 64 32 120 / 77 02 115 / 77 42 115 / 92 34 36	1.59
00 20 16 P		34 12 130 / 34 22 130 / 34 32 130 / 79 02 120 / 79 02 125 / 79 42 125	1.27
00 20 16 P ESD		34 12 130 ESD / 34 22 130 ESD / 34 32 130 ESD / 79 02 120 ESD / 79 02 125 ESD / 79 42 125 ESD	1.29
00 20 17		35 12 115 ESD / 35 22 115 ESD / 35 42 115 ESD / 64 32 120 ESD / 77 02 115 ESD / 77 32 115 ESD	1.53
00 20 18		35 22 115 / 77 02 115 / screw drivers 0.4 x 2.5 / 0.5 x 3.0 / 0.6 x 3.5 / 0.8 x 4.0 / PH0 / PH1	1.01
00 20 18 ESD		35 22 115 ESD / 77 02 115 ESD / screw drivers 0.4 x 2.5 / 0.5 x 3.0 / 0.6 x 3.5 / 0.8 x 4.0 / PH0 / PH1	1.03

- > small tools that can be carried easily on any job
- > belt tool pouch can carry 2 tools up to 6" long
- > tool bag made of tough polyester fabric, with hook and loop fastening and belt loop
- > attractive cardboard packaging for merchandising
- > dimensions (W x H x D): 2 3/4 x 6 11/16 x 2" (70 x 170 x 50 mm)



Product Number	Packaging			Set contents	Units	∆ ∆ Ibs
00 20 72 V01	X	-	Mini pliers set in belt tool pouch	-	-	0.77
			86 03 150	Mini Pliers Wrench	1	-
			87 01 125	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-
00 20 72 V02	Χ	-	Mini pliers set in belt tool pouch	-	-	0.86
		P4	74 01 160	High Leverage Diagonal Cutter	1	-
			87 01 150	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-

**00 19 72 LE** Belt pouch for two pairs of pliers, empty

Pliers Sets 2-Piece	00
------------------------	----

- > perfect starter sets with our most popular pump pliers
- > 7 1/4" and 10" sizes
- > the Cobra Pliers set offers a push-button adjustment that stays set in place until you change it.
- > the Alligator Pliers set offers easy adjustment with 9 positions to find the perfect position



Product Number	Packaging			Set contents	Units	∆∆ Ibs
00 31 V01 US	X	-	Cobra® Water Pump Pliers Set	-	-	1.15
			87 01 180	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-
			87 01 250	KNIPEX Cobra® High-Tech Water Pump Pliers	1	-
00 31 20 V02	X	-	Alligator®Water Pump Pliers Set	-	-	1.18
			88 01 180	KNIPEX Alligator® Water Pump Pliers	1	-
			88 01 250	KNIPEX Alligator® Water Pump Pliers	1	-

- > heavy-duty ABS material, black
- all-round aluminum frame mounted sturdy center board, each side contains multi-purpose push-in facilities by elastic loops and 12 small pockets
- > pull-out handle embedded in the base and two integrated smooth in-line skater runners
- > 66 pound (30 kg) maximum load
- > can be opened on one or both sides (V form); base tray and cover can be partially or fully opened independently of each other; stands securely in all opening positions; the special runners are gentle on the floor and ensure stability
- > lockable
- > removable document compartment and removable tool panel with 13 tool pouches
- > base tray height 2 23/64" (60 mm), can be subdivided by flexible inserts; tool panel as cover plate with 13 tool pouches





Product Number	Packaging	Dimension external (internal) width Inch mm	Dimension external (internal) height Inch mm	Dimension external (internal) depth Inch mm	∆ ∆ lbs
00 21 41 LE		20 (18 7/8, 17 1/2) 510 (480/445)	10 5/8 (4 9/64) 270 (105)	16 9/64 (14 9/16, 13) 410 (370/330)	18.96





## The tether attachment point for the range with multi-component handles

Tools can fall down anytime you are using them from a high height, for example; when using them on cherry pickers, scaffolding, ladders and by industrial climbers working with wire rope hoists.

## KNIPEX offers a wide range of pliers and accessories that can reliably prevent the KNIPEX pliers from falling down.

There is a very stable tether attachment on the inside of the handles which is welded onto the handle for attaching the tether or adapter strap. The lug enables the equipment to be attached and put down quickly. The sophisticated elements from our KNIPEX Tethered Tools Program offers several individual variations for connection and use.

#### Please read all warnings on product packaging carefully

- > Do not use on live circuits. Always switch off power.
- > Always wear approved eye protection.
- > NO PPE = No Personal Protective Equipment.
- > Only for latching tools from the KNIPEX Tethered Tools range, connected and combined in accordance with this description.
- > Tether extends to length of around 5 feet (1.5 m) rig to avoid contact with objects below.
- > Do not use around moving or rotating equipment.
- > Will not support human weight.
- > Inspect for wear before each use. Do not use if evidence of wear.



### **The Tool Drop Protection System**

for tools with tether attachment

- Versatile application potential ranging from building construction to industrial climbers
- ▶ Reliably prevents the tool from falling down, and can protect against serious injuries, damage to property or loss

### Tether

- > wide working radius: flexible tether for user-friendly work
- > variable fastening options: with strap made of a flat belt sewn to one end and a cord and cord stopper sewn into the other end
- > suitable for all KNIPEX pliers with tether attachment



#### **Adapter Straps**

**00** 50

00

- > diverse options for fastening in combination with the carabiner and the tether
- > permits fast, safeguarded switching from the fastener on the tool bag to the tether and from one tool to another
- > suitable for all KNIPEX pliers with tether attachment



#### Carabiners

**00** 50

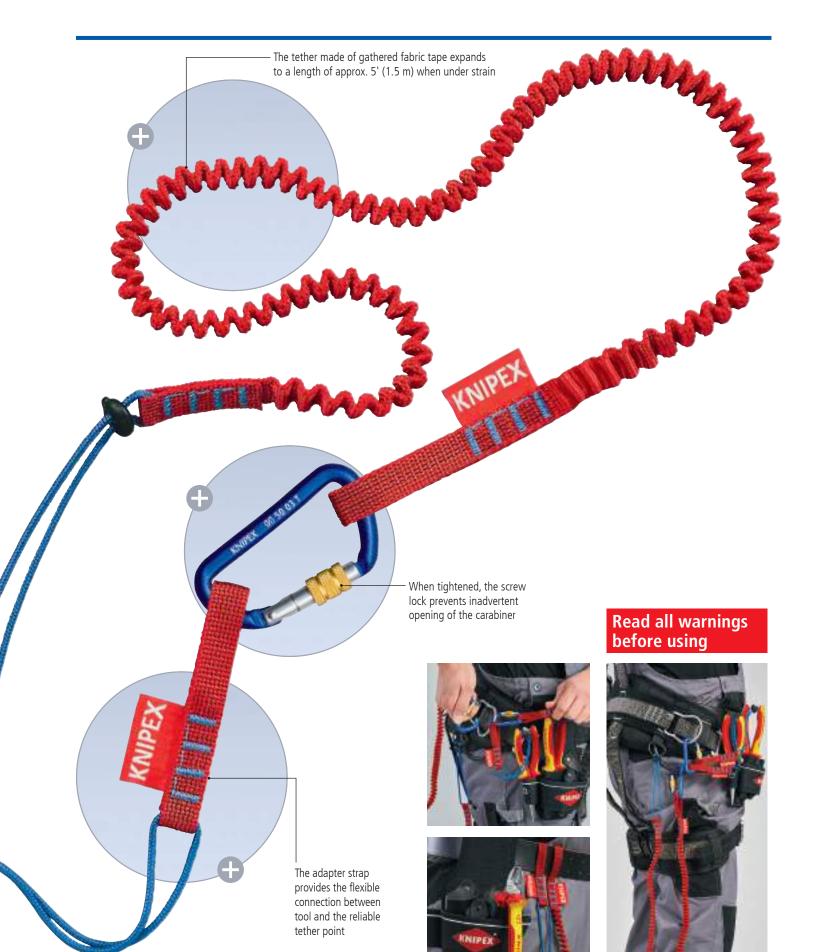
- > with screw lock to prevent accidental opening
- > strong and light aluminum design weighing just 1 ounce
- > for connecting adapter strap and tether or to attach these to a fixed point







00 50 04 T BKA: The complete tethering system set



### Pliers with tether attachment point

**Complete range** 



Pliers range with teth	er attachment poi	nt for a tool tether
	Product Number	Description
	02 02 225 T BKA black atramentized; head polished	High Leverage Combination Pliers,
	08 22 145 T BKA black atramentized; head polished	Needle-Nose Combination Pliers, slim head for use in inaccessible work areas
	09 02 240 T BKA black atramentized; head polished	Lineman's Pliers, ultra-high leverage design for 25% easier cutting power
	09 12 240 T BKA black atramentized; head polished	09 12 240 T BKA: with a universal terminal crimper and a fish tape puller on the backside
	13 02 614 T BKA black atramentized; head polished	Electrician's Pliers, ideal for cable work, gripping and bending wire or even cutting medium hard and hard wire
	13 82 8 T BKA black atramentized; head polished	Electrical Installation Pliers, multifunctional 6-in-1 pliers for electrical installation; cutting, stripping, crimping, gripping, bending and deburring
	26 12 200 T BKA black atramentized; head polished	Long Nose Pliers w/Cutter, elastic precision tips will not deform or bend and will spring back into place
	26 22 200 T BKA black atramentized; head polished	26 22 200 T BKA: with 40° angled tips for hard to reach spaces
	71 02 200 T BKA black atramentized	KNIPEX CoBolt® Compact Bolt Cutters, particularly high cutting performance with little physical effort
	71 22 200 T BKA black atramentized	71 22 200 T BKA: 20° angled head with single-sided joint bar and diagonal cutting edge for almost flush cutting
	71 32 200 T BKA black atramentized	71 32 200 T BKA: notch in the blade for cutting thicker wire
au C	74 02 200 T BKA black atramentized; head polished	High Leverage Diagonal Cutters, high cutting performance with minimum effort. Available in 8" and 10" lengths
	74 02 250 T BKA black atramentized; head polished	
	74 22 200 T BKA black atramentized; head polished	12° angled head in a 8" length
all	74 22 250 T BKA black atramentized; head polished	12° angled head in a 10" length

Pliers range with teth		
	Product Number	Description
	86 05 180 T BKA chrome plated	Pliers Wrenches, pliers and a wrench in a single tool, for damage free installation of plated fittings; Available in 7 1/4" and 10" lengths
98	86 05 250 T BKA chrome plated	
	87 02 180 T BKA grey atramentized; head polished	KNIPEX Cobra® High-tech Water Pump Pliers, grips any shaped object — round, square, hex or flat. Push-button adjustment means that once the capacity is set, it stays set. Available in 7 1/4",
	87 02 250 T BKA grey atramentized; head polished	10" and 12" lengths
	87 02 300 T BKA grey atramentized; head polished	
	88 02 250 T BKA black atramentized; head polished	KNIPEX Alligator® Water Pump Pliers, self-locking on pipes and nuts – no slipping off the workpiece, box-joint design for high stability. Available in 10" and 12" lengths
	88 02 300 T BKA black atramentized; head polished	
	95 12 165 T BKA burnished	Cable Shears, precision ground, hardened blades: clean and smooth cut without crushing and deformation
	95 62 190 T BKA head polished	Wire Rope Cutter, special blade geometry prevents the wire rope from fanning out

VDE Pliers range with tether attachment point for a tool tether									
	Product Number	Description							
	26 16 200 T N chrome plated	Snipe Nose Side Cutting Pliers, (Stork Beak Pliers), extremely durable, elastic precision tips; half-round, long, pointed jaws							
	26 26 200 T N chrome plated	26 16 200 T: straight 26 26 200 T: bent							
	70 06 160 T N chrome plated	Diagonal Cutter, slim head for use in inaccessible work areas; available with fall protection in a compact length of 160 mm and a robust 180 mm length							
	70 06 180 T N chrome plated								
	74 06 200 T N chrome plated	High Leverage Diagonal Cutters, high cutting performance with minimum effort; Available with fall protection in lengths of 200 mm and 250 mm							
	74 06 250 T N chrome plated								
	87 26 250 T N chrome plated	KNIPEX Cobra® VDE, High-Tech Water Pump Pliers, push the button for adjustment on the workpiece and nuts							
	95 16 165 T N chrome plated	Cable Shears, precision ground, hardened blades: clean and smooth cut without crushing and deformation							

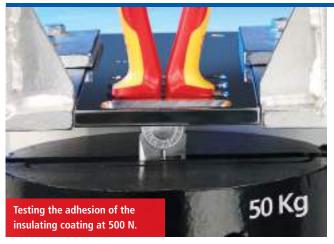
	Product Number	Description
	00 50 01 T BK	N 1 x Tether Wide working radius: the tether made of gathered fabric tape expands to a length of approx. 1.5 m when under strain
	00 50 02 T BK	N 3 x Adapter straps Flexible connection between tool and the reliable tether point
00	00 50 03 T BK	2 x Carabiner When tightened, the screw lock prevents inadvertent opening of the carabiner
( S	00 50 04 T BK	Tethering System Set For diverse options for attaching KNIPEX pliers using the tether attachment (1 x Tether, 3 x Adapter straps, 2 x Carabiner)



## Insulated tools are a matter of trust

Professionals trust their tools. This trust is vital when working on electrical installations. In this case, the electrician holding the pliers is also holding his life in his hands. Our insulated tools therefore not only meet statutory requirements, but also offer the greatest possible safety, reliability and performance.











#### Regulated by standards

Only trained professionals are allowed to work on live installations. Such work is subject to strict occupational health and safety standards such as the German DIN VDE 0105, the international EN 50110 and IEC 60364 and the USA NFPA 70E. In each case they must deploy special tools that have been specifically manufactured and tested for this work. Tools used in live work must meet the requirements determined by DIN EN / IEC 60900 and NFPA 70E. KNIPEX tools which bear the special mark \$\triangle 1000 \mathbf{V}\$ are approved for work up to 1000 \mathbf{V}\$ AC.

#### Guaranteed individually checked

Every insulated tool undergoes, one by one, a dielectric strength at 10,000 V AC before we sell it. This means that work in the area up to 1,000 V AC has a safety buffer of ten times the permitted maximum limit. Other procedures check the reliability of the insulation towards heat, cold, tensile and impact force. In addition to the KNIPEX quality assurance team, external institutes and test centers such as the VDE guarantee that all insulated criteria have been satisfied. We stand by this responsibility with our name on the insulation of KNIPEX tools.

#### Strong beneath the insulation

The insulation provides safety when handling electrical installations, but the mechanical properties of the basic tool, such as cutting performance, precision and stability remain the other key-factor for a reliable function of insulated tools.

With our insulated pliers, users can depend on the quality and durability of products from KNIPEX production. For assembly tools insulated by us, we use basic tools from tried and tested suppliers whose quality we subject to regular, stringent checks. The expert can rely on this double dependability of tool and insulation.

### Always comply with the current valid regulations and observe the SAFETY INSTRUCTIONS given below:

- > Insulated tools must be transported in a manner that will prevent any damage to the insulation.
- > Check before every use whether the insulation is damaged in any way, defective tools must be discarded.
- > Always keep your insulated tools clean and dry.
- > Wear protective goggles when working with cutting nippers or working overhead.
- > Always wear goggles or a facial mask when working on live equipment.
- > Make sure the workplace is clean and orderly, particularly when you are working on live installations.
- > Wear protective clothing and use SAFETY equipment (e.g. insulating gloves, insulating mats, protective covers) especially in confined working spaces.
- > Use only a tool with suitable dimensions. That will prevent slipping on the workpiece and unintentional contact with non-insulated parts.
- > Make sure that detached parts or cut-off ends of conductors do not fall onto live parts.

#### 35% less effort required than with conventional combination pliers Cutting edge hardness (approx. 63 HRC) for heavy-duty cutting

- > easier work due to high leverage design
- > easier cutting, powerful gripping, bending and pulling
- > long cutting edges for thicker cables
- > gripping zones for flat and round material for a variety of uses
- > high-grade special tool steel; forged, multi stage oil-hardened



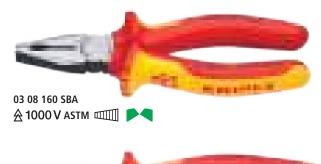
					Cutting capacities						
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	mm²	∆¹∆ Ibs
02 08 200 US	Х	8 200	<b>会1000∨ ASTM</b> □□□□	black atramentized polish	nolichad	insulated, multi-component grips,	7/64 2.8	3/32 2.2	1/2 13.0	25.0	0.82
02 08 225 US	X	9 225			polisned	ASTM-tested		3/32 2.5	35/64 14.0	25.0	0.95

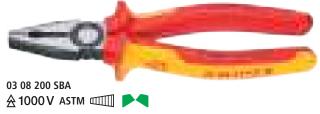
### Combination Pliers DIN ISO 5746 IEC 60900 DIN EN 60900

03

- > gripping zones for flat and round material for a variety of uses
- > cutting edges for soft and hard wire
- > long cutting edges for thicker cables
- > cutting edge hardness (approx. 60 HRC)
- > special tool steel; forged, multi stage oil-hardened







							Cutting capacities				
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	₩ mm²	∆'∆ Ibs
03 08 160 SBA	Х	6 1/4 160	<u>À</u> 1000 V ASTM □□□□	black		insulated, multi-component grips, ASTM-tested	1/8 3.1	5/64 2.0	25/64 10.0	16.0	0.55
03 08 200 SBA	X	<mark>8</mark> 200	ASTWI WILLIAM	atramentized			5/32 3.8	3/32 2.5	1/2 13.0	16.0	0.76

# Needle-Nose Combination Pliers DIN ISO 5746

08

# Small high leverage combination pliers with pointed jaw For all common installation and repair work

Handy for use when working in confined areas due to slim head design and pointed jaws (anti-twist)

- > easy cutting due to the high leverage joint
- > cutting edges for soft, medium hard and hard wire
- > long service life and stable tips
- > high-grade special tool steel; forged, multi stage oil-hardened



							Cutting capacities				
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	mm²	∆¹∆ Ibs
08 28 145 US	X	<b>5 3/4</b> 145	À 1000 V ASTM □□□□	black atramentized	polished	insulated, multi-component grips, VDE-tested	1/8 3.0	<mark>5/64</mark> 2.0	5/16 8.0	16.0	0.39

# Lineman's Pliers DIN ISO 5746 IEC 60900 DIN EN 60900

09

- > effective cross-hatched knurled gripping zone in the jaws for strong
- > gripping and pulling
- > cutting edges for soft and hard wire, nails, ACSR and piano wire
- > cutting edge hardness (approx. 64 HRC)
- > vanadium steel, forged, multi stage oil-hard



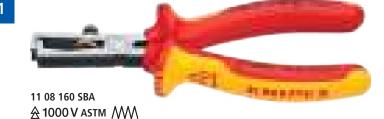
							Cutting capacities		
		<b>←→</b> Inch				"	Ø Inch	Ø Inch	۵۵
Product Number	Packaging	mm		Pliers	Head	Handles	Ømm	Ø mm	lbs
09 08 240 US	X	9 1/2 240	À 1000 V ASTM	black atramentized	polished	insulated, multi-component handles, ASTM-tested	3/16 4.6	1/8 3.0	1.02

# Insulation Strippers IEC 60900 DIN EN 60900

11

> for single, multi and fine-stranded conductors with plastic or rubber insulation max. 13/64" (5.0 mm) dia., suitable for 8 AWG wire

- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > special tool steel; forged, oil-hardened



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Stripping capacities Ø Inch Ø mm	Stripping capacities mm²	AWG	∆∆ lbs
11 08 160 SBA	X	6 1/4 160	<u>ASTM</u> /////	black atramentized	polished	insulated, multi-component grips, ASTM-tested	13/64 5.0	10.0	up to 8	0.40

- 13
- > to grip flat and round material, for bending, deburring, cutting cable,
- > smooth surfaces near the tips grip single conductors without damaging them; serrated gripping surfaces and pipe grip for gripping flat and round material
- > clear-cut outside edge on the jaw for working on flush-mounted junction boxes and deburring feed-through holes
- > cable shears with induction hardened precision cutting edges
- > slim dimensions for easy access in confined areas
- > bolted joint: precise, zero-backlash operation of pliers
- > high-grade special tool steel; forged, multi stage oil-hardened



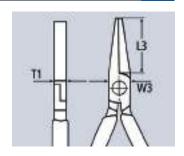
							Cutt capac	J			
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch	& AWG	Stripping capacities for cross-sections AWG	Crimping capacities AWG	
13 88 8 US	X	8 200	<b>≙</b> 1000 V ASTM	black atramentized	polished	insulated, multi-component grips, ASTM-tested	9/16	0	12 and 14	12 - 20	0.60

### **Flat Nose Pliers**

DIN ISO 5745 IEC 60900 DIN EN 60900

20

- > flat, short, wide jaws
- > serrated gripping surfaces
- > chrome vanadium electric steel; forged, oil-hardened

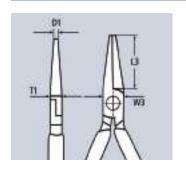




						Dimensions			
		<b>←→</b> Inch				L3 Inch	W3 Inch	T1 Inch	Δ <sup>1</sup> Δ
Product Number	Packaging	mm		Pliers	Handles	mm	mm	mm	lbs
20 06 160		6 1/2 165	<u>♠</u> 1000 V <b>♠</b>	chrome plated	insulated, multi-component grips, VDE-tested	1 3/16 30.0	43/64 17.0	3/8 9.5	0.41

# Round Nose Pliers DIN ISO 5745 IEC 60900 DIN EN 60900

- > for bending wire loops
- > round, short jaws; smooth ground
- > smooth tips
- > special tool steel; forged, oil-hardened







								Dime	nsions		
		4→► Inch					L3 Inch	W3 Inch	D1 Inch	T1 Inch	47
Product Number	Packaging	mm		Pliers	Head	Handles	mm	mm	mm	mm	lbs
22 08 160 SBA	V	6 1/4	<u></u>	black atramentized	polished	insulated with multi-	1 3/16	45/64	1/8	3/8	0.40
22 00 100 3BA	^	160	ASTM	black attailletitizeu	polisileu	component grips, ASTM-tested	30.0	18.0	3.0	9.5	0.40

- > suitable for fine gripping and cutting work
- > pointed, half-round jaws
- > serrated gripping surfaces
- > cutting edges for soft, medium hard and hard wire
- > induction hardened cutting edges, cutting edge hardness (approx. 61 HRC)
- > vanadium steel; forged, multi stage oil-hardened



							Cutting capacities Dimensions							
		4>						•	L3	W3	T1	W4	T2	
		Inch					Ø Inch	Ø Inch	Inch	Inch	Inch	Inch	Inch	$\Delta \Delta$
Product Number	Packaging	mm		Pliers	Head	Handles	Ø mm	Ømm	mm	mm	mm	mm	mm	lbs
25 08 160 SBA	V	6 1/4	<b>☆ 1000 V ASTM</b>	black	polished	insulated, multi-component	3/32	1/16	1 31/32	21/32	23/64	1/8	3/32	0.34
25 08 160 3BA	٨	160	$\Theta \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare$	atramentized	polistied	grips, ASTM-tested	2.5	1.6	50.0	16.5	9.0	3.0	2.5	0.34

### **Snipe Nose Side Cutting Pliers**

Stork Beak Pliers

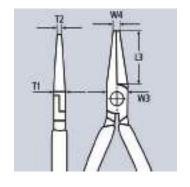
DIN ISO 5745 IEC 60900 DIN EN 60900

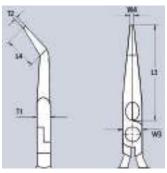
26

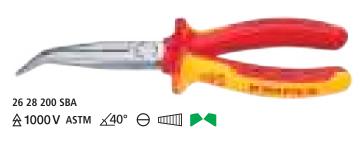
#### Elastic tips: stable even when twisted

- > distortion-tolerant, flexible precision tips
- > half-round, long, pointed jaws
- > with hardened cutting edges (approx. 61 HRC) for soft, medium hard and hard wire
- > vanadium steel; forged, multi-stage oil-hardened

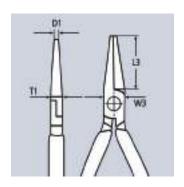








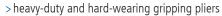
							Cutting o	apacities		Dimensions				
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	L3 Inch mm	T1 Inch mm	W3 Inch mm	W4 Inch mm	T2 Inch mm	∆∆ lbs
26 18 200 US	X	<mark>8</mark> 200	<u>A</u> 1000 V ASTM	black atramentized	polished	insulated, multi-component grips, ASTM-tested	1/8 3.2	3/32 2.2	2 7/8 73.0	3/8 9.5	45/64 18.0	1/8 3.0	3/32 2.5	0.45
26 28 200 SBA	Х	8 200	À 1000 V ASTM  ✓40° ⊖ □□□□ ▶ ■	black atramentized	polished	insulated, multi-component grips, ASTM-tested	1/8 3.2	3/32 2.2	2 7/8 73.0	3/8 9.5	<b>45/64</b> 18.0	1/8 3.0	3/32 2.5	0.46



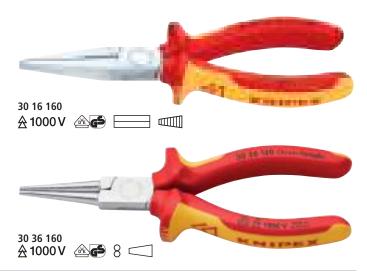
**Style 1** Long, trapezoidal jaws; serrated gripping surfaces

### Style 3

Long, round jaws; smooth gripping surfaces



- > different jaw styles for a wide range of applications
- > chrome vanadium electric steel; forged, oil-hardened



							Dimensions					
Product Number	Packaging	4→► Inch mm		Pliers	Handles	Style	L3 Inch mm	W3 Inch mm	T1 Inch mm	W4 Inch mm	T2 Inch mm	∆¹∆ Ibs
T TOUGET TAUTIDET	rackaging	1111111		I IICI3		Jtylc						103
30 16 160		6 1/4 160	<b>≙</b> 1000 V <b>△♣ ── ─</b>	chrome plated	insulated, multi-component grips, VDE-tested	1	1 53/64 46.5	21/32 16.5	3/8 9.5	1/8 3.0	13/64 5.0	0.33
30 36 160		6 1/4 160	<b>≙</b> 1000 V <b>△€</b> 8 <b></b>	chrome plated	insulated, multi-component grips, VDE-tested	3	1 19/32 41.0	21/32 16.5	3/8 9.5	13/64 5.0	3/32 2.5	0.31

# Diagonal Cutters

DIN ISO 5749 IEC 60900 DIN EN 60900

- > essential cutting tool for all-around use
- > high-quality material and precise workmanship for long service life
- > precision cutting edges for soft and hard wire
- > clean cutting of thin copper wires even at the cutting edge tips
- > induction hardened cutting edges (approx. 62 HRC)
- > narrow head style for use in confined areas
- > vanadium steel; forged, multi stage oil-hardened
- > 70 26 160 has a strong precision rivet for smooth movement and 20% higher cutting force





Slim head style and precise cutting capability are perfect for working in confined areas





70 26 160 With elongated cutting edge ★ 1000 V

							Cut	ting capaci	ties	
Product Number	Packaging	<b>4→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆ ∆ lbs
70 08 160 SBA	Х	6 1/4 160	A 4000V ACTA	black atramentized	nalishad	insulated, multi-component handles,	5/32 4.0	1/8 3.2	5/64 2.0	0.49
70 08 180 SBA	X	7 1/4 180	<u>A</u> 1000 V ASTM	DIACK ALIAMENTIZEO	polished	ASTM-tested	5/32 4.0	1/8 3.0	3/32 2.5	0.58
70 26 160		6 1/4 160	<u>A</u> 1000 V △ ♣ ►	chrome plated		insulated, multi-component grips, VDE-tested	5/32 4.0	1/8 3.0	5/64 2.0	0.51

### KNIPEX X-Cut®

Compact Diagonal Cutter IEC 60900 DIN EN 60900

### 73

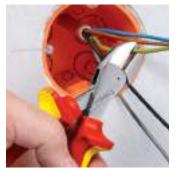
### Powerful, light and universal

#### Cuts fine strands as well as multi-stranded cables and piano wires

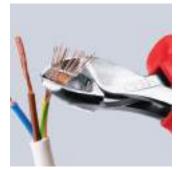
- > box-joint design: highest stability with low weight
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > large opening width for thicker cables
- > cuts all wires precisely, even fine copper wires
- > double supported joint axis for heavy-duty work
- > compact, lightweight construction
- > universal usage in the assembly, maintenance and production
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened











### 40% less effort required

compared with standard diagonal cutters of the same length with double mounted hinged joint.

							Cutt	ing capac	ities		
		4▶								₩	
		Inch				Ø Inch	Ø Inch	Ø Inch	Ø Inch	Ø Inch	$\Delta \Delta$
Product Number	Packaging	mm		Pliers	Handles	Ømm	Ømm	Ømm	Ømm	Ømm	lbs
73 06 160		6 1/4	<b>☆ 1000 V △ ← ► </b> ☐	chrome plated	insulated, multi-component	3/16	5/32	7/64	3/32	15/32	0.41
75 00 100		160	₹ 1000 v	cilionie piated	grips, VDE-tested	4.8	3.8	2.7	2.2	12.0	0.41

# **High Leverage Diagonal Cutters**

DIN ISO 5749 IEC 60900 DIN EN 60900

74

- > forged-on axle for heavy-duty work
- > for very tough, continuous use
- > high cutting performance with minimum effort due to optimum coordination of the cutting edge angle and transmission ratio
- > precision cutting edges induction hardened (approx. 64 HRC) cuts several types of wire including piano wire
- > chrome vanadium heavy-duty steel; forged, multi stage oil-hardened

#### 78 08 250 SBA

The 10" long diagonal cutter is suitable for copper conductors up to 16 mm<sup>2</sup> and aluminum conductors up to 35 mm<sup>2</sup>



★ 1000 V ASTM

### 20% less effort required

compared to conventional diagonal cutters of the same length, with forgedon joint axle.

							Cutting capacities			
Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Ø Inch Ø mm	Ø Inch Ø mm	∆¹∆ Ibs
74 08 200 US	Х	<mark>8</mark> 200	<b>P4</b>	black atramantized	polished	insulated, multi-component handles,	11/64 4.2	1/8 3.0	3/32 2.5	0.68
74 08 250 US	X	10 250	会1000V ASTM	black atramentized	polisned	ASTM-tested	3/16 4.6	9/64 3.5	1/8 3.0	1.04

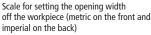
### **Pliers Wrench**

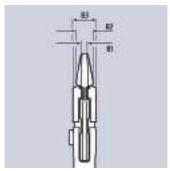
insulated

IEC 60900 DIN EN 60900

**86** 







- > pliers and a wrench in a single tool
- > excellent for gripping, holding, pressing and bending applications
- > zero backlash jaw surface pressure prevents damage to edges of sensitive components
- > opening width lasered onto the pliers head for setting before putting the tool on the workpiece
- > adjustment at the touch of a button directly on the workpiece
- > parallel jaws allow infinitely variable gripping of all widths to the specified maximum size
- > the action of the jaws allows bolted connections to be tightened and released quickly using the ratchet principle
- > lever transmission greater than 10 1 for strong gripping power
- > chrome vanadium electric steel; forged, oil-hardened



86 06 250 U	
<u> </u>	₩ <b>G</b>

								[	Dimension	S	
Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Handles	Inch mm	Adjustment positions	B1 Inch mm	B2 Inch mm	B3 Inch mm	∆ ∆ Ibs
86 06 250 US	X	10 250	<b>≙</b> 1000 V <b>△←</b>	chrome plated	Insulated, multi-component grips, VDE-tested	2 52	19	5/16 8	5 /16 8	35/64 14	1.14

## KNIPEX Alligator®

Water Pump Pliers

DIN ISO 8976 IEC 60900 DIN EN 60900

88

More output and comfort compared to conventional water pump pliers of the same length: offers 9 adjustment positions for 30% more gripping capacity

- > good access to the workpiece due to slim size in the head and joint area
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened





Product Number	Packaging	<b>d→</b> Inch mm		Pliers	Head	Handles	Ø Inch Ø mm	Inch mm	Adjustment positions	∆¹∆ lbs
88 07 300	X	12 300	<b>≙</b> 1000 V <b>△€</b>	chrome plated	chrome plated	plastic dipped insulated, VDE-tested	2 3/4 70	2 3/64 60	9	1.46
88 08 250 US	X	1 <mark>0</mark> 250	<b>≙</b> 1000 V ASTM	black atramentized	polished	insulated, multi-component handles, ASTM-tested	1 31/32 50	1 13/16 46	9	0.87

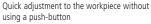
- > adjustment by shifting the jaw directly on to the workpiece: fast, secure and comfortable handling
- > opening at the touch of a button apart from the workpiece
- > fine adjustment for optimum adaptation to different workpiece sizes and comfortable gripping position
- > good access to the workpiece due to slim size in the head and joint area
- > self-locking on pipes and nuts: no slipping off the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness (approx. 61 HRC): low wear and reliable gripping
- > box-joint design: high stability because of double guide
- > pinch guard prevents operators' fingers being pinched
- > chrome vanadium electric steel; forged, multi stage oil-hardened



The adjustment action to adapt to the workpiece is easy and reliable with the KNIPEX Cobra®: place the upper gripping jaw of the opened pliers on the workpiece, push pliers to close, done!









Just push the pliers handle to adjust

Product Number	Packaging	<b>←→</b> Inch mm		Pliers	Head	Handles	O] Ø Inch	Ø Inch Ø mm	Inch mm	Adjustment positions	∆ ∆ Ibs
87 28 250 US	Х	10 250	<b>≙ 1000 V ASTM</b>	grey atramentized	polished	insulated, multi-component grips, ASTM-tested	2	1 31/32 50	1 13/16 46	24	0.88

#### IEC 60900 DIN EN 60900

- > insulated and tested according to IEC 60900
- > plastic dipped insulated
- > chrome plated
- > spring steel, high-strength

#### 92 27 61

For ultra fine mounting work; extra fine tips; straight tips; gripping surfaces matte finish for optimum grip

#### 92 27 62

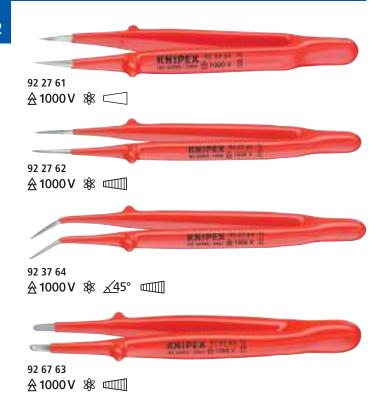
Straight tips; gripping surfaces with fine transverse serration

#### 92 37 64

Bent tips; gripping surfaces with fine transverse serration

#### 92 67 63

Straight tips; serrated gripping surfaces



Product Number	Packaging	d→ Inch mm		Finish	∆ <sup>†</sup> ∆ Ibs
92 27 61		5 1/8 130	<u></u> <u>↑1000</u> V	plastic dipped insulated, VDE-tested	0.07
92 27 62		<mark>6</mark> 150	<u>A</u> 1000 V № □□□	plastic dipped insulated, VDE-tested	0.08
92 37 64		<mark>6</mark> 150	<u>A</u> 1000 V № <u>√</u> 45° □□□	plastic dipped insulated, VDE-tested	0.08
92 67 63		5 3/4 145	<u>A</u> 1000 V № □□□	plastic dipped insulated, VDE-tested	0.10

Cable Shears	95
IEC 60900 DIN EN 60900	0

- > for cutting copper and aluminum cables
- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > no crushing, slight deformation of the cable only
- > with pinch guard and slip guard
- > adjustable bolted joint
- > shears body: surgical steel, stainless, vacuum-hardened
- > handles: plastic, impact-resistant

#### 95 06 230

For copper conductors single wire up to 5/8" ( $16 \text{ mm}^2$ ), multi-stranded wire up to 1/0 AWG ( $50 \text{ mm}^2$ ), fine stranded up to  $70 \text{ mm}^2$  and aluminum conductors multi-stranded wire up to  $70 \text{ mm}^2$ ; Easy cutting with one-hand operation due to high transmission ratio; stainless – surgical grade – steel; oil-hardened and tempered



						Cutting o	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	₩ mm²	AWG	∆ ∆ Ibs
95 06 230		9 1/4 230	À 1000 V ♠♠ ♦ ₽ ■	polished	plastic insulated, VDE-tested	5/8 16	50	Solid - 1/0 Stranded - 2/0	0.60



Cut performed with a Diagonal Cutter: high effort required, inaccurate cut, considerable deforming and crushing of the cable.



Cut performed with a Cable Shear: easy, clean cut without any deformation of the cable.

- > for cutting copper and aluminum cables, single and multi-stranded wires
- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > easy cutting with one-hand operation
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-locking
- > high-grade special tool steel; forged, oil-hardened



						Cutting o	apacities		
Product Number	Packaging	<b>d→</b> Inch mm		Tool	Handles	Ø Inch Ø mm	₩ mm²	AWG	∆¹∆ Ibs
95 18 165 US	X	6 1/2 165	<b>≙</b> 1000 V ASTM <b>⊕</b>	burnished	insulated, multi-component grips, ASTM-tested	19/32 15	50	1/0	0.58

# **Cable Shears**

with twin cutting edge IEC 60900 DIN EN 60900 95

- Initial cut: using the front cutting edge to cut the insulating sheath on larger cable diameters leaves an ergonomic handle opening width.

> for cutting copper and aluminum cables

- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > easy cutting with one-hand operation
- > by dividing the cutting actions into initial cut (insulating sheath in the front cutting area) and final cut (conductor in the back cutting area), cables up to 25/32" (20 mm) dia. can be cut in one-hand operation
- > less effort required due to favorable lever ratio and special blade
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-locking
- > high-grade special tool steel; forged, oil-hardened



Final cut: after cutting the sheath in the front profile the conductors are cut in the rear area.



						Cutting o	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Tool	Handles	Ø Inch Ø mm	₩ mm²	AWG	∆¹∆ Ibs
95 18 200 SBA	Х	<mark>8</mark> 200	<b>☆ 1000 V ASTM  ♣ </b>	burnished	insulated, multi-component grips, ASTM-tested	25/32 20	70	2/0	0.75

### Short design, length only 20" (500 mm) Lightweight, high leverage

- > insulated and tested according to IEC 60900 and ASTM F1505
- > for cutting copper and aluminum cables, single and multi-stranded wires
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > less effort required due to favorable lever ratio and optimized cutting edge geometry
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > cutter head: vanadium electric steel; forged, oil-hardened
- > handle shank: aluminum tube, high-strength



						Cutting of	capacities		
Product Number Pa	ackaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	₩ mm²	AWG	∆'∆ Ibs
95 17 500		<mark>20</mark> 500	<u>A</u> 1000 V <u>A</u> € € 5	burnished	plastic dipped insulated, VDE-tested	1 1/16 27	150	5/0	3.26

# Cable Shears IEC 60900 DIN EN 60900

95 2

- > for cutting copper and aluminum cables, single and multi-stranded wires
- > not suitable for steel wire and wire ropes

Large cutting capacity: max. 1 1/16" (27 mm) dia./150 m<sup>2</sup>

- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > favorable lever ratio due to toggle lever
- > pinch guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > bolted cutter head, replaceable
- > blade head: high-grade chrome vanadium electric steel; forged, oil-hardened
- > handle: steel tube



						Cutting c	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	Ø Inch Ø mm	mm²	AWG	∆ ∆ lbs
95 27 600		23 1/2 600	<b>≙</b> 1000 V <b>△€ ♀ ▮</b>	polished	plastic dipped insulated, VDE-tested	1 1/16 27	150	5/0	5.08

**95 29 600** Spare cutter head for 95 27 600

- > for cutting copper and aluminum cables, single and multi-stranded wires
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > one-hand operation using ratchet principle
- > minimal handforce required due to very high transmission ratio
- > two-stage ratchet drive for easy cutting
- > simple handling as a result of lightweight and compact design – can be used even in confined areas
- > pinch guard prevents operators' fingers being pinched
- > high-grade special tool steel; forged, oil-hardened



for easier cutting





95 36 250 SBA **≙1000V ♠€ ♦ ₩ ►5** 



95 36 280 SBA **☆1000V ���� �� MM <b>₽\$** 

	4▶		

						Cutting o	apacities		
Product Number	Packaging	<b>4→</b> Inch mm		Tool	Handles	Ø Inch Ø mm	₩ mm²	MCM	∆'∆ Ibs
95 36 250 SBA	X	10 250	À 1000 V ♠♣ ↔ MM 📲	black lacquered	insulated, multi-component grips, VDE-tested	1 1/4 32	240	500	1.24
95 36 280 SBA	X	11 280	≙1000 V @ ♣ ♦ //// ¶ ¶	black lacquered	insulated, multi-component grips, VDE-tested	2 3/64 52	380	750	1.64



# Sturdy. Easy to use. Innovative ratchet-drive.

- > insulated and tested according to IEC 60900 and ASTM F1505
- > easy handling due to lightweight (1.82 lbs) and compact construction 12 1/2" (320 mm) length usable in confined areas
- > cuts through copper and aluminum cables with diameters of up to 2 23/64" (60 mm) in one-hand and two-handed operations
- > hardened cutting edges, precisely ground, cut smoothly and neatly without crushing
- > for cutting copper and aluminum single conductors as well as multistranded cables (not suitable for steel wire and wire ropes)
- > innovative 3-stage ratchet-drive with high leverage for easy cutting in one-hand and two-handed operation
- > fixed handle with support area for laying down the pliers when cutting
- > high-grade special tool steel; forged, oil-hardened

**95 39 320 02** Fixed cutter repair kit for 95 36 320









						_	apacities		
Product Number	Packaging	<b>←→</b> Inch mm		Tool	Handles	Ø Inch Ø mm	₩ mm²	MCM	∆ ∆ lbs
95 36 320		12 1/2 320	≙1000 V △ ← ↔ MM € €	black atramentized	insulated, multi-component grips, VDE-tested	2 3/64 60	600	1200	1.83
95 39 320 01	Pivot cutter r	epair kit	for 95 36 320						



# Cable Cutters for Wire Rope and ACSR

IEC 60900 DIN EN 60900



- > for ACSR, wire ropes, steel rods, copper and aluminum cables
- > suitable for cutting overhead line cables with strain relief wire
- > angular cutting blades prevent fanning out
- > optimum transmission ratio for high cutting performance
- > bolted cutter head, replaceable
- > lightweight
- > cutter head: high-grade special tool steel, multi stage oil-hardened
- > handles: aluminum, high-strength



95	77	600	
Δ	10	nn v	





						Cı	utting capacit	ties		
Product Number	Packaging	<b>←→</b> Inch mm		Head	Handles	₩ mm²	Ø Inch Ø mm	Ø Inch Ø mm	AWG	∆¹∆ Ibs
95 77 600		23 5/8 600	<b>≙</b> 1000 V <b>♦</b> ◎ <b>§ §</b>	polished	plastic dipped insulated	150	35/64 14	23/64 9	5/0	5.02

95 79 600 Spare cutter head for 95 77 600

### **Crimping Pliers**

for wire ferrules (end sleeves) IEC 60900 DIN EN 60900

- > for crimping wire end ferrules according to DIN 46228 parts 1 and 4 in an area of application from 24 - 14 AWG (0.25 up to 2.5 mm<sup>2</sup>)
- > crimping in marked trapezoidal dies for tight connections between the sleeve and the conductor
- > vanadium electric steel; forged, oil-hardened





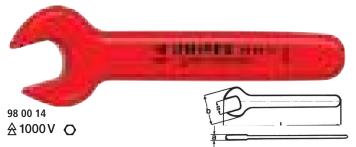




			1					1	
Product Number	Packaging	<b>4→</b> Inch mm		Head	Handles	Capacity mm²	AWG	Number of crimping positions	∆ ∆ Ibs
	3 3	5 3/4			insulated, multi-component grips,			•	
97 68 145 A		145	<b></b> 1000 V <b>△</b>	polished	VDE-tested	0.25 - 2.5	24 - 14	4	0.41







Metric Versions	
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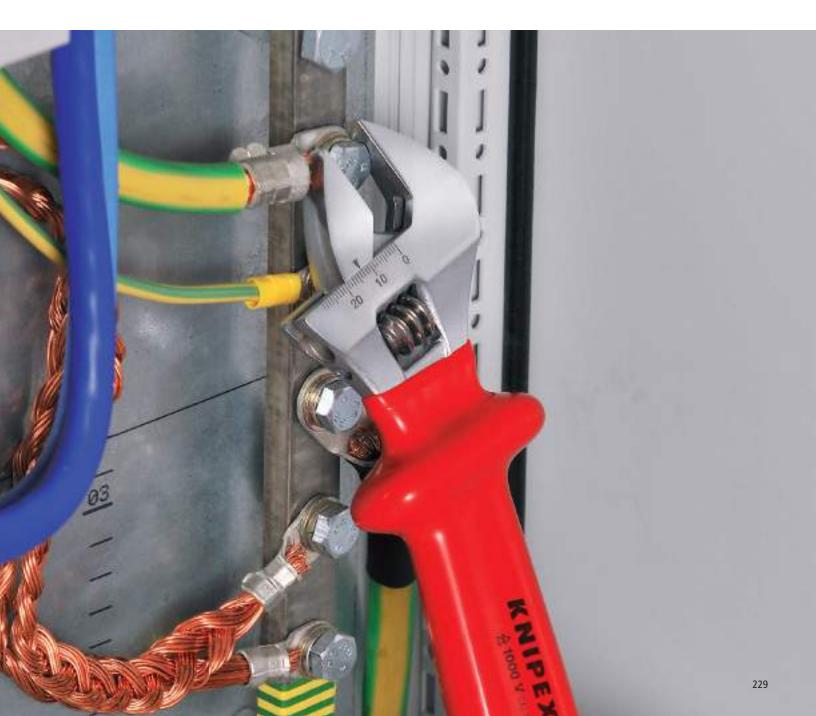
			Length I max.	Width across flats S	Head width b max.	Head thickness a max.	44
Product Number	Packaging		Inch mm	Inch mm	Inch mm	Inch mm	lbs
98 00 07	3 3		4 1/8 105.0	7.0	25/32 20.0	5/32 4.0	0.06
98 00 08			4 1/8 105.0	8.0	55/64 22.0	5/32 4.0	0.07
98 00 09			4 1/8 105.0	9.0	15/16 24.0	5/32 4.0	0.08
98 00 10			4 1/8 105.0	10.0	1 1/16 27.0	13/64 5.0	0.11
98 00 11			4 3/4 120.0	11.0	1 3/16 30.0	7/32 5.5	0.12
98 00 12			5 125.0	12.0	1 1/4 32.0	7/32 5.5	0.15
98 00 13			5 1/8 130.0	13.0	1 11/32 34.0	1/4 6.5	0.15
98 00 14		A 40001/ O	5 1/4 135.0	14.0	1 3/8 35.0	1/4 6.5	0.14
98 00 15		<u> </u>	5 3/4 145.0	15.0	1 29/64 37.0	<mark>9/32</mark> 7.0	0.20
98 00 16			6 7/64 155.0	16.0	1 1/2 38.0	<mark>9/32</mark> 7.0	0.25
98 00 17			6 7/64 155.0	17.0	1 21/32 42.0	5/16 8.0	0.26
98 00 18			6 1/4 160.0	18.0	1 3/4 44.0	5/16 8.0	0.33
98 00 19			6 1/2 165.0	19.0	1 27/32 47.0	23/64 9.0	0.31
98 00 22			7 1/2 190.0	22.0	2 3/64 52.0	23/64 9.0	0.48
98 00 24			8 1/4 210.0	24.0	2 13/64 56.0	23/64 9.0	0.54
98 00 27			8 1/2 215.0	27.0	2 31/64 63.0	23/64 9.0	0.70

Product Number	Packaging		Length I max. Inch mm	Width across flats S Inch mm	Head width b max. Inch mm	Head thickness a max. Inch mm	∆¹∆ Ibs
98 00 3/4"			7 1/2 190.5	3/4	1 27/32 47.0	23/64 9.0	0.34
98 00 3/8"			4 1/4 108.0	3/8	1 1/16 27.0	13/64 5.0	0.09
98 00 5/16"			4 1/4 108.0	5/16	<b>55/64</b> 22.0	5/32 4.0	0.09
98 00 5/8"		<b>≙</b> 1000 V <b>○</b>	6 1/2 165.1	5/8	1 1/2 38.0	<mark>9/32</mark> 7.0	0.26
98 00 7/16"		± 1000 V €	4 3/4 120.7	7/16	1 3/16 30.0	7/32 5.5	0.11
98 00 9/16"			6 152.4	9/16	1 3/8 35.0	1/4 6.5	0.21
98 00 1/2"			5 1/2 139.7	1/2	1 11/32 34.0	1/4 6.5	0.18
98 00 1/4"			4 1/4 108.0	1/4	25/32 20.0	5/32 4.0	0.08

- > parallel smooth gripping jaws > adjustable gripping width
- > with scaling for presetting the width apart from the workpiece
- > chrome vanadium steel

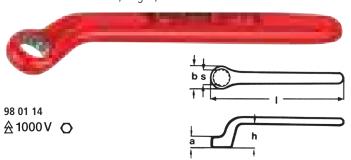


Product Number	Packaging	<b>4→</b> Inch mm		Tool	Handle	Inch mm	Jaw width Inch mm	Head width Inch mm	Width Inch mm	Depth Inch mm	∆¹∆ Ibs
98 07 250		10 1/4 260	À1000V	chrome plated	plastic dipped insulated, VDE-tested	1 3/16 30	5/16 8.0	5/8 16.0	2 7/8 73.0	25/32 20.0	1.2



- > cranked
- > chrome plated
- > chrome vanadium steel; forged, oil-hardened





Metric Versions								
Product Number	Packaging		Length I max. Inch mm	Width across flats S Inch mm	Head width b max. Inch mm	Head thickness a max. Inch mm	Depth of crank h max. Inch mm	∆ ∆ lbs
98 01 07			<mark>6</mark> 150.0	7.0	15/32 12.0	<mark>9/32</mark> 7.0	<b>45/64</b> 18.0	0.13
98 01 08			6 7/64 155.0	8.0	35/64 14.0	<mark>9/32</mark> 7.0	3/4 19.0	0.13
98 01 09			6 1/2 165.0	9.0	39/64 15.5	<mark>5/16</mark> 8.0	3/4 19.0	0.17
98 01 10			6 1/4 160.0	10.0	43/64 17.0	23/64 9.0	25/32 20.0	0.17
98 01 11			6 1/2 165.0	11.0	47/64 18.5	25/64 10.0	53/64 21.0	0.19
98 01 12			7 1/4 185.0	12.0	47/64 18.5	25/64 10.0	29/32 23.0	0.24
98 01 13		A 4000 V O	<b>7</b> 1/4 185.0	13.0	53/64 21.5	<mark>7/16</mark> 11.0	29/32 23.0	0.25
98 01 14		<u>A</u> 1000 V <b>○</b>	<b>7 1/2</b> 195.0	14.0	29/32 23.0	15/32 12.0	15/16 24.0	0.30
98 01 15			8 200.0	15.0	15/16 24.0	15/32 12.0	15/16 24.0	0.34
98 01 16			8 200.0	16.0	1 1/32 26.0	15/32 12.0	1 1/32 26.0	0.38
98 01 17			8 205.0	17.0	1 1/16 27.0	1/2 13.0	1 1/32 26.0	0.38
98 01 18			8 1/4 210.0	18.0	1 <mark>9/64</mark> 29.0	1/2 13.0	1 7/64 28.0	0.53
98 01 19			8 3/4 225.0	19.0	1 3/16 30.0	35/64 14.0	1 7/64 28.0	0.54
98 01 22			8 3/4 225.0	22.0	1 3/8 35.0	19/32 15.0	1 3/16 30.0	0.61

Imperial Versions						Head thickness a	Depth of crank h		
Product Number	Packaging		Length I max. Inch mm	Width across flats S Inch mm	Head width b max. Inch mm	max. Inch mm	max. Inch mm	∆ ∆ lbs	
98 01 1 1/16"			10 7/16 265.0	1 1/16	1 1/2 38.0	5/8 16.0	1 3/16 30.0	1.21	
98 01 11/16"			8 205.0	11/16	1 1/16 27.0	1/2 13.0	1 1/32 26.0	0.41	
98 01 3/4"				8 3/4 225.0	3/4	1 3/16 30.0	35/64 14.0	1 7/64 28.0	0.55
98 01 5/16"		<u>≙</u> 1000 V <b>○</b>	6 7/64 155.0	5/16	35/64 14.0	<mark>9/32</mark> 7.0	3/4 19.0	0.15	
98 01 5/8"			8 200.0	5/8	1 1/32 26.0	15/32 12.0	1 1/32 26.0	0.45	
98 01 7/8"			8 3/4 225.0	7/8	1 3/8 35.0	19/32 15.0	1 3/16 30.0	0.70	
98 01 9/16"		7 1/2 195.0	9/16	29/32 23.0	15/32 12.0	15/16 24.0	0.36		

> special tool steel, oil-hardened



Product Number	Packaging	d→ Inch mm		Width across flats S mm	Handle length <mark>Inch</mark> mm	Head dia. <mark>Inch</mark> mm	↓ ∆ Ibs
98 04 10		8 200	<u>A</u> 1000 V <u>A</u> € ○	10.0	6 7/64 155	3/4 19.5	0.80
98 04 13		8 200		13.0	6 7/64 155	59/64 23.5	0.81
98 04 17		8 200		17.0	6 7/64 155	1 1/8 28.5	1.06
98 04 19		8 200		19.0	6 7/64 155	1 7/32 31.0	1.31
98 04 22		8 200		22.0	6 7/64 155	1 23/64 34.5	1.42
98 05 13		12 300		13.0	6 7/64 155	59/64 23.5	0.94
98 05 17		1 <mark>2</mark> 300	A 1000 V △ 🗗 🔿	17.0	6 7/64 155	1 1/8 28.5	1.24
98 05 19		12 300		19.0	6 7/64 155	1 7/32 31.0	1.56

### Screwdrivers for Hexagon Socket Screws with T-Handle IEC 60900 DIN EN 60900

98

> special tool steel, oil-hardened





Product Number	Packaging	<b>4−►</b> Inch mm		Width across flats S mm	Length of non-insulated blade ± 2 Inch mm	T-Handle width Inch mm	∆ ∆ lbs
98 14 05		4 3/4 120		5.0	23/64 9.0	3 1/2 90.0	0.49
98 14 06		4 3/4 120	≙ 1000 V <b>○</b>	6.0	25/64 10.0	3 1/2 90.0	0.46
98 14 08		4 3/4 120		8.0	7/16 11.0	3 1/2 90.0	0.63
98 15 05		10 250		5.0	23/64 9.0	3 1/2 90.0	0.80
98 15 06		10 250	<u>≙</u> 1000 V <b>○</b>	6.0	<b>25/64</b> 10.0	3 1/2 90.0	1.00
98 15 08		10 250	-	8.0	7/16 11.0	3 1/2 90.0	0.79

### T-handle

with driving square 3/8" or 1/2" IEC 60900 DIN EN 60900

- > for use with sockets
- > for quick, easy and secure locking of attached sockets
- > chrome plated
- > high-grade special tool steel; forged, oil-hardened





Product Number	Packaging	<b>d→</b> Inch mm		Handle length <mark>Inch</mark> mm	Square drive Inch	∆¹∆ Ibs
98 30		8 200	<b>☆ 1000 V</b>	6 <mark>1/2</mark> 165	3/8	0.91
98 40		8 200	<u>A</u> 1000 V ½	6 1/2 165	1/2	1.34

### **Reversible Ratchets**

with driving square 3/8" or 1/2" IEC 60900 DIN EN 60900

98

- > for use with sockets
- > reversible for clockwise and counterclockwise directions
- > extremely smooth action
- > for quick, easy and secure locking of attached sockets
- > chrome vanadium steel; forged



Product Number	Packaging	<b>4−►</b> Inch mm		Square drive Inch	∆ <sup>1</sup> ∆ Ibs
98 31		7 1/2 190	<b>☆ 1000 V ¾</b>	3/8	0.71
98 41		10 7/16 265	<u>A</u> 1000 V <u>№</u>	1/2	1.38

### **Extension Bars**

with internal and external driving square 3/8" or 1/2" IEC 60900 DIN EN 60900

98

- > for use with sockets
- > with internal and external square
- > for quick, easy and secure locking of attached sockets
- > chrome vanadium steel, forged



98 35 125 **☆** 1000 V **¾ ¾** 



98 45 250

**☆1000V ½ ⅓** 

Product Number	Packaging	d→ Inch mm		Square drive Inch	∆†∆ Ibs
98 35 125		5 125	<u>숲</u> 1000 V 🌃 🚳	3/8	0.33
98 35 250		10 250		3/8	0.62
98 45 125		5 125	<u>☆</u> 1000 V ☑ ⑫	1/2	0.57
98 45 250		10 250		1/2	1.08

# Hexagon Sockets for hexagonal screws for internal square 3/8" or 1/2"

IEC 60900 DIN EN 60900

98

- > for metric hexagonal head screws
- > chrome plated
- > chrome vanadium steel



98 37 17





98 47 17 **☆1000V ◎ ②** 



Product Number	Packaging	<b>4−►</b> Inch mm		Width across flats S Inch mm	dia. of effective tool side d max. Inch mm	Square drive Inch	∆¹∆ Ibs
98 37 10		1 21/32 42		25/64 10.0	47/64 18.7	3/8	0.07
98 37 11		1 21/32 43		<b>7/16</b> 11.0	25/32 20.0	3/8	0.08
98 37 12		1 3/4 44		15/32 12.0	53/64 21.2	3/8	0.09
98 37 13		1 49/64 45	<b>≙</b> 1000 V <b>○ ③</b>	1/2 13.0	<b>57/64</b> 22.5	3/8	0.09
98 37 14		1 13/16 46	¥ 1000 V @ @	35/64 14.0	15/16 23.7	3/8	0.10
98 37 16		1 13/16 46		5/8 16.0	1 1/32 26.2	3/8	0.12
98 37 17		1 13/16 46		43/64 17.0	1 5/64 27.5	3/8	0.12
98 37 19		1 59/64 49		3/4 19.0	1 3/16 30.0	3/8	0.14
98 47 10		2 1/8 54	_	25/64 10.0	3/4 19.5	1/2	0.14
98 47 11		2 1/8 54	_	7/16 11.0	13/16 20.7	1/2	0.15
98 47 12		2 11/64 55	_	15/32 12.0	29/32 23.0	1/2	0.14
98 47 13		2 11/64 55	_	1/2 13.0	29/32 23.2	1/2	0.15
98 47 14		2 11/64 55	_	35/64 14.0	31/32 24.5	1/2	0.16
98 47 16		2 11/64 55	<b>≙</b> 1000 V <b>⊘ ②</b>	5/8 16.0	1 1/16 26.9	1/2	0.19
98 47 17		2 11/64 55		43/64 17.0	1 7/64 28.2	1/2	0.18
98 47 18		2 11/64 55	_	45/64 18.0	1 9/64 29.0	1/2	0.19
98 47 19		2 1/8 54	_	3/4 19.0	1 13/64 30.7	1/2	0.22
98 47 22		2 9/32 58	_	55/64 22.0	1 23/64 34.5	1/2	0.28
98 47 24		2 13/32 61	_	15/16 24.0	1 29/64 37.0	1/2	0.34
98 47 27		2 31/64 63		1 1/16 27.0	1 19/32 41.0	1/2	0.42

- > 12 points of contact > for imperial hexagonal head screws
- > chrome plated
- > chrome vanadium steel



98 47 1/2" **☆1000V ◎ ②** 



Product Number	Packaging	<b>↓→</b> Inch mm		Width across flats S Inch	dia. of effective tool side d max. Inch	Square drive Inch	∆ ∆ Ibs
98 37 1/2"		1 49/64 45		1/2	57/64	3/8	0.09
98 37 3/4"		1 59/64 49	숲 1000 V ◎ ⑰	3/4	1 3/16	3/8	0.14
98 37 3/8"		1 21/32 42		3/8	47/64	3/8	0.07
98 37 5/16"		1 21/32 42		5/16	5/8	3/8	0.07
98 37 5/8"		1 13/16 46		5/8	1 1/32	3/8	0.11
98 37 7/16"		1 11/16 43		7/16	25/32	3/8	0.08
98 37 9/16"		1 27/32 47		9/16	15/16	3/8	0.09
98 47 1"		2 13/32 61		1	1 19/32	1/2	0.38
98 47 1/2"		2 11/64 55		1/2	29/32	1/2	0.15
98 47 11/16"		2 11/64 55		11/16	1 7/64	1/2	0.18
98 47 3/4"		2 11/64 55	<b>≙</b> 1000 V <b>◎ ②</b>	3/4	1 13/64	1/2	0.19
98 47 5/8"		2 11/64 55		5/8	1 1/16	1/2	0.19
98 47 7/8"		2 <mark>9/32</mark> 58		7/8	1 23/64	1/2	0.26
98 47 9/16"		2 11/64 55		9/16	31/32	1/2	0.16

# Hexagon Sockets for hexagon socket screws

for internal square 3/8" or 1/2"
DIN 7422 IEC 60900 DIN EN 60900

98

- > for metric internal hexagonal socket screws
- > chrome plated
- > special tool steel



Product Number	Packaging	<b>4−►</b> Inch mm		Width across flats S mm	Length of non-insulated blade ± 2 Inch mm	Square drive Inch	∆¹∆ Ibs
98 39 05		3 75		5.0	23/64 9	3/8	0.12
98 39 06		3 75	<b>≙</b> 1000 V <b>○ ③</b>	6.0	25/64 10	3/8	0.15
98 39 08		3 75		8.0	7/16 11	3/8	0.20
98 49 05		3 75		5.0	23/64 9	1/2	0.16
98 49 06		3 75	<u>A</u> 1000 V <b>○</b> 🔞	6.0	25/64 10	1/2	0.18
98 49 08		3 75		8.0	7/16 11	1/2	0.21

### **Reversible Ratchet**

with driving square 1/2"
ISO 3315 IEC 60900 DIN EN 60900

98

- > reversible for clockwise and counterclockwise directions
- > very reliable coupling of sockets with bolt-activated locking system
- > chrome vanadium steel



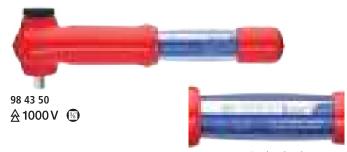
Product Number	Packaging	<b>←►</b> Inch mm		Square drive Inch	∆¹∆ Ibs
98 42		10 1/2 265	<u>A</u> 1000 V	1/2	1.27

### **Torque Wrench**

with driving square, reversible IEC 60900 DIN EN 60900 DIN EN ISO 6789

98

- > reversible for tightening of left handed threads
- > lockable torque adjustment
- > very reliable coupling of sockets with bolt-activated locking system
- > transparent insulated scale range
- > calibration certificate included
- > chrome vanadium steel



Transparent insulated scale range

Product Number	Packaging	<b>d→</b> Inch mm		Range of application	Square drive Inch	∆¹∆ Ibs
98 33 25		11 27/64 290	<b>☆1000</b> V <b>¾</b>	5 - 25 Nm	3/8	2.17
98 33 50		15 385	<b>☆1000</b> V <b>¾</b>	5 - 50 Nm	3/8	2.71
98 43 50		15 385	<b>☆1000 V</b>	5 - 50 Nm	1/2	2.71

- > ergonomically improved handle shape with comfortable slip guard
- > secure grip due to slip-proof soft components
- > thumb recess and "finger hook" at the end of the handle ensure a good transmission of force when the blade is pulled
- > solid, fixed straight blade
- > transparent protective cap
- > blade: special tool steel, oil-hardened

#### 98 54

Back of the blade is plastic coated to avoid short circuit



Product Number	Packaging	<b>←→</b> Inch mm		Handle	Blade length Inch mm	∆¹∆ Ibs
98 52		7 1/2 190	<u>A</u> 1000 V △ €	insulated multi-component handle, VDE-tested	1 31/32 50	0.18
98 54	X	7 1/2 190	<u>A</u> 1000 V △ ►	insulated multi-component handle, VDE-tested	1 31/32 50	0.18

# **Dismantling Knives**IEC 60900 DIN EN 60900

**98** 

- > ergonomically improved handle shape with comfortable slip guard
- > secure grip due to slip-proof soft components
- > thumb recess and "finger hook" at the end of the handle ensure a good transmission of force when the blade is pulled
- > transparent protective cap

#### 98 53 03

Solid, fixed hook blade; suitable for round cables; blade: special tool steel, oil-hardened

#### 98 53 13

Narrow, fixed hook blade, sickle shaped; suitable for sector cables; blade: special tool steel, oil-hardened

#### 98 55

Solid, fixed hook blade, sickle shaped; with guide shoe at the blade point: no damage of the conductor insulation; blade: surgical steel, stainless, air-hardened



Guide shoe 98 55



Product Number	Packaging	<b>d→→</b> Inch mm		Handle	Blade length Inch mm	Radius <mark>Inch</mark> mm	∆ ∆ lbs
98 53 03		6 3/4 170	<b>☆</b> 1000 V <b>△</b>	insulated multi-component handle, VDE-tested	1 7/64 28	9/32 7	0.14
98 53 13		<b>7 1/2</b> 190	<b>☆</b> 1000 V <b>△</b>	insulated multi-component handle, VDE-tested	1 31/32 50	1 37/64 40	0.14
98 55	X	7 1/4 180	<b>≙</b> 1000 V <b>△</b>	insulated multi-component handle, VDE-tested	1 1/2 38	59/64 23.5	0.15

**☆1000V △** 

### Cable Knife

with replaceable blade IEC 60900 DIN EN 60900

98

- > straight blade with special grinding; replaceable
- > with hinged blade guard, integrated in the handle, captive
- > back of the blade is plastic coated to avoid short circuit
- > ergonomically shaped safety handle
- > blade: surgical steel, stainless, air-hardened



Product Number	Packaging	<b>←→</b> Inch mm		Blade length Inch mm	∆¹∆ Ibs
98 56		<mark>7 1/2</mark> 190	<b>≙</b> 1000 V <b>△</b>	1 31/32 50	0.14
98 56 09	Spare Blade for 98 56				

98

Flat Nose Pliers o	f plastic
insulating	
IEC 60900 DIN EN 60900	ASTM F1505

- > full insulation reduces risk of short circuit
- > for meter assembly and meter blocking
- > class C; range of use up to -40°C/-40°F
- > plastic material, fiberglass-reinforced
- > handles with soft plastic zone for a better grip

98 62 01 À 1000 V △ ← □ □ □ □

Product Number	Packaging	<b>d→</b> Inch mm		∆ ∆ lbs
98 62 01		<b>7 1/4</b> 180	<u>A</u> 1000 V <b>A</b> €	0.26

**KNIPEX** presents high-quality and sturdy plastic pliers featuring protection against bridging for working on live parts up to AC 1000V and DC 1500V.

These solid plastic pliers do not act on magnetic fields and are fully spark free. They are also excellent for use in chemically aggressive environments.

Snipe Nose Pliers of plastic	
insulating	98
IEC 60900 DIN EN 60900 ASTM F1505	6

- > full insulation reduces risk of short circuit
- > class C; range of use up to -40°C/-40°F
- > plastic material, fiberglass-reinforced
- > handles with soft plastic zone for better grip

Product Number	Packaging	←► Inch mm		∆¹∆ Ibs
98 62 02		8 3/4 220	<b>≙</b> 1000 V <b>△←</b> ⊖ □□□	0.32





# Insulating Plastic Clamp DIN VDE 0680-1

98 6

- > for holding insulating mats in place
- > with integrated spring
- > full insulation reduces risk of short circuit
- > solid plastic, fiberglass-reinforced



Product Number	Packaging	<b>←→</b> Inch mm		Clamping capacity Inch mm	∆¹∆ Ibs
98 64 02		<mark>6</mark> 150	<u>≙</u> 1000 V ////\	1 <mark>9/32</mark> 15	0.13

# Plastic Slip-On Caps

DIN VDE 0680-1

98

- > to cover bare live cable ends max. 25/64" (10 mm) dia.
- > plastic



98 65 01 会 1000 V

Product Number	Packaging	<b>d→</b> Inch mm		Conductor key	∆¹∆ Ibs
98 65 01		3 <mark>5/32</mark> 80		1	0.02
98 65 02		3 5/32 80	<u>A</u> 1000 V	2	0.02
98 65 03		3 5/32 80		3	0.02

# **Self-Clamping Slip-On Caps**DIN VDE 0680-1

98

- > to cover bare live cable ends
- > plastic



98 65 30 会 1000 V

Product Number	Packaging	<b>4−►</b> Inch mm		Inside dia. <mark>Inch</mark> mm	∆ Ibs
98 65 10		3 5/32 80		25/64 10	0.02
98 65 20		3 15/16 100	<u></u> ★ 1000 V	25/32 20	0.07
98 65 30		4 1/4 110		1 3/16 30	0.12

> for added protection when working live or close to live parts



### 98 67 05 **☆** 1000 V **△**

Product Number	Packaging		Dimensions Inch mm	Thickness <mark>Inch</mark> mm	∆ lbs
98 67 05		- <u>A</u> 1000 V <u>@</u> €	20 x 20 500 x 500	3/64 1.0	0.66
98 67 10		₩ 1000 V @\$\ <b>\$</b>	39 3/8 x 39 3/8 1000 x 1000	3/64 1.0	2.65

PUK® Junior Hacksaw	98
IEC 60900 DIN EN 60900	90

> saw blade for metal and wood with 25 teeth per inch, exchangeable



Product Number	Packaging	<b>←→</b> Inch mm		Saw blade length <mark>Inch</mark> mm	∆†∆ Ibs
98 90		9 1/2 240	<u></u> 1000 V	<mark>6</mark> 150	0.41



### **Safety Compact Tool Case**

10 parts

IEC 60900 DIN EN 60900

- > shock-resistant plastic case
- > foam insert with precise recesses for holding the pliers
- > equipped with a range of custom insulated KNIPEX tools for work on electrical systems
- > all tools 100% tested and meet ASTM F1505 and IEC 60900 requirements
- > ext. dimensions (W x H x D): 14 31/32 x 3 11/32 x 10 15/64" (380 x 85 x 260 mm)
- > int. dimensions (W x H x D): 13 3/16 x 2 3/4 x 93/64" (335 x 70 x 230 mm)









Product Number	Packaging			Set contents	Units	∆ ∆ lbs
98 99 11 S3	Х	-	Safety compact tool case with insulated tools (3/8") for working on electrical systems	-	-	3.64
		<u>A</u> 1000 V <b>%</b>	98 31	Reversible Ratchet, with external square 3/8"	1	-
		A 40001/ 🗺 🔘	98 35 125	Extension Bar, with internal/external	1	-
		<u>A</u> 1000 V <b>⅓</b> 🚳	98 35 250	square 3/8"	1	-
			98 37 1/2"		1	-
			98 37 3/4"		1	-
			98 37 3/8"		1	-
		<b>≙</b> 1000 V <b>○</b> 🔞	98 37 5/16"	12-Point Socket, with internal square 3/8"	1	-
			98 37 5/8"	3/6	1	-
			98 37 7/16"		1	-
			98 37 9/16"		1	-
98 99 11 S4	X	-	Safety compact tool case with insulated tools (3/8") for working on electrical systems	-	-	3.64
		<u>A</u> 1000 V <b>⅓</b>	98 31	Reversible Ratchet, with external square 3/8"	1	-
		A 40001/ 🗺 🔿	98 35 125	Extension Bar, with internal/external	1	-
		<u>A</u> 1000 V <b>⅓</b> 🚳	98 35 250	square 3/8"	1	-
			98 37 10		1	-
			98 37 11		1	-
			98 37 12	Harrana and the barrana day	1	-
		<b>≙</b> 1000 V ◎ ③	98 37 13	Hexagon socket for hexagonal screws, with internal square 3/8"	1	-
			98 37 14	With Internal square 570	1	-
			98 37 17		1	-
			98 37 19		1	-
98 99 11 S5	X	-	Safety compact tool case with insulated tools (1/2") for working on electrical systems	-	-	5.62
		<b>☆1000 V</b>	98 41	Reversible Ratchet, with driving square 1/2"	1	-
		A 40001/ <b>E</b>	98 45 125	Extension Bar, with internal/external	1	-
		<u>A</u> 1000 V 💯 છ	98 45 250	square 1/2"	1	-
			98 47 1"		1	-
			98 47 1/2"		1	-
			98 47 11/16"	12 Deint Cocket with internal square	1	-
		<b>≙</b> 1000 V <b>◎ ③</b>	98 47 3/4"	12-Point Socket, with internal square 1/2"	1	-
			98 47 5/8"	"-	1	-
			98 47 7/8"		1	-
			98 47 9/16"		1	-
98 99 11 S6	X	-	Safety compact tool case with insulated tools (1/2") for working on electrical systems	-	-	5.62
		<b>≙</b> 1000 V <b>½</b>	98 41	Reversible Ratchet, with driving square 1/2"	1	-
		<u>A</u> 1000 V ½ ⅓	98 45 125	Extension Bar, with internal/external	1	-
		△ 1000 V 22 (2)	98 45 250	square 1/2"	1	-
			98 47 13		1	-
			98 47 14		1	-
			98 47 17	Hovagon cocket for hovagonal service	1	-
		<u>A</u> 1000 V ◎ ⑧	98 47 19	Hexagon socket for hexagonal screws, with internal square 1/2"	1	-
			98 47 22	With internal square 1/2	1	-
			98 47 24		1	-
			98 47 27		1	_



Product Number	Packaging			Set contents	Units	∆ ∆ Ibs
98 99 12	Х	-	Standard To	-	12.20	
		<b>☆ 1000 V △</b>	03 07 200	Combination Pliers	1	-
		<u>A</u> 1000 V @♠ ▶◀	70 07 160	Diagonal Cutter	1	-
			98 00 10		1	-
			98 00 11		1	-
			98 00 12		1	-
		<u> </u>	98 00 13	Open End Wrench	1	-
			98 00 14		1	-
			98 00 17		1	-
			98 00 19		1	-
		<u>A</u> 1000 V △	98 53 03	Dismantling Knife for round cables	1	-
			98 20 25		1	-
		£ 1000 V ♠€ ♣	98 20 35	Screwdrivers for slotted screws	1	-
			98 20 40		1	-
			98 20 55		1	-
			98 24 00		1	-
			98 24 01	Screwdriver for cross recessed screws, Phillips®	1	-
			98 24 02		1	-
		<u>A</u> 1000 V ½	98 40	T-Handle Drive, with driving square 1/2"	1	-
			98 47 10		1	-
			98 47 11		1	-
		<u>À</u> 1000 ∨ <b>⊘ ②</b>	98 47 12		1	-
			98 47 13	Hexagon Socket for hexagonal screws, with internal square 1/2"	1	-
			98 47 14		1	-
			98 47 17		1	-
			98 47 19		1	-
		<b>≙</b> 1000 V <b>△</b>	98 52	Cable Knife	1	-

- > tool roll made of hard-wearing polyester fabric
- > with sturdy, adjustable snap-closure
- > containing a range of insulated KNIPEX tools for work on electrical installations



Product Number	Packaging			Set contents	Units	∆∆ lbs
98 99 13	Χ	-	Tool Roll 15	parts	-	5.41
		<b>≙</b> 1000 V <b>△♠ ■■</b>	03 07 200	Combination Pliers	1	-
		<b>☆</b> 1000 V <b>△♠ ////</b>	11 07 160	Diagonal Cutter	1	-
		<b>☆1000</b> V <b>△♠ ♦ ■ ■</b>	26 17 200	Snipe Nose Side Cutting Pliers, (Stork Beak Pliers)	1	-
		<b>≙</b> 1000 V <b>△♠</b>	70 07 160	Diagonal Cutter	1	-
		<b>☆</b> 1000 V <b>△♠ ♦ ₹ 5</b>	95 17 200	Cable Shears, with twin cutting edge	1	-
	<u></u>	98 00 10		1	-	
			98 00 13		1	-
		98 00 14	Open End Wrench	1	-	
			98 00 17		1	-
			98 00 19		1	-
			98 20 25		1	-
		↔ 1000 V 🙉 🖨 🚍	98 20 40	Screwdrivers for slotted screws	1	-
			98 20 55	Screwarivers for stotled screws	1	-
			98 20 65		1	-
		<b>☆</b> 1000 V <b>△</b>	98 52	Cable Knife	1	-

# Safety Tool Rolls 8 parts

- > plastic tool roll
- > equipped with open end wrenches for work on electrical systems
- > all tools 100% tested and meet ASTM F1505 and IEC 60900 requirements
- > dimensions, rolled out (W x H x D): 16 9/64 x 63/64 x 11 13/32" (410 x 25 x 290 mm)
- > dimensions, rolled up (W x H x D): 2 61/64 x 2 61/64 x 11 13/32" (75 x 75 x 290 mm)



Product Number	Packaging			Set contents	Units	∆ ∆ Ibs
98 99 13 S4		-	Safety Toll Roll 8 parts	-	-	1.71
		<u> </u>	98 00 1/4"		1	-
			98 00 5/16"		1	-
			98 00 3/8"		1	-
			98 00 7/16"	Onen End Wyensh	1	-
			98 00 1/2"	Open End Wrench	1	-
			98 00 9/16"		1	-
			98 00 5/8"		1	-
			98 00 3/4"		1	-
98 99 13 S5			Safety Toll Roll 8 parts		-	2.54
		숲 1000 V 🔿	98 00 24		1	-
			98 00 22		1	-
			98 00 19		1	-
			98 00 17	Open End Wranch	1	-
			98 00 14	Open End Wrench	1	-
			98 00 13		1	-
			98 00 10		1	-
			98 00 08		1	-

#### 98 99 14

- > hard-wearing case made of ABS material, red; containing a range of KNIPEX tools for work on electrical installations, tested according to IEC 60900, as well as additional protective covers, clamps and gloves
- > sturdy aluminum frame with D-shape rings for belt and fix, sturdy center board with multipurpose push-in facilities by elastic loops and 12 small pockets
- > comfortable handle and mounting device for a "trolley" embedded in the bottom (available for ordering ref. 00 21 40 T)
- > metal hinges
- > 66 pounds (30 kg) maximum load
- > can be opened on one or both sides; bottom tray and cover can be opened independently
- > stands securely in any opening position due to lid-holders and hinge mechanisms on both sides, that register in a position of 45° and 90°
- > 3-digit lock and 2 clamp-locks for fixation of the cover
- > removable document compartment and removable tool board, with 13 push-in compartments on one side
- > 2 tilting locks to fix the bottom
- > base tray height 2 9/32" (58 mm), can be subdivided by flexible inserts; cover plate with 6 large push-in compartments, can be fixed by push-button
- > ext. dimensions ( W x H x D): 19 19/64 x 10 3/64 x 16 9/64" (490 x 220 x 410 mm) int. dimensions (W x H x D): 17 33/64 x (4 1/8 + 4 1/8) 13 25/32" (445 x (105 + 105) x 350 mm)

#### 00 21 40 T

- > telescopic handle for rolling transport
- > applicable for cases: 00 21 40 LE Tool Case "BIG Twin" and 98 99 14 Universal Tool Case
- > height adjustable handle with catch
- > integrated mechanism for fixation to the case, for rapid assembly and removal
- > with 2 smooth running rolls
- > dimensions: 60 x 245 x 400 (1,000) mm (extended)









Product Number	Packaging			Set contents	Units	∆ ∆ lbs
98 99 14	X	-	Universal Tool Case 46 parts	-	-	35.83
		<b>≙1000 V △€</b>	70 07 160	Diagonal Cutter	1	-
			88 07 250	Alligator® Water Pump Pliers	1	-
			98 00 10		1	-
			98 00 13	00 13		-
			98 00 14	0 5 1111 1	1	-
			98 00 17	Open End Wrenches	1	-
			98 00 19		1	-
		A 400014 <b>O</b>	98 00 22		1	-
		<u>A</u> 1000 V <b>○</b>	98 01 10		1	-
			98 01 13		1	-
			98 01 14	D. W. I	1	-
			98 01 17	Box Wrenches	1	-
			98 01 19		1	-
			98 01 22		1	-
		<b>≙</b> 1000 V <b>△</b>	98 67 05	Insulating Mat, from rubber	3	-
		A 400014 M	98 40	T-Handle Drive, with driving square 1/2"		-
		会1000 V ½	98 42	Reversible Ratchet, with driving square 1/2"	1	-
		A 1000 V <b>I</b>	98 45 125	Extension Bar, with internal/external	1	-
		<u>A</u> 1000 V 🔀 🔞	98 45 250	square 1/2"	1	-
		<u>A</u> 1000 V <b>③</b> ⑤	98 47 10		1	-
			98 47 11		1	-
			98 47 12		1	-
			98 47 13		1	-
			98 47 14	Hexagon socket for hexagonal screws, with internal square 1/2"	1	-
			98 47 17	with internal square 1/2	1	-
			98 47 19		1	-
			98 47 22		1	-
			98 47 24		1	-
		A 1000V A	98 52	Cable Knife	1	-
		<u>A</u> 1000 V △	98 53 03	Dismantling Knife for round cables	1	-
		<u></u> ★ 1000 V /////	98 64 02	Insulating Plastic Clamp, from plastic	6	-
		<u></u> ★ 1000 V	98 65 40	Electricians' Gloves	1	-
98 99 14 LE			Universal Tool Case empty	-	-	290.5 8235
00 21 40 T			Trolley for rolling case transport	-	-	42.3 1200







9K 98 98 21 US



9K 98 98 22 119



K 98 98 25 US



9K 98 98 26 US

9K 98 98 25 US			9K 98 98 26 US			
Product Number	Packaging			Set contents	Units	∆∆ Ibs
9K 98 98 20 US			5 Pc Automotive Pliers /Screwdriver Tool Set-1,000V	-	-	2.90
			74 08 250 US	10" High Leverage Diagonal Cutters-1,000V Insulated	1	-
		A 400014 <b>A</b>	88 08 250 US	10" Alligator® Pliers-1,000V Insulated	1	-
		<u>A</u> 1000 V <b>○</b>	9T 53704	MAXXPRO 1,000V Insulated 4" Slotted 5/32" Tip	1	-
			9T 53706	MAXXPRO 1,000V Insulated 6" Slotted 1/4" Tip	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
9K 98 98 21 US			5 Pc Pliers/Screwdriver Tool Set-1,000V Insulated	·	-	2.62
			74 08 200 US	8" High Leverage Diagonal Cutters-1,000V Insulated	1	-
		1	02 08 225 US	9" High Leverage Combination Pliers-1,000V Insulated	1	-
		<u>A</u> 1000 V <b>○</b>	9T 53705	MAXXPRO 1,000V Insulated 5" Slotted 7/32" Tip	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 54812	MAXXPRO 1,000V Insulated 5" Square #2	1	-
9K 98 98 22 US			5 Pc Pliers/Screwdriver Tool Set-1,000V Insulated	-	-	4.35
		-	74 08 250 US	10" High Leverage Diagonal Cutters-1,000V Insulated	1	-
		<u></u>	09 08 240 US	9-1/4" High Leverage Lineman New England Head- 1,000V Insulated	1	-
			9T 53705	MAXXPRO 1,000V Insulated 5" Slotted 7/32" Tip	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 54812	MAXXPRO 1,000V Insulated 5" Square #2	1	-
9K 98 98 25 US			7 Pc Pliers/Screwdriver Tool Set-1,000V, Nylon Pouch	-	-	4.35
			74 08 200 US	8" High Leverage Diagonal Cutters-1,000V Insulated	1	-
			88 08 250 US	10" Alligator® Pliers-1,000V Insulated	1	-
		<b>♠1000∨○</b>	26 18 200 US	8" Long Nose Pliers w/ Cutter-1,000V Insulated	1	-
		× 1000 V 🔾	02 08 225 US	9" High Leverage Combination Pliers-1,000V Insulated	1	-
			9T 53705	MAXXPRO 1,000V Insulated 5" Slotted 7/32" Tip	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 54812	MAXXPRO 1,000V Insulated 5" Square #2	1	-
9K 98 98 26 US			7 Pc Pliers/Screwdriver Tool Set-1,000V, Nylon Pouch	-	-	4.45
			09 08 240 US	9-1/4" High Leverage Lineman New England Head- 1,000V Insulated	1	-
			26 18 200 US	8" Long Nose Pliers w/ Cutter-1,000V Insulated	1	-
		<u>A</u> 1000 V <b>○</b>	88 08 250 US	10" Alligator® Pliers-1,000V Insulated	1	-
			74 08 250 US	10" High Leverage Diagonal Cutters-1,000V Insulated	1	-
			9T 53705	MAXXPRO 1,000V Insulated 5" Slotted 7/32" Tip	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 54812	MAXXPRO 1,000V Insulated 5" Square #2	1	-



Product Number	Packaging			Set contents	Units	∆∆ Ibs
9K 98 98 27 US			7 Pc Pliers/Screwdriver Tool Set-1,000V, Nylon Pouch	-	-	4.33
			26 18 200 US	10" High Leverage Diagonal Cutters-1,000V Insulated	1	-
			74 08 200 US	10" Alligator® Pliers-1,000V Insulated	1	-
		A 400014 O	02 08 225 US	MAXXPRO 1,000V Insulated 4" Slotted 5/32" Tip	1	-
		<u>A</u> 1000 V <b>○</b>	88 08 250 US	MAXXPRO 1,000V Insulated 6" Slotted 1/4" Tip	1	-
			9T 53704	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 53706	MAXXPRO 1,000V Insulated 6" Slotted 1/4" Tip	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
9K 98 98 30 US			10 Pc Pliers/Screwdriver Tool Set-1,000V, Hard Case	-	-	6.54
			02 08 225 US	9" High Leverage Combination Pliers-1,000V Insulated	1	-
			74 08 200 US	8" High Leverage Diagonal Cutters-1,000V Insulated	1	-
			95 18 165 US	6-1/2" Cable Shears-1,000V Insulated	1	-
			26 18 200 US	8" Long Nose Pliers w/ Cutter-1,000V Insulated	1	-
		<b>≙</b> 1000 V <b>○</b>	88 08 250 US	10" Alligator® Pliers-1,000V Insulated	1	-
			9T 53704	MAXXPRO 1,000V Insulated 4" Slotted 5/32" Tip	1	-
			9T 53706	MAXXPRO 1,000V Insulated 6" Slotted 1/4" Tip	1	-
			9T 53711	MAXXPRO 1,000V Insulated 3-1/4 Phillips #1	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 54812	MAXXPRO 1,000V Insulated 5" Square #2	1	-
9K 98 98 31 US			10 Pc Pliers/Screwdriver Tool Set-1,000V, Hard Case	-	-	6.90
			02 08 225 US	10" High Leverage Diagonal Cutters-1,000V Insulated	1	-
			74 08 200 US	6-1/4" Cable Shears-1,000V Insulated	1	-
			95 18 165 US	9-1/4" High Leverage Lineman New England Head- 1,000V Insulated	1	-
		A 1000 V 🔿	26 18 200 US	8" Long Nose Pliers w/ Cutter-1,000V Insulated	1	-
		<u> </u>	88 08 250 US	10" Alligator® Pliers-1,000V Insulated	1	-
			9T 53704	MAXXPRO 1,000V Insulated 4" Slotted 5/32" Tip	1	-
			9T 53706	MAXXPRO 1,000V Insulated 6" Slotted 1/4" Tip	1	-
			9T 53711	MAXXPRO 1,000V Insulated 3-1/4 Phillips #1	1	-
			9T 53712	MAXXPRO 1,000V Insulated 4" Phillips #2	1	-
			9T 54812	MAXXPRO 1,000V Insulated 5" Square #2	1	-

00 11 01	192	03 01 200	28	13 81 8	45	28 21 200	56	38 81 200 B	69
00 11 02	193	03 01 250	28	13 82 8	45	28 71 280	57	38 91 200	69
00 11 03	193	03 02 160	28	13 82 8 T BKA	45, 210	28 81 280	57	40 04 180	70
00 11 04	193	03 02 180	28	13 88 8 US	45, 216	29 11 160	58	40 04 250	70
00 11 06	194	03 02 200	28	15 11 120	46	29 21 160	58	40 14 250	70
00 11 06 V01	194	03 08 160 SBA	28, 214	15 19 005	46	30 11 140	59	41 04 180	71
00 11 V50	195	03 08 200 SBA	28, 214	15 19 006	46	30 11 160	59	41 04 250	71
00 19 41	196	08 21 145	29	15 19 008	46	30 11 190	59	41 04 300	71
00 19 55 S4	196	08 22 145	29	15 19 010	46	30 16 160	59, 218	41 14 250	71
00 19 55 S5	196	08 22 145 T BKA	29, 210	15 51 160	46	30 21 140	59	41 24 225	71
00 19 56	197	08 28 145 US	29, 215	15 61 160	46	30 21 160	59	41 34 165	71
00 19 56 LE	197	09 01 240	31	15 81 160	46	30 21 190	59	41 44 200	71
00 19 57	197	09 02 240	31	16 20 16 SB	47	30 31 160	59	42 14 280	72
00 19 58 V01	197	09 02 240 T BKA	31, 210	16 20 165 SB	47	30 36 160	59, 218	42 24 280	72
00 19 58 V02	197	09 08 240 US	31, 215	16 29 165	47	30 41 160	60	42 34 280	72
00 19 72 LE	198, 204	09 11 240	31	16 30 135 SB	47	31 11 160	60	42 44 280	72
00 20 01 V15	199	09 12 240	31	16 39 135	47	31 21 160	60	44 10 J5	73
00 20 01 V16	199	09 12 240 T BKA	31, 210	16 40 150	48	32 11 135	61	44 10 J6	73
00 20 01 V17	199	10 98 1220	32	16 49 150	48	32 21 135	61	44 11 J0	74
00 20 03 SB	200	10 99 1220	32	16 60 05 SB	48	32 31 135	61	44 11 J1	74
00 20 03 V02	200	11 01 160	33	16 65 125 SB	49	33 01 160	61	44 11 J2	74
00 20 04 SB	200	11 02 160	33	16 80 125 SB	49	34 12 130	64	44 11 J3	74
00 20 04 V01	200	11 08 160 SBA	33, 215	16 85 125 SB	49	34 12 130 ESD	64	44 11 J4	74
00 20 05 US	201	11 82 130	34	16 95 01 SB	50	34 22 130	64	44 19 J5	73
00 20 06 US1	201	11 92 140	34	16 95 02 SB	50	34 22 130 ESD	64	44 19 J6	73
00 20 06 US2	201	12 11 180	35	19 01 130	51	34 32 130	64	44 20 J51	73
00 20 07 US1	201	12 12 02	37	20 01 125	51	34 32 130 ESD	64	44 20 J61	73
00 20 08 US1	201	12 12 06	37	20 01 140	51	34 42 130	64	44 21 J01	74
00 20 08 US2	201	12 12 10	37	20 01 160	51	34 42 130 ESD	64	44 21 J11	74
00 20 09 V01	202	12 12 11	37	20 01 180	51	34 52 130	64	44 21 J21	74
00 20 10	202	12 12 13	37	20 02 140	51	34 52 130 ESD	64	44 21 J31	74
00 20 11	202	12 12 14	37	20 02 160	51	35 11 115	65	44 21 J41	74
00 20 16	203	12 19 180	35	20 06 160	51, 216	35 12 115	65	44 29 J51	73
00 20 16 P	203	12 21 180	35	22 01 125	51, 210	35 12 115 ESD	66	44 29 J61	73
00 20 16 P ESD	203	12 29 180	35	22 01 140	52	35 21 115	65	44 31 J02	74
00 20 17	203	12 40 200	38	22 01 160	52	35 22 115	65	44 31 J12	74
00 20 18	203	12 42 195	39	22 02 140	52	35 22 115 ESD	66	44 31 J22	74
00 20 18 ESD	203	12 49 01	38	22 02 160	52	35 31 115	65	44 31 J32	74
00 20 72 V01	204	12 49 02	38	22 08 160 SBA	52, 216	35 32 115	65	44 31 J42	74
00 20 72 V02	204	12 49 03	38	23 01 140	52	35 32 115 ESD	66	45 10 170	80
00 21 40 T	247	12 49 21	39	25 01 125	53	35 41 115	65	45 21 200	80
00 21 41 LE	205	12 49 23	39	25 01 140	53	35 42 115	65	46 10 100	81
00 31 20 V02	204	12 50 200	38	25 01 160	53	35 42 115 ESD	66	46 10 A5	73
00 31 V01 US	204	12 59 01	38	25 02 140	53	35 52 145	65	46 10 A6	73
00 50 01 T BK	211	12 59 02	38	25 02 160	53	35 62 145	65	46 11 A0	75
00 50 02 T BK	211	12 62 180	40	25 08 160 SBA	53, 217	35 72 145	65	46 11 A1	75
00 50 03 T BK	211	12 64 180	40	25 21 160	53	35 82 145	65	46 11 A2	75
00 50 04 T BK	211	12 69 21	40	26 11 200	54	36 12 130	67	46 11 A3	75
02 01 180	27	12 69 23	40	26 11 200 S1	54	36 22 125	67	46 11 A4	75
02 01 200	27	12 69 31	40	26 12 200	54	36 32 125	67	46 11 G0	80
02 01 225	27	12 74 180 SB	41	26 12 200 T BKA	54, 210	37 11 125	68	46 11 G1	80
02 02 180	27	12 79 31	41	26 16 200 T	211	37 21 125	68	46 11 G2	80
02 02 200	27	12 80 040 SB	41	26 18 200 US	55, 217	37 31 125	68	46 11 G3	80
02 02 225	27	12 80 100 SB	41	26 21 200	54	37 41 125	68	46 11 G4	80
02 02 225 T BKA	27, 210	13 01 160	42	26 22 200	54	38 11 200	69	46 19 A5	73
02 08 200 US	27, 214	13 01 614	42	26 22 200 T BKA	54, 210	38 21 200	69	46 19 A6	73
02 08 225 US	27, 214	13 02 160	42	26 26 200 T	211	38 31 200	69	46 20 A51	73
03 01 140	28	13 02 614 T BKA	42, 210	26 28 200 SBA	55, 217	38 41 190	69	46 20 A61	73
03 01 160	28	13 42 165	43	27 01 160	56	38 71 200	69	46 21 A01	75
03 01 180	28	13 62 180	44	28 01 200	56	38 81 200 A	69	46 21 A11	75
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46 21 A21	75	61 02 200	86	71 79 460	91	77 02 135 H ESD	113	81 19 250	122
46 21 A31	75	62 12 120	103	71 79 610	91	77 11 115	109	83 10 010	123
46 21 A41	75	64 01 115	105	71 79 760	91	77 12 115	109	83 10 015	123
46 29 A51	73	64 02 115	105	71 79 910	91	77 12 115 ESD	111	83 10 020	123
46 29 A61	73	64 02 115 ESD	106	71 82 950	92	77 21 115 N	109	83 10 030	123
46 31 A02	75	64 11 115	105	71 89 950	92	77 21 130	109	83 10 040	123
46 31 A12	75	64 12 115	105	72 01 140	95	77 22 115	109	83 20 010	123
46 31 A22	75	64 12 115 ESD	106	72 01 160	95	77 22 115 ESD	111	83 20 015	123
46 31 A32	75	64 22 115	105	72 01 180	95	77 22 130	109	83 20 020	123
46 31 A42	75	64 32 120	105	72 02 125	95	77 32 115	109	83 30 005	124
48 11 J0	76	64 32 120 ESD	106	72 11 160	95	77 32 115 ESD	111	83 30 010	124
48 11 J1	76	64 42 115	105	72 21 160	95	77 32 120 H	112	83 30 015	124
48 11 J2	76	64 52 115	105	72 51 160	95	77 32 120 H ESD	113	83 30 020	124
48 11 J3	76	64 62 120	105	72 62 200	96	77 41 115	109	83 30 030	124
48 11 J4	76	64 62 120 ESD	106	73 02 160	98	77 42 115	109	83 60 010	124
48 21 J01	76	64 72 120	105	73 06 160	98, 219	77 42 115 ESD	111	83 60 015	124
48 21 J11	76	67 01 140	86	73 71 180	99	77 42 130	109	83 61 010	124
48 21 J21	76	67 01 160	86	73 72 180 BK	99	77 52 115	109	83 61 015	124
48 21 J31	76	67 01 200	86	74 01 140	101	77 52 115 ESD	111	83 61 020	124
48 21 J41	76	68 01 160	87	74 01 160	101	77 72 115	109	84 11 200	125
48 31 J0	77	68 01 180	87	74 01 180	101	77 72 115 ESD	111	84 21 200	125
48 31 J1	77	68 01 200	87	74 01 200	101	78 03 125	115	85 01 250 US	125
48 31 J2	77	68 01 280	87	74 01 250	101	78 03 125 ESD	116	85 51 180 A	126
48 31 J3	77	69 01 130	87	74 02 140	101	78 03 140	117	85 51 180 C	127
48 41 J01	77	69 03 130	87	74 02 160	101	78 03 140 ESD	117	85 51 250 A	126
48 41 J11	77	70 01 110	93	74 02 180	101	78 13 125	115	85 51 250 AF	127
48 41 J21	77	70 01 125	93	74 02 200	101	78 13 125 ESD	116	85 51 250 C	127
48 41 J31	77	70 01 140	93	74 02 200 T BKA	101, 210	78 23 125	115	85 59 250 A	126
49 11 A0	78	70 01 160	94	74 02 250	101	78 31 125	115	85 59 250 A	127
49 11 A1	78	70 01 180	93	74 02 250 T BKA	101, 210	78 41 125	115	85 59 250 C	127
49 11 A2	78	70 02 125	93	74 06 200 T	211	78 61 125	115	86 01 250	129
49 11 A3	78	70 02 140	93	74 06 250 T	211	78 61 125 ESD	116	86 02 250	129
49 11 A4	78	70 02 160	94	74 08 200 US	101, 219	78 61 140	117	86 03 125	129
49 21 A01	78	70 02 180	93	74 08 250 US	101, 219	78 61 140 ESD	117	86 03 150	129
49 21 A11	78	70 06 160 T	211	74 12 160	101	78 71 125	115	86 03 180	129
49 21 A21	78	70 06 180 T	211	74 12 180	101	78 71 125 ESD	116	86 03 250	129
49 21 A31	78	70 08 160 SBA	94, 218	74 21 180	101	78 81 125	115	86 03 300	129
49 21 A41	78	70 08 180 SBA	93, 218	74 21 200	101	78 91 125	115	86 03 400 US	130
49 31 A0	79	70 11 110	93	74 21 250	101	79 02 120	119	86 05 150	129
49 31 A1	79	70 26 160	94, 218	74 22 200	101	79 02 120 ESD	121	86 05 180	129
49 31 A2	79	71 01 160	88	74 22 200 T BKA		79 02 125	119	86 05 180 T BKA	
49 31 A3	79	71 01 200	88	74 22 250	101	79 02 125 ESD	121	86 05 250	129
49 41 A01	79	71 01 200 R	90	74 22 250 T BKA	210	79 12 125	119	86 05 250 T BKA	
49 41 A11	79	71 01 250	90	74 91 250	102	79 12 125 ESD	121	86 06 250 US	129, 220
49 41 A21	79	71 02 200 71 02 200 T BKA	88	75 02 125	107	79 22 120	119	86 43 250 US 87 01 125	129
49 41 A31 50 00 160	79	71 12 200 1 BKA	88, 210 88	75 12 125 75 22 125	107 107	79 22 120 ESD 79 22 125	121 119		133 133
	82		89		107		121	87 01 150	133
50 00 180 50 00 210	82 82	71 21 200 71 22 200	89	75 52 125 76 01 125	107	79 22 125 ESD 79 32 125	119	87 01 180 87 01 250	133
50 00 210	82	71 22 200 71 22 200 T BKA	89, 210	76 12 125	102	79 32 125 79 32 125 ESD	121	87 01 300	133
50 00 230	82	71 31 200	89, 210	76 22 125	102	79 42 125	119	87 01 300 87 01 400 US	134
50 00 300	82	71 31 200 71 31 200 R	90	76 81 125	102	79 42 125 ESD	121	87 01 560 US	134
50 01 180	82	71 31 250 K	90	77 01 115	102	79 42 125 Z	119	87 01 360 03 87 02 180	134
50 01 180	82	71 32 200	89	77 01 113	109	79 42 125 Z ESD	121	87 02 180 T BKA	133, 210
50 01 210	82	71 32 200 T BKA	89, 210	77 01 130	109	79 52 125	119	87 02 180 1 BKA 87 02 250	133, 210
50 01 250	82	71 41 200	89	77 02 115 77 02 115 ESD	111	79 52 125 ESD	121	87 02 250 T BKA	133, 210
50 01 230	82	71 72 460	91	77 02 113 E3D 77 02 120 H	112	79 62 125	119	87 02 300 BKA	133, 210
51 01 210	83	71 72 400	91	77 02 120 H 77 02 120 H ESD	113	79 62 125 ESD	121	87 02 300 T BKA	
55 00 300	83	71 72 760	91	77 02 120 H E3D	109	81 01 250	121	87 11 250	135, 210
61 01 200	86	71 72 700	91	77 02 130 77 02 135 H	112	81 11 250	122	87 19 250	135
37 01 200	00		51	. 7 02 133 11	112	J. 11 230	122	37 13 230	155

87 21 250	135	92 27 61	152, 222	95 32 060	164	97 49 60	176	97 61 145 A	188
87 21 300	135	92 27 62	152, 222	95 32 100	164	97 49 62	176, 191	97 61 145 F	188
87 22 250	135	92 28 69 ESD	150	95 32 315 A	165	97 49 63	191	97 62 145 A	188
87 26 250 T	211	92 28 70 ESD	150	95 32 320	166	97 49 64	176	97 68 145 A	188, 227
87 28 250 US	136, 221	92 28 71 ESD	150	95 32 340 SR US	167	97 49 65	191	97 71 180	188
87 41 250	137	92 28 72 ESD	150	95 36 250 SBA	162, 225	97 49 65 1	177, 191	97 72 180	188
87 51 250	137	92 32 29	151	95 36 280 SBA	162, 225	97 49 66	191	97 81 180	189
88 01 180	139	92 34 28	151	95 36 315 A	165	97 49 66 1	177, 191	97 90 05	190
88 01 250	139	92 34 36	152	95 36 320	166, 226	97 49 67	191	97 90 06	190
88 01 300	139	92 34 37	152	95 39 250	162	97 49 68	191	97 90 09	190
88 01 400	140	92 37 64	152, 222	95 39 280	162	97 49 68 1	177, 191	97 90 10	190
88 02 180	139	92 38 75 ESD	150	95 39 315 A 01	165	97 49 69 1	176, 191	97 90 12	190
88 02 250	139	92 44 42	153	95 39 315 A 02	165	97 49 69 2	176, 191	97 90 23	190
88 02 250 T BKA	139, 210	92 52 23	153	95 39 320 01	166, 226	97 49 70	176	97 90 24	190
88 02 300	139	92 58 74 ESD	150	95 39 320 02	166, 226	97 49 74	176	97 91 01	191
88 02 300 T BKA	139, 210	92 64 43	153	95 39 720	164	97 49 76	176	98 00 07	228
88 07 300	139, 220	92 64 44	153	95 39 870	164	97 49 81	176	98 00 08	228
88 08 250 US	139, 220	92 67 63	152, 222	95 41 165	159	97 49 82	176	98 00 09	228
89 01 250	142	92 69 84	154	95 59 200 01	156	97 49 83	176	98 00 1/2"	228
90 01 125	142	92 70 46	153	95 61 150 US	167	97 49 84	176	98 00 1/4"	228
90 20 185	142	92 72 45	153	95 61 190	168	97 49 87	176	98 00 10	228
90 25 20	143	92 78 77 ESD	150	95 62 160	169	97 49 90	176	98 00 11	228
90 25 40	144	92 84 18	154	95 62 190	168	97 49 93	176	98 00 12	228
90 29 01	143	92 88 73 ESD	150	95 62 190 T BKA	168, 210	97 49 94	176	98 00 13	228
90 29 02	143	92 94 91	154	95 71 445	169	97 49 95	176	98 00 14	228
90 29 15	143	92 95 89	154	95 71 600	169	97 50 01	177	98 00 15	228
90 29 185	142	92 95 90	154	95 77 600	169, 227	97 51 10	178	98 00 16	228
90 29 40	144	94 10 185	143	95 79 445	169	97 51 12	178	98 00 17	228
90 42 250	144	94 15 215	155	95 79 600	169, 227	97 52 04	181	98 00 18	228
90 42 340	144	94 19 185	143	95 81 600	169	97 52 05	181	98 00 19	228
90 49 340	144	94 19 185 02	143	95 89 600	169	97 52 06	181	98 00 22	228
90 49 340 M	144	94 19 215	155	97 21 215	170	97 52 08	181	98 00 24	228
90 55 280	145	94 35 215	155	97 21 215 B	170	97 52 09	181	98 00 27	228
90 59 280	145	94 55 200	156	97 21 215 C	170	97 52 10	181	98 00 3/4"	228
90 61 16	145	95 02 21	156	97 21 215 SB	170	97 52 13	181	98 00 3/8"	228
90 61 20	145	95 03 160 SB	157	97 22 240	170	97 52 14	181	98 00 5/16"	228
90 70 220	146	95 05 10 SB	158	97 33 01	173	97 52 19	181	98 00 5/8"	228
91 00 200	146	95 05 140	157	97 33 02	173	97 52 20	181	98 00 7/16"	228
91 13 250	147	95 05 155 SBA	158	97 43 05	174	97 52 23	181	98 00 9/16"	228
91 19 250 01	147	95 05 165	158	97 43 06	174	97 52 30	182	98 01 07	230
91 31 180	147	95 05 185	157	97 43 200	174	97 52 33	182	98 01 08	230
91 51 160	148	95 05 190	157	97 43 200 A	174	97 52 34	182	98 01 09	230
91 61 160	148	95 06 230	158, 222	97 49 04	175	97 52 35	182	98 01 1 1/16"	230
91 71 160	148	95 11 165	159	97 49 05	175	97 52 36	182	98 01 10	230
91 92 180	148	95 11 200	160	97 49 06	175	97 52 37	182	98 01 11	230
92 02 53	149	95 12 165	159	97 49 08	175	97 52 38	182	98 01 11/16"	230
92 02 54	149	95 12 165 T BKA	159, 210	97 49 09	175	97 52 50	182	98 01 12	230
92 02 55	149	95 12 200	160	97 49 15	175	97 52 63 DG	184	98 01 13	230
92 08 78 ESD	150	95 12 500	161	97 49 16	175	97 52 64	184	98 01 14	230
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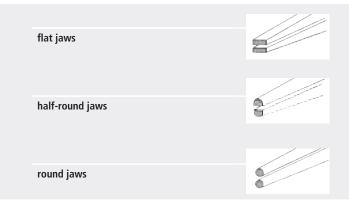
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#### **BASIC SHAPES OF THE JAWS**



# **JOINT CONNECTIONS**



Forged-in joint axle

The rivet is part of one handle (forged from one piece)

- > high stability for highest strain
- > long service life



#### Joint with inserted rivet

A proven, sturdy and precise rivet connection for all standard pliers.



#### **Bolted** joint

For particularly demanding requirements in terms of precision and smooth operation, e.g. in circlip pliers and cable shears (even the finest multi-stranded conductors have to be cut cleanly).





for cutting and gripping (combination, stork beak and radio pliers, etc.)



**Gripping Pliers** 

(flat-, long-nose and water pump pliers, etc.)



**Special Pliers** 

for special applications, e.g. notching or punching different types of materials (sheet-metal nibbler, tile nibbling pincers,

# **TYPES OF JOINTS**

#### Lap joint

The two pliers halves lie on top of each other but are not milled out.

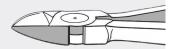
#### Single joint

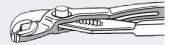
Half the thickness in each pliers handle is milled away in the joint area so that both handles can be laid into each other.

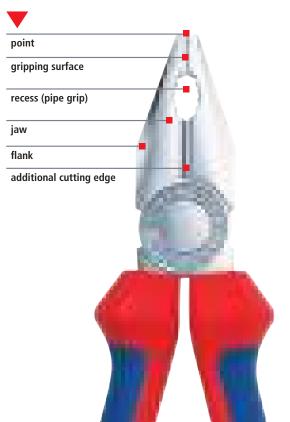
#### **Box joint**

One handle on the pliers is slit. The other handle is pushed through this slot. This joint connection can withstand a high level of load and strain because the joint bolt is supported on both sides and the inside handle is guided on both sides.









# **Safety instructions**

- Each tool should only be used for its specified purpose.
- When using cutting pliers: beware of wire ends flying off. Wear protective goggles and – if needed – gloves.
   Be aware of bystanders!
- Only handles marked with the symbol ★1000 V are insulating.

### **Care Tips**

A drop of oil on polished surfaces and in the joint will keep the tool in good working order and will increase the service life of your pliers.



# End Cutting Nipper Oblique Cutter Diagonal Cutter Center Cutter

#### **Cutting edge shapes**



with bevel (outside bevel)



semi-flush



with small bevel (outside bevel)



semi-flush



with very small bevel (outside bevel)



semi-flush



without bevel (outside bevel)



flush



flush cut



ultra or super flush

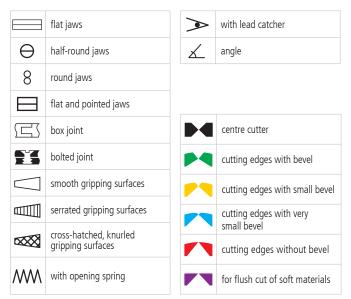
### **WIRE CLASSES**

		Material examples	Type of wire	Tensile str N/mm²	ength kp/mm²
	•	Copper, plastics	soft	220	22
	•	Nail, wire pin	medium-hard	750	75
-	•	Wire rope strand, steel wire	hard	1800	180
-	•	Spring steel wire	piano wire	2300	230

# STRUCTURE OF THE ARTICLE NUMBER HEAD/HANDLES

STRUCTU	JRE OF T	HE ARTICLI	E NUMBER	HEAD/	HANDLES	
Basic model e.g.: Combination Pliers	Style e.g.: straight	Finish e.g.: head polished, handles plastic coated	Length e.g.: 180 mm	0	Pliers black atramentized, head polished	
03	0		180	1	Head polished, handles plastic coated	<-O'
				2	Head polished, handles with multi- component grips	<-O
				3	Pliers chrome plated, handles plastic coated	(1)
				4	Pliers chrome plated	YO GIRLWIR
				5	Pliers chrome plated, handles with multi- component grips	
				6	Pliers chrome plated, handles insulated with multi-component grips VDE-tested DIN EN/IEC 60900	<b>№</b> £1000 V
				7	Pliers chrome plated, handles with dipped insulation, VDE tested DIN EN/IEC 60900	<b>△</b> ★ 1000 V
				8	Pliers head polished, handles with multi- component grips; ASTM-tested	

## **SYMBOLS**



	electrostatic discharging, dissipative
<b>X</b>	electronics
	VDE tested, also in conforman- ce to GPSG (Equipment and Product Safety Act)
<u>⊹</u> 1000 V	insulated according to IEC 60900 and ASTM F1505, usable up to 1000 V AC/1500 V DC
<b>≙</b> 1000 V	insulated according to DIN VDE 0680/1, suitable for the application up to 1000 V AC / 1500 V DC
CE	conforms to a European directive
[Cap	mechanically tested in accordance with the equipment and product safety act
<b>X</b>	WEEE marking (Waste Electrical and Electronic Equipment Directive)

7,7	weight
<b>◄</b> —	length
	soft wire
	medium hard wire
	hard wire
	piano wire
<b>♦</b>	Cu + Al multi-conductor cable, solid and multi-stranded
	wire rope
Fe	iron
(0000000)	ribbon cable
	steel wire armoured cable (SWA)

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gesis®	Wieland Electric GmbH
Kapton®, KEVLAR®	E. I. du Pont de Nemours and Company
Radox®	HUBER+SUHNER AG
Phillips®	Phillips Screw Company
Pozidriv <sup>®</sup>	European Industrial Service Ltd.
systainer®	TANOS GmbH
Mini-Fit <sup>®</sup> , Micro-Fit <sup>™</sup>	Molex® Inc.
MC®	Multi-Contact AG
Solarlok®	Tyco Electronics
Torx®	Acument Global Technologies, Inc.



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