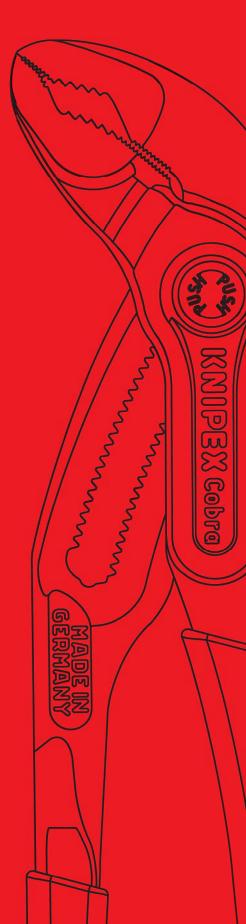
GENERAL CATALOGUE



DIGENS MADE IN GERMANY SINCE 1882

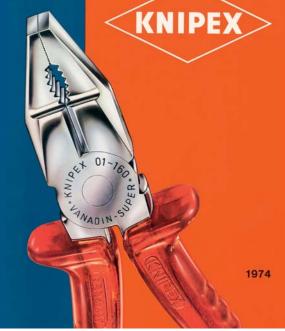


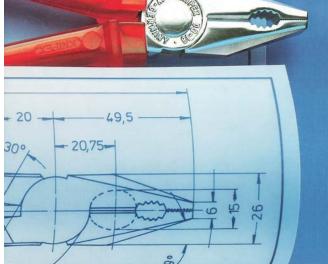
The pliers company

KNIPEX Quality – Made in Germany

KNIPE

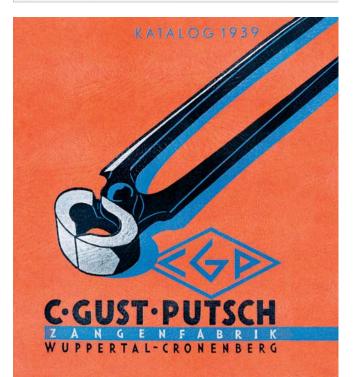






KNIPEX Pliers. German craftsmanship from design to production. Catalogue 1985 2nd edition





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 more 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 in 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 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 models in lots of small steps 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, hold with 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 cutters with box joint and precision cutting edges.
- 5 Speed and versatility: pliers wrench screws, holds, bends and presses without damaging materials.
- 6 High performance cutting edges: TwinForce[®] high strength thanks to unique transmission.
- 7 End cutting nippers redefined: bolt end cutting nippers light, slim, cut directly on the pivot point.
- 8 Problem-solver: spring hose clamp pliers the only pliers for all 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 further development 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 – naturally in close dialogue with experienced users. The first products manufactured using series production processes are subjected to further extensive tests – under conditions far more stringent than normal load.



The locking mechanism on the spring hose clamp pliers permit simple and safe work, even with closed clamps. Modern CAD technology simulates the mechanism on the screen.

Filip Marovic, project manager for KNIPEX Product Development – "It can be seen repeatedly during the development cycles how important even the smallest detail can be. This is the very thing that motivates me to find creative new solutions. During the process we also take new technical possibilities in processing technology and materials into consideration."

٠

-

-

12.25

2.8

20.74

28.48

58.54

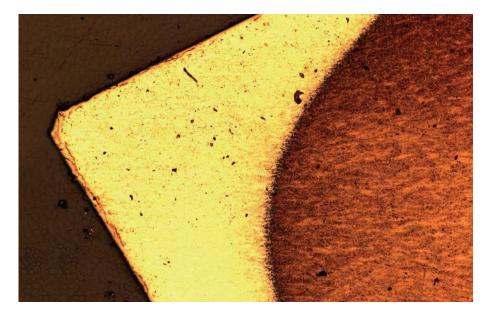
4.45

53

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. Because 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 cutter area (light) is in sharp contrast to the softer structure of the body of the pliers (dark).





Handles of the "Alligator" water pump pliers" being forged under the hydraulic double-acting hammer.

1 50

IT I

I. I. I. I. I. I.

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 tonnes, the yellow glowing piece of steel is pounded in the upper and lower die at a temperature of 1,250°C. This gives it its basic shape and simultaneously a well-compacted structure.

The production of the forging die in our toolmaking works 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 centres 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.

All tools can only be as good as the production technology used to manufacture them. In other words, there can be no superior products without advances in production processes.

Due to our specialisation, we can focus on the technologies needed to produce high quality pliers efficiently. We have more than 400 machines, built with the specialised 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 programme the software for the control and operation of the machinery ourselves in many cases.

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



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

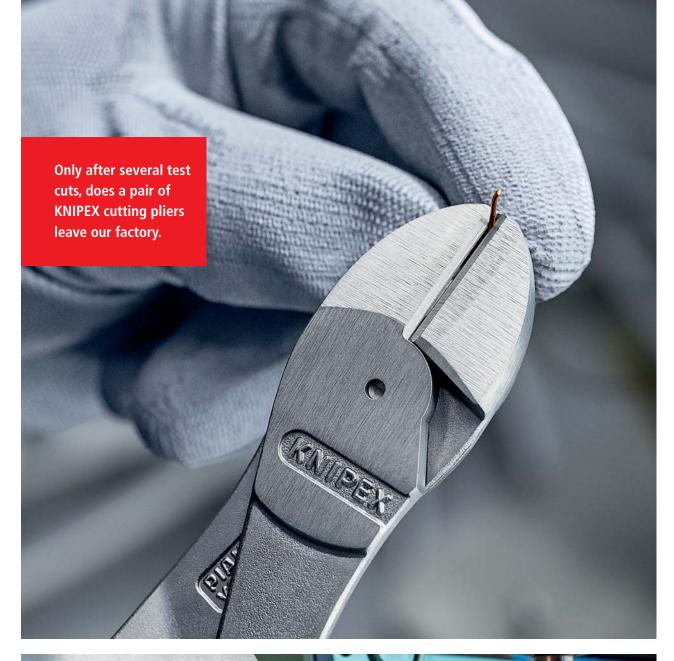




Efficiently coordinated processes and machinery.

Over 45,000 pairs of different models of pliers leave our factory every day.







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 and shaping, and also no 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 — both 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 test plants — 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.

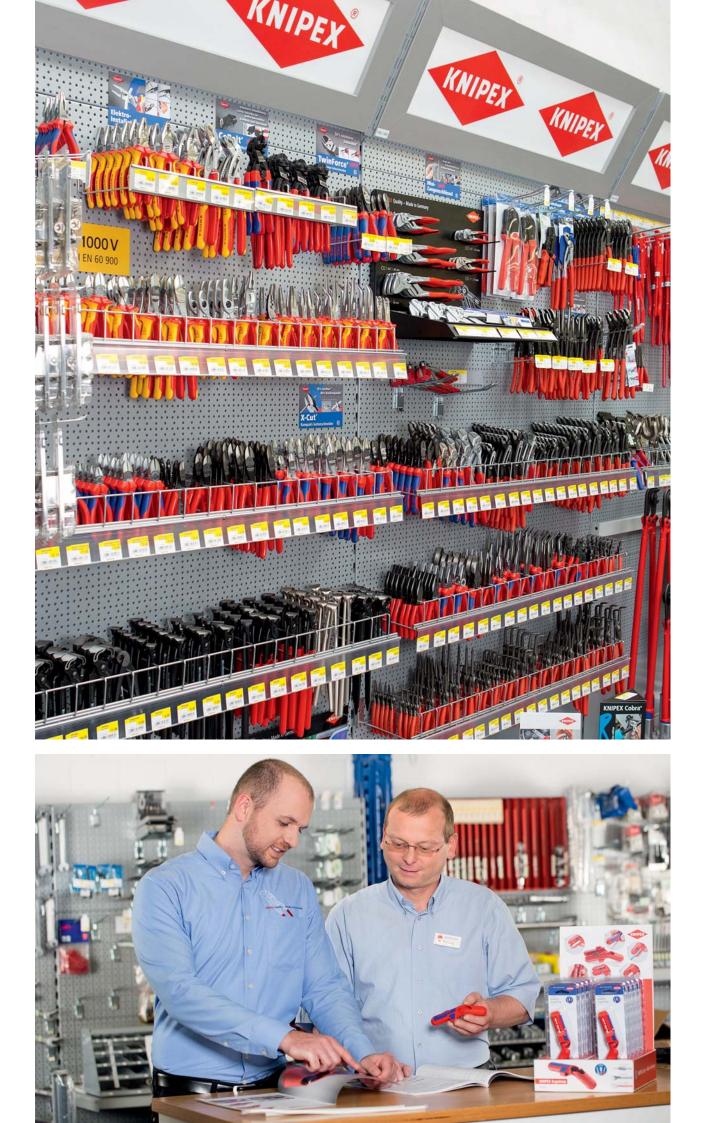
More than excellent pliers: what else you can expect from us.

Quality does not stop with the product. Trust, reliability and a collaborative approach define our business relationships — with consistent customer orientation, good service and competent field staff. We provide advice and training, and supply you with extensive digital product data whose format we adapt 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 — so that your customers can always find the tool they are looking for.



We also present the breadth and depth of our range at in-house exhibitions and open 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 still 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 fairs each year. On platforms and 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 whole world via social media and hundreds of KNIPEX online videos.



We make up to date information available digitally in several languages on all usual channels.

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 identify 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.



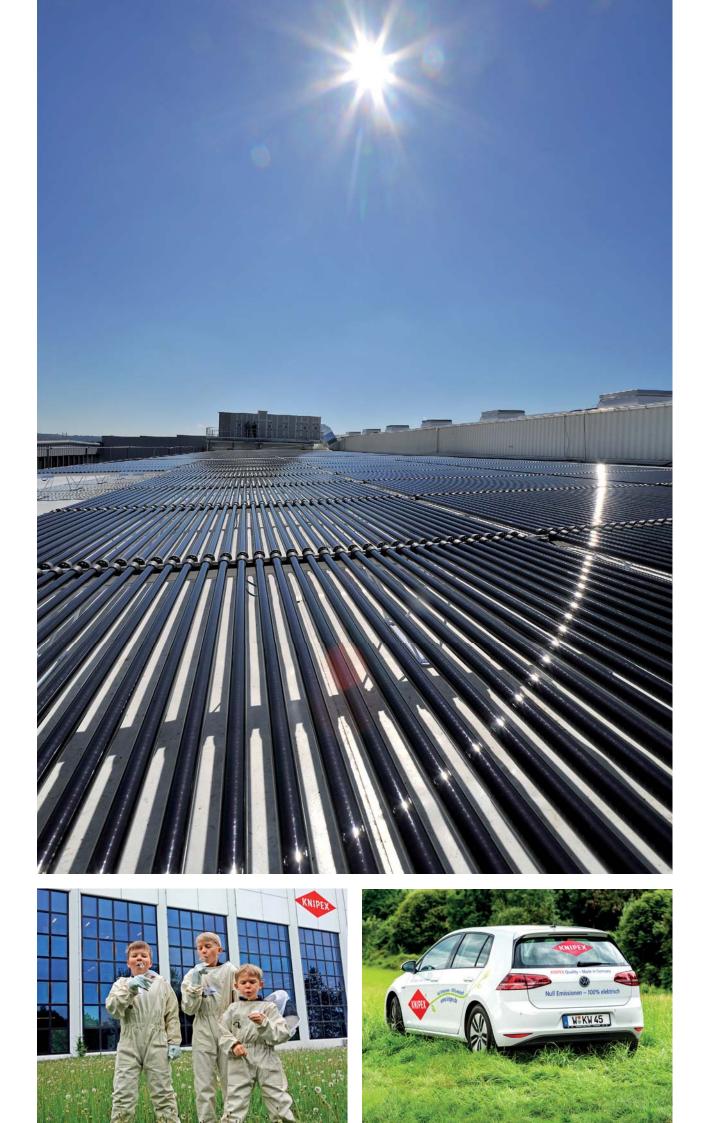
Our junior staff obtain their qualifications in our own modern training workshop.











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 where 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 organisations from 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 at singing together in schools.

At a glance

Overview of products

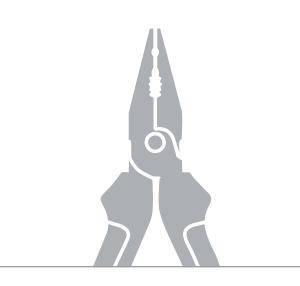
| 26 | Combination and Multifunctional Pliers Combination Pliers Pliers for Installation Round Nose and Flat Nose Pliers | 0 |
|-----|--|---|
| 40 | Wire Strippers and Dismantling Tools Insulation Strippers with adapted blades MultiStrip 10 Dismantling Tools | |
| 58 | Gripping and Grip Pliers Flat Nose Pliers Round Nose Pliers Grip Pliers | |
| 70 | Circlip Pliers Circlip Pliers Precision Circlip Pliers Circlip Pliers Sets | P |
| 84 | Carpenters' Pincers and Concreters' Nippers Carpenters' Pincers Concreter's Nippers High Leverage Concreters' Nippers | to large |
| 90 | Cutting Pliers Diagonal Cutters Bolt Cutters End Cutting Nippers | <u>R</u> |
| 110 | Pipe Wrenches and Water Pump Pliers Pliers Wrenches Cobra [®] Alligator [®] Pipe Wrenches | 50 |
| 130 | Special Pliers and Control Cabinet Keys Pipe Cutters Spring Hose Clamp Pliers Magnetic LED Lamp Control Cabinet Keys | - 0- |
| 152 | Cable and Wire Rope Shears Cable Shears Cable Cutters with ratchet action Wire Rope Shears | Ô |
| 164 | Crimping Pliers and Crimp Assortments Crimp System Pliers PreciForce [®] Cable Connectors | |
| 192 | Insulated Tools Pliers Wrenches Screwdrivers Sets | |
| 232 | Electronics Pliers and Precision Tweezers Cutting Pliers Gripping Pliers Precision Tweezers | 0 |
| 254 | Pliers with tether attachment point for mounting a fall protection | A CONTRACT OF CONTRACT. |
| 258 | Tool Assortments and Tool Cases Pliers Sets Tool Bags Tool Cases | |
| 274 | Index / Article Number Index Pliers-ABC | |

Combination and Multifunctional Pliers

08 25 125

(We sh

| Combination Pliers | 28 |
|--|----|
| High Leverage Combination Pliers | 29 |
| Needle-Nose Combination Pliers | 30 |
| Mini Combination Pliers | 32 |
| "Lineman's Pliers" | 33 |
| Pliers for Electrical Installation | 34 |
| Electricians' Pliers | 36 |
| Round Nose Pliers with cutting edge (Jewellers' Pliers) | 37 |
| Flat Nose Pliers with cutting edges (Precision Mechanics Pliers) | 37 |
| Snipe Nose Pliers with centre cutter (Telephone Pliers) | 37 |
| Snipe Nose Side Cutting Pliers (Radio Pliers) | 38 |
| Snipe Nose Side Cutting Pliers (Stork Beak Pliers) | 39 |



Combination Pliers DIN ISO 5746

- > with gripping zones for flat and round material, suitable for versatile use
- > with cutting edges for soft and hard wire
- > long cutting edges for thicker cables
- > cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, multi stage oil-hardened





03







03 07 200 A1000V ▲ ▲

| Article No. | EAN 4003773- | | | Pliers | Head | Handles | Ømm | Ømm | Ø mm | mm ² | 5 |
|-------------|-----------------|---------|----------|---|----------|--|------|------|------|-----------------|-----|
| | | mm | | Filets | пеац | ndifules | | | | | g |
| 03 01 140 | 015192 | 140 | _ | | | | 2.8 | 1.8 | 9.0 | 10 | 112 |
| 03 01 160 | 013235 | 160 | | | | | 3.1 | 2.0 | 10.0 | 16 | 187 |
| 03 01 180 | 013242 | 180 | | black atramentized | polished | plastic coated | 3.4 | 2.2 | 12.0 | 16 | 216 |
| 03 01 200 | 013259 | 200 | | | | | 3.8 | 2.5 | 13.0 | 16 | 276 |
| 03 01 250 | 015222 | 250 | - | | | | 3.8 | 2.5 | 15.0 | 25 | 489 |
| 03 02 160 | 023203 | 160 | | Device a stramentized polished with multi-component grips | | 3.1 | 2.0 | 10.0 | 16 | 223 | |
| 03 02 180 | 023197 | 180 | | | polished | with multi-component grips | 3.4 | 2.2 | 12.0 | 16 | 254 |
| 03 02 200 | 034940 | 200 | | | | | 3.8 | 2.5 | 13.0 | 16 | 322 |
| 03 05 140 | 039730 | 140 | | | | with multi-component grips | 2.8 | 1.8 | 9.0 | 10 | 139 |
| 03 05 160 | 039518 | 160 | | | | | 3.1 | 2.0 | 10.0 | 16 | 222 |
| 03 05 180 | 034933 | 180 | | chrome plated | | | 3.4 | 2.2 | 12.0 | 16 | 254 |
| 03 05 200 | 041146 | 200 | | | | | 3.8 | 2.5 | 13.0 | 16 | 324 |
| 03 06 160 | 021902 | 160 | <u> </u> | | | | 3.1 | 2.0 | 10.0 | 16 | 228 |
| 03 06 180 | 021926 | 180 | <u>r</u> | chrome plated | | insulate with multi-component grips, VDE-tested | 3.4 | 2.2 | 12.0 | 16 | 264 |
| 03 06 200 | 033776 | 200 | | | | VDE lested | 3.8 | 2.5 | 13.0 | 16 | 326 |
| 03 07 160 | 015307 | 160 | | | | | 3.1 | 2.0 | 10.0 | 16 | 254 |
| 03 07 180 | 015314 | 180 | A 1000 V | chromo plotod | | with dipped insulation, | 3.4 | 2.2 | 12.0 | 16 | 285 |
| 03 07 200 | 015321 | 200 | | chrome plated | | VDE-tested | 3.8 | 2.5 | 13.0 | 16 | 339 |
| 03 07 250 | 015345 | 250 | | | 3.8 | 2.5 | 15.0 | 25 | 597 | | |

High Leverage Combination Pliers DIN ISO 5746

02

02 01 180

02 02 180

III 💌

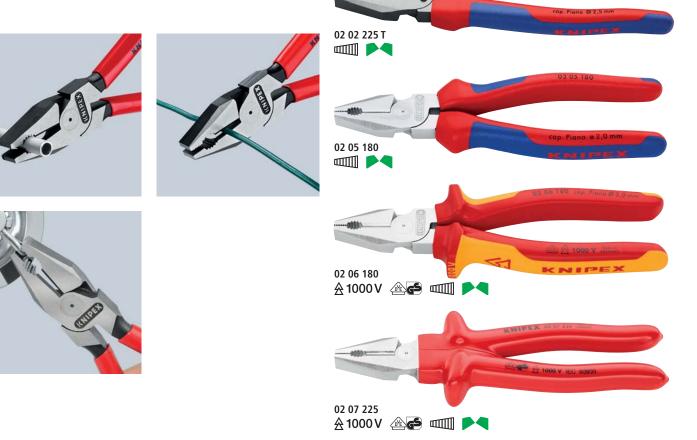
35 % less effort required than with conventional combination pliers

With cutting edges (hardness approx. 63 HRC) for heavy duty

- > easier work due to optimised leverage
- > easier cutting, powerful gripping, bending and pulling
- > long cutting edges for thicker cables
- > with gripping zones for flat and round material, suitable for versatile use
- > High-grade special tool steel, forged, multi stage oil-hardened

02 02 225 T*

pliers with tether attachment point for mounting a fall protection



| | | | | | | Cutting capacities | | | | | |
|-------------|-----------------|-------------------|---------------------------|--------------------|----------|---|------|------|------|-----------------|--------|
| Article No. | EAN 4003773- | ∢- ► mm | | Pliers | Head | Handles | Ø mm | Ø mm | Ø mm | mm ² | ۲ d |
| 02 01 180 | 033134 | 180 | | | | | 2.5 | 2.0 | 11.5 | 16 | 202 |
| 02 01 200 | 039679 | 200 | | black atramentized | polished | plastic coated | 2.8 | 2.2 | 13.0 | 25 | 298 |
| 02 01 225 | 013198 | 225 | | | | | 3.0 | 2.5 | 14.0 | 25 | 358 |
| 02 02 180 | 034896 | 180 | | | | | 2.5 | 2.0 | 11.5 | 16 | 240 |
| 02 02 200 | 034902 | 200 | | | polished | with multi-component grips | 2.8 | 2.2 | 13.0 | 25 | 342 |
| 02 02 225 | 043379 | 225 | | black atramentized | | | 3.0 | 2.5 | 14.0 | 25 | 409 |
| 02 02 225 T | 079934 | 225 | | | | with multi-component grips and integrated tether attachment point | 3.0 | 2.5 | 14.0 | 25 | 413 |
| 02 05 180 | 043072 | 180 | | | | with multi-component grips | 2.5 | 2.0 | 11.5 | 16 | 238 |
| 02 05 200 | 043089 | 200 | | chrome plated | | | 2.8 | 2.2 | 13.0 | 25 | 342 |
| 02 05 225 | 010005 | 225 | | | | | 3.0 | 2.5 | 14.0 | 25 | 400 |
| 02 06 180 | 010012 | 180 | | | | | 2.5 | 2.0 | 11.5 | 16 | 247 |
| 02 06 200 | 010029 | 200 | ≜ 1000 V @ € ■ ■ ■ ■ ■ | chrome plated | | insulate with multi-component grips, VDE-tested | 2.8 | 2.2 | 13.0 | 25 | 343 |
| 02 06 225 | 010036 | 225 | | | | | 3.0 | 2.5 | 14.0 | 25 | 401 |
| 02 07 200 | 022299 | 200 | £ 1000 V ๔๔ | chromo platod | | with dipped insulation, VDE-tested | 2.8 | 2.2 | 13.0 | 25 | 380 |
| 02 07 225 | 022305 | 225 | | chrome plated | | with dipped insulation, VDE-tested | 3.0 | 2.5 | 14.0 | 25 | 486 |

* Other tools with tethering can be found from page 254 ff



Needle-Nose Combination Pliers DIN ISO 5746

08

Small High Leverage Combination Pliers with pointed jaw. For all common installation and repair work.

Handy use when working in confined areas thanks 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

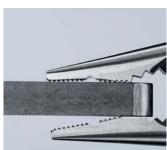
> the reliable and diverse combination pliers when out and about

- > easy cutting thanks to the high leverage joint
- > with 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*

pliers with tether attachment point for mounting a fall protection





Firm grip also on flat material due to three-point rest



Easy cutting thanks to the high leverage joint



Tips remain dimensionally stable also in case of major torsional forces









| | | | | | | | Cutting capacities | | | | |
|-------------|-----------------|------------------|-------------|--------------------|----------|---|--------------------|------|------|-----------------|------------------|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Ø mm | Ø mm | Ø mm | mm ² | ۲ <mark>۵</mark> |
| 08 21 145 | 078951 | 145 | | black atramentized | polished | plastic coated | 3.0 | 2.0 | 8.0 | 16 | 116 |
| 08 22 145 | 078968 | 145 | | black atramentized | polished | with multi-component grips | 3.0 | 2.0 | 8.0 | 16 | 148 |
| 08 22 145 T | 080640 | 145 | | black atramentized | polished | with multi-component grips and integrated tether attachment point | 3.0 | 2.0 | 8.0 | 16 | 152 |
| 08 25 145 | 078975 | 145 | | chrome plated | | with multi-component grips | 3.0 | 2.0 | 8.0 | 16 | 148 |
| 08 26 145 | 079361 | 145 | ≜ 1000 V @@ | chrome plated | | insulate with multi-component grips, VDE-tested | 3.0 | 2.0 | 8.0 | 16 | 154 |

Combination Pliers Chrome Vanadium DIN ISO 5746 IEC 60900 DIN EN 60900 01 > for heaviest duty > with gripping zones for flat and round material, suitable for versatile use > with cutting edges for soft, hard and piano wire

01 06 190

£1000V @ € 💷

- > long cutting edges for thicker cables
- > cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- > particularly wear resistant gripping jaws; hardness of the gripping jaws approx. 53 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

| | | | | | | | | | Cutting capacities | | | | | | |
|-------------|----------|-------------|--------------|---------------|--------------------------------------|-----|-----|------|--------------------|-----|--|--|--|--|--|
| | EAN | ∢ —▶ | | | | | | | • | 5 | | | | | |
| Article No. | 4003773- | mm | | Pliers | Handles | Ømm | Ømm | Ømm | mm ² | g | | | | | |
| 01 06 160 | 040729 | 160 | £ 1000 V @ 🚭 | chromo plated | inculated with multi-component gring | 2.0 | 1.5 | 10.0 | 16 | 201 | | | | | |
| 01 06 190 | 040415 | 190 | | chiome plated | nsulated with multi-component grips | 2.5 | 2.0 | 13.0 | 25 | 320 | | | | | |

08

Mini Combination Pliers

> compact combination pliers for professionals and hobbyists

- > with gripping zones for flat and round material,
- suitable for versatile use
- > with cutting edges for soft and hard wire
- > cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
- > Vanadium steel, forged, multi stage oil-hardened



| | | | | | | Cutting capacities | | | |
|-------------|----------|-------------|---------------|----------------------------|-----|--------------------|-----|-----------------|----|
| | EAN | ∢ —▶ | | | | | • | | 52 |
| Article No. | 4003773- | mm | Pliers | Handles | Ømm | Ømm | Ømm | mm ² | g |
| 08 05 110 | 034957 | 110 | chrome plated | with multi-component grips | 2.5 | 1.6 | 9.0 | 10 | 85 |



Lineman's Pliers DIN ISO 5746 ASME B107.20

American style

High transmission ratio for easy cutting

Requires 50 % less effort compared with conventional combination pliers due to an optimised transmission ratio

09

09 01 240

09 02 240

09 02 240 T

XX 🕨

09 11 240

09 12 240 T

XX 💌

- > solid construction for heaviest strain; universally applicable
- > ergonomically optimised handle shape for firm contact to the hand and fatigue reducing operation
- > particularly effective cross-hatched knurled gripping zone in the jaws – for strong gripping and pulling
- > additional gripping zone below the joint for powerful leverage and pressing performance
- > with cutting edges for soft and hard wire
- cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- > Vanadium steel, forged, multi stage oil-hardened

09 11 240 / 09 12 240 / 09 12 240 T*

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

09 02 240 T / 09 12 240 T*

pliers with tether attachment point for mounting a fall protection



Gripping zone below the joint for powerful leverage



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



Long cutting edges for cutting flat cables



09 11/12 240: universal mandrel crimping area below the joint



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

| | | | | | | Cutting | capacities | |
|-------------|-----------------|--------|--------------------|----------|---|---------|------------|------------------|
| | EAN 4003773- | 73- mm | Pliers | Head | Handles | Ø mm | Ø mm | ۲ <mark>۵</mark> |
| 09 01 240 | 064992 | 240 | black atramentized | polished | with non-slip plastic coating | 4.6 | 3.0 | 435 |
| 09 02 240 | 065005 | 240 | | | with multi-component grips | 4.6 | 3.0 | 470 |
| 09 02 240 T | 079941 | 240 | black atramentized | polished | with multi-component grips and integrated tether attachment point | 4.6 | 3.0 | 474 |
| 09 11 240 | 071952 | 240 | black atramentized | polished | with non-slip plastic coating | 4.6 | 3.0 | 435 |
| 09 12 240 | 071969 | 240 | | | with multi-component grips | 4.6 | 3.0 | 470 |
| 09 12 240 T | 079958 | 240 | black atramentized | polished | with multi-component grips and integrated tether attachment point | 4.6 | 3.0 | 474 |

* Other tools with tethering can be found from page 254 ff

Pliers for Electrical Installation

The all-rounder for professionals

Multifunctional pliers for the electrical installation; to grip flat and round material, for bending, deburring, cutting cable, stripping and crimping end sleeves (ferrules) 6 functions in one pair of pliers

> smooth surfaces near the tips grip single cores without damaging them; serrated gripping surfaces and pipe grip for gripping flat and round material

13

- > clear-cut outside edge on the jaw for working on flush-mounted junction boxes and deburring feed-through holes
- > stripping holes for conductors of ~0.75 $1.5~mm^2$ and $2.5~mm^2$ crimp die for wire-end ferrules 0.5 $2.5~mm^2$
- > cable shears with (induction-hardened) precision cutting edges for copper and aluminium cables up to 5 x 2.5 mm² / dia. 15 mm
- > slim dimensions for easy access
- > bolted joint: precise, zero backlash operation of pliers
- > High-grade special tool steel, forged, multi stage oil-hardened

13 82 200 T*

pliers with tether attachment point for mounting a fall protection

















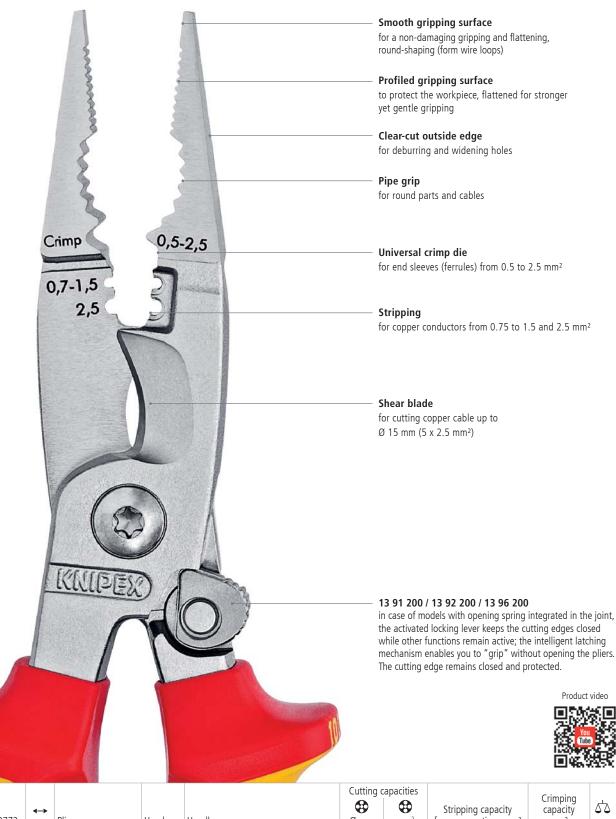












5 EAN Article No. 4003773-Pliers Head Handles Ømm for cross-sections mm² mm² mm² mm g 13 81 200 075240 200 black atramentized polished plastic coated 15 50 0.75 - 1.5 / 2.5 0.5 - 2.5 265 13 82 200 075080 with multi-component grips 15 50 0.75 - 1.5 / 2.5 0.5 - 2.5 280 200 black atramentized polished with multi-component grips and 13 82 200 T 079972 200 black atramentized polished 15 50 0.75 - 1.5 / 2.5 0.5 - 2.5 284 integrated tether attachment point insulate with multi-component grips, 200 280 13 86 200 075097 chrome plated 15 50 0.75 - 1.5 / 2.5 0.5 - 2.5 VDE-tested 13 91 200 075257 50 0.5 - 2.5 200 black atramentized plastic coated 15 0.75 - 1.5 / 2.5 265 polished 13 92 200 075103 polished 50 0.75 - 1.5 / 2.5 0.5 - 2.5 200 black atramentized with multi-component grips 15 280 insulate with multi-component grips, 13 96 200 075110 200 chrome plated 15 50 0.75 - 1.5 / 2.5 0.5 - 2.5 280 VDE-tested

MULTIFUNCTIONAL PLIERS

Electricians' Pliers

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

13 05 160 T*

pliers with tether attachment point for mounting a fall protection



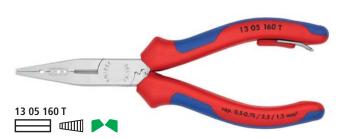














Gripping



Stripping





Crimping 0.5 to 2.5 mm²

| | | | | | | Cutting o | apacities | | |
|-------------|-----------------|------------------|--------------------|----------|---|-----------|-----------|---|-----------------------|
| Article No. | EAN 4003773- | ∢ ► mm | Pliers | Head | Handles | Ø mm | Ø mm | Stripping capacities mm ² | ۵ ^۲ ۵ g |
| 13 01 160 | 034971 | 160 | black atramentized | polished | plastic coated | 2.5 | 1.6 | 0.5 - 0.75 / 1.5 / 2.5 | 112 |
| 13 02 160 | 010470 | 160 | black atramentized | polished | with multi-component grips | 2.5 | 1.6 | 0.5 - 0.75 / 1.5 / 2.5 | 139 |
| 13 05 160 | 071426 | 160 | chrome plated | | with multi-component grips | 2.5 | 1.6 | 0.5 - 0.75 / 1.5 / 2.5 | 139 |
| 13 05 160 T | 079965 | 160 | chrome plated | | with multi-component grips and integrated tether attachment point | 2.5 | 1.6 | 0.5 - 0.75 / 1.5 / 2.5 | 143 |

Round Nose Pliers with cutting edge
(Jewellers' Pliers)19DIN ISO 574319

- > ideal for cutting and bending activities, also in electronics
- > for bending wire loops
- > precision-ground round jaws with fine, pointed tips
- > cutting edges additionally induction hardened, cutting edgehardness approx. 60 HRC
- > Vanadium steel, forged, multi stage oil-hardened



| | | | | | | | Cutting o | apacities | | | | | | |
|-------------|----------|----------|---|--------------------|----------|----------------|-----------|-----------|-----|------|-----|------|-----|----|
| | EAN | - | | | | | | | D1 | L3 | T1 | W3 | W4 | 52 |
| Article No. | 4003773- | mm | | Pliers | Head | Handles | Ømm | Ømm | mm | mm | mm | mm | mm | g |
| 19 01 130 | 034995 | 130 | 8 | black atramentized | polished | plastic coated | 2.2 | 1.6 | 1.0 | 32.0 | 8.0 | 13.5 | 2.0 | 73 |
| 19 03 130 | 014348 | 130 | 8 | chrome plated | | plastic coated | 2.2 | 1.6 | 1.0 | 32.0 | 8.0 | 13.5 | 2.0 | 72 |

23

W4

⊕[†] w₃

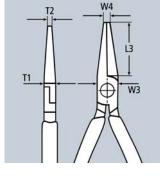
Ľ3

D1

T1

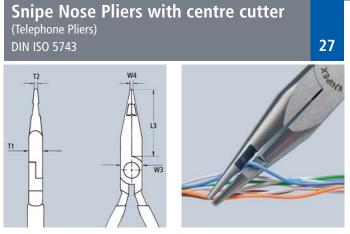
Flat Nose Pliers with cutting edges (Precision Mechanics Pliers) DIN ISO 5745

- > suitable for gripping and cutting work in fine mechanics
- > flat, long jaws, tapering
- > cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened





| | | | | | Cutting capacities Dimensions | | ns | | | | | |
|-------------|----------|-------------|----------|----------------|-------------------------------|-----|-----|------|------|-----|-----|----|
| | EAN | ∢ —▶ | | | \bullet | | T1 | L3 | W3 | W4 | T2 | 52 |
| Article No. | 4003773- | mm | Head | Handles | Ømm | Ømm | mm | mm | mm | mm | mm | g |
| 23 01 140 | 041290 | 140 | polished | plastic coated | 2.5 | 1.6 | 7.0 | 35.0 | 12.5 | 3.0 | 4.5 | 75 |



- > for gripping and separating of single wires in harnesses
- > with centre cutter for soft wire
- > half-round jaws
- > knurled gripping surfaces
- > Chrome vanadium electric steel, forged, oil-hardened



| | | | | | | | Dii | mensio | ns | | |
|-------------|----------|-------------|--|----------|----------------|------|------|--------|-----|-----|-----|
| | EAN | ∢ —▶ | | | | L3 | W3 | T1 | W4 | T2 | 52 |
| Article No. | 4003773- | mm | | Head | Handles | mm | mm | mm | mm | mm | g |
| 27 01 160 | 016106 | 160 | $\Theta \blacksquare \blacksquare \blacksquare \blacksquare$ | polished | plastic coated | 47.0 | 16.5 | 9.5 | 3.0 | 2.0 | 120 |

MULTIFUNCTIONAL PLIERS

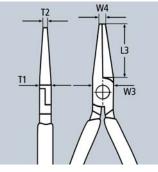


- > suitable for finer gripping and cutting work
- > pointed, half-round jaws
- > knurled gripping surfaces
- > with cutting edges for soft, medium-hard and hard wire
- > cutting edges additionally induction hardened, cutting edge hardness approx. 61 HRC
- > Vanadium steel, forged, multi stage oil-hardened





25

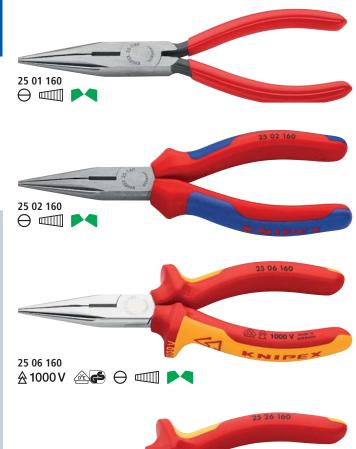




T2,

L4

T1



| 3 | (1000 V mthin |
|-----------|---------------|
| 25 26 160 | KNIPEX |

≙1000 V @ € ⊻40° ⊖ □□□ ►

| | | | | | | | Cutting o | apacities | | | Dimer | nsions | | | |
|-------------|-----------------|------------------|------------------------------------|-------------------------|-----------|---|-----------|-----------|----------|----------|----------|----------|----------|----------|---------|
| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Head | Handles | Ø mm | Ø mm | L3 mm | L4 mm | W3 mm | T1 mm | W4 mm | T2 mm | ۲۵ g |
| 25 01 125 | 015932 | 125 | | | | | 2.2 | 1.6 | 27.0 | | 13.0 | 7.0 | 2.5 | 1.8 | 73 |
| 25 01 140 | 013082 | 140 | Θ | black atra- mentized | polished | plastic coated | 2.5 | 1.6 | 42.0 | | 15.0 | 8.0 | 2.5 | 2.0 | 89 |
| 25 01 160 | 013099 | 160 | | mentized | | | 2.5 | 1.6 | 50.0 | | 16.5 | 9.0 | 3.0 | 2.5 | 113 |
| 25 02 140 | 023159 | 140 | $\Theta \blacksquare \blacksquare$ | black atra- | polished | with | 2.5 | 1.6 | 42.0 | | 15.0 | 8.0 | 2.5 | 2.0 | 109 |
| 25 02 160 | 023166 | 160 | | mentized | polisileu | multi-component grips | 2.5 | 1.6 | 50.0 | | 16.5 | 9.0 | 3.0 | 2.5 | 144 |
| 25 03 125 | 043065 | 125 | Θ | chrome plated | | plastic coated | 2.2 | 1.6 | 27.0 | | 13.0 | 7.0 | 2.5 | 1.8 | 72 |
| 25 05 140 | 035015 | 140 | $\Theta \blacksquare \blacksquare$ | chrome | | with | 2.5 | 1.6 | 42.0 | | 15.0 | 8.0 | 2.5 | 2.0 | 111 |
| 25 05 160 | 022817 | 160 | | plated | | multi-component grips | 2.5 | 1.6 | 50.0 | | 16.5 | 9.0 | 3.0 | 2.5 | 144 |
| 25 06 160 | 033806 | 160 | 1000 V இ€ ⊖ ™₩ ► | chrome plated | | insulated with multi-com- ponent grips, VDE-tested | 2.5 | 1.6 | 50.0 | | 16.5 | 9.0 | 3.0 | 2.5 | 146 |
| 25 21 160 | 015994 | 160 | ∡40° ⊖ আ∭ ►◀ | black atra- mentized | polished | plastic coated | 2.5 | 1.6 | 50.0 | 23.0 | 16.5 | 9.0 | 3.0 | 2.5 | 112 |
| 25 25 160 | 016007 | 160 | ∡40° ⊖ আ ► | chrome plated | | VDE-tested | 2.5 | 1.6 | 50.0 | 23.0 | 16.5 | 9.0 | 3.0 | 2.5 | 143 |
| 25 26 160 | 052111 | 160 | ≵ 1000 V @@ ∡40° ⊖ আ∭ ►◀ | chrome plated | | insulated with multi-com- ponent grips, VDE-tested | 2.5 | 1.6 | 50.0 | 23.0 | 16.5 | 9.0 | 3.0 | 2.5 | 144 |

MULTIFUNCTIONAL PLIERS

Snipe Nose Side Cutting Pliers (Stork Beak Pliers) DIN ISO 5745

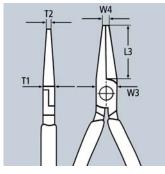
Elastic tips: dimensionally stable even when twisted

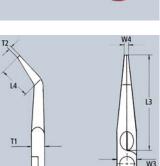
- > distortion-tolerant, elastic precision tips
- > half-round, long, pointed jaws
- > with cutting edges (hardness approx. 61 HRC) for soft, medium-hard and hard wire
- > Vanadium steel, forged, multi stage oil-hardened

26 12 200 T / 26 15 200 T / 26 22 200 T / 26 25 200 T*

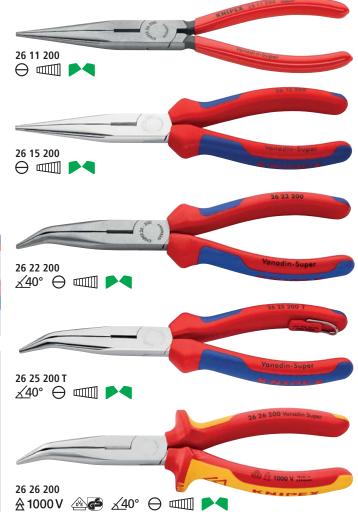
pliers with tether attachment point for mounting a fall protection







26



| | | | | | | | Cutting o | apacities | | | Dimer | nsions | 5 | | |
|-------------|-----------------|-----------------|---|-------------------------|----------|---|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Head | Handles | Ø mm | Ø mm | L3 mm | L4 mm | T1 mm | W3 mm | W4 mm | T2 mm | ۵'ک g |
| 26 11 200 | 022824 | 200 | Θ | black atra- mentized | polished | plastic coated | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 170 |
| 26 12 200 | 023142 | 200 | Θ | black atra- mentized | polished | with multi-component grips | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 201 |
| 26 12 200 T | 079989 | 200 | Θ | black atra- mentized | polished | with multi-component grips and integrated tether attachment point | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 205 |
| 26 13 200 | 040590 | 200 | Θ | chrome plated | | plastic coated | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 169 |
| 26 15 200 | 035022 | 200 | Θ | chrome plated | | with multi-component grips | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 198 |
| 26 15 200 T | 035022 | 200 | Θ | chrome plated | | with multi-component grips and integrated tether attachment point | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 202 |
| 26 16 200 | 022831 | 200 | ≙ 1000 V @ ⊖ ==== | chrome plated | | insulated with multi-component grips, VDE-tested | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 206 |
| 26 17 200 | 016069 | 200 | ≙ 1000 V ≧ ⊖ আ∭ ► 1 | chrome plated | | with dipped insulation, VDE-tested | 3.2 | 2.2 | 73.0 | | 9.5 | 18.0 | 3.0 | 2.5 | 212 |
| 26 21 200 | 022848 | 200 | <u>∡40°</u> ⊖ ■■■ | black atra- mentized | polished | plastic coated | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 171 |
| 26 22 200 | 023135 | 200 | <u>∡40°</u> ⊖ আ∭ ▶◀ | black atra- mentized | polished | with multi-component grips | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 197 |
| 26 22 200 T | 080008 | 200 | <u>∡40°</u> ⊖ ∭ ► | black atra- mentized | polished | with multi-component grips and integrated tether attachment point | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 201 |
| 26 25 200 | 035039 | 200 | <u>∡40°</u> ⊖ আ∭ ▶ | chrome plated | | with multi-component grips | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 199 |
| 26 25 200 T | 080015 | 200 | <u>∡40°</u> ⊖ আ∭ ▶◀ | chrome plated | | with multi-component grips and integrated tether attachment point | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 203 |
| 26 26 200 | 022855 | 200 | ≙ 1000 V ≙ ∡40° ⊖ আ∭ ▶ ◀ | chrome plated | | insulated with multi-component grips, VDE-tested | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 204 |
| 26 27 200 | 016090 | 200 | ≜ 1000 V @€ ∡40° ⊖ আ≣ ►◀ | chrome plated | | with dipped insulation, VDE-tested | 3.2 | 2.2 | 73.0 | 23.0 | 9.5 | 18.0 | 3.0 | 2.5 | 220 |

* Other tools with tethering can be found from page 254 ff

Wire Strippers and Dismantling Tools -D.D.3.

| Insulation Stripper | 42 |
|---|----|
| Electronics Wire Stripping Shears | 42 |
| Electronics Wire Stripper | 43 |
| Diagonal Insulation Strippers | 43 |
| Precision Insulation Strippers | 44 |
| Insulation Strippers with adapted blades | 45 |
| MultiStrip 10 Automatic Insulation Stripper | 46 |
| Self-Adjusting Insulation Strippers | 47 |
| Automatic Insulation Stripper | 47 |
| Automatic Insulation Stripper for flat cable | 48 |
| Mini Stripping Tool | 48 |
| Wire Stripper for fibre optics | 49 |
| Stripping Tool for fibre optics | 49 |
| Stripping Tweezers for Coated Wire | 49 |
| Dismantling Pliers | 50 |
| Insulation Strippers | 51 |
| Dismantling Tools | 51 |
| Stripping Tool for coax cables | 53 |
| Dismantling Tool for flat and round cables | 54 |
| Dismantling Tool for data cables | 54 |
| Universal Dismantling Tools | 55 |
| ErgoStrip [®] Universal Dismantling Tool | 56 |
| | |



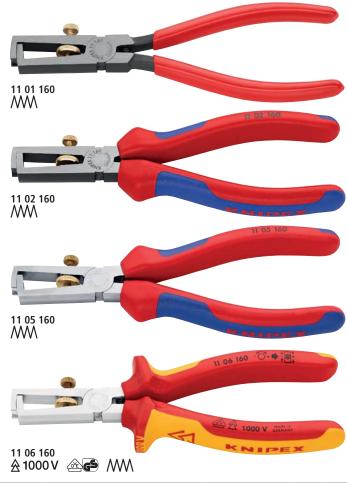
Insulation Strippers

- > for single, multiple and fine stranded conductors with plastic or rubber insulation max. 5.0 mm dia. or resp. 10 mm² cable cross section
- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > Special tool steel, forged, oil-hardened





11



| | EAN | - | | | | | Stripping ca | pacities | | 47 |
|-------------|----------|----------|------------------|--------------------|----------|---|--------------|-----------------|-----|-----|
| Article No. | 4003773- | mm | | Pliers | Head | Handles | Ømm | mm ² | AWG | g |
| 11 01 160 | 013556 | 160 | MM | black atramentized | polished | plastic coated | 5.0 | 10 | 7 | 131 |
| 11 02 160 | 023180 | 160 | MM | black atramentized | polished | with multi-component grips | 5.0 | 10 | 7 | 165 |
| 11 05 160 | 039570 | 160 | MM | chrome plated | | with multi-component grips | 5.0 | 10 | 7 | 157 |
| 11 06 160 | 021933 | 160 | £ 1000 V @€ \\\\ | chrome plated | | insulated with multi-component grips, VDE-tested | 5.0 | 10 | 7 | 166 |
| 11 07 160 | 015499 | 160 | <u> </u> | chrome plated | | with dipped insulation, VDE-tested | 5.0 | 10 | 7 | 180 |
| 11 12 160 | 034964 | 160 | | black atramentized | polished | with multi-component grips | 5.0 | 10 | 7 | 156 |
| 11 17 160 | 015505 | 160 | £ 1000 V 🖄 🚰 | chrome plated | | with dipped insulation, VDE-tested | 5.0 | 10 | 7 | 181 |

Electronics Wire Stripping Shears

11 8





- > for cutting and stripping single, multiple and fine-stranded conductors with up to 0.75 mm² cable cross-section
- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > with opening spring
- > Special tool steel, oil-hardened



| | EAN | ∢ —► | | | | Stripping capacities | 52 |
|-------------|----------|-------------|---------|----------|----------------------------|----------------------|----|
| Article No. | 4003773- | mm | | Head | Handles | mm ² | g |
| 11 82 130 | 071648 | 130 | X\$X MM | polished | with multi-component grips | 0.01 - 0.75 | 75 |

Electronics Wire Stripper

- > for single, multiple and fine stranded cables having a diameter from 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
- > with opening spring
- > the mirror polish together with a fine film of oil offer effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > Special tool steel, forged, oil-hardened



| Article No. | EAN 4003773- | ← ► mm | | Head | Handles | Stripping capacities Ø mm | ۵'۵ g |
|-------------|-----------------|------------------|---------|-----------------|----------------------------|------------------------------|----------|
| 11 92 140 | 016908 | 140 | x\$8 MM | mirror polished | with multi-component grips | 0.1 - 0.8 | 99 |

11 9

Diagonal Insulation Strippers

With long cutting edges

High cutting capacity due to high leverage joint

- > precision stripping holes for single conductors of 1.5 and 2.5 \mbox{mm}^2
- > convenient cutting of NYM cables up to 5 x 2.5 \mbox{mm}^2
- > long tips for ultra fine cutting work also in confined areas induction hardened precision blades,
- > cutting edge hardness approx. 60 HRC
- > Vanadium steel, forged, multi stage oil-hardened









elongated cutting edge





improved transmission ratio

| | | | | | | | | | Cutting o | apacities | Τ |
|-------------|-----------------|------------------|------------------------|-----------------------|----------|--|---------------------------------------|---------|-----------|-----------|------------------|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Cutting capacities mm ² | AWG | Ø mm | Ø mm | ۵ <mark>۵</mark> |
| 14 22 160 | 034988 | 160 | P | black atramentized | polished | with multi-component grips | 1.5 + 2.5 | 15 + 13 | 2.5 | 1.5 | 206 |
| 14 25 160 | 028697 | 160 | / | chrome plated | | with multi-component grips | 1.5 + 2.5 | 15 + 13 | 2.5 | 1.5 | 206 |
| 14 26 160 | 040279 | 160 | ≙ 1000 V ﷺ ► | chrome plated | | insulated with multi-component grips, VDE-tested | 1.5 + 2.5 | 15 + 13 | 2.5 | 1.5 | 216 |

Precision Insulation Strippers with adapted blades

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



12 12 02 with cable guide and length stop



12

12

Precise cutting of the insulation to a complete extent





12 12 02

with additional cable guide for exact positioning of the cable in the stripping area of the blade $% \left({{{\rm{s}}_{\rm{s}}}} \right)$

12 12 11 / 12 12 12 for solar cables

specially adapted to multi-layered and RADOX $^{\odot}$ insulations; with additional cable support for a better centring of multi-layer insulated conductors in the stripping profiles

12 12 13 / 12 12 14

specially for cables according to US specifications (AWG)



Positive stripping thanks to precise shape of the blades

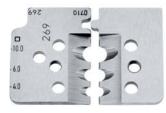
Maximum cable cross-section (in mm²) per profile:



12 19 02



SOZ



12 19 12



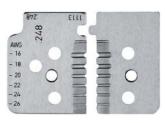
12 19 13

-12

-10



12 19 10



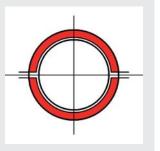
12 19 14



12 19 11

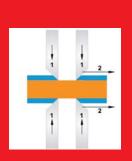
Principle of operation with adapted blades

Properly 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 multilayer insulations.



Precisely and reliably

Two pairs of blades (1) cut the insulation to a complete extent. Then the blade pairs move apart, and thus the insulation is removed form-fit (2). The pliers open automatically after the stripping procedure.

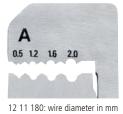


| Article No. | EAN 4003773- | ← ► mm | | Pliers | Handles | Stripping capacities mm ² | AWG | ۵'ک g |
|-------------|-----------------|------------------|---------------|---------------|----------------------------|--------------------------------------|-----------------------------|----------|
| 12 12 02 | 048077 | 195 | | | | 0.03-0.09/0.14/0.38/0.57/1/1.5/2.08 | | 447 |
| 12 12 06 | 049005 | 195 | MM | burnished | with multi-component grips | 0.14-0.25 / 0.75 / 1.5 / 2.5 / 4 / 6 | | 445 |
| 12 12 10 | 049012 | 195 | | | | 2.5 / 4 / 6 / 10 | | 445 |
| 12 12 11 | 062998 | 195 | | burnished | with multi-component grips | 1.5 / 2.5 / 4 / 6 | | 449 |
| 12 12 12 | 073758 | 195 | MM | V Duffished V | with multi-component grips | 4 / 6 / 10 | | 450 |
| 12 12 13 | 062998 | 195 | | humiched | with multi component aving | | 10 / 12 / 14 / 16 / 18 / 20 | 449 |
| 12 12 14 | 062998 | 195 | MM | burnished | with multi-component grips | | 16 / 18 / 20 / 22 / 24 / 26 | 450 |
| 12 19 02 | 049036 | 1 Set o | of spare | blades for 1 | 2 12 02 | | | |
| 12 19 06 | 049043 | 1 Set o | , of spare | blades for 1 | 2 12 06 | | | |
| 12 19 10 | 049050 | 1 Set o | , of spare | blades for 1 | 2 12 10 | | | |
| 12 19 11 | 063001 | 1 Set o | of spare | blades for 1 | 2 12 11 | | | |
| 12 19 12 | 073765 | 1 Set o | of spare | blades for 1 | 2 12 12 | | | |
| 12 19 13 | 077558 | 1 Set o | of spare | blades for 1 | 2 12 13 | | | |
| 12 19 14 | 077565 | 1 Set o | of spare | blades for 1 | 2 12 14 | | | |

12

Insulation Strippers with adapted blades





mm² 0.5 0.75 1.0 1.5 2.5 4.0 6.0

12 21 180: wire cross-sections in mm²

> with replaceable blades for 4 or 6 different conductor cross-sections

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



| | EAN | - | | | | Stripping | capacities | | 52 | | |
|-------------|----------|----------|------------------------------------|----------------------|-----------------------|-----------|---------------------------------------|-------------------------------------|-----|--|--|
| Article No. | 4003773- | mm | | Pliers | Handles | Ømm | mm ² | AWG | g | | |
| 12 11 180 | 000792 | 180 | | | 0.5 / 1.2 / 1.6 / 2.0 | | | | 368 | | |
| 12 21 180 | 000815 | 180 | MM | black lacquered | with plastic grips | | 0.5 - 0.75 / 1 / 1.5 / 2.5 / 4 / 6 | 20 - 19 / 17 / 15 / 13 / 11 / 10 | 366 | | |
| 12 19 180 | 022145 | 1 pair | of spare | blades for 12 11 180 |) | | | | | | |
| 12 29 180 | 022152 | | pair of spare blades for 12 11 180 | | | | | | | | |

KNIPEX MultiStrip 10 Automatic Insulation Stripper

12 42

12 42 195

MM (PATENTED)

Stripping without re-adjustment from 0.03 to 10 mm² Universal blade geometry – robust and more durable Ideal grip design with excellent haptics Recessed wire cutter

- > fully automatic adjustment to all single-, multi- and fine-stranded conductors with PVC insulation and a number of special insulation throughout the entire capacity range from 0.03 to 10 mm²
- > no manual fine adjustment necessary, no damage to the conductors
- > the clamping jaws made of steel hold the cable in a way that prevents slipping without damaging the remaining insulation
- > with recessed wire cutter for copper and aluminium conductors, multi-stranded up to 10 mm² and single-stranded up to 6 mm²
- > particularly smooth-running mechanics and very low weight
- > replaceable blades block and length stop
- > handle with soft-plastic zone for a steady grip
- > body: plastic, fibreglass-reinforced
- > blade: special tool steel, oil-hardened



cables up to 10 mm²



Steel clamping jaws avoid skidding of the cable

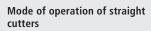


Precise stripping from 0.03 to 10 mm² without re-adjustment



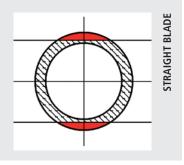
Patented mechanics

The incision depth of the stripping blade adjusts fully automatically to the diameter of the wire and accordingly also to the thickness of all standard insulating materials. There is no need for any manual adjustment which is still necessary when other conventional pliers with a wide wire-stripping range are used.



An incision is made in the red area only.

Not suitable for highly-flexible or armoured insulation materials or for multi-layered insulation.



MultiStrip _{re}



| Article No. | EAN 4003773- | ↔ mm | Stripping capacities mm ² | AWG | ۵'ک g |
|-------------|-----------------|----------------------------------|---|--------|----------|
| 12 42 195 | 054580 | 195 MW | 0.03 - 10 | 32 - 7 | 136 |
| 12 49 21 | 057581 | Spare blades block for 12 42 195 | | | |
| 12 49 23 | 057604 | Spare length stop for 12 42 195 | | | |

Self-Adjusting Insulation Strippers



12 40 200: Adjustable length stop

12 40 200

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

- > for single, multiple and fine stranded conductors with plastic or rubber insulation
- > adapts automatically to the respective cable cross-section; prevents damage to the conductor
- > cutting depth can be adjusted for different insulation materials
- > with wire cutter for copper and aluminium wires, multiple stranded up to 10 mm² and single stranded up to 6 mm²
- > smoothly operating mechanism
- > stripping blades and clamping jaws easily replaceable
- > low weight

12

12 40 200: Precise stripping prevents damage

to the conductor

- > body: plastic, fibreglass-reinforced
- > blade: special tool steel, oil-hardened



12 40 200 MM

| Article No. | EAN 4003773- | ∢ ► mm | | Stripping capacities mm² | AWG | Length stop mm | ۵'ک g | | | | | |
|-------------|-----------------|------------------|---|-----------------------------|--------|-------------------|----------|--|--|--|--|--|
| 12 40 200 | 026662 | 200 | MM | 0.03 - 10 | 32 - 7 | 3.0 - 18.0 | 202 | | | | | |
| 12 50 200 | 034407 | 200 | MM | 2.5 - 16 | 13 - 5 | | 200 | | | | | |
| 12 49 01 | 026679 | 1 pair | ir of spare blades for 12 40 200 | | | | | | | | | |
| 12 49 02 | 026686 | 1 pair | pair of spare clamping jaws for 12 40 200 | | | | | | | | | |
| 12 49 03 | 026693 | Spare I | ength stop for 12 40 20 | 0 | | | | | | | | |
| 12 49 04 | 053071 | Torsior | n spring for 12 40/50 200 |) | | | | | | | | |
| 12 49 05 | 053088 | Coil sp | ring in the head for 12 4 | 0/50 200 | | | | | | | | |
| 12 59 01 | 034414 | 1 pair | pair of spare blades for 12 50 200 | | | | | | | | | |
| 12 59 02 | 034421 | 1 pair | pair of spare clamping jaws for 12 50 200 | | | | | | | | | |

Automatic Insulation Stripper

12 62

- > compact standard tool at a favourable price for all current cable cross-sections and insulating materials
- > adapts automatically to the respective cable cross-section; prevents damage to the conductor
- > high operation comfort thanks to handy shape and low weight narrow head style for use in confined areas
- > with wire cutter for copper and aluminium wires up to 2.5 mm²
- > with adjustable length stop from 6.0 18.0 mm for cutting the same stripping lengths during repetitive work
- > body: plastic, fibreglass-reinforced
- > blades: special tool steel, oil-hardened, interchangeable

| Article No. 12 62 180 | EAN 4003773- 054573 | ←→ mm 180 | MM | Stripping capacities mm ² 0.2 - 6 | AWG 24 - 10 | ∆'∆ g 151 | | | | | |
|---------------------------------|---------------------------|---|----|--|----------------|-----------------|--|--|--|--|--|
| 12 69 21 12 69 23 | | | | | | | | | | | |



Automatic Insulation Stripper for flat cable



| > for PVC insulated flat cables up to a max. 12 mm wi | dth |
|---|-----|
| and 0.75 to 2.5 mm ² | |

- > adapts automatically to the various conductor heights; prevents damage to the conductor
- > long stripping lengths possible
- > blade replaceable
- > smoothly operating mechanism
- > low weight

12

64

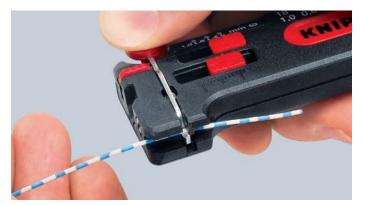
- > body: plastic, fibreglass-reinforced
- > blade: special tool steel, oil-hardened



| Article No. | EAN 4003773- | ∢ ► mm | | Stripping capacities mm ² | AWG | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|-----------------|---|---------|-----------------------|
| 12 64 180 | 073284 | 180 | | 0.75 - 2.5 | 19 - 13 | 125 |
| | | | | | | |
| 12 69 31 | 073932 | 1 pair o | of spare blades | for 12 64 180 | | |

Mini Stripping Tool





| Article No. | EAN 4003773- | ∢ →→ mm | | Stripping capacities Ø mm | AWG | ۵۵ g |
|--------------|-----------------|-------------------|----|------------------------------|---------|---------|
| 12 80 040 SB | 071655 | 100 | MW | 0.12 - 0.4 | 36 - 26 | 52 |
| 12 80 100 SB | 043119 | 100 | MM | 0.30 - 1.0 | 28 - 18 | 34 |

> precise stripping, stepwise adjustment to the conductor diameters with wire cutter

- > adjustable length stop from 4.0 15.0 mm
- > with locking device
- > housing: plastic, impact-proof

MM

12 80 040 SB

12 64 180

••••••••

12

for thin copper conductors dia. 0.12 to 0.4 \mbox{mm}

12 80 100 SB

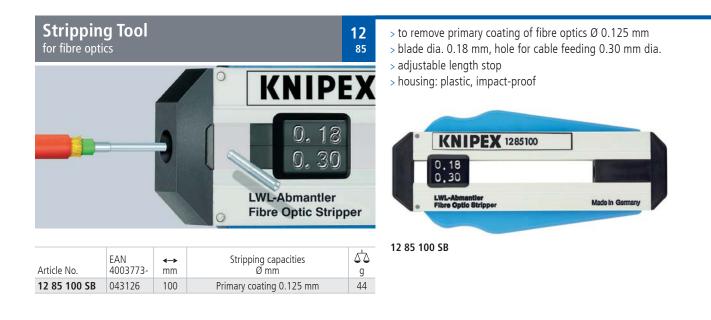
for thin copper conductors dia. 0.3 to 1.0 mm



12 80 100 SB



| Article No. | EAN 4003773- | ∢→ mm | Pliers | Handles | Stripping capacities Ø mm | ۵'۵ g |
|--------------|-----------------|-----------------|-----------|--------------------|---|----------|
| 12 82 130 SB | 050094 | 130 | burnished | with plastic grips | primary-coating: 0.125 mm / secondary-coating: 0.250 mm | 69 |



15

Stripping Tweezers for Coated Wire



9

- > for stripping off varnished insulation on copper wires
- > blades for other wire diameters available as spare parts
- > tweezers body: spring steel, oil-hardened
- > handle shells: plastic





| Article No. | EAN 4003773- | ∢ ► mm | Stripping capacities Ø mm | ے م |
|-------------|-----------------|------------------|--|--------|
| 15 11 120 | 015550 | 120 | 0.6 | 34 |
| 15 19 005 | 021551 | 1 pair o | f spare blades for 15 11 120, Ø 0.5 mm | |
| 15 19 006 | 021568 | 1 pair o | f spare blades for 15 11 120, Ø 0.6 mm | |
| 15 19 008 | 021575 | 1 pair o | f spare blades for 15 11 120, Ø 0.8 mm | |
| 15 19 010 | 021582 | 1 pair o | f spare blades for 15 11 120, Ø 1.0 mm | |

DISMANTLING TOOLS

Dismantling Pliers

Multifunctional – cutting, dismantling and stripping 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 deep mounted flush sockets thanks to slim head design and optimally angled cable sheath cutter

Strip cables easily and without damage thanks to circular cutting edge with depth limit

- > suitable for universal use: precision wire stripping holes for conductors from 1.5 and 2.5 mm²
- > with diagonal cutters for cutting and trimming conductors, wires, small screws and nails
- > all cutters additionally induction hardened to approx. 61 HRC for high wear resistance
- > 30% lighter than comparable pliers
- > Vanadium steel, forged, multi stage oil-hardened



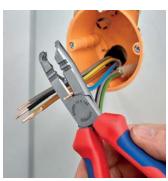




Stripping holes for conductors of 1.5 mm² and 2.5 mm²



Cutting cable up to 13 mm diameter

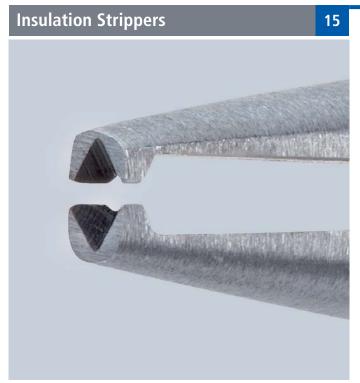


Cutting edges shortening of single wires



Dismantling deep down in a flush-mounted socket

| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Dismantling capacities Ø mm | | 0 Ø mm | Ø mm | ۲ <mark>۵</mark> |
|-------------|-----------------|------------------|------------------|-----------------------|----------|--|--------------------------------|-----------|-----------|------|------------------|
| 13 42 165 | 079675 | 165 | P1 | black atramentized | polished | with multi-component grips | 8 - 13 | 1.5 / 2.5 | 3.2 | 2.2 | 176 |
| 13 45 165 | 079699 | 165 | | chrome plated | | with multi-component grips | 8 - 13 | 1.5 / 2.5 | 3.2 | 2.2 | 176 |
| 13 46 165 | 079910 | 165 | 🎮 🏾 🕅 1000 V 🖄 🛃 | chrome plated | | insulated with multi- component grips, VDE-tested | 8 - 13 | 1.5 / 2.5 | 3.2 | 2.2 | 190 |



> for stripping thin cables

- > accurate boring to match diameter of wire, precise stripping prism; non-adjustable
- > with opening spring
- > Chrome vanadium electric steel, forged, oil-hardened



| Article No. | EAN 4003773- | ∢→ mm | | Head | Handles | Stripping capacities Ø mm | ۵۵ g |
|-------------|-----------------|-----------------|----|----------|----------------|------------------------------|---------|
| 15 51 160 | 044451 | 160 | MM | polished | plastic coated | 0,5 | 101 |
| 15 61 160 | 014843 | 160 | MM | polished | plastic coated | 0,6 | 102 |
| 15 81 160 | 015574 | 160 | MM | polished | plastic coated | 0,8 | 102 |





| Article No. | EAN 4003773- | ∢ ► mm | | Stripping capacities Ø mm | ۵۵ g | | | | |
|--------------|-----------------|------------------|---|------------------------------|---------|--|--|--|--|
| 16 20 16 SB | 060451 | 130 | MM | 4.0 - 16.0 | 95 | | | | |
| 16 20 28 SB | 060468 | 130 | MM | 8.0 - 28.0 | 95 | | | | |
| 16 20 165 SB | 043133 | 165 | MM | 8.0 - 28.0 | 85 | | | | |
| | | | | | | | | | |
| 16 29 165 | 043140 | | pare blade 6 20 16 SB / 16 20 28 SB / 16 20 165 SB | | | | | | |

- > 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-proof

16 20 165 SB

with knife and hook blade, protective cap included



16 20 16 SB



16 20 165 SB

DISMANTLING TOOLS

Dismantling Tool



Setting the tool for circular cutting



Longitudinal cut



Spiral cutting

- > 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

16

30

> housing: plastic, impact-proof



16 30 135 SB

| Article No. 16 30 135 SB | | | MM | Stripping capacities Ø mm 6.0 - 29.0 | ۲۵ g 120 | | | | | |
|-----------------------------|---|--|----|--|----------------|--|--|--|--|--|
| 16 39 135 | 033349 135 MM 6.0 - 29.0 120 027317 Spare blade for 16 30 135 SB | | | | | | | | | |

Dismantling Tool

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





16 40 150



Setting the tool for longitudinal cut



Longitudinal cut



Turning the tool for circumferential cut



Circular cut





Adjustable cutting depth

Stripping Tool for coax cables

16 60

- > for stripping coax 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
- by means of a hexagonal key (Allen key)
- > the blade spacing remains constant
- > housing: plastic, impact-proof



16 60 05 SB



3 stripping steps in one operation

Article No.

16 60 05 SB

Interior layers uncovered individually

RG 58, RG 59 + RG 62

73

16

60

Dismantling of Coax-cable in three steps



EAN ←→ Cable type g

Wire stripping tool for coax and data cable

044888

> universal stripping tool for Coax cables RG 59, RG 6, RG 7, RG 11

105 MM

- > for stripping outer sheath and interior insulation in a single process
- > adjustable stripping blade for data cable
- > two stripping blades for cutting and stripping telephone ribbon cable (4P/6P/8P) in a single operation
- > integrated blade for cutting data cables
- > housing: plastic, impact-proof



16 60 06 SB



| | EAN | ∢ —▶ | | | 52 |
|-------------|----------|-------------|----|--------------------------|-----|
| Article No. | 4003773- | mm | | Cable type | g |
| 16 60 06 SB | 077961 | 125 | MM | RG 59, RG 6, RG 7, RG 11 | 100 |

DISMANTLING TOOLS

Dismantling Tool

for flat and round cables



| Article No. | EAN 4003773- | ∢→ mm | | Stripping capacities Ø mm | ۵ ^۲ ۵ g |
|--------------|-----------------|-----------------|----|--|-----------------------|
| 16 60 100 SB | 040811 | 100 | MM | Coax-cables 4.8 - 7.5 mm round cables 3 x 0,75 mm ² | 22 |

- > for dismantling and stripping all common coax cables between 4.8 - 7.5 mm dia. (e.g. for TV- and satellite antenna), also suitable for PVC round cable 3 x 0.75 mm²
- > with length scale 5.0 20.0 mm
- > double shell, folding back stripping tool
- > with opening spring and locking device
- > body: plastic, fibreglass-reinforced



- > for flat cables up to 12 mm in width
- > for dismantling and stripping all common round and damp-proof installation cables Ø 4.0 to 13.0 mm (e.g. NYM cable 3 x 1.5 mm² up to 5 x 2.5 mm²)
- > stripping device for cross-sections 0.8 / 1.5 / 2.5 mm² (AWG 20 / 16 / 14)
- > with opening spring and locking device
- > for use in confined and difficult to access work areas
- > also for use in conduit and distribution boxes
- > body: plastic, fibreglass-reinforced

16 64 125 SB



| | EAN | 4- | Stripping | capacities | | 52 |
|--------------|----------|-----------|------------|-----------------|--|----|
| Article No. | 4003773- | mm | Ømm | mm ² | Types of cables | g |
| 16 64 125 SB | 076933 | 125 | 4.0 - 13.0 | 0.8 - 2.5 | flat cable 12 mm / round cable Ø 4 - 13 mm | 48 |

16

16

64

Dismantling Tool



- > for stripping UTP and STP data cables with diameters of 4.5 to 10.0 mm
- > stripping device for cross-sections 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4 mm²
- > double shell, folding back stripping tool
- > with opening spring and locking device
- > practical clip for easy transport
- > body: plastic, fibreglass-reinforced
- > blades: special tool steel, oil-hardened, TiN-coated

16 65 125 SB MM

| | EAN | 4- | | Stripping | capacities | | 47 |
|--------------|----------|-----------|----|------------|-----------------|---|----|
| Article No. | 4003773- | mm | | Ømm | mm ² | Types of cables | g |
| 16 65 125 SB | 043157 | 125 | MM | 4.5 - 10.0 | 0.2 - 4 | CAT 5, CAT 6, CAT 7, Twisted-Pair (UTP/STP) | 50 |

DISMANTLING TOOLS

Universal Dismantling Tools

16 8

- > for dismantling and stripping all common round and damp-proof installation cables between 8 - 13 mm dia.
 (e.g. 3 x 1.5 mm² up to 5 x 2.5 mm²)
- > also for use in conduit and distribution boxes
- > double shell, folding back stripping tool
- > with opening spring and locking device
- > practical clip for easy transport
- > body: plastic, fibreglass-reinforced

16 85 125 SB

with additional blade for longitudinal cuts; telescopic blade inside; stripping device for cross-sections 0.2 / 0.3 / 0.8 / 1.5 / 2.5 / 4 mm²; with integrated cable guide for longitudinal cut. This enables rigid insulation (e.g. halogen-free) to be stripped more easily.



16 85 125 SB MM

16 80 125 SB

MM

| | EAN | 4- | | Stripping | capacities | | 52 |
|--------------|----------|-----------|----|------------|-----------------|--|----|
| Article No. | 4003773- | mm | | Ømm | mm ² | Types of cables | g |
| 16 80 125 SB | 040828 | 125 | MM | 8.0 - 13.0 | | round cable, e.g.: 3 x 1.5 mm ² up to 5 x 2.5 mm ² | 71 |
| 16 85 125 SB | 060444 | 125 | MM | 8.0 - 13.0 | 0.2 - 4.0 | round cable, e.g.: 3 x 1.5 mm ² up to 5 x 2.5 mm ² | 67 |

16

90

Universal Dismantling Tool for building and industrial cables



- > for dismantling and stripping all common round and damp-proof installation cables between 8.0 - 13.0 mm dia. (e.g. 3 x 1.5 mm² up to 5 x 2.5 mm²)
- > specially suitable for larger cross-sections and for difficult insulating materials
- > no adjustment of blades to cutting depth required
- > with opening spring and locking device
- > stripping device for conductors and strands 1.5 mm² and 2.5 mm²
- > two-way length stop (ideal for right and left-handers)
- > fastening device on the end of the handle (fall protection)
- > for use in confined and difficult to access work areas
- > also for use in conduit and distribution boxes
- > body: plastic, fibreglass-reinforced



16 90 130 SB

| | EAN | - | | Stripping | capacities | | 47 |
|--------------|----------|----------|----|------------|-----------------|---|----|
| Article No. | 4003773- | mm | | Ømm | mm ² | Types of cables | g |
| 16 90 130 SB | 076940 | 130 | MM | 8.0 - 13.0 | 1.5 + 2.5 | round cable, e.g. 3 x 1.5 mm ² up to 5 x 2.5 mm ² | 47 |

KNIPEX ErgoStrip[®] Universal Dismantling Tool

16 ⁹⁵ NEW

For the fast and precise dismantling and stripping of all common round and damp-proof installation cables (e.g. NYM cable 3 x 1.5 mm² up to 5 x 2,5 mm²), data cable (e.g. twisted pair) and coax cable Innovative, ergonomic pistol grip design for easy cutting,

- stripping and longitudinal cut of the sheath
 > conical, slimmed down tool ends for better access in
- confined areas > stripping device for cross-sections 0.2 / 0.3 / 0.8 / 1.5 / 2.5 and 4 mm²
- > simplified insertion of single wires for stripping using location ridges
- > with opening spring and locking device
- > easy insertion of coax and data cable thanks to opening aid
- > multi-component design with a soft plastic zone for comfortable use and a secure grip
- > housing made from stable plastic fibreglass-reinforced





ErgoStrip[®]







Dismantling of a NYM cable

With concealed cutter in overhanging thumb rest on the side for convenient lengthwise cut

Stripping of single conductors



Dismantling of a data cable



Dismantling of a coax cable



Stripping of a coax cable



| | | | | | Stripping capacities | | | | | | | | |
|-------------|-----------------|------------------|----|----------------------|--|-----------------------------------|---------------------|--------|--|--|--|--|--|
| Article No. | EAN 4003773- | ← → mm | | Round cables Ø mm | Conductors and strands mm ² | Data cables | Coax-cables Ø mm | ۲ g | | | | | |
| 16 95 01 SB | 079927 | 135 | MM | 8 - 13 | 0.2 - 4 | CAT 5 - 7, Twisted-Pair (UTP/STP) | 4.8 - 7.5 | 95 | | | | | |

Gripping and Grip Pliers

+ 28-280 Salary

GERMA

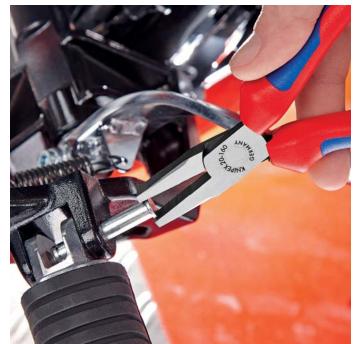
INS X

| Flat Nose Pliers | 60 |
|---|----|
| Round Nose Pliers | 61 |
| Long Reach Needle Nose Pliers | 61 |
| Long Reach Needle Nose Pliers with transverse profiles | 62 |
| Telephone Pliers | 63 |
| Gripping Pliers (Needle Nose Pliers) | 63 |
| Long Nose Pliers | 64 |
| Relay Adjusting Pliers | 65 |
| Duckbill Pliers | 65 |
| Gripping Pliers for precision mechanics | 66 |
| Mechanics' Pliers | 67 |
| Universal Grip Pliers | 68 |
| Welding Grip Pliers | 68 |
| Grip Pliers | 69 |

Flat Nose Pliers DIN ISO 5745

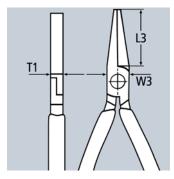
- > flat, short, wide jaws> knurled gripping surfaces
- > Special tool steel, forged, oil-hardened













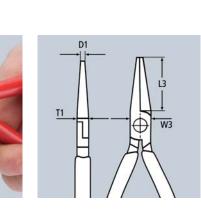
| | | | | | | | | Dimensions | | | |
|-------------|-----------------|------------------|---------------|----------------|-----------|--|----------|------------|----------|------------------|--|
| Article-No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | L3 mm | W3 mm | T1 mm | ۲ <mark>۵</mark> | |
| 20 01 125 | 014447 | 125 | | | | | 27.0 | 14.5 | 8.0 | 75 | |
| 20 01 140 | 014454 | 140 | | black | polished | plastic coated | 28.0 | 15.5 | 9.5 | 107 | |
| 20 01 160 | 015017 | 160 | | atramentized | polisileu | plastic coated | 30.0 | 17.0 | 9.5 | 144 | |
| 20 01 180 | 015666 | 180 | | | | | 35.0 | 19.0 | 10.0 | 188 | |
| 20 02 140 | 043386 | 140 | | black | polished | with multi-component grips | 28.0 | 15.5 | 9.5 | 137 | |
| 20 02 160 | 035008 | 160 | | atramentized | polisileu | with main-component grips | 30.0 | 17.0 | 9.5 | 172 | |
| 20 05 140 | 042464 | 140 | | chrome plated | | with multi-component grips | 28.0 | 15.5 | 9.5 | 136 | |
| 20 05 160 | 042457 | 160 | | chilome plated | | with multi-component grips | 30.0 | 17.0 | 9.5 | 176 | |
| 20 06 160 | 033783 | 160 | 1000 V இ€ | chrome plated | | insulated with multi-component grips, VDE-tested | 30.0 | 17.0 | 9.5 | 176 | |

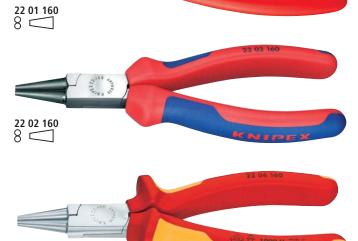
GRIPPING PLIERS

Round Nose Pliers

> for bending wire loops

- > round, short jaws; finely ground
- > Special tool steel, forged, oil-hardened





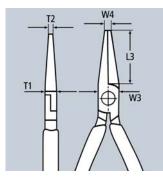
22 06 160 ≙1000V € 8 ◯

| | | | | | | | | Dimer | imensions | | |
|-------------|----------|------------|--------------------------|--------------------------------|----------------------------|--|------|-------|-----------|-----|-----|
| | EAN | ∢ → | | | | | L3 | W3 | D1 | T1 | 52 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | g |
| 22 01 125 | 014461 | 125 | | | | | 27.0 | 14.5 | 2.0 | 8.0 | 75 |
| 22 01 140 | 013013 | 140 | | black atramentized polished | polished | shed plastic coated | 28.0 | 16.5 | 2.5 | 9.5 | 100 |
| 22 01 160 | 015024 | 160 | | attamentized | | | 30.0 | 18.0 | 3.0 | 9.5 | 140 |
| 22 02 140 | 043430 | 140 | 8 | black | with multi-component grips | 28.0 | 16.5 | 2.5 | 9.5 | 129 | |
| 22 02 160 | 023173 | 160 | ° | atramentized | polished | with multi-component grips | 30.0 | 18.0 | 3.0 | 9.5 | 170 |
| 22 05 140 | 042891 | 140 | 8 | chrome plated | | with multi-component grips | 28.0 | 16.5 | 2.5 | 9.5 | 127 |
| 22 05 160 | 077275 | 160 | 0 | chiome plated | | with multi-component grips | 30.0 | 18.0 | 3.0 | 9.5 | 169 |
| 22 06 160 | 033790 | 160 | ≵ 1000 V ﷺ 8 ◯ | chrome plated | | insulated with multi-component grips, VDE-tested | 30.0 | 18.0 | 3.0 | 9.5 | 175 |

22

Long Reach Needle Nose Pliers DIN ISO 5743

- > specially suitable for gripping and assembly work with a higer prehensile power
- > knurled gripping surfaces
- > High-grade special tool steel, forged, oil-hardened





| | | | | | | | | Dimer | nsions | | | |
|-------------|----------|---------|----------|--------------------|----------|----------------|------|-------|--------|-----|------|-----|
| | EAN | | | | | | L3 | W3 | T1 | W4 | T2 | 5 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 28 01 200 | 044468 | 200 | | black atramentized | polished | plastic coated | 33.0 | 13.5 | 10.5 | 4.0 | 10.5 | 197 |
| 28 21 200 | 028246 | 200 | Θ | black atramentized | polished | plastic coated | 34.0 | 13.5 | 10.5 | 3.0 | 3.0 | 187 |

GRIPPING PLIERS

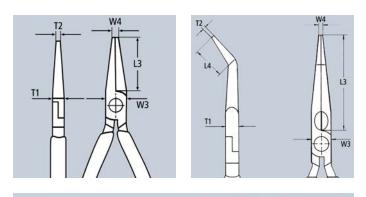
Long Reach Needle Nose Pliers with transverse profiles DIN ISO 9745

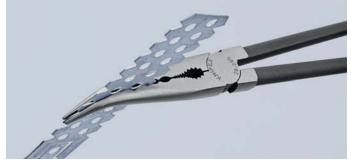
28

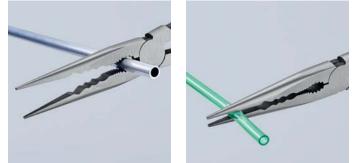
Long assembly pliers with wave profile

For gripping, adjustment and assembly work in hard to reach areas thanks to slim, very long design Deep parts can be easily reached using the slim, half-round tips

- > careful yet reliable gripping, holding and guiding of small copper pipes, screws and cables as well as other round parts thanks to milled grooves with smooth surfaces
- > serrated pipe grip to grip round parts
- > 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







Wave-shaped gripping profile: transverse profile for gripping, holding and guiding





| | | | | | | | | Dimensions L3 L4 W3 T1 W4 | | | | | |
|-------------|----------|----------|-----------------|--------------------|----------|----------------|------|------------------------------|------|-----|-----|-----|-----|
| | EAN | - | | | | | L3 | L4 | W3 | T1 | W4 | T2 | 52 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | mm | g |
| 28 71 280 | 079415 | 280 | | black atramentized | polished | plastic coated | 76.5 | | 20.0 | 9.0 | 3.0 | 2.5 | 235 |
| 28 81 280 | 079422 | 280 | Щ∭ <u>∡4</u> 5° | black atramentized | polished | plastic coated | 70.0 | 20.0 | 20.0 | 9.0 | 2.5 | 2.5 | 235 |

Telephone Pliers DIN ISO 5745

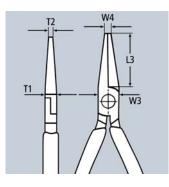
29

> gripping surfaces cross-hatched, knurled

> Chrome vanadium electric steel, forged, oil-hardened

29 21 160 / 29 25 160

extra slim, fine tips; also suitable for soldering work





| | | | | | | | | Dimer | nsions | | | |
|-------------|----------|----------|---|--------------------|----------|----------------------------|------|-------|--------|-----|-----|-----|
| | EAN | - | | | | | L3 | W3 | T1 | W4 | T2 | 52 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 29 11 160 | 016175 | 160 | | black atramentized | polished | plastic coated | 55.0 | 14.0 | 8.0 | 2.5 | 8.5 | 103 |
| 29 21 160 | 043454 | 160 | \ominus I I I I I I I I I I I I I I I I I I I | black atramentized | polished | plastic coated | 54.0 | 14.0 | 9.0 | 2.0 | 2.0 | 112 |
| 29 25 160 | 043478 | 160 | $\ominus \bigotimes$ | chrome plated | | with multi-component grips | 54.0 | 14.0 | 9.0 | 2.0 | 2.0 | 139 |

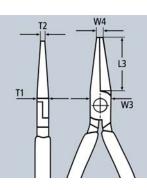


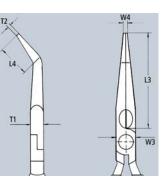
31

31 11 160

 $\Box \Box$

- > precision pliers for very exact assembly, bending and adjusting work
- > with extra long jaws: length of jaws 55.0 mm
- > smooth ground gripping surfaces
- > edges carefully deburred
- > Chrome vanadium electric steel, forged, oil-hardened







| | | | | | | | Dimensions | | | | | | |
|-------------|----------|----------|-----------------|--------------------|----------|----------------------------|------------|------|------|-----|-----|-----|-----|
| | EAN | - | | | | | L3 | L4 | W3 | T1 | W4 | T2 | 52 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | mm | g |
| 31 11 160 | 044475 | 160 | $\Box \Box$ | black atramentized | polished | plastic coated | 55.0 | | 16.0 | 7.5 | 2.0 | 2.5 | 100 |
| 31 15 160 | 016465 | 160 | $\Box \Box$ | chrome plated | | with multi-component grips | 55.0 | | 16.0 | 7.5 | 2.0 | 2.5 | 124 |
| 31 21 160 | 046790 | 160 | <u>∡</u> 45° ⊟⊂ | black atramentized | polished | plastic coated | 55.0 | 27.0 | 16.0 | 7.5 | 2.0 | 2.5 | 97 |
| 31 25 160 | 016489 | 160 | <u>∡45°</u> ⊟⊂⊃ | chrome plated | | with multi-component grips | 55.0 | 27.0 | 16.0 | 7.5 | 2.0 | 2.5 | 123 |

GRIPPING PLIERS

Long Nose Pliers

- > heavy-duty and hard-wearing gripping pliers
- > different jaw styles
- > Chrome vanadium electric steel, forged, oil-hardened

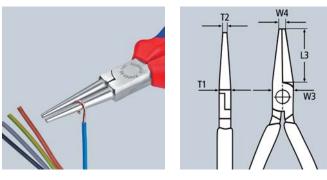
Style 1

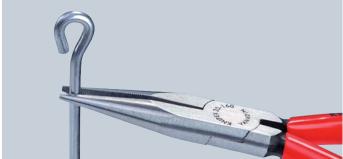
long, trapezoidal jaws; knurled gripping surfaces

Style 2

long, half-round jaws; knurled gripping surfaces Style 3

long, round jaws; smooth gripping surfaces





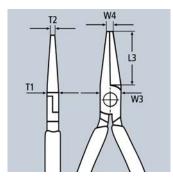
| 30 | |
|----|---|
| | AND |
| | 30 11 160 |
| | 30 25 180 |
| | |
| | 80 36 160 Chrone Vonadar (1) 100 V (1) 100 |
| | 30 36 160 ☆1000 V @ € 8 < |

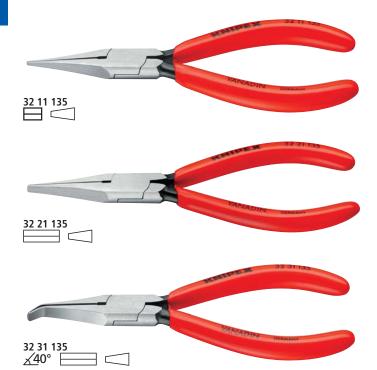
| | | | | | | | | | Dimer | nsions | | | |
|-------------|-----------------|------------------|---------------------------|-------|--------------------|----------|--|----------|----------|----------|----------|----------|----------|
| Article-No. | EAN 4003773- | ∢ → mm | | Style | Pliers | Head | Handles | L3 mm | W3 mm | T1 mm | W4 mm | T2 mm | Δ'Δ g |
| 30 11 140 | 033936 | 140 | | , | | | | 42.0 | 15.0 | 8.0 | 2.5 | 4.0 | 86 |
| 30 11 160 | 023128 | 160 | | 1 | black atramentized | polished | plastic coated | 46.5 | 16.5 | 9.5 | 3.0 | 5.0 | 121 |
| 30 11 190 | 013051 | 190 | | | | | | 50.0 | 18.5 | 9.5 | 3.0 | 7.0 | 140 |
| 30 13 140 | 016298 | 140 | | | | | | 42.0 | 15.0 | 8.0 | 2.5 | 4.0 | 87 |
| 30 13 160 | 043485 | 160 | | 1 | chrome plated | | plastic coated | 46.5 | 16.5 | 9.5 | 3.0 | 5.0 | 118 |
| 30 15 140 | 042914 | 140 | | | | | | 42.0 | 15.0 | 8.0 | 2.5 | 4.0 | 106 |
| 30 15 160 | 035046 | 160 | | 1 | chrome plated | | with multi-component grips | 46.5 | 16.5 | 9.5 | 3.0 | 5.0 | 149 |
| 30 15 190 | 001881 | 190 | | | | | | 50.0 | 18.5 | 8.0 | 3.0 | 7.0 | 171 |
| 30 16 160 | 001904 | 160 | ≜ 1000 V @ € | 1 | chrome plated | | insulated with multi-component grips, VDE-tested | 46.5 | 16.5 | 9.5 | 3.0 | 5.0 | 150 |
| 30 21 140 | 042433 | 140 | | | | | | 42.0 | 15.0 | 8.0 | 2.5 | 2.0 | 95 |
| 30 21 160 | 035053 | 160 | Θ | 2 | black atramentized | polished | plastic coated | 50.0 | 16.5 | 9.5 | 3.0 | 2.5 | 121 |
| 30 21 190 | 016366 | 190 | | | | | | 50.0 | 18.5 | 8.0 | 3.0 | 2.4 | 135 |
| 30 23 140 | 016373 | 140 | Θ | 2 | chrome plated | | plastic coated | 42.0 | 15.0 | 8.0 | 2.5 | 2.0 | 95 |
| 30 25 140 | 001980 | 140 | | | | | | 42.0 | 15.0 | 8.0 | 2.5 | 2.0 | 114 |
| 30 25 160 | 035060 | 160 | Θ | 2 | chrome plated | | with multi-component grips | 50.0 | 16.5 | 9.5 | 3.0 | 2.5 | 151 |
| 30 25 190 | 043515 | 190 | | | | | | 50.0 | 18.5 | 8.0 | 3.0 | 2.4 | 168 |
| 30 31 160 | 035077 | 160 | 8 | 3 | black atramentized | polished | plastic coated | 41.0 | 16.5 | 9.5 | 5.0 | 2.5 | 110 |
| 30 33 160 | 043539 | 160 | 8 | 3 | chrome plated | | plastic coated | 41.0 | 16.5 | 9.5 | 5.0 | 2.5 | 111 |
| 30 35 140 | 043102 | 140 | 8 | 3 | chroma plated | | with multi component arise | 37.5 | 15.0 | 8.0 | 4.0 | 2.0 | 102 |
| 30 35 160 | 035084 | 160 | ° | 5 | chrome plated | | with multi-component grips | 41.0 | 16.5 | 9.5 | 5.0 | 2.5 | 138 |
| 30 36 160 | 002123 | 160 | ≵ 1000 V ≧€ 8 ◯ | 3 | chrome plated | | insulated with multi-component grips, VDE-tested | 41.0 | 16.5 | 9.5 | 5.0 | 2.5 | 141 |

Relay Adjusting Pliers DIN ISO 5743

32

- > for gripping components and wires of the smallest diameters and for bending contact and relay springs
- > polished gripping surfaces
- > edges carefully deburred
- > High-grade special tool steel, forged, oil-hardened



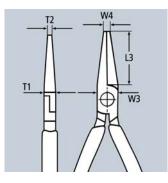


| | | | | | | | | Dimer | nsions | | | |
|-------------|----------|----------|-------------|--------------------|----------|----------------|------|-------|--------|-----|-----|----|
| | EAN | - | | | | | L3 | W3 | T1 | W4 | T2 | 52 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 32 11 135 | 035091 | 135 | $\Box \Box$ | black atramentized | polished | plastic coated | 34.0 | 12.5 | 7.0 | 1.4 | 1.5 | 73 |
| 32 21 135 | 043553 | 135 | $\Box \Box$ | black atramentized | polished | plastic coated | 34.0 | 12.5 | 7.0 | 1.4 | 3.5 | 74 |
| 32 31 135 | 043560 | 135 | <u>∡40°</u> | black atramentized | polished | plastic coated | 32.0 | 12.5 | 7.0 | 1.4 | 3.5 | 73 |

Duckbill Pliers DIN ISO 5743

- > duckbill shaped jaws 9.0 mm wide at the tip and tapering to 1.5 mm thickness
- > smooth gripping surfaces
- > Chrome vanadium electric steel, forged, oil-hardened







| | | | | | | | | Dimer | nsions | | | |
|-------------|----------|-------------|-------------|--------------------|----------|----------------|------|-------|--------|-----|-----|-----|
| | EAN | ∢ —▶ | | | | | L3 | W3 | T1 | W4 | T2 | 5 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 33 01 160 | 016663 | 160 | $\Box \Box$ | black atramentized | polished | plastic coated | 55.0 | 15.0 | 7.5 | 3.0 | 9.0 | 103 |
| 33 03 160 | 016670 | 160 | $\Box \Box$ | chrome plated | | plastic coated | 55.0 | 15.0 | 7.5 | 3.0 | 9.0 | 103 |

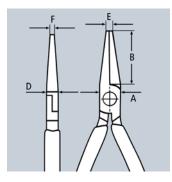
GRIPPING PLIERS

Gripping Pliers for precision mechanics

| DIN ISO 9655 | 37 | |
|--|----|-------------------|
| > precision pliers for fine assembly work, e g. in electronics and fine mechanics > for gripping, holding, bending and adjusting > tips precision ground > smooth gripping surfaces > edges carefully deburred > lap joint > Chrome vanadium electric steel, forged, oil-hardened | | 37 11 125 |
| Style 1 flat, wide jaws | | |
| Style 2 flat, concave and pointed jaws | | 37 21 125 |
| Style 3 | | $\square \square$ |

Style 3 half-round jaws

Style 4 round, pointed jaws to bend wire loops





| | | | | | | | | | Dimer | nsions | | | |
|-------------|----------|------------|--------------------|-------|--------------------|----------|----------------|------|-------|--------|-----|-----|----|
| | EAN | ∢ → | | | | | | В | А | D | Е | F | 52 |
| Article-No. | 4003773- | mm | | Style | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 37 11 125 | 014287 | 125 | $\square \bigcirc$ | 1 | black atramentized | polished | plastic coated | 27.0 | 12.5 | 7.0 | 2.0 | 5.5 | 76 |
| 37 13 125 | 043638 | 125 | $\Box \Box$ | 1 | chrome plated | | plastic coated | 27.0 | 12.5 | 7.0 | 2.0 | 5.5 | 71 |
| 37 21 125 | 035138 | 125 | $\Box \Box$ | 2 | black atramentized | polished | plastic coated | 27.0 | 12.5 | 7.0 | 2.0 | 2.0 | 74 |
| 37 23 125 | 043645 | 125 | | 2 | chrome plated | | plastic coated | 27.0 | 12.5 | 7.0 | 2.0 | 2.0 | 72 |
| 37 31 125 | 035145 | 125 | $\Theta \square$ | 3 | black atramentized | polished | plastic coated | 27.0 | 12.5 | 7.0 | 2.0 | 1.6 | 74 |
| 37 33 125 | 016960 | 125 | $\Theta \Box$ | 3 | chrome plated | | plastic coated | 27.0 | 12.0 | 7.0 | 2.0 | 1.6 | 78 |
| 37 41 125 | 035152 | 125 | 8 | 4 | black atramentized | polished | plastic coated | 27.0 | 14.5 | 8.0 | 2.0 | 1.0 | 76 |
| 37 43 125 | 043652 | 125 | 8 | 4 | chrome plated | | plastic coated | 27.0 | 14.5 | 8.0 | 2.0 | 1.0 | 76 |

Mechanics' Pliers DIN ISO 5745

38

> high bending strength of the pliers tips

> gripping surfaces cross-hatched, knurled

> Vanadium electric steel; forged, oil-hardened

38 71 200

70° angled, half-round jaws, suitable for pulling split pins; for gripping at points that are difficult to access

38 91 200 / 38 95 200

45° angled, half-round, long jaws, also suitable for gripping spark plugs and round components (spark plug cover "grabber")

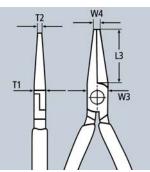
Style 2

40° angled jaws

Style 3 curved tips











38 21 200 ∡40° ⊖ ∞∞

38 41 190

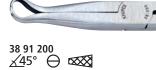


38 31 200 ⊖ ⋘





38 71 200 ∡70° ⊖ ∞∞



| | | | | | | | | Dimer | nsions | | | |
|-------------|----------|-------------|---|--------------------|----------|----------------------------|------|-------|--------|-----|-----|-----|
| | EAN | ∢ —▶ | | | | | L3 | W3 | T1 | W4 | T2 | 52 |
| Article-No. | 4003773- | mm | | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 38 11 200 | 035169 | 200 | \ominus | black atramentized | polished | plastic coated | 73.0 | 17.5 | 9.5 | 3.0 | 2.5 | 179 |
| 38 15 200 | 039594 | 200 | \ominus | chrome plated | | with multi-component grips | 73.0 | 17.5 | 9.5 | 3.0 | 2.5 | 209 |
| 38 21 200 | 035176 | 200 | <u>∡4</u> 0° ⊖ ∞∞ | black atramentized | polished | plastic coated | 73.0 | 17.5 | 9.5 | 3.0 | 2.5 | 175 |
| 38 25 200 | 043669 | 200 | <u>∡40°</u> ⊖ ∞∞ | chrome plated | | with multi-component grips | 73.0 | 17.5 | 9.5 | 3.0 | 2.5 | 209 |
| 38 31 200 | 040712 | 200 | \ominus and \Box | black atramentized | polished | plastic coated | 73.0 | 17.5 | 9.5 | 3.0 | 2.5 | 176 |
| 38 35 200 | 017134 | 200 | \ominus x x x x x x x x x x x x x x x x x x x | chrome plated | | with multi-component grips | 73.0 | 17.5 | 9.5 | 3.0 | 2.5 | 205 |
| 38 41 190 | 017141 | 190 | | black atramentized | polished | plastic coated | 50.0 | 18.0 | 8.0 | 2.0 | 8.0 | 139 |
| 38 45 190 | 043676 | 190 | | chrome plated | | with multi-component grips | 50.0 | 18.0 | 8.0 | 2.0 | 8.0 | 171 |
| 38 71 200 | 017202 | 200 | ∡70° ⊖ ൽ | black atramentized | polished | plastic coated | 73.0 | 17.5 | 9.5 | 3.0 | 2.0 | 174 |
| 38 91 200 | 017219 | 200 | ∡45° ⊖ 🕸 | black atramentized | polished | plastic coated | 73.0 | 17.5 | 9.5 | | 2.5 | 177 |
| 38 95 200 | 017233 | 200 | <u>∡4</u> 5° ⊖ ∞∞ | chrome plated | | with multi-component grips | 73.0 | 17.5 | 9.5 | | 2.5 | 207 |

GRIP PLIERS

Universal Grip Pliers

- > hold round, profile and flat material securely
- > heavy duty model
- > with adjustment screw and release lever
- > one-hand operation
- > high clamping pressure due to toggle lever action
- > pliers body: rolled steel, high-strength
- > gripping jaws: chrome vanadium electric steel, forged

40 14 250

with one pivoting jaw





| Article No. | EAN 4003773- | ←→ mm | Pliers | , mm | mm | | ۵'۵ g |
|-------------|-----------------|-----------------|--------------------|---------|----|----|----------|
| 40 04 180 | 022190 | 180 | bright zinc plated | 35 | 25 | 32 | 310 |
| 40 04 250 | 002710 | 250 | bright zinc plated | 35 | 30 | 32 | 521 |
| 40 14 250 | 080329 | 250 | bright zinc plated | 43 | 42 | 45 | 600 |

Welding Grip Pliers

42

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









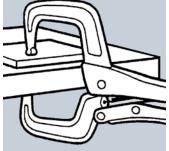






42 44 280





| | EAN | ∢ > | | C] | | 52 |
|-------------|----------|------------|--------------------|---------|----|-----|
| Article No. | 4003773- | mm | Pliers | mm | mm | g |
| 42 14 280 | 022206 | 280 | bright zinc plated | 30 - 65 | 50 | 917 |
| 42 24 280 | 022213 | 280 | bright zinc plated | 10 - 70 | | 850 |
| 42 34 280 | 022220 | 280 | bright zinc plated | | 90 | 692 |
| 42 44 280 | 080350 | 280 | bright zinc plated | | 90 | 740 |

42 24 280

42 34 280

42 44 280

webs up to 40 mm

heat resistant malleable cast iron jaws; round

or tubular material items lying centrally side by side are held securely during welding

gripping jaws of chrome vanadium steel, drop forged; clamps cumbersome workpieces and sections with high

moveable jaws; gripping jaws of chrome vanadium steel, drop forged; Clamps and balances bulky work components and profiles with high ridges of up to 40 mm

68

Grip Pliers

41

- > hold round, profile and flat material securely
- > heavy duty model
- > with adjustment screw and release lever
- > one-hand operation
- > high clamping pressure due to toggle lever action
- > pliers body: rolled steel, high-strength
- > gripping jaws: chrome vanadium electric steel, forged

Style 0 jaws for round workpieces, with wire cutter

Style 1

jaws with double prism for round, section and flat material

Style 2

straight jaws for flat material

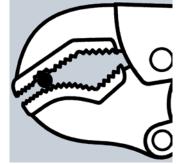
Style 3

Long-Nose Grip Pliers, narrow, long jaws

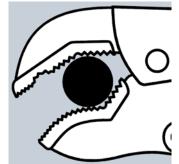
Style 4

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 24 225



41 34 165

41 44 200 ∡70° আ∭



| | EAN | > | | | | C] |]; | \bigcirc | 52 |
|-------------|----------|-----|---------|-------|--------------------|----|----|------------|-----|
| Article-No. | 4003773- | mm | | Style | Pliers | mm | mm | mm | g |
| 41 04 180 | 002741 | 180 | | | | 30 | 20 | 30 | 363 |
| 41 04 250 | 002758 | 250 | | 0 | bright zinc plated | 40 | 20 | 30 | 517 |
| 41 04 300 | 022183 | 300 | | | | 65 | 30 | 34 | 923 |
| 41 14 250 | 023470 | 250 | | 1 | bright zinc plated | 36 | 36 | 36 | 557 |
| 41 24 225 | 023487 | 225 | | 2 | bright zinc plated | 25 | 16 | 30 | 504 |
| 41 34 165 | 047858 | 165 | | 3 | bright zinc plated | 20 | 10 | 24 | 189 |
| 41 44 200 | 080343 | 200 | ∡70° আ∭ | 4 | bright zinc plated | 20 | 20 | 30 | 400 |



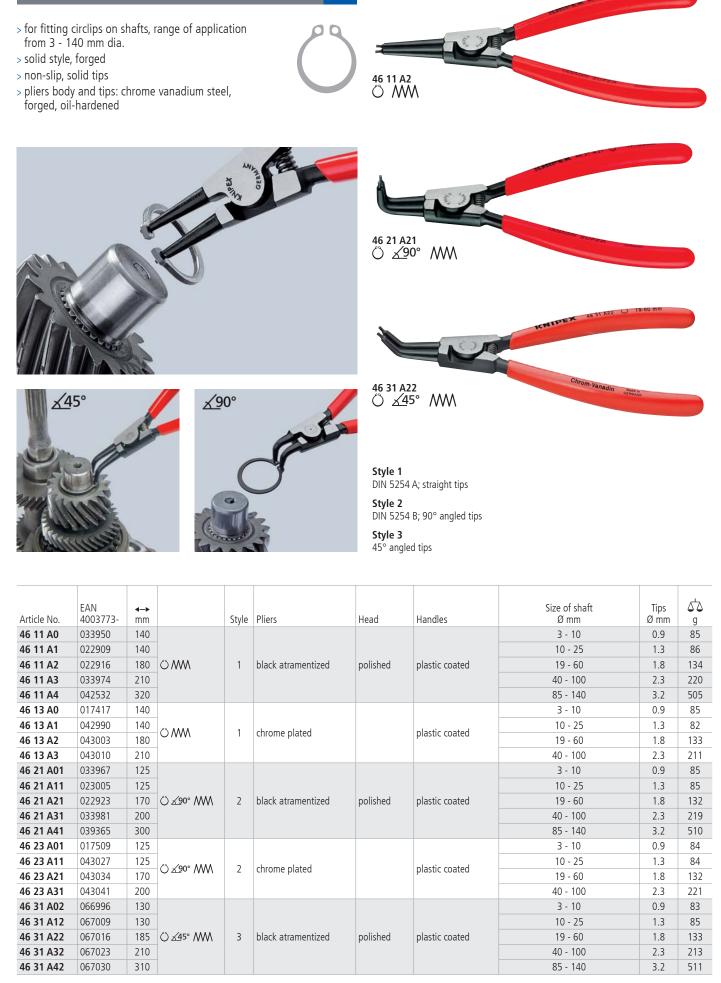
| Circlip Pliers to assemble internal circlips into bores | | | | |
|---|--|--|--|--|
| Circlip Pliers to assemble external circlips on shafts | | | | |
| Precision Circlip Pliers to assemble internal circlips into bores | | | | |
| – with overstretching limiter | | | | |
| Precision Circlip Pliers to assemble external circlips on shafts | | | | |
| – with overstretching limiter | | | | |
| Circlip Pliers for large internal circlips up to 400 mm | | | | |
| Circlip Pliers for large external circlips up to 400 mm | | | | |
| Circlip Tool for circlips up to 1000 mm | | | | |
| Special Retaining Ring Pliers for retaining rings on shafts | | | | |
| Circlip Pliers for grip rings on shafts | | | | |
| Sets of Circlip Pliers | | | | |
| Pliers Sets in a foam tray | | | | |
| Precision Circlip Pliers Sets | | | | |



Style 1 DIN 5256 C, straight tips Style 2 DIN 5256 D; 90° angled tips Style 3

Style 3 45° angled tips

| Article No. | EAN 4003773- | ∢ ► mm | | Style | Pliers | Head | Handles | Size of bore Ø mm | Tips Ø mm | ۲۵ g |
|-------------|-----------------|------------------|----------------|-------|--------------------|----------|----------------|----------------------|--------------|---------|
| 44 11 J0 | 040286 | 140 | | | | | | 8 - 13 | 0.9 | 88 |
| 44 11 J1 | 022862 | 140 | | | | | | 12 - 25 | 1.3 | 88 |
| 44 11 J2 | 022879 | 180 | C | 1 | black atramentized | polished | plastic coated | 19 - 60 | 1.8 | 135 |
| 44 11 J3 | 033943 | 225 | | | | | | 40 - 100 | 2.3 | 196 |
| 44 11 J4 | 042549 | 320 | | | | | | 85 - 140 | 3.2 | 469 |
| 44 13 J0 | 048176 | 140 | | | | | | 8 - 13 | 0.9 | 89 |
| 44 13 J1 | 042938 | 140 | | | | | | 12 - 25 | 1.3 | 88 |
| 44 13 J2 | 042945 | 180 | C | 1 | chrome plated | | plastic coated | 19 - 60 | 1.8 | 138 |
| 44 13 J3 | 042952 | 225 | | | | | | 40 - 100 | 2.3 | 194 |
| 44 13 J4 | 017301 | 320 | | | | | | 85 - 140 | 3.2 | 463 |
| 44 21 J01 | 040132 | 130 | | | | | | 8 - 13 | 0.9 | 88 |
| 44 21 J11 | 022886 | 130 | | | | | | 12 - 25 | 1.3 | 88 |
| 44 21 J21 | 022893 | 170 | O <u>⊀</u> 90° | 2 | black atramentized | polished | plastic coated | 19 - 60 | 1.8 | 139 |
| 44 21 J31 | 033769 | 215 | | | | | | 40 - 100 | 2.3 | 196 |
| 44 21 J41 | 043683 | 300 | 1 | | | | | 85 - 140 | 3.2 | 462 |
| 44 23 J11 | 042969 | 130 | | | | | | 12 - 25 | 1.3 | 89 |
| 44 23 J21 | 042976 | 170 | O <u>⊀</u> 90° | 2 | chrome plated | | plastic coated | 19 - 60 | 1.8 | 138 |
| 44 23 J31 | 042983 | 215 | | | | | | 40 - 100 | 2.3 | 200 |
| 44 31 J02 | 066941 | 140 | | | | | | 8 - 13 | 0.9 | 90 |
| 44 31 J12 | 066958 | 140 | | | | | | 12 - 25 | 1.3 | 90 |
| 44 31 J22 | 066965 | 180 | ℃ <u>∡4</u> 5° | 3 | black atramentized | polished | plastic coated | 19 - 60 | 1.8 | 140 |
| 44 31 J32 | 066972 | 225 | | | | | | 40 - 100 | 2.3 | 195 |
| 44 31 J42 | 066989 | 310 | | | | | | 85 - 140 | 3.2 | 465 |



46

Circlip Pliers

to assemble external circlips on shafts

CIRCLIP PLIERS

Precision Circlip Pliers to assemble internal circlips into bores DIN 5256

With inserted tips for reliable work

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

- > bolted joint: precise, zero backlash operation of pliers
- > non-slip plastic coating on the handles
- > pliers body: chrome vanadium electric steel, forged, oil-hardened
- > inserted tips: spring steel wire, drawn

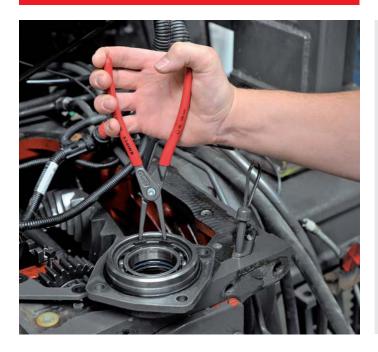
Style 1 DIN 5256 C; straight tips Style 2

DIN 5256 D; 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 bounce off.

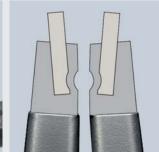


Precision and durability

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 spring steel



Tight fit through compression

| Article No. | EAN 4003773- | ∢ ► mm | | Style | Pliers | Handles | Size of bore Ø mm | Tips Ø mm | ۵'ک g |
|-------------|-----------------|------------------|----------|-------|-------------------|-------------------------------|----------------------|--------------|----------|
| 48 11 J0 | 048510 | 140 | | | | | 8 - 13 | 0.9 | 105 |
| 48 11 J1 | 048527 | 140 | | 1 | | | 12 - 25 | 1.3 | 105 |
| 48 11 J2 | 048534 | 180 | OT | | grey atramentized | with non-slip plastic coating | 19 - 60 | 1.8 | 175 |
| 48 11 J3 | 048541 | 225 | - | | | | 40 - 100 | 2.3 | 266 |
| 48 11 J4 | 048558 | 320 | - | | | | 85 - 140 | 3.2 | 580 |
| 48 21 J01 | 048619 | 130 | | | | | 8 - 13 | 0.9 | 105 |
| 48 21 J11 | 048633 | 130 | | | | | 12 - 25 | 1.3 | 105 |
| 48 21 J21 | 048640 | 165 | €¶ ∘و∡ ژ | 2 | grey atramentized | with non-slip plastic coating | 19 - 60 | 1.8 | 175 |
| 48 21 J31 | 048657 | 210 | 1 | | | | 40 - 100 | 2.3 | 265 |
| 48 21 J41 | 048664 | 305 | | | | | 85 - 140 | 3.2 | 576 |

Now also with overstretching limiter For all circlips with a diameter of 8 - 100 mm

- > with overstretching limiter for standardized assembly according to DIN 472
- > the adjustable stop screw prevents overexpansion
- > adjustment using hexagonal screw
- > ideal for series production as excessive expansion of rings is effectively prevented

Style 3 DIN 5256 C, straight tips

Style 4 DIN 5256 D; 90° angled tips



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 overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.





| Article No. | EAN 4003773- | ∢ ► mm | | Style | Pliers | Handles | Size of shaft Ø mm | Tips Ø mm | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|---------------------------|-------|-------------------|-------------------------------|-----------------------|--------------|-----------------------|
| 48 31 J0 | 079552 | 140 | | July | | handles | 8 - 13 | 0.9 | 105 |
| 48 31 J1 | 073864 | 140 | | 3 | grey atramentized | with non-slip plastic coating | 12 - 25 | 1.3 | 105 |
| 48 31 J2 | 073871 | 180 | OTI | | | | 19 - 60 | 1.8 | 175 |
| 48 31 J3 | 073888 | 225 |] | | | | 40 - 100 | 2,3 | 266 |
| 48 41 J01 | 079569 | 130 | | | | | 8 - 13 | 0.9 | 105 |
| 48 41 J11 | 079576 | 130 | ♡ <u>∡9</u> 0° ₽ € | 1 | arov atramontized | with non-clin plactic conting | 12 - 25 | 1.3 | 105 |
| 48 41 J21 | 079640 | 165 | | 4 | grey atramentized | with non-slip plastic coating | 19 - 60 | 1.8 | 175 |
| 48 41 J31 | 079590 | 210 | | | | | 40 - 100 | 2.3 | 265 |

CIRCLIP PLIERS

Precision Circlip Pliers to assemble external circlips on shafts DIN 5254

With inserted tips for reliable work

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

- > 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
- > non-slip plastic coating on the handles
- > pliers body: chrome vanadium electric steel, forged, oil-hardened
- > inserted tips: spring steel wire, drawn

Style 1

DIN 5254 A; straight tips

Style 2 DIN 5254 B; 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 bounce off.



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



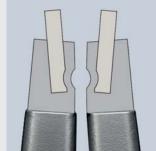
49

KNIPEX-Precision Circlip Pliers: fit circlips without distortion; easy and quick assembling

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 spring steel

Tight fit through compression

| Article No. | EAN 4003773- | ∢ ► mm | | Style | Pliers | Handles | Size of shaft Ø mm | Tips Ø mm | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|-----------------------------|-------|-------------------|----------------------------------|-----------------------|--------------|-----------------------|
| 49 11 A0 | 048718 | 140 | | | | | 3 - 10 | 0.9 | 101 |
| 49 11 A1 | 048725 | 140 | 0 23 MM | | | | 10 - 25 | 1.3 | 100 |
| 49 11 A2 | 048732 | 180 | | 1 | grey atramentized | with non-slip plastic coating | 19 - 60 | 1.8 | 170 |
| 49 11 A3 | 048749 | 225 | | | | country | 40 - 100 | 2.3 | 270 |
| 49 11 A4 | 048756 | 320 | | | | | 85 - 140 | 3.2 | 599 |
| 49 21 A01 | 048817 | 130 | | | | | 3 - 10 | 0.9 | 100 |
| 49 21 A11 | 048824 | 130 | | | | | 10 - 25 | 1.3 | 102 |
| 49 21 A21 | 048831 | 165 | 5 Ů <i>∡</i> 90° €€ MM) | 2 | grey atramentized | with non-slip plastic coating | 19 - 60 | 1.8 | 169 |
| 49 21 A31 | 048848 | 210 | | | | country | 40 - 100 | 2.3 | 272 |
| 49 21 A41 | 048855 | 305 | | | | | 85 - 140 | 3.2 | 601 |

Now also with overstretching limiter For all circlips with a diameter of 8 - 100 mm

- > with overstretching limiter for standardized assembly according to DIN 471
- > the adjustable stop screw prevents overexpansion
- > adjustment using hexagonal screw
- > ideal for series production as excessive expansion of rings is effectively prevented

Style 3 DIN 5254 A; straight tips;

Style 4 DIN 5254 B; 90° angled tips



49 41 A11 ℃ <u>×</u>90° **€ ▲** MM

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 overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.

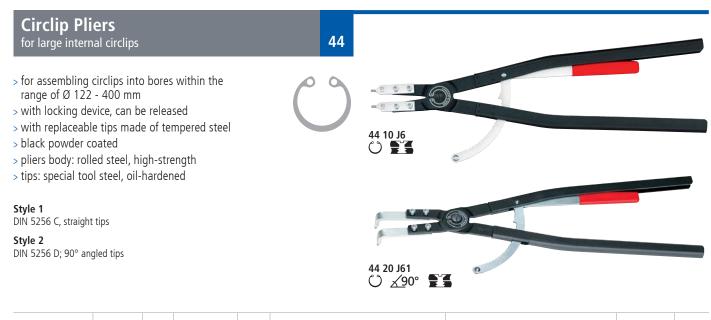




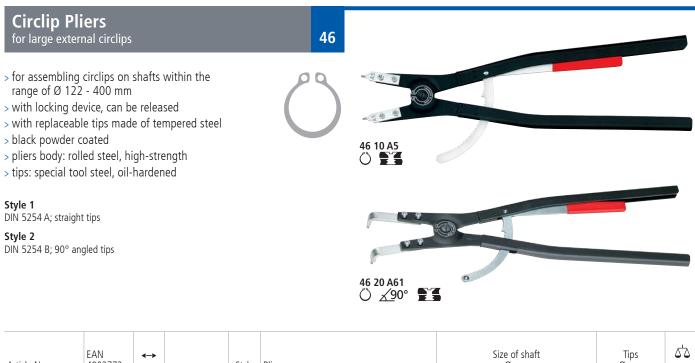
10 - 25 mm

| Article No. | EAN 4003773- | ∢ ► mm | | Style | Pliers | Handles | Size of shaft Ø mm | Tips Ø mm | ۲ _م |
|-------------|-----------------|------------------|-----------------------------|-------------|--------------------|-------------------------------|-----------------------|--------------|----------------|
| 49 31 A0 | 061748 | 140 | | | | | 3 - 10 | 0.9 | 103 |
| 49 31 A1 | 073895 | 140 | | 3 grey atra | grey atramentized | with non-slip plastic coating | 10 - 25 | 1.3 | 100 |
| 49 31 A2 | 073901 | 180 | | | grey attainentized | | 19 - 60 | 1.8 | 170 |
| 49 31 A3 | 073918 | 225 | | | | | 40 - 100 | 2.3 | 270 |
| 49 41 A01 | 061755 | 130 | | | | | 3 - 10 | 0.9 | 102 |
| 49 41 A11 | 079606 | 130 | ° ⊻ 9° € € MM | 4 | grou atramontized | with non-slip plastic | 10 - 25 | 1.3 | 102 |
| 49 41 A21 | 079613 | 165 | | 4 | grey atramentized | coating | 19 - 60 | 1.8 | 169 |
| 49 41 A31 | 079620 | 210 | | | | | 40 - 100 | 2.3 | 272 |

CIRCLIP PLIERS



| Article No. | EAN 4003773- | ∢→ mm | | Style | Pliers | Size of bore Ø mm | Tips Ø mm | ۲۵ g | | |
|-------------|-----------------|-----------------|--------------------------|--|---------------------------|----------------------|--------------|---------|--|--|
| 44 10 J5 | 024910 | 570 | 053 | 1 | black pourder control | 122 - 300 | 3.5 | 1738 | | |
| 44 10 J6 | 024927 | 580 | | | black powder-coated | 252 - 400 | 4.5 | 1755 | | |
| 44 20 J51 | 024958 | 590 | Ú <u>∡9</u> ° ₽ ¶ | 2 | hisela secondari se sta d | 122 - 300 | 3.5 | 1803 | | |
| 44 20 J61 | 024965 | 600 | | 2 | black powder-coated | 252 - 400 | 4.5 | 1723 | | |
| 44 19 J5 | 024934 | 1 pair | of spare tips for 4 | 14 10 J5 | | | | | | |
| 44 19 J6 | 024941 | 1 pair | of spare tips for 4 | are tips for 44 10 JS are tips for 44 10 JG | | | | | | |
| 44 29 J51 | 024972 | 1 pair | of spare tips for 4 | 14 20 J5 | 1 | | | | | |
| 44 29 J61 | 024989 | 1 pair | of spare tips for 4 | 14 20 J6 | 1 | | | | | |



| Article No. | EAN 4003773- | ∢ →→ mm | | Style | Pliers | Size of shaft Ø mm | Tips Ø mm | ۲۵ g |
|-------------|-----------------|-------------------|----------------------|----------|---------------------|-----------------------|--------------|---------|
| 46 10 A5 | 024996 | 560 | 23 | 1 | | 122 - 300 | 3.5 | 1773 |
| 46 10 A6 | 025009 | 570 | Ö | | black powder-coated | 252 - 400 | 4.5 | 1795 |
| 46 20 A51 | 025023 | 570 | (h) (nos 5 -7 | 2 | | 122 - 300 | 3.5 | 1832 |
| 46 20 A61 | 025030 | 580 | "℃ ≰90° ₽"≦ | 2 | black powder-coated | 252 - 400 | 4.5 | 1826 |
| 46 19 A5 | 024316 | 1 pair (| of spare tips for 4 | 46 10 A5 | 5 | | | |
| 46 19 A6 | 025016 | 1 pair (| of spare tips for 4 | 46 10 A6 | 5 | | | |
| 46 29 A51 | 025047 | 1 pair (| of spare tips for 4 | 46 20 A5 | 51 | | | |
| 46 29 A61 | 025054 | 1 pair (| of spare tips for 4 | 46 20 A6 | 51 | | | |

Circlip Tool for large internal and external circlips up to 1000 mm

46

- > universally usable for large circlips with diameters of 400 1000 mm reliable opening and closing of the circlips and holding by self-locking precision spindle drive
- > for fitting and removing circlips
- > circlips are reliably catched thanks to short, direct attachment
- > replaceable tips having working ends with diameters of 6 and 9 mm, for perfect adaption to the handling bores in the circlips
- > optional operation by hand, with Allen key, ratchet wrench or cordless screwdriver
- > areas of application are heavy engines where very high forces and torques are transmitted with large shafts and bearings, e.g. wind turbines, tidal power stations, generator construction, hydropower stations, large machine construction (rolling mills, presses), shipbuilding, aerospace
- > tool in a plastic case with foam insert
- > tip material: chrome-vanadium electric steel









Machine operable







| Article No. | EAN 4003773- | | Size of bore Ø mm | Size of shaft Ø mm | ۵'۵ g |
|-------------|-----------------|----|----------------------|-----------------------|----------|
| 46 10 100 | 075417 | OO | 400 - 1000 | 400 - 1000 | 2200 |

CIRCLIP PLIERS

Special Retaining Ring Pliers for retaining rings on shafts

DIN ISO 5743

- > 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 3.6 mm

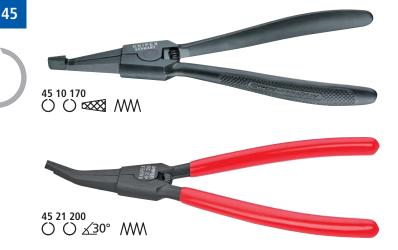
45 21 200

angled jaws with centering hole; for snap rings larger than 12.0 mm dia., e.g. for securing cardan shafts in a motor vehicle; minimum ring split gap of the rings 2.2 mm

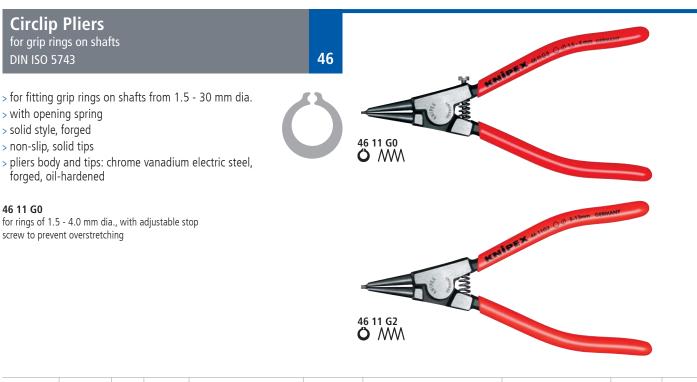




45 10 170



| | EAN | - | | | | 5 |
|-------------|----------|----------|--------------------|-----------|----------------|-----|
| Article No. | 4003773- | mm | | Pliers | Handles | g |
| 45 10 170 | 017370 | 170 | 00∞8MM | burnished | | 156 |
| 45 21 200 | 031208 | 200 | 00 <i>∡</i> 30° MM | burnished | plastic coated | 186 |



| Article No. | EAN 4003773- | ∢ —► mm | | Pliers | Head | Handles | Size of shaft Ø mm | Tips Ø mm | ۲۵ g |
|-------------|-----------------|-------------------|--------|--------------------|--------------|-----------------|-----------------------|--------------|---------|
| 46 11 G0 | 047896 | 140 | 0 MM | black atramentized | polished | plastic coated | 1.5 - 4.0 | 0.9 | 87 |
| 46 11 G1 | 031062 | 140 | | | | | 4.0 - 7.0 | 1.3 | 85 |
| 46 11 G2 | 031079 | 140 | A 4444 | black atromantized | a a Bala a d | plastic control | 5.0 - 13.0 | 1.8 | 85 |
| 46 11 G3 | 031086 | 140 | Ö/WM | black atramentized | polished | plastic coated | 14.0 - 18.0 | 2.3 | 86 |
| 46 11 G4 | 031093 | 180 | | | | | 20.0 - 30.0 | 3.2 | 134 |

Circlip Pliers Sets



00 19 56 OO > tool roll made of hard-wearing polyester fabric> with practical, adjustable quickrelease fastener

00 19 56

four common Circlip Pliers for internal and external circlips

00 19 57

four common Precision Circlip Pliers for highest requirements



| Article No. | EAN 4003773- | | | | Style | Capacitiy Ø mm | Tips Ø mm | Quantity | ۵۲ g |
|-------------|-----------------|-------------------|----------------|----------------------------------|---------------|-------------------|--------------|----------|---------|
| 00 19 56 | 030973 | | Circlip Pliers | Set 4 parts | | | | | 670 |
| | | C | 44 11 J2 | Circlip Pliers | straight tips | 19 - 60 | 1.8 | 1 | |
| | | C) <u>⊀</u> 90° | 44 21 J21 | for internal circlips into bores | angled tips | 19 - 60 | 1.8 | 1 | |
| | | 0 MM O | 46 11 A2 | Circlip Pliers | straight tips | 19 - 60 | 1.8 | 1 | |
| | | © <i>∡</i> 90° MM | 46 21 A21 | for external circlips on shafts | angled tips | 19 - 60 | 1.8 | 1 | |
| 00 19 57 | 050056 | | Precision Cir | clip Pliers Set 4 parts | | | | | 66 |
| | | | 48 11 J1 | Precision Circlip Pliers | | 12 - 25 | 1.3 | 1 | 1 |
| | | OSS | 48 11 J2 | for internal circlips into bores | | 19 - 60 | 1.8 | 1 | 1 |
| | | | 49 11 A1 | Precision Circlip Pliers | straight tips | 10 - 25 | 1.3 | 1 | 1 |
| | | 0 II MM | 49 11 A2 | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | 1 |

Sets of pliers in a foam tray

00 20

- > in a foam tray for workbenches and tool trolleys
- > clearly organised storage of tools
- > precisely-sized recesses for holding the pliers
- > foam tray dimensions (L x W x H): 335 x 165 x 33 mm
- > Material: two colour, closed pore foam





00 20 01 V09

| Article No. | EAN 4003773- | | | | Quantity | ۲ _۵ ع |
|--------------|-----------------|---------------------------|----------------|---|----------|---------------------|
| 00 20 01 V02 | 069652 | | Circlip Pliers | Set "SRZ" Six precision circlip pliers in a foam tray | | 915 |
| | | () | 48 11 J1 | | 1 | |
| | | OS | 48 11 J2 | Precision Circlip Pliers for internal circlips into bores | 1 | |
| | | Ů ₽≦ <u>∡</u>90° | 48 21 J21 | | 1 | |
| | | Ö €`S MM Ö €`S MM ∡90° | 49 11 A1 | | 1 | |
| | | | 49 11 A2 | Precision Circlip Pliers for external circlips on shafts | 1 | |
| | | | 49 21 A21 | | 1 | |
| 00 20 01 V09 | 073291 | | Circlip Pliers | Set "SRZ II" Four precision circlip pliers in a foam tray | | 820 |
| | | ons | 48 11 J2 | Drazizion Civelin Dliars far internal sireling in have balas | 1 | |
| | | Ŭ ₽ ¶ <u>∡</u> 90° | 48 21 J21 | Precision Circlip Pliers, for internal circlips in bore holes | 1 | |
| | | Ő ES MM | 49 11 A2 | Descrition Circlin Divers for external circline on shafts | 1 | |
| | | Ů 🛐 MM ∡90° | 49 21 A21 | Precision Circlip Pliers, for external circlips on shafts | 1 | |

81

CIRCLIP PLIERS

Precision Circlip Pliers Sets

- attractive sales packaging with Euro standard perforation
- contains common Precision
 Circlip Pliers for highest requirements
- > sturdy plastic packaging, also suitable for storage of the pliers





00 20 03 SB

00 20 04 SB

| Article No. | EAN 4003773- | | | | Style | Capacity Ø mm | Tips Ø mm | Quantity | ۲۵ g |
|-------------|-----------------|-------------------------|-------------|----------------------------------|--------------------------|------------------|--------------|----------|---------|
| 00 20 03 SB | 050100 | | Precision C | irclip Pliers Set | | | | | 685 |
| | | () • | 48 11 J1 | Precision Circlip Pliers | | 12 - 25 | 1.3 | 1 | |
| | | OT | 48 11 J2 | for internal circlips into bores | | 19 - 60 | 1.8 | 1 | |
| | | | 49 11 A1 | Precision Circlip Pliers | straight tips | 10 - 25 | 1.3 | 1 | |
| | | ÖESMM | 49 11 A2 | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | |
| 00 20 04 SB | 062417 | | Precision C | irclip Pliers Set | | | | | 127 |
| | | 013 | 48 11 J1 | 48 11 J1 | Precision Circlip Pliers | | 12 - 25 | 1.3 | 1 |
| | | | 48 11 J2 | for internal circlips into bores | | 19 - 60 | 1.8 | 1 | _ |
| | | | 49 11 A1 | Precision Circlip Pliers | straight tips | 10 - 25 | 1.3 | 1 | |
| | | ° ES MM | 49 11 A2 | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | |
| | | | 48 21 J11 | Precision Circlip Pliers | | 12 - 25 | 1.3 | 1 | |
| | | Ů Ľ <u>×</u> 90° | 48 21 J21 | for internal circlips into bores | 1.1.6 | 19 - 60 | 1.8 | 1 | 1 |
| | | ÖTTM | 49 21 A11 | Precision Circlip Pliers | angled tips | 12 - 25 | 1.3 | 1 | 1 |
| | | <u>∡9</u> 0° | 49 21 A21 | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | 1 |

00 20

Precision Circlip Pliers Set

00 21

> high quality, shock-resistant plastic case

> dimensions, (W x H x D): 260 x 80 x 210 mm

> clearly organised storage of tools

> contains common Precision Circlip Pliers for highest requirements> precisely-sized recesses for holding the pliers

00 21 25



| Article No. | EAN 4003773- | | | | Style | Capacity Ø mm | Tips Ø mm | Quantity | ۲ <mark>۵</mark> |
|-------------|-----------------|-------------------------|------------------------|--|---------------|------------------|--------------|----------|------------------|
| 00 21 25 | 050131 | | Precision-C | irclip Pliers Set | | | | | 1635 |
| | | 053 | 48 11 J1 | Precision Circlip Pliers | | 12 - 25 | 1.3 | 1 | |
| | | | 48 11 J2 | for internal circlips into bores | straight tips | 19 - 60 | 1.8 | 1 | |
| | | OSIM | 49 11 A1 | riccision circip rifers | straight tips | 10 - 25 | 1.3 | 1 | |
| | | | 49 11 A2 | | | 19 - 60 | 1.8 | 1 | |
| | | Ů ₽ <u>₹</u> 90° | 48 21 J11 48 21 J21 | Precision Circlip Pliers for internal circlips into bores | | 12 - 25 | 1.3 | 1 | |
| | | | 48 21 J21 | for internal circlips into bores | angled tips | 19 - 60 | 1.8 | 1 | |
| | | ÖESMM | 49 21 A11 | Precision Circlip Pliers | angled tips | 10 - 25 | 1.3 | 1 | |
| | | <u>√9</u> 0° | 49 21 A21 f | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | |

Circlip Pliers Sets

- > attractive sales packaging with Euro standard perforation
 > contains common Circlip Pliers for highest requirements
 > sturdy plastic packaging, also suitable for storage of the pliers





00 20 04 V01

00 20 03 V02

| Article No. | EAN 4003773- | | | | Style | Capacity Ø mm | Tips Ø mm | Quantity | ے ا g |
|--------------|-----------------|-----------------|---------------|--|----------------|------------------|--------------|----------|----------|
| 00 20 03 V02 | 077640 | | Circlip Plier | s Set | | | | | 45 |
| | | o | 44 11 J1 | Circlip Pliers for internal circlips into bores stra Circlip Pliers for external circlips on shafts stra | straight ting | 12 - 25 | 1.3 | 1 | |
| | | 0 | 44 11 J2 | | | 19 - 60 | 1.8 | 1 | |
| | | 19 | 46 11 A1 | | straight tips | 10 - 25 | 1.3 | 1 | |
| | | 0 | 46 11 A2 | | | 19 - 60 | 1.8 | 1 | |
| 00 20 04 V01 | 077633 | | Circlip Plier | s Set | | | | | 89 |
| | | 0 | 44 11 J1 | Circlip Pliers for internal circlips into bores | straight tips | 12 - 25 | 1.3 | 1 | |
| | | 0 | 44 11 J2 | | | 19 - 60 | 1.8 | 1 | |
| | | 29 | 46 11 A1 | Circlip Pliers | | 10 - 25 | 1.3 | 1 | |
| | | 0 | 46 11 A2 | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | |
| | | C3 /000 | 44 21 J11 | Circlip Pliers | | 12 - 25 | 1.3 | 1 | |
| | | °€∡ (° | 44 21 J21 | for internal circlips into bores | a second stars | 19 - 60 | 1.8 | 1 | _ |
| | | 12 /000 | 46 21 A11 | Circlip Pliers | angled tips | 10 - 25 | 1.3 | 1 | |
| | | _© <u>∡9</u> 0° | 46 21 A21 | for external circlips on shafts | | 19 - 60 | 1.8 | 1 | |

00 20



Carpenters' Pincers and Concreters' Nippers

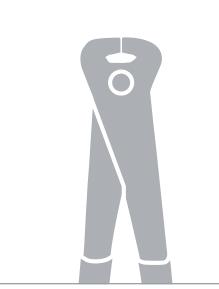
005 × 200

BOULERCON

Man Land

Elen .

| Carpenters' Pincers | 86 |
|--|----|
| Hammerhead Style Carpenters' Pincers | 86 |
| Farriers' Pincers (Tear-off Pliers for vehicle bodywork) | 87 |
| Potters' Pincers (Brick Pincers) | 87 |
| End Cutting Nippers | 87 |
| Concreters' Nippers (Tower Pincers, Steel Fixers' Nippers) | 88 |
| High Leverage Concreters' Nippers | 89 |



CARPENTERS' PINCERS

Carpenters' Pincers DIN ISO 9243

50

- > for heaviest duty
- > specially favoured by craftsmen for their precise workmanship
- > extreme wear resistance and well balanced
- > cutting edges additionally hardened; cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, oil-hardened







| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Head | Handles | Cutting capacities | 52 |
|------------------|-----------------|-----------------|----------|--------------------|----------|-----------------|--------------------|----------|
| 50 00 160 | 013129 | 160 | | | neau | | 1.8 | g 215 |
| 50 00 180 | 013136 | 180 | _ | | polished | | 2.0 | 303 |
| 50 00 210 | 013143 | 210 | P | black atramentized | | | 2.2 | 398 |
| 50 00 225 | 013150 | 225 | | | | | 2.2 | 427 |
| 50 00 250 | 013167 | 250 | | | | | 2.2 | 563 |
| 50 00 300 | 015710 | 300 | _ | | | | 2.4 | 862 |
| 50 01 160 | 015802 | 160 | | | | | 1.8 | 223 |
| 50 01 180 | 016021 | 180 | _ | | | | 2.0 | 316 |
| 50 01 210 | 016052 | 210 | | black atramantized | nalishad | plastic control | 2.2 | 411 |
| 50 01 225 | 016083 | 225 | | black atramentized | polished | plastic coated | 2.2 | 437 |
| 50 01 250 | 016267 | 250 | | | | | 2.2 | 583 |
| 50 01 300 | 016915 | 300 | | | | | 2.4 | 903 |

51

Hammerhead Style Carpenters' Pincers

- > with striking face to hammer down nails
- > cutting edges additionally hardened; cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, oil-hardened











| Multi-f | uncti | onal: | |
|---------|-------|---------|-----------|
| driving | in aı | nd pull | ing nails |

| | | | | | | Cutting capacities | |
|-------------|----------|-----|--------------------|----------|----------------|--------------------|-----|
| | EAN | > | | | | \bullet | 5 |
| Article No. | 4003773- | mm | Pliers | Head | Handles | Ømm | g |
| 51 01 210 | 023104 | 210 | black atramentized | polished | plastic coated | 1.8 | 413 |

Farriers' Pincers (Tear-off Pliers for vehicle bodywork) **DIN ISO 5743**

55





- > the ideal pliers for the farrier
- > with small head and anvil for redirecting horseshoe-nails
- > also suitable for dismantling work in vehicle body workshops
- > cutting edges additionally hardened; cutting edge hardness approx. 59 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened



55 00 300

| | EAN | ∢ —▶ | | | Head width | 52 |
|-------------|----------|-------------|--------------------|----------|------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | mm | g |
| 55 00 300 | 014072 | 300 | black atramentized | polished | 20.0 | 786 |

Potters' Pincers (Brick Pincer) **DIN ISO 5743**

| 50 | |
|----|--|
| 20 | |

- > for pottery work
- > with wire cutter for soft wire
- > cutting edges additionally hardened;

cutting edge hardness approx. 59 HRC

> High-grade special tool steel, forged, multi stage oil-hardened





| | EAN | ∢ → | | | Head width | 5 |
|-------------|----------|------------|--------------------|----------|------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | mm | g |
| 58 30 225 | 014331 | 225 | black atramentized | polished | 20.0 | 347 |



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





| | | | | | | | Cu | Cutting capacities | | | |
|-------------|-----------------|------------------|--|--------------------|----------|----------------|-----|--------------------|-----|--------------|--|
| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Head | Handles | Ømm | Ø mm | Ømm | 2 <u>7</u> 2 | |
| 68 01 160 | 013792 | 160 | | black atramentized | polished | | 4.0 | 2.8 | 2.3 | 202 | |
| 68 01 180 | 013808 | 180 | | | | plastic coated | 4.0 | 3.2 | 2.5 | 284 | |
| 68 01 200 | 013815 | 200 | | | | plastic coated | 4.0 | 3.5 | 2.8 | 319 | |
| 68 01 280 | 077664 | 280 | | | | | 4.5 | 4.0 | 3.2 | 465 | |

CONCRETERS' NIPPERS

Concreters' Nippers (Tower Pincers, Steel Fixers' Nippers) DIN ISO 9242

99 0

> to twist and cut wire in one operation: fast, reliable and economical

- > unobtained precision and long service life make these the most widely purchased concreters' nippers in the world
- cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened

99 00 220 K12

with 12 mm head, particularly suitable for tile paving work



99 00 200



99 00 220



99 00 250





99 00 280



99 00 300





99 00 220 K12

| | | | | | | Cutting c | apacities | |
|---------------|-----------------|------------------|--------------------|----------|----------------|-----------|-----------|--------|
| Article No. | EAN 4003773- | ∢ → mm | Pliers | Head | Handles | Ø mm | Ø mm | ۲ g |
| 99 00 200 | 014393 | 200 | | | | 1.8 | 1.4 | 230 |
| 99 00 220 | 013273 | 220 | | | | 2.4 | 1.6 | 315 |
| 99 00 250 | 013280 | 250 | black atramentized | polished | | 2.4 | 1.6 | 400 |
| 99 00 280 | 014096 | 280 | | | | 2.8 | 1.8 | 455 |
| 99 00 300 | 014409 | 300 | | | | 3.1 | 1.8 | 510 |
| 99 00 220 K12 | 027812 | 220 | black atramentized | polished | | 2.4 | 1.6 | 315 |
| 99 01 200 | 021452 | 200 | | | | 1.8 | 1.4 | 247 |
| 99 01 220 | 021469 | 220 | | | | 2.4 | 1.6 | 334 |
| 99 01 250 | 021483 | 250 | black atramentized | polished | plastic coated | 2.4 | 1.6 | 429 |
| 99 01 280 | 021490 | 280 | | | | 2.8 | 1.8 | 499 |
| 99 01 300 | 014416 | 300 | | | | 3.1 | 1.8 | 548 |
| 99 04 220 | 048398 | 220 | | | | 2.4 | 1.6 | 321 |
| 99 04 250 | 048213 | 250 | bright zinc plated | | | 2.4 | 1.6 | 398 |
| 99 04 280 | 048220 | 280 | | | | 2.8 | 1.8 | 457 |

High Leverage Concreters' Nippers

99

High lever transmission

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

Extra-slim form for tying deep mounted steel rods

- > to lace concrete reinforcing steel with binding wire from a roll wire is twisted and cut in a single pass
- > high-leverage joint, minimising strain, even when thick binding wires are used
- > the high damping of the cutting stroke on cutting through the binding wire reduces the strain on tendons and muscles
- > cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened











99 14 300

| | | | | | | Cutting o | apacities | | |
|-------------|-----------------|-----------------|--------------------|----------|----------------|-----------|-----------|------------------|---------|
| Article No. | EAN 4003773- | ∢→ mm | Pliers | Head | Handles | Ø mm | Ø mm | Head width mm | ۲۵ g |
| 99 10 250 | 071396 | 250 | black atramantized | nalishad | | 3.3 | 1.8 | 23.0 | 350 |
| 99 10 300 | 022398 | 300 | black atramentized | polished | | 3.8 | 2.0 | 25.0 | 501 |
| 99 11 250 | 071402 | 250 | | | | 3.3 | 1.8 | 23.0 | 350 |
| 99 11 300 | 042365 | 300 | black atramentized | polished | plastic coated | 3.8 | 2.0 | 25.0 | 537 |
| 99 14 250 | 071419 | 250 | bright zing plated | | | 3.3 | 1.8 | 23.0 | 350 |
| 99 14 300 | 028116 | 300 | bright zinc plated | | | 3.8 | 2.0 | 25.0 | 499 |

Cutting Pliers

10-160 MADEIN GERMANY

TTT?

ALLER ALLE

| Diagonal Cutters for plastics | 92 |
|--|-----|
| Diagonal Cutter for fibre optics | 92 |
| Diagonal Cutters | 94 |
| Diagonal Cutters – the next generation | 95 |
| Diagonal Cutters for electromechanics | 96 |
| X-Cut® | 97 |
| High Leverage Diagonal Cutters | 98 |
| TwinForce® | 100 |
| High Leverage Centre Cutters | 101 |
| CoBolt® | 102 |
| CoBolt® XL | 104 |
| Bolt Cutters | 106 |
| Concrete Mesh Cutter | 107 |
| Bolt End Cutting Nippers | 108 |
| High Leverage End Cutting Nippers | 108 |
| End Cutting Nippers | 109 |
| End Cutting Nippers for mechanics | 109 |



Diagonal Cutters for plastics DIN ISO 5746

7

- > cutting face flush ground
- > for nearly flush cutting of moulded plastic components from sprues
- > cuts soft materials such as lead in a flush cut
- > with opening spring
- > Vanadium electric steel; forged, oil-hardened

72 01 160

with elongated cutting edge



Elongated cutting edge (5 mm) 25 % more cutting performance

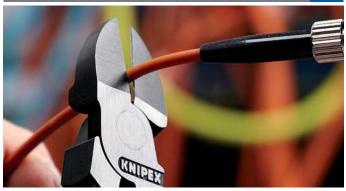




| Article No. | EAN 4003773- | ∢> mm | | Head | Handles | ے م |
|-------------|-----------------|--------------------|--------------------------|----------|----------------------------|--------|
| 72 01 140 | 043713 | 140 | | | | 125 |
| 72 01 160 | 041245 | 160 | MW 🔨 | polished | plastic coated | 164 |
| 72 01 180 | 046837 | 180 | _ | | | 193 |
| 72 02 125 | 044215 | 125 | MW 🔨 | polished | with multi-component grips | 109 |
| 72 11 160 | 046813 | 160 | <u>∡4</u> 5° Г ММ | polished | plastic coated | 156 |
| 72 21 160 | 046820 | 160 | <u>∡</u> 85° Г ₩ | polished | plastic coated | 165 |

72

Diagonal Cutter for fibre optics DIN ISO 5743



- > specially developed for cutting fibre optics (glass fibre cables)
- > with elongated cutting edge
- > cutting face flush ground
- > cutting edges additionally induction hardened
- > with opening spring
- > Vanadium electric steel, forged, multi stage oil-hardened



| | EAN | ∢ → | | | | 52 |
|-------------|----------|------------|------|----------|----------------|-----|
| Article No. | 4003773- | mm | | Head | Handles | g |
| 72 51 160 | 028031 | 160 | MW 🔽 | polished | plastic coated | 166 |

KNIPEX WORLD OF DIAGONAL CUTTERS

With its four tailor-made diagonal cutters, KNIPEX provides solutions for every application. An extraordinary variety ensures an excellent response from the "KNIPEX World of diagonal cutters" to whatsoever specification.

KNIPEX-Diagonal Cutter The classic model. The indispensable cutting tool for versatile use.

KNIPEX-High Leverage Diagonal Cutter The robust. For very tough, continuous use.

KNIPEX X-Cut® The all-rounder. Compact and light. Powerful and precise.

KNIPEX TwinForce®

The superior model. For comfortable cutting, repetitive cutting or extremely hard cutting jobs.

Diagonal Cutter



Long cutting edges for cutting cable; also precise enough for the finest stranded wires Hand force is multiplied by 12

High Leverage Diagonal Cutter



Forged on hinged joint for robust use Hand force is multiplied by 13

TwinForce®



The reapplying cutter Double-hinged design Hand force is multiplied by 39

X-Cut[®]



Box joint: greatest stability with little weight Hand force is multiplied by 16



Diagonal Cutters DIN ISO 5749

- > the indispensable diagonal cutter for all-round use
- > high quality material and precise workmanship for long service life

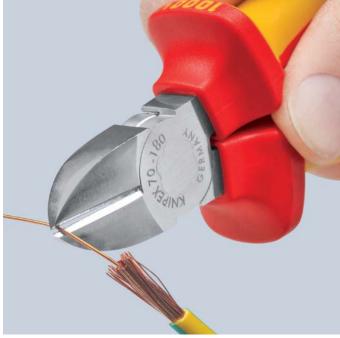
70

- > precision cutting edges for soft and hard wire
- > clean cutting of thin copper wires, also at the cutting-edge tips
- > cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- > narrow head style for use in confined areas
- > Vanadium steel, forged, multi stage oil-hardened

70 05 180 T*

Pliers with tether attachment point for mounting a fall protection







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

| | EAN 4003773- 014324 013402 013419 018070 034025 023098 034049 039501 039488 043706 0 043706 0 039488 043706 0 039488 043706 03948 043706 033813 018124 040293 033813 018179 018193 | | | | | | Cut | ting capaci | ities | |
|-------------|---|------------------|------------------|-----------------------|----------|---|------|-------------|-------|---------|
| Article No. | | ∢ → mm | | Pliers | Head | Handles | Ø mm | Ø mm | Ø mm | ۲۵ g |
| 70 01 110 | 014324 | 110 | | | | | 3.0 | 2.0 | 1.2 | 80 |
| 70 01 125 | 013402 | 125 | P 4 | black | | | 3.0 | 2.3 | 1.5 | 80 |
| 70 01 140 | 013419 | 140 | | atramentized | polished | plastic coated | 4.0 | 2.5 | 1.8 | 126 |
| 70 01 180 | 018070 | 180 | | | | 4.0 | 3.0 | 2.5 | 200 | |
| 70 02 125 | 034025 | 125 | | | | | 3.0 | 2.3 | 1.5 | 119 |
| 70 02 140 | 023098 | 140 | | black atramentized | polished | with multi-component grips | 4.0 | 2.5 | 1.8 | 150 |
| 70 02 180 | 034049 | 180 | | atramentized ' | | 4.0 | 3.0 | 2.5 | 252 | |
| 70 05 125 | 039501 | 125 | | | | | 3.0 | 2.3 | 1.5 | 119 |
| 70 05 140 | 039488 | 140 | - | | | with multi-component grips | 4.0 | 2.5 | 1.8 | 154 |
| 70 05 180 | 043706 | 180 | | chrome plated | | | 4.0 | 3.0 | 2.5 | 246 |
| 70 05 180 T | 080039 | 180 | | | | with multi-component grips and integrated tether attachment point | 4.0 | 3.0 | 2.5 | 250 |
| 70 06 125 | 018124 | 125 | | | | | 3.0 | 2.3 | 1.5 | 121 |
| 70 06 140 | 040293 | 140 | 🚖 1000 V 🖄 🚰 🗲 🥊 | chrome plated | | insulated with multi-component grips, VDE-tested | 4.0 | 2.5 | 1.8 | 160 |
| 70 06 180 | 033813 | 180 | 1 | | | grips, v DL-lesteu | 4.0 | 3.0 | 2.5 | 254 |
| 70 07 180 | 018179 | 180 | 숲 1000 V 🖄 🖨 ▶◀ | chrome plated | | with dipped insulation, VDE-tested | 4.0 | 3.0 | 2.5 | 269 |
| 70 11 110 | 018193 | 110 | ▶ • MM | black atramentized | polished | plastic coated | 3.0 | 2.0 | 1.2 | 91 |
| 70 15 110 | 029649 | 110 | | chrome plated | | with multi-component grips | 3.0 | 2.0 | 1.2 | 98 |

Diagonal Cutters DIN ISO 5749

70

70 01 160

70 02 160

KNIPE

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

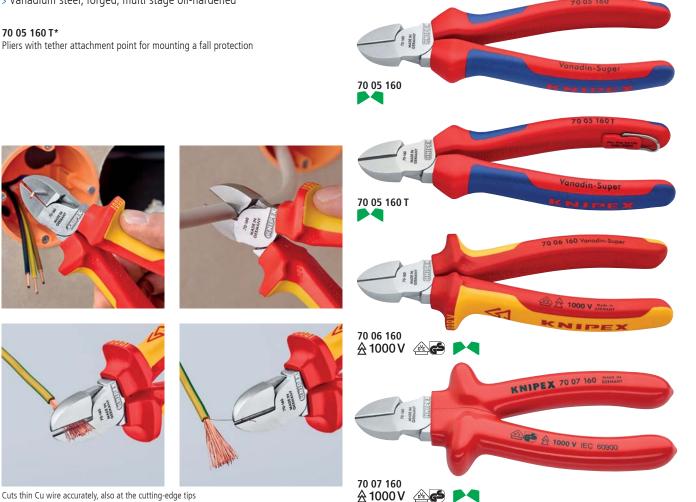
20% higher cutting force than the previous model, plus longer cutting edges

High cutting force due to optimum cutting geometry and transmission ratio

- > strong precison rivet for even movement and long service-life
- > high-precision cutting edges: additionally induction hardened, cutting-edge hardness approx. 62 HRC
- > narrow head with long cutting edges: good access also in confined areas
- > long tool life and high loading capacity
- > the essential diagonal cutters for diverse use
- > Vanadium steel, forged, multi stage oil-hardened

70 05 160 T*

Pliers with tether attachment point for mounting a fall protection



| | | | | | | | Cut | ting capac | ities | |
|-------------|-----------------|------------------|---------------------------|-----------------------|----------|---|------|------------|-------|---------|
| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Head | Handles | Ø mm | Ø mm | Ø mm | ۲۵ g |
| 70 01 160 | 013426 | 160 | P9 | black atramentized | polished | plastic coated | 4.0 | 3.0 | 2.0 | 171 |
| 70 02 160 | 034032 | 160 | P9 | black atramentized | | with multi-component grips | 4.0 | 3.0 | 2.0 | 206 |
| 70 05 160 | 039600 | 160 | | chrome plated | | with multi-component grips | 4.0 | 3.0 | 2.0 | 207 |
| 70 05 160 T | 080022 | 160 | P9 | chrome plated | | with multi-component grips and integrated tether attachment point | 4.0 | 3.0 | 2.0 | 207 |
| 70 06 160 | 021995 | 160 | <u> </u> | chrome plated | | insulated with multi-component grips, VDE-tested | 4.0 | 3.0 | 2.0 | 216 |
| 70 07 160 | 018155 | 160 | £ 1000 V € 🏲 🕇 | chrome plated | | with dipped insulation, VDE-tested | 4.0 | 3.0 | 2.0 | 227 |
| 70 26 160 | 018223 | 160 | 会 1000 V @ @ / / / | chrome plated | | insulated with multi-component grips, VDE-tested | 4.0 | | | 216 |

* Other tools with tethering can be found from page 254 ff

Diagonal Cutters for electromechanics DIN ISO 5749

76

- > with sharp, precisely aligned cutting edges for soft, hard wire and piano wire
- cutting edges additionally induction hardened, cutting edge hardness approx. 63 HRC
- > lap joint
- > Vanadium electric steel, forged, multi stage oil-hardened

76 12 125

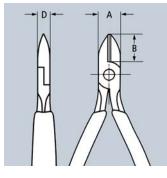
low-friction double spring for gentle and even opening

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, multiple stranded wires)



| 125 tr | |
|------------------|-----------|
| 76 01 125 🕸 🕨 | |
| | 76 05 125 |
| and the second | |
| 76 05 125 🕸 🕨 | KNIPEY |

| | | | | | | | C | 0.4 - 2.5 1.8 1.0 0.4 - 2.5 1.8 1.0 | | | Di | Dimensions | | |
|-------------|-----------------|------------------|-------------------|-----------------------|----------|----------------------------|-----------|---|-----|------|---------|------------|---------|------------------|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Ø mm | 0 Ømm | | Ø mm | A mm | B mm | D mm | ۲ <mark>۵</mark> |
| 76 01 125 | 018490 | 125 | X\$X 💌 | black atramentized | polished | plastic coated | 0.4 - 3.0 | 2.3 | 1.5 | 0.6 | 14.5 | 16 | 9 | 90 |
| 76 03 125 | 018506 | 125 | x\$\$ > | chrome plated | | plastic coated | 0.4 - 2.5 | 1.8 | 1.0 | 0.6 | 14.5 | 16 | 9 | 90 |
| 76 05 125 | 005315 | 125 | X\$X 🏲 🖣 | chrome plated | | with multi-component grips | 0.4 - 2.5 | 1.8 | 1.0 | 0.6 | 14.5 | 16 | 9 | 118 |
| 76 12 125 | 048015 | 125 | * * 1 MM | black atramentized | polished | with multi-component grips | 0.4 - 2.5 | 1.8 | 1.0 | 0.6 | 14.5 | 16 | 9 | 112 |
| 76 22 125 | 048022 | 125 | X88 🚩 💙 XXX | black atramentized | polished | with multi-component grips | 0.4 - 2.5 | | | | 14.5 | 16 | 9 | 107 |
| 76 81 125 | 018544 | 125 | x\$X 📂 🦰 | black atramentized | polished | plastic coated | 0.4 - 1.7 | 1.3 | 0.8 | | 14.5 | 16 | 9 | 87 |

KNIPEX X-Cut®

Compact Diagonal Cutters, high lever transmission DIN ISO 5749

Powerful, light and universal

Cuts precisely finest strands as well as multi-core cables and piano wires

- > high cutting capacity with very little effort thanks to the optimum co-ordination of cutting-edge angle and leverage ratio
- > box-joint design: highest stability with low weight
- > large opening width for thicker cables
- > cuts precisely, even through fine copper wires
- > compact, low-weight construction
- > doubly supported joint axis for heaviest duty
- > universally usable, in the assembly, maintenance and production
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

73 05 160 T*

Pliers with tether attachment point for mounting a fall protection





73















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

Box-joint design: highest stability with low weight

| | | | | | | | | Cutt | ing capa | cities | | |
|-------------|-----------------|-----------------|--------------------------|-----------------------|----------|---|------|------|----------|--------|------|------------------|
| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Head | Handles | Ø mm | Ø mm | Ø mm | Ø mm | Ø mm | ۲ <mark>۵</mark> |
| 73 02 160 | 075127 | 160 | ₽₹C | black atramentized | polished | with multi-component grips | 4.8 | 3.8 | 2.7 | 2.2 | 12.0 | 175 |
| 73 05 160 | 075134 | 160 | | chrome plated | | with multi-component grips | 4.8 | 3.8 | 2.7 | 2.2 | 12.0 | 175 |
| 73 05 160 T | 080077 | 160 | P< ⊑ | chrome plated | | with multi-component grips and integrated tether attachment point | 4.8 | 3.8 | 2.7 | 2.2 | 12.0 | 179 |
| 73 06 160 | 075141 | 160 | 会 1000 V @@ ●● | chrome plated | | insulated with multi-component grips, VDE-tested | 4.8 | 3.8 | 2.7 | 2.2 | 12.0 | 175 |

High Leverage Diagonal Cutters

- > for very tough, continuous use
- > high cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > precision cutting edges additionally induction hardened (cutting edge hardness approx. 64 HRC), for all sorts of wire including piano wire
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

Style 1

with opening spring; to be activated if required

Style 2

angled head offers clearance for gripping

Length 250 mm

the 250-mm-long diagonal cutter is suitable for copper conductors up to 16 $\rm mm^2$ and aluminium conductors up to 35 $\rm mm^2$

74 02 200 / 74 02 250 / 74 22 200 / 74 22 250 T*

Pliers with tether attachment point for mounting a fall protection

20% less effort required

compared to conventional diagonal cutters of the same length. With integrated forged joint axle. For very tough, continuous use



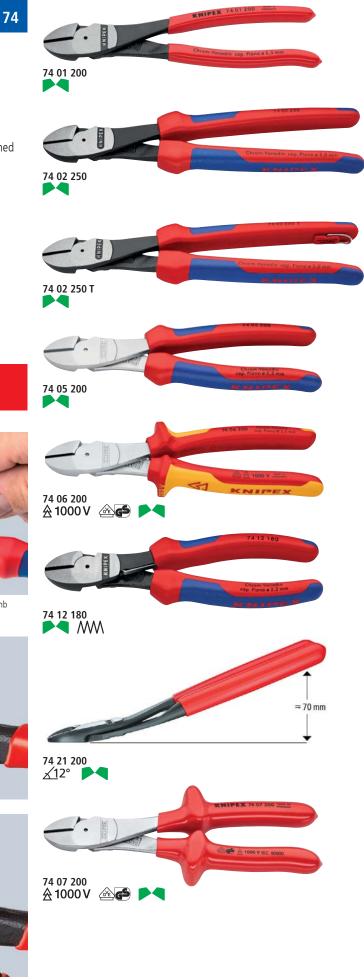
74 12: opening spring in deactivated position



74 12: just gentle sliding with your thumb will activate the opening spring









With integrated forged joint axle for very tough, continuous use

| Article No. 4 74 01 140 0 74 01 160 0 74 01 180 0 74 01 200 0 74 01 250 0 74 02 140 0 74 02 200 0 74 02 200 0 74 02 200 0 74 02 250 0 | | | | | | | | Cutt | ing capa | cities | |
|---|----------|-------------|-------------------------|--------------|---|----------------------------|--|------|----------|--------|-----|
| | EAN | ∢ —▶ | | | | | | | | | 52 |
| Article No. | 4003773- | mm | | Style | Pliers | Head | Handles | Ømm | Ømm | Ømm | g |
| 74 01 140 | 039747 | 140 | | | | | | 3.1 | 2.0 | 1.5 | 131 |
| 74 01 160 | 033141 | 160 | | | | | | 3.4 | 2.5 | 2.0 | 178 |
| 74 01 180 | 022008 | 180 | | 0 | black atramentized | polished | plastic coated | 3.8 | 2.7 | 2.2 | 241 |
| 74 01 200 | 034056 | 200 | | | anamentizea | | | 4.2 | 3.0 | 2.5 | 263 |
| 74 01 250 | 034063 | 250 | | | | | | 4.6 | 3.5 | 3.0 | 391 |
| 74 02 140 | 042419 | 140 | | | | | | 3.1 | 2.0 | 1.5 | 157 |
| 74 02 160 | 023081 | 160 | | 0 | black | poliched | with multi component arise | 3.4 | 2.5 | 2.0 | 209 |
| 74 02 180 | 023074 | 180 | | 0 | atramentized | polished | with multi-component grips | 3.8 | 2.7 | 2.2 | 273 |
| 74 02 200 | 040309 | 200 | - | | | | | 4.2 | 3.0 | 2.5 | 304 |
| 74 02 200 T | 080084 | 200 | P9 | 0 | black atramentized | polished | with multi-component grips and integrated tether attachment point | 4.2 | 3.0 | 2.5 | 308 |
| 74 02 250 | 042402 | 250 | | 0 | black atramentized | polished | with multi-component grips | 4.6 | 3.5 | 3.0 | 437 |
| 74 02 250 T | 080091 | 250 | ۴۹ | 0 | black atramentized | polished | with multi-component grips and integrated tether attachment point | 4.6 | 3.5 | 3.0 | 441 |
| 74 05 140 | 039617 | 140 | | | | | | 3.1 | 2.0 | 1.5 | 157 |
| 74 05 160 | 022961 | 160 | | | | | | 3.4 | 2.5 | 2.0 | 209 |
| 74 05 180 | 022978 | 180 | | 0 | chrome plated | me plated | with multi-component grips | 3.8 | 2.7 | 2.2 | 270 |
| 74 05 200 | 035367 | 200 | | | | | | 4.2 | 3.0 | 2.5 | 303 |
| 74 05 250 | 039754 | 250 | | | | | 4.6 | 3.5 | 3.0 | 440 | |
| 74 06 160 | 040705 | 160 | | | | | | 3.4 | 2.5 | 2.0 | 215 |
| 74 06 180 | 022985 | 180 | | | | | insulated with multi-component | 3.8 | 2.7 | 2.2 | 280 |
| 74 06 200 | 033820 | 200 | A 1000 V 🖄 🖨 ▶◀ | 0 | chrome plated | | grips, VDE-tested | 4.2 | 3.0 | 2.5 | 308 |
| 74 06 250 | 041955 | 250 | - | | | | | 4.6 | 3.5 | 3.0 | 453 |
| 74 07 200 | 018414 | 200 | | _ | | | with dipped insulation, | 4.2 | 3.0 | 2.5 | 328 |
| 74 07 250 | 018421 | 250 | <u> </u> | 0 | chrome plated | | VDE-tested | 4.6 | 3.5 | 3.0 | 510 |
| 74 12 160 | 065111 | 160 | | | black | | | 3.4 | 2.5 | 2.0 | 209 |
| 74 12 180 | 060192 | 180 | | 1 | atramentized | polished | with multi-component grips | 3.8 | 2.7 | 2.2 | 273 |
| 74 21 180 | 069973 | 180 | | | | | | 3.8 | 2.7 | 2.2 | 235 |
| 74 21 200 | 050483 | 200 | <u>∡1</u> 2° ▶ | 2 | black | polished | plastic coated | 4.2 | 3.0 | 2.5 | 258 |
| 74 21 250 | 045021 | 250 | | | atramentized | | | 4.6 | 3.5 | 3.0 | 390 |
| 74 22 200 | 051831 | 200 | | | | | with multi-component grips | 4.2 | 3.0 | 2.5 | 300 |
| 74 22 200 T | 080107 | 200 | | | black | | with multi-component grips and integrated tether attachment point | 4.2 | 3.0 | 2.5 | 304 |
| 74 22 250 | 071372 | 250 | <u>∡1</u> 2° ▶ ◀ | 2 black poli | polished | with multi-component grips | 4.6 | 3.5 | 3.0 | 437 | |
| 74 22 250 T | 080114 | 250 | | | ² atramentized ^{po} | | with multi-component grips and integrated tether attachment point | 4.6 | 3.5 | 3.0 | 441 |

KNIPEX TwinForce[®] High Performance Diagonal Cutter DIN ISO 5749

The 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
- > low cutting impact: gentle on hands. The tension on muscles and tendons is relieved
- > for comfortable cutting, repetitive cutting or extremely hard cutting jobs
- > high degree of stability and zero-backlash due to precisely milled forged-in axles
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

73 72 180 F

with opening spring to simplify reapplication and for repetitive cutting



The High Performance Diagonal Cutter with opening spring to simplify reapplication and for repetitive cutting



The opening spring can be easily activated and deactivated by a press of the thumb





| | | | | | | | Cutting capacities | | | | |
|-------------|----------|-------------|------|--------------------|----------|----------------------------|--------------------|-----|--------------|-----|-----|
| | EAN | ∢ —▶ | | | | | \bullet | | \mathbf{O} | | 52 |
| Article No. | 4003773- | mm | | Pliers | Head | Handles | Ømm | Ømm | Ømm | Ømm | g |
| 73 71 180 | 074762 | 180 | | black atramentized | polished | plastic coated | 5.5 | 4.6 | 3.2 | 3.0 | 255 |
| 73 72 180 | 074779 | 180 | | black atramentized | polished | with multi-component grips | 5.5 | 4.6 | 3.2 | 3.0 | 280 |
| 73 72 180 F | 077657 | 180 | MW 🗲 | black atramentized | polished | with multi-component grips | 5.5 | 4.6 | 3.2 | 3.0 | 280 |

nForce

73



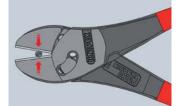


New for diagonal cutters

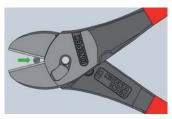
Cuts again 50% easier than the tried and tested KNIPEX High Leverage Diagonal Cutters

The option to reapply the tool. The KNIPEX TwinForce® cuts even 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.

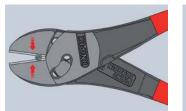
KNIPEX TwinForce® Reapplying



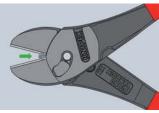
Insert the wires as close to the hinge as possible. In case of cutters with very high transmission, the width of the gap between the cutting edges close to the fulcrum may be less than the thickness of the wire. Wires may slip forward when the cutting starts.



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

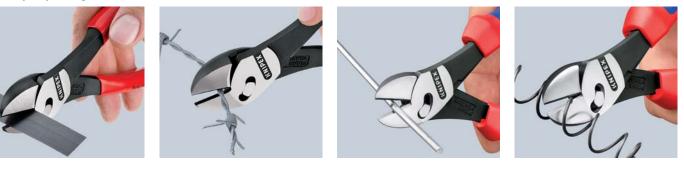


First make a notch in the wire using the KNIPEX TwinForce® until the required hand force increases considerably. Now open the pliers and slide the wire backwards towards the joint.



You can repeat this process if necessary.

Extremely easy cutting with little strain



74

91

High Leverage Centre Cutters DIN ISO 5743

> with integrated forged axle for heaviest duty

- > with precision cutting edges for soft, hard and piano wire
- > cuts thick wires with less effort than other diagonal cutters
- of the same length
- > centric precision cutting edges
- > high cutting performance with minimum effort due to optimum co-ordination of the cutting edge angle and transmission ratio
- > cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened





The cutting edges are in the centre of the cutter head



| | | | | | | Cutting capacities | | | | |
|-------------|----------|------------|--------------------|----------|----------------|--------------------|-----|-----|-----|-----|
| | EAN | ∢ > | | | | \bullet | | | | 5 |
| Article No. | 4003773- | mm | Pliers | Head | Handles | Ømm | Ømm | Ømm | Ømm | g |
| 74 91 250 | 034070 | 250 | black atramentized | polished | plastic coated | 5.0 | 5.0 | 3.8 | 3.5 | 395 |

KNIPEX CoBolt[®] Compact Bolt Cutters DIN ISO 5743

71

Exceptional cutting performance

- > precision cutting edges for soft and hard wire as well as piano wire
- > cuts components like bolts, nails, rivets, etc. up to 5.2 mm dia.
- > exceptional cutting performance with minimum effort because of unsurpassedly effective lever action design
- > cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

CoBolt® 60% less effort

required compared to conventional high-leverage diagonal cutters. The ingenious lever-action mechanism ensures an extremely favourable lever ratio with very little friction. The cutting force is about 30 times higher than the hand force applied.

Improved cutting performance

Micro-structured cutting edge allows easy cutting of large cross-sections

With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm

71 12 200

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

71 02 200 T*

Pliers with tether attachment point for mounting a fall protection







Micro-structured cutting edge allows easy cutting of large cross-sections



With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm



71 12 200

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

| | | | | | Cutting capacities | | | | |
|-------------|-----------------|------------------|--------------------|---|--------------------|------|------|------|----------|
| Article No. | EAN 4003773- | ∢ → mm | Pliers | Handles | Ømm | Ø mm | Ø mm | Ø mm | Δ'Δ q |
| 71 01 200 | 033165 | 200 | black atramentized | plastic coated | 6.0 | 5.2 | 4.0 | 3.6 | 335 |
| 71 02 200 | 047056 | 200 | | with slim multi-component grips | 6.0 | 5.2 | 4.0 | 3.6 | 372 |
| 71 02 200 T | 080046 | 200 | black atramentized | with multi-component grips and integrated tether attachment point | 6.0 | 5.2 | 4.0 | 3.6 | 376 |
| 71 12 200 | 066859 | 200 | black atramentized | with slim multi-component grips | 6.0 | 5.2 | 4.0 | 3.6 | 375 |

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

With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm

71 32 200 / 71 32 200 T*

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

71 32 200 T*

Pliers with tether attachment point for mounting a fall protection



71 31 200/71 32 200/71 32 200 T The recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings



71 31 200/71 32 200/71 32 200 T With gripping surface below the joint for gripping and pulling wires with a diameter as from 1 mm



KNIPEX

| | | | | | | | Cutting capacities | | | | |
|----|------------|----------|-------------|-------|--------------------|---|--------------------|-----|-----|-----|-----|
| | | EAN | 4- > | | | | \bullet | | | | 52 |
| Ar | ticle No. | 4003773- | mm | Style | Pliers | Handles | Ømm | Ømm | Ømm | Ømm | g |
| 71 | 31 200 | 042327 | 200 | 3 | black atramentized | plastic coated | 6.0 | 5.2 | 4.0 | 3.6 | 330 |
| 71 | 32 200 | 066880 | 200 | | | with slim multi-component grips | 6.0 | 5.2 | 4.0 | 3.6 | 370 |
| 71 | I 32 200 T | 080060 | 200 | 3 | black atramentized | with multi-component grips and integrated tether attachment point | 6.0 | 5.2 | 4.0 | 3.6 | 374 |

71 31 200

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

71 22 200 / 71 22 200 T*

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

71 22 200 T*

Pliers with tether attachment point for mounting a fall protection

71 41 200

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



71 21 200 <u>∡2</u>0° ►





| | | | | | | Cutting capacities | | | | |
|-------------|-----------------|------------------|--------------------------|--------------------|---|--------------------|------|------|-----|----------|
| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Handles | Ømm | Ø mm | Ø mm | Ømm | ∆'∆ q |
| 71 21 200 | 066866 | 200 | <u>∡2</u> 0° ▶ ◀ | black atramentized | plastic coated | 6.0 | 5.2 | 4.0 | 3.6 | 320 |
| 71 22 200 | 066873 | 200 | | black atramentized | with slim multi-component grips | 6.0 | 5.2 | 4.0 | 3.6 | 375 |
| 71 22 200 T | 080053 | 200 | <u>∡2</u> 0° ▶ ₩₩ | | with multi-component grips and integrated tether attachment point | 6.0 | 5.2 | 4.0 | 3.6 | 379 |
| 71 41 200 | 066897 | 200 | <u>∡2</u> 0° ▶◀ | black atramentized | plastic coated | 6.0 | 5.2 | 4.0 | 3.6 | 335 |



KNIPEX CoBolt[®] XL Compact bolt cutters

71

The compact bolt cutters from KNIPEX now also available in 250 mm length for one and two-hand operation. Up to a 40-fold increase of manual force.

For powerful cutting of larger cross-sections as well as very hard materials

Two-hand 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
- > with a gripping surface below the joint for gripping and pulling wires with a diameter from 1.0 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

to the fulcrum

71 31 250 blades with recess for easier cutting of larger cross-sections thanks to better leverage close















Two-hand operation for maximum cutting force

| | | | | | Cutting capacities | | | |
|-------------|----------|-------------|--------------------|----------------|--------------------|-----|-----|-----|
| | EAN | ∢ —▶ | | | | | | 5 |
| Article No. | 4003773- | mm | Pliers | Handles | Ømm | Ømm | Ømm | g |
| 71 01 250 | 079637 | 250 | black atramentized | plastic coated | 5.6 | 4.0 | 3.8 | 465 |
| 71 31 250 | 079644 | 250 | black atramentized | plastic coated | 6.0 | 4.3 | 4.2 | 465 |



Bolt Cutters cut hard components up to 48 HRC

> cutting capacity up to 48 HRC hardness

- > robust cutting edges are additionally 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 minimise effort
- > sturdy non-slip two-colour dual component handle sleeves
- > precise adjustment (12 positions) by eccentric bolt
- > high cutting performance with minimum effort due to optimum co-ordination 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







Forged-in stopper with damping inserts: cushions the cutting stroke comfortably



71 72



| | | | | | | (| Cutting capacities | | | | | | |
|-------------|-----------------|-----------------|---|---------------------------|----------------------------|----------------|--------------------|----------------|------------------|--|--|--|--|
| Article No. | EAN 4003773- | ∢→ mm | | Head | Handles | HRC 19 Ø mm | HRC 40 Ø mm | HRC 48 Ø mm | ۲ <mark>۵</mark> | | | | |
| 71 72 460 | 066750 | 460 | | | | 8 | 6 | 5 | 2100 | | | | |
| 71 72 610 | 066767 | 610 | | arey stramentized | with multi-component grips | 9 | 8 | 7 | 2550 | | | | |
| 71 72 760 | 066774 | 760 | | grey atramentized | | 11 | 9 | 8 | 4250 | | | | |
| 71 72 910 | 066781 | 910 | | | | 13 | 10 | 9 | 4950 | | | | |
| 71 79 460 | 066804 | Spare | rutter head for | 71 72 460 complete with s | screws | | | | | | | | |
| 71 79 610 | 066811 | | | 71 72 610 complete with s | | | | | | | | | |
| 71 79 760 | 066828 | Spare of | re cutter head for 71 72 760 complete with screws | | | | | | | | | | |
| 71 79 910 | 066835 | Spare of | re cutter head for 71 72 910 complete with screws | | | | | | | | | | |

Concrete Mesh Cutter

- > cutting capacity up to 48 HRC hardness
- > robust cutting edges are additionally 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 minimise effort
- > sturdy non-slip two-colour dual component handle sleeves
- > precise adjustment (12 positions) by eccentric bolt
- > high cutting performance with minimum effort due to optimum co-ordination 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





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

| | | | | | | Cutting capacities | | | |
|-------------|-----------------|------------------|--------------------------|----------------------------|----------------|--------------------|----------------|---------|--|
| Article No. | EAN 4003773- | ∢ ► mm | Head | Handles | HRC 19 Ø mm | HRC 40 Ø mm | HRC 48 Ø mm | ۲۵ g | |
| 71 82 950 | 066798 | 950 | grey atramentized | with multi-component grips | 11 | 9 | 6 | 4060 | |
| 71 89 950 | 066842 | Spare | cutter head for 71 82 95 | 0 complete with screws | | | | | |

71 82 950

71 82



Bolt End Cutting Nippers high lever transmission

DIN ISO 5743

Extraordinary cutting performance: also for piano wire



Particularly efficient for fence construction



Almost flush cutting of bolts, nails etc.

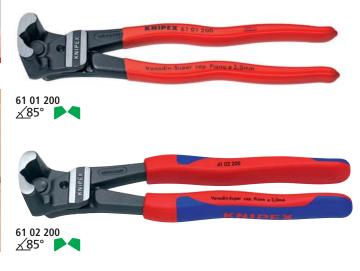
Powerful, compact, comfortable

- > compared to conventional lever-assisted end cutting nippers, greater cutting capacity, less effort required and better handling
- > for all classes of wire including piano wire
- > exceptional cutting capacity due to high-leverage joint
- > cutting edges additionally induction hardened; cutting edge hardness approx. 64 HRC
- > Vanadium steel, forged, multi stage oil-hardened

61 02 200

61

with slim two-colour multi-component sleeves without collar for better handling and easier transport; with large contact surface on the handles for better allotment of pressure and more comfort at work



| | | | | | | | Cutting capacities | | | | |
|-------------|----------|------------|-------------------------|--------------------|----------|---------------------------------|--------------------|-----|-----|-----|-----|
| | EAN | ∢ → | | | | | \bullet | | | | 5 |
| Article No. | 4003773- | mm | | Pliers | Head | Handles | Ømm | Ømm | Ømm | Ømm | g |
| 61 01 200 | 033172 | 200 | <u>∡8</u> 5° ▶ ◀ | black atramentized | polished | plastic coated | 1.0 - 6.0 | 4.0 | 3.5 | 3.0 | 435 |
| 61 02 200 | 067047 | 200 | <u>∡8</u> 5° ▶ ◀ | black atramentized | polished | with slim multi-component grips | 1.0 - 6.0 | 4.0 | 3.5 | 3.0 | 435 |

67

High Leverage End Cutting Nippers DIN ISO 5748

- > with cutting edges for soft, hard and piano wire
- > high cutting capacity with little effort due to optimum co-ordination of cutting edge angle and transmission ratio
- > cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened





| | | | | | | | Cutting capacities | | | | |
|-------------|-----------------|-------------------|--|-----------------------|----------|----------------------------|--------------------|------|------|-----|---------|
| Article No. | EAN 4003773- | ∢ →→ mm | | Pliers | Head | Handles | Ø mm | Ø mm | Ø mm | Ømm | ۲۵ g |
| 67 01 140 | 043690 | 140 | | | | | 4.0 | 3.1 | 2.0 | 1.5 | 152 |
| 67 01 160 | 040620 | 160 | | black atramentized | polished | plastic coated | 4.5 | 3.4 | 2.5 | 2.0 | 237 |
| 67 01 200 | 040637 | 200 | | attamentized | | | 5.0 | 3.8 | 3.0 | 2.5 | 318 |
| 67 05 140 | 017929 | 140 | | | | | 4.0 | 3.1 | 2.0 | 1.5 | 176 |
| 67 05 160 | 017936 | 160 | | chrome plated | | with multi-component grips | 4.5 | 3.4 | 2.5 | 2.0 | 266 |
| 67 05 200 | 017943 | 200 | | | | | 5.0 | 3.8 | 3.0 | 2.5 | 361 |

End Cutting Nippers DIN ISO 5748

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

- > with cutting edges for soft and hard wire
- > also suitable for twisting and cutting binding wire
- > cutting edges additionally induction hardened,
- cutting edge hardness approx. 61 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened







68 01 180

| | | | | | | Cutting capacities | | | |
|-------------|----------|-----------|--------------|----------|-----------------|--------------------|-----|-----|-----|
| | EAN | 4- | | | | \bullet | | | 52 |
| Article No. | 4003773- | mm | Pliers | Head | Handles | Ømm | Ømm | Ømm | g |
| 68 01 160 | 013792 | 160 | | | | 4.0 2.8 | 2.8 | 2.3 | 202 |
| 68 01 180 | 013808 | 180 | black | polished | plastic control | 4.0 | 3.2 | 2.5 | 284 |
| 68 01 200 | 013815 | 200 | atramentized | polisned | plastic coated | 4.0 | 3.5 | 2.8 | 319 |
| 68 01 280 | 077664 | 280 | | | | 4.5 | 4.0 | 3.2 | 467 |

68

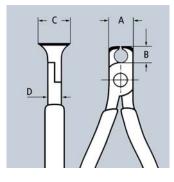
End Cutting Nippers

for mechanics

DIN ISO 5748

69

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



| | | | | | | Cutting capacities | | | | Dimensions | | | |
|-------------|----------|----------|-----------------------|----------|----------------|--------------------|------------|-----|-----|------------|-----|----|----|
| | EAN | - | | | | \bigcirc | \bigcirc | | | A | В | D | С |
| Article No. | 4003773- | mm | Pliers | Head | Handles | Ømm | Ømm | Ømm | Ømm | mm | mm | mm | mm |
| 69 01 130 | 017974 | 130 | black atramentized | polished | plastic coated | 0.4 - 2.0 | 1.3 | 1.0 | 0.8 | 16 | 7.5 | 10 | 20 |
| 69 03 130 | 018001 | 130 | chrome plated | | plastic coated | 0.4 - 2.0 | 1.3 | 1.0 | 0.8 | 16 | 7.5 | 10 | 20 |

69 01 130

52

g

Pipe Wrenches and Water Pump Pliers AA

Second St

Z-POE 12 GEP

60R. 54735

| Pliers Wrenches | 112 |
|---|-----|
| Set of pliers wrenches | 113 |
| Pliers Wrench XL | 114 |
| Multiple Slip Joint Spanner | 115 |
| Smart Grip® | 115 |
| Cobra® | 116 |
| Cobra® XL / XXL | 118 |
| Cobra®matic | 119 |
| Cobra® QuickSet | 120 |
| Cobra [®] VDE | 121 |
| Cobra® ES | 121 |
| Alligator® | 122 |
| Alligator® XL | 124 |
| Water Pump Pliers with groove joint | 125 |
| Mini Water Pump Pliers with groove joint. | 125 |
| Pipe Wrenches 90° | 126 |
| Pipe Wrenches 45° | 126 |
| Pipe Wrenches S-type | 127 |
| Pipe Wrenches S-Type with rapid adjustment. | 127 |
| Siphon- and Connector Pliers | 128 |
| | |



Pliers Wrenches

pliers and a wrench in a single tool DIN ISO 5743

Replaces the need for sets of metric and imperial spanners Smooth jaws for damage free installation of plated fittings – working directly on chrome!

- > adjustable tightening tool
- > also excellent for gripping, holding, pressing and bending workpieces
- > zero backlash jaw pressure prevents damage to edges of sensitive components
- > adjustment at the touch of a button directly on the workpiece
- > parallel jaws give a more solid grip; the construction gives infinite adjustment of all widths up to the specified maximum size
- > reliable catching of the hinge bolt: no unintentional shifting
- > the action of the jaws allows quick tightening and release of bolted connections using the ratchet principle
- > lever transmission greater than 10 : 1 for strong gripping power
- > Chrome vanadium electric steel, forged, oil-hardened

Length 125 mm

the mini pliers wrench for precision mechanics; particularly suitable for working on small bolted connections; very good access in very confined areas

Length 150 mm

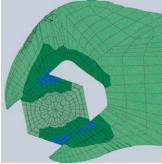
ideal multi-purpose wrench in pocket size; indispensable companion in emergency tool kit

Length 180 mm

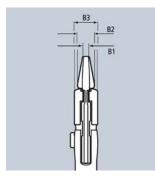
with narrow gripping jaws - for tightening situations that require a slim tool

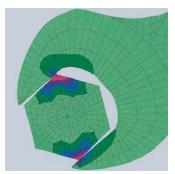
86 05 180 / 86 05 250 T*

Pliers with tether attachment point for mounting a fall protection

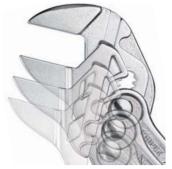


Pliers wrench: zero backlash contact pressure, no damage to edges





Conventional open end wrench: edge pressure causes surface damage



Fast adjustment by pushing a button





86



86 03 150



86 03 180











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, utilisation as a small vice.

PLIERS WRENCHES



Working on plated fittings without damage of the surface



imperial spanners

KNIPE



Ideal for bending operations



The mini pliers wrench for precision mechanics

| | | | | | | | | | D | imensior | าร | |
|-------------|-----------------|-------------------|----|------------------|---|-------|----------|-------------------------|----------|----------|----------|------------------|
| Article No. | EAN 4003773- | ∢ —► mm | | Pliers | Handles | Inch | mm mm | Adjustment positions | B1 mm | B2 mm | B3 mm | ۲ <mark>۵</mark> |
| 86 03 125 | 077497 | 125 | | | | 7/8 | 23 | 11 | 3.0 | 5.0 | 9.5 | 105 |
| 86 03 150 | 069676 | 150 | | | | 1 | 27 | 14 | 4.7 | 7.0 | 10.5 | 175 |
| 86 03 180 | 035466 | 180 | S | chrome plated | plastic coated | 1 3/8 | 35 | 13 | 5.0 | 8.0 | 12.0 | 254 |
| 86 03 250 | 033837 | 250 | | plateu | | 1 3/4 | 46 | 17 | 8.0 | 8.0 | 14.0 | 536 |
| 86 03 300 | 041429 | 300 | | | | 2 3/8 | 60 | 22 | 9.5 | 9.5 | 15.0 | 729 |
| 86 05 150 | 069928 | 150 | | | with multi-component grips | 1 | 27 | 14 | 4.7 | 7.0 | 10.5 | 193 |
| 86 05 180 | 047162 | 180 | | | with multi-component grips | 1 3/8 | 35 | 13 | 5.0 | 8.0 | 12.0 | 277 |
| 86 05 180 T | 080121 | 180 | ag | chrome plated | with multi-component grips and integrated tether attachment point | 1 3/8 | 35 | 13 | 5.0 | 8.0 | 12.0 | 281 |
| 86 05 250 | 047841 | 250 | | plated | with multi-component grips | 1 3/4 | 46 | 17 | 8.0 | 8.0 | 14.0 | 571 |
| 86 05 250 T | 080138 | 250 | | | with multi-component grips and integrated tether attachment point | 1 3/4 | 46 | 17 | 8.0 | 8.0 | 14.0 | 575 |

Set of pliers wrenches 5-piece

> tool roll made of hard-wearing polyester fabric

- > with hook and loop fastener
- > Fitted with 1 each of 86 03 125/150/180/250/300



| Article No. | EAN 4003773- | | | Quantity | ۵'۵ g |
|-------------|-----------------|---------------|---|----------|----------|
| 00 19 55 S4 | 077817 | Set of pliers | wrenches | | 2060 |
| | | 86 03 125 | KNIPEX Mini pliers wrench, pliers and a wrench in a single tool | 1 | |
| | | 86 03 150 | Mini Pliers Wrench, pliers and a wrench in a single tool | 1 | |
| | | 86 03 180 | Pliers Wrench, pliers and a wrench in a single tool | 1 | |
| | | 86 03 250 | Pliers Wrench, pliers and a wrench in a single tool | 1 | |
| | | 86 03 300 | Pliers Wrench, pliers and a wrench in a single tool | 1 | |

Pliers Wrench XL pliers and a wrench in a single tool DIN ISO 5743

The unique installation tool now also in 400 mm length For opening widths up to 85 mm / 3 3/8"

> excellent for gripping, holding, pressing and bending workpieces

86

03

- > optimised 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
- > Chrome vanadium electric steel, forged, oil-hardened



Pliers Wrench XL

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 AF 85 or 3 3/8"

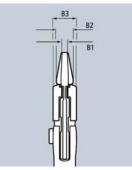
smooth jaws, for damage free installation of quality union joints made from brass, red brass, stainless steel or chrome-plated material

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 the button for adjustment on the workpiece





Handles

plastic coated

Pliers

chrome plated



EAN

4003773-

077312

--

mm

400

| it | | 2 | |
|----|------|------|--------------------|
| | X | 6 | ER |
| | | | |
| | | | KNIPEX |
| | 0055 | | HADE IN GERMANY |
| | | D' ' | |

C)

Inch

3 3/8

 \bigcirc

mm

85

Adjustment

positions

25

Pliers head = original size

5

g

1460

Dimensions

B2

mm

16

B3

mm

20

B1

mm

12.5

| 86 | 03 | 400 |
|-----|----|-----|
| 114 | | |

Article No.

Multiple Slip Joint Spanner DIN ISO 5743



Self-locking: no slip on workpieces; less effort required





87

Fine adjustment by pushing a button: fast and comfortable

In operation on rusted nut with rounded edges

The Multiple Slip Joint Spanner 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 spanner can be managed by the exceptionally powerful closing gripping jaws of this spanner.

| | EAN | ∢ → | | | | \Box | \bigcirc | Adjustment | 52 |
|-------------|----------|------------|-------------------|----------|----------------|-------------|------------|------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | Handles | Inch | mm | positions | g |
| 87 41 250 | 054566 | 250 | grey atramentized | polished | plastic coated | 3/8 - 1 1/4 | 10 - 32 | 15 | 328 |

85

KNIPEX SmartGrip®

Water Pump Pliers with automatic adjustment DIN ISO 8976

- > ideal for frequent changeovers to workpieces of different sizes
- > automatic adjustment per one-hand operation both for right-handed and left-handed use
- > good access to the workpiece thanks to the slim dimensions in the head and joint area and flush joint bolt
- > self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness approx.61 HRC: low wear and stable gripping
- > box-joint design: high stability because of the double guide
- > 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



85 01 250

Adjustment to suit the workpiece is automatic with the KNIPEX SmartGrip[®]! Place the outer jaw on the workpiece, squeeze the handles – turn!



| | EAN | 4- | | | | EO | C] | \bigcirc | 50 |
|-------------|----------|-----------|-------------------|----------|----------------|--------|-----|------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | Handles | Ø Inch | Ømm | mm | g |
| 85 01 250 | 061304 | 250 | grey atramentized | polished | plastic coated | 1 1/4 | 32 | 36 | 370 |

- > for metric and imperial nuts and screws with widths across flats from 10 to 32 mm (3/8" up to 1 1/4"); self-locking from 17 mm: no slipping on the workpiece
- > zero-backlash gripping of metric or imperial hexagonal headed screws, no rounding of bolt heads
- > reliable and tight gripping of rounded, rusty, or thick coated bolts and screws
- > ideal for work on vehicle brake systems
- > quick tightening of bolted connections using ratchet action
- > adjustment at the touch of a button directly on the workpiece, also possible with one hand only
- > fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > box-joint design: high stability because of the double guide
- > reliable catching of the hinge bolt: no unintentional shifting
- > favourable lever action: optimum transmission of force
- > guard prevents operators' fingers being pinched
- > replaces a set of wrenches, ideal for tightening locknuts
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



KNIPEX Cobra® **Hightech Water Pump Pliers DIN ISO 8976**

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

87 02 250 / 87 02 250 T* / 87 05 250

with slim two-colour multi-component sleeves without collar for better handling and easier transport

87 02 180 / 87 02 250 / 87 02 300 T*

Pliers with tether attachment point for mounting a fall protection





Fast and firm adjustment directly on the

workniece

Fine adjustment by pushing a button: fast and comfortable









KNIPEX Cobra® - the Hightech Water Pump Pliers.

No more time-consuming presetting of the required opening size. Just position the upper jaw to the workpiece, push button and move close the lower jaw, ingeniously simple.

obra







87 01 180

87

0





87 01 300



87 02 250



87 02 250 T











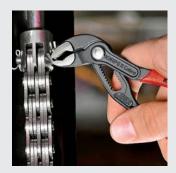
Teeth set against the direction of rotation have a self-locking effect and prevent slipping on the workpiece





Mini-Cobra®

pocket sized tool with full fledged tool function. Capacity up to 27 mm dia.









| Article No. | EAN 4003773- | ←→ mm | | Pliers | Head | Handles | Ø Inch | O]; Ømm | ∭ mm | Adjustment positions | ۵ ^۲ ۵ g |
|-------------|-----------------|-----------------|---|-------------------|----------|--|--------|------------|---------|-------------------------|-----------------------|
| 87 01 125 | 069935 | 125 | | | | | 1 | 27 | 27 | 13 | 85 |
| 87 01 150 | 060116 | 150 | | | | | 1 1/4 | 32 | 30 | 11 | 145 |
| 87 01 180 | 022015 | 180 | | grey atramentized | polished | with non-slip plastic coating | 1 1/2 | 42 | 36 | 18 | 170 |
| 87 01 250 | 022022 | 250 | | | | | 2 | 50 | 46 | 25 | 335 |
| 87 01 300 | 034087 | 300 | | | | | 2 3/4 | 70 | 60 | 30 | 530 |
| 87 02 180 | 042396 | 180 | | | | with multi-component grips | 1 1/2 | 42 | 36 | 18 | 196 |
| 87 02 180 T | 080145 | 180 | | | | with multi-component grips and integrated tether attachment point | 1 1/2 | 42 | 36 | 18 | 200 |
| 87 02 250 | 040316 | 250 | _ | | | with slim multi-component grips | 2 | 50 | 46 | 25 | 366 |
| 87 02 250 T | 080152 | 250 | | grey atramentized | polished | with slim multi-component grips and integrated tether attachment point | 2 | 50 | 46 | 25 | 370 |
| 87 02 300 | 029144 | 300 | | | | with multi-component grips | 2 3/4 | 70 | 60 | 30 | 580 |
| 87 02 300 T | 080169 | 300 | | | | with multi-component grips and integrated tether attachment point | 2 3/4 | 70 | 60 | 30 | 584 |
| 87 03 125 | 073949 | 125 | | | | | 1 | 25 | 27 | 13 | 85 |
| 87 03 180 | 005667 | 180 | | | | | 1 1/2 | 42 | 36 | 18 | 175 |
| 87 03 250 | 043805 | 250 | | chrome plated | | with non-slip plastic coating | 2 | 50 | 46 | 25 | 314 |
| 87 03 300 | 041382 | 300 | | | | | 2 3/4 | 70 | 60 | 30 | 530 |
| 87 05 250 | 005681 | 250 | | chroma plated | | with slim multi-component grips | 2 | 50 | 46 | 25 | 355 |
| 87 05 300 | 014126 | 300 | | chrome plated | | with multi-component grips | 2 3/4 | 70 | 60 | 30 | 579 |

* Other tools with tethering can be found from page 254 ff

KNIPEX Cobra® XL/XXL Pipe Wrenches and Water Pump Pliers DIN ISO 5743

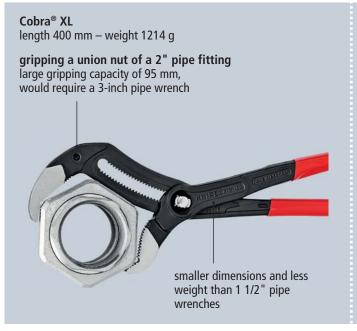
> greater gripping capacity but much lower weight than comparable pipe wrenches 87

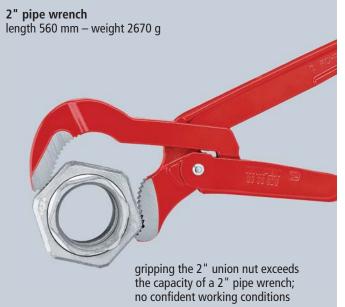
- > fast push-button adjustment directly on the workpiece, no unintentional slipping of the joint
- > fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- > box-joint design: high stability because of the double guide
- > guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



Both the KNIPEX Cobra[®] XL and XXL offer the performance 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 e.g. grip a 2" pipe fitting and weighs 50 % less than a 2" pipe wrench, which has a much lower gripping capacity. With its handy length of 400 mm, the Cobra[®] XL also fits into a plumber's tool kit. The Cobra[®] XXL comes along with the weight of a 2" pipe wrench but offers a back-up gripping capacity up to 4 1/2".







| Article No. | EAN 4003773- | ∢→ mm | Pliers | Head | Handles | O] Ø Inch | O] Ø mm | ∑ mm | Adjustment positions | ۵'۵ g |
|-------------|-----------------|-----------------|-------------------|----------|----------------|--------------|------------|---------|-------------------------|----------|
| 87 01 400 | 005636 | 400 | grey atramentized | polished | plastic coated | 3 1/2 | 90 | 95 | 27 | 1214 |
| 87 01 560 | 044321 | 560 | grey atramentized | polished | plastic coated | 4 1/2 | 115 | 120 | 20 | 2750 |



KNIPEX Cobra®...matic Water Pump Pliers DIN ISO 8976

> all features of the KNIPEX Cobra® 87 01 250

Special feature:

- > automatic adjustment at the touch of a button directly on the workpiece
- > the sheltered positioned spring ensures that the pliers close automatically once the push-button is activated (one-hand operation!)



87 11 250 আ∭ ⊆∵ MM

| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Head | Handles | O] Ø Inch | O] ∅ mm | ∑_ mm | Adjustment positions | ۵'۵ g |
|-------------|-----------------|------------------|-------------------|-------------------|----------|-------------------------------|--------------|------------|----------|----------------------|----------|
| 87 11 250 | 035473 | 250 | | grey atramentized | polished | with non-slip plastic coating | 2 | 50 | 46 | 25 | 314 |
| 87 19 250 | 022640 | Spare s | pring for 87 11 2 | 50 | | | | | | | |

KNIPEX Cobra® QuickSet Hightech Water Pump Pliers DIN ISO 8976

Fully open, push, grab! Additional 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
- > the adjustment directly on the workpiece is possible by simply sliding the pliers handle
- > securely lock 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
- > to re-activate the sliding function, the hinge bolt must be released by pressing the push button and the pliers must be completely opened again

uickSet

> Chrome vanadium electric steel, forged, multi stage oil-hardened









87 22 250 আ∭ ∫⊑∫

Product video



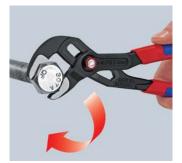
- > self-locking on pipes and nuts:
 - no slipping on the workpiece and low handforce required
- > fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width



Press the button - open pliers completely



 $\label{eq:press} \ensuremath{\mathsf{Press}}\xspace \ensuremath{\mathsf{the}}\xspace \ensuremath{\mathsf{open}}\xspace \ensuremath$





The hinge bolt locks itself with the first workload



| Article No. | EAN 4003773- | ∢→ mm | Pliers | Handles | O] Ø Inch | O] Ømm | ∑‡ mm | Adjustment positions | ۵ ^۲ ۵ g |
|-------------|-----------------|-----------------|-------------------|----------------------------|--------------|-----------|----------|-------------------------|-----------------------|
| 87 21 250 | 072775 | 250 | arey stromentized | plastic coated | 2 | 50 | 46 | 25 | 335 |
| 87 21 300 | 078524 | 300 | grey atramentized | plastic coated | 2 3/4 | 70 | 60 | 25 | 530 |
| 87 22 250 | 077794 | 250 | grey atramentized | with multi-component grips | 2 | 50 | 46 | 25 | 364 |

KNIPEX Cobra® VDE

Hightech Water Pump Pliers, insulated DIN ISO 8976 IEC 60900 DIN EN 60900

- > adjustment by shifting one jaw directly on to the workpiece: fast, reliable and comfortable handling
- > opening at the touch of a button apart from the workpiece
- > fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width
- > good access to the workpiece due to slim size in the head and joint area
- > self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- > box-joint design: high stability because of the double guide
- > 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® VDE: place the upper gripping jaw of the opened pliers on the workpiece, push pliers to close, done!

| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Handles | O] Ø Inch | O] Ømm | mm | Adjustment positions | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|-----------------|---------------|--|--------------|-----------|----|-------------------------|-----------------------|
| 87 26 250 | 071495 | 250 | £1000V @€ আ∭ [] | chrome plated | insulated with multi-component grips, VDE-tested | 2 | 50 | 46 | 24 | 340 |

87

KNIPEX Cobra[®] ES Water Pump Pliers extra-slim DIN ISO 8976

87 5



Very slim design in the complete head and joint area (compared to conventional water pump pliers)

- > ideal for service, maintenance and equipment repair, in automotive and general industry
- > long, narrow jaws
- > particularly good access to the workpiece due to very slim construction of head and joint area
- > firm grip also on 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 sizes of workpieces and a comfortable handle width
- > self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > box-joint design: high stability because of the double guide
- > reliable catching of the hinge bolt: no unintentional shifting
- > favourable lever action: optimum transmission of force
- > guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



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



Grips nuts up to 34 mm (1 5/8") across flats



87 51 250

| Article No. | EAN 4003773- | ∢ ► mm | Pliers | Head | Handles | O] Ø Inch | O]; ø mm | | max. parallel opening width in mm | max. gripping depth | Adjustment positions | ۵'ک g |
|-------------|-----------------|------------------|----------------------|----------|----------------------------------|--------------|-------------|----|---|---------------------------|-------------------------|----------|
| 87 51 250 | 061267 | 250 | grey atramentized | polished | with non-slip plastic coating | 1 1/4 | 32 | 34 | 37 | 42 | 19 | 328 |

KNIPEX Alligator® Water Pump Pliers DIN ISO 8976

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

Good access to the workpiece due to slim size of head and joint area

- > self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- > box-joint design: high stability because of the double guide
- > robust construction, insensitive to dirt; particularly suitable for outdoor work
- > guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened

88 02 250 / 88 02 250 T* / 88 05 250

with slim multi-component grips without collar for better handling and easier transport

88 02 250 / 88 02 300 T*

Pliers with tether attachment point for mounting a fall protection

UP.



88

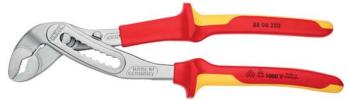


KNIPEX 88 01 250





88 05 250 ∭∭ ∫□ 3







Self-locking on pipes and nuts: no slipping on the workpiece; the complete actuating force can be used to turn the workpieces; not having to squeeze the pliers handles reduces the required effort



Alligator®









Conventional water pump pliers

Alligator® 250/300



specially hardened teeth high resistance to wear, allowing durable, reliable gripping

robust adjusting mechanism insensitive to dirt, particularly suitable for outdoor work

notch curved adjustment positioning 30% more gripping capacity, optimised adjustment to the workpiece and a handy handle position, slim design

box joint, double guide no loosening of the joint connection, continuous heavy duty

| | EAN | ∢ ► | | | | | EO | [O] | \bigcirc | Adjustment | 52 |
|-------------|----------|------------|-----------------------------|-----------------------|----------|--|--------|-----|------------|------------|-----|
| Article No. | 4003773- | mm | | Pliers | Head | Handles | Ø Inch | Ømm | mm | positions | g |
| 88 01 180 | 035480 | 180 | | | | | 1 1/2 | 42 | 36 | 9 | 180 |
| 88 01 250 | 022992 | 250 | | black atramentized | polished | plastic coated | 2 | 50 | 46 | 9 | 319 |
| 88 01 300 | 034094 | 300 | | attainentizeu | | | 2 3/4 | 70 | 60 | 9 | 511 |
| 88 02 180 | 044222 | 180 | | | | with multi-component grips | 1 1/2 | 42 | 36 | 9 | 215 |
| 88 02 250 | 019282 | 250 | - | | | with slim multi-component grips | 2 | 50 | 46 | 9 | 357 |
| 88 02 250 T | 080176 | 250 | | black atramentized | polished | with slim multi-component grips and integrated tether attachment point | 2 | 50 | 46 | 9 | 361 |
| 88 02 300 | 029151 | 300 | | attainentizeu | | with multi-component grips | 2 3/4 | 70 | 60 | 9 | 565 |
| 88 02 300 T | 080619 | 300 | - | | | with multi-component grips and integrated tether attachment point | 2 3/4 | 70 | 60 | 9 | 569 |
| 88 03 180 | 042860 | 180 | | chromo plated | | plastic control | 1 1/2 | 42 | 36 | 9 | 181 |
| 88 03 250 | 005742 | 250 | | chrome plated | | plastic coated | 2 | 50 | 46 | 9 | 317 |
| 88 05 180 | 060130 | 180 | | | | | 1 1/2 | 42 | 36 | 9 | 214 |
| 88 05 250 | 035497 | 250 | | chrome plated | | with multi-component grips | 2 | 50 | 46 | 9 | 344 |
| 88 05 300 | 042389 | 300 | | | | | 2 3/4 | 70 | 60 | 9 | 560 |
| 88 06 250 | 039303 | 250 | ☆ 1000 V @ © © | chrome plated | | insulated with multi-component grips, VDE-tested | 2 | 50 | 46 | 9 | 374 |
| 88 07 250 | 019343 | 250 | 会 1000 V @€ | chromo plated | | with disped inculation VDE tested | 2 | 50 | 46 | 9 | 420 |
| 88 07 300 | 022350 | 300 | | chrome plated | | with dipped insulation, VDE-tested | 2 3/4 | 70 | 60 | 9 | 661 |

* Other tools with tethering can be found from page 254 ff

KNIPEX Alligator[®] XL Pipe Wrench and Water Pump Pliers DIN ISO 5743

The classic in 400 mm length Robust construction, insensitive to dirt; particularly suitable for outdoor work

- > good access to the workpiece due to slim size in the head and joint area
- > guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



88 01 400

88



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 ½") than comparable pipe wrenches. With their handy length of 400 mm, 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 on the workpiece and low handforce required

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

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

11-notch adjustment for a gripping capacity up to 3 $1\!/\!2$ ", optimised adjustment to the workpiece and a comfortable handle position



| Article No. | EAN 4003773- | ∢ ► mm | Pliers | Head | Handles | O] Ø Inch | O] Ømm | | Adjustment positions | ۵'۵ g |
|-------------|-----------------|------------------|--------------------|----------|-------------------------------|--------------|-----------|----|-------------------------|----------|
| 88 01 400 | 075844 | 400 | black atramentized | polished | with non-slip plastic coating | 3 1/2 | 90 | 95 | 11 | 1190 |

Water Pump Pliers with groove joint DIN ISO 8976

89

- > self-locking on pipes and nuts: no slipping on the workpiece and low hand force required
- > easy, convenient engagement in 5 different positions due to milled tongue
- > non-slip joint
- > jaw profile designed to fit screws and nuts
- > joint design reduces strain of the centre bolt, hence no wear on pivot
- > guard prevents operators' fingers being pinched
- > gripping surfaces with special hardened teeth
- > teeth hardness approx. 61 HRC for tool length 250 mm: low wear and stable gripping
- > Chrome vanadium electric steel, forged, multi stage oil-hardened





89 03 250



| Article No. | EAN 4003773- | ∢→ mm | Pliers | Head | Handles | O] Ø Inch | O] Ø mm | | ۵'ک g |
|-------------|-----------------|-----------------|--------------------|----------|----------------------------|--------------|------------|----|----------|
| 89 01 250 | 013334 | 250 | black atramentized | polished | plastic coated | 1 5/16 | 34 | 36 | 340 |
| 89 03 250 | 015086 | 250 | chrome plated | | plastic coated | 1 5/16 | 34 | 36 | 338 |
| 89 05 250 | 043836 | 250 | chrome plated | | with multi-component grips | 1 5/16 | 34 | 36 | 371 |

90

Mini Water Pump Pliers with groove joint DIN ISO 8976

> easy, convenient engagement in 4 different positions

- > non-slip joint
- > joint design reduces strain of the centre bolt, hence no wear on pivot
- > Chrome vanadium electric steel, forged, oil-hardened





| | EAN | ∢ → | | | | τO | EO] | \bigcirc | 5 |
|-------------|----------|------------|--------------------|----------|----------------|--------|------|------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | Handles | Ø Inch | Ømm | mm | g |
| 90 01 125 | 035503 | 125 | black atramentized | polished | plastic coated | 11/16 | 17 | 14 | 103 |
| 90 03 125 | 050490 | 125 | chrome plated | | plastic coated | 11/16 | 17 | 14 | 105 |

Pipe Wrenches 90° DIN 5234

83 1

83 10 015 <u>∡9</u>0° আ∭

- > Swedish pattern
- > 90° angled jaws
- > jaws with offset teeth in opposite direction
- > teeth additionally induction hardened
- > I-beam handle design
- > captive adjusting nut
- > red powder coated, jaws bright ground
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



| | EAN | - | | | EO | τO | O: | 52 |
|-------------|----------|----------|----------------|-------------------|--------|-----|-------|------|
| Article No. | 4003773- | mm | | Pliers | Ø Inch | Ømm | Inch | g |
| 83 10 010 | 014188 | 310 | | | 1 5/8 | 42 | 1 | 779 |
| 83 10 015 | 014195 | 420 | | | 2 3/8 | 60 | 1 1/2 | 1415 |
| 83 10 020 | 014201 | 560 | <u>√</u> 90° আ | red powder-coated | 2 3/4 | 70 | 2 | 2600 |
| 83 10 030 | 022329 | 650 | | | 4 3/8 | 110 | 3 | 3433 |
| 83 10 040 | 022336 | 750 | | | 5 1/8 | 130 | 4 | 4921 |

83 2

Pipe Wrenches 45° DIN 5234

- > Swedish pattern
- > 45° angled jaws
- > jaws with offset teeth in opposite direction
- > teeth additionally induction hardened
- > I-beam handle design
- > captive adjusting nut
- > red powder coated, jaws bright ground
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



| Article No. | EAN 4003773- | 4→ mm | | Pliers | O] Ø Inch | O] Ø mm | OT Inch | ۵ ^۲ ۵ g |
|-------------|-----------------|-----------------|----------------|-------------------|--------------|------------|------------|-----------------------|
| 83 20 010 | 014218 | 320 | | | 1 5/8 | 42 | 1 | 817 |
| 83 20 015 | 014225 | 430 | <u>∡</u> 45° আ | red powder-coated | 2 3/8 | 60 | 1 1/2 | 1408 |
| 83 20 020 | 014232 | 570 | | | 2 3/4 | 70 | 2 | 2596 |







Pipe Wrenches S-Type DIN 5234

> slim, S-type jaw

- > jaws with offset teeth in opposite direction
- > teeth additionally induction hardened
- > three-point contact on pipes, self-locking
- > I-beam handle design
- > captive adjusting nut
- > red powder coated, jaws bright ground
- > Chrome vanadium electric steel, forged, multi stage oil-hardened



| | EAN | 4- | | EO | EO | | 52 |
|-------------|----------|-----------|-------------------|--------|-----|-------|------|
| Article No. | 4003773- | mm | Pliers | Ø Inch | Ømm | Inch | g |
| 83 30 005 | 025221 | 245 | | 1 1/2 | 35 | 1/2 | 472 |
| 83 30 010 | 014249 | 320 | | 1 5/8 | 42 | 1 | 836 |
| 83 30 015 | 014256 | 420 | red powder-coated | 2 3/8 | 60 | 1 1/2 | 1540 |
| 83 30 020 | 014263 | 540 | | 2 3/4 | 70 | 2 | 2669 |
| 83 30 030 | 014164 | 680 | | 4 3/4 | 120 | 3 | 4366 |

83 6

Pipe Wrenches S-Type with rapid adjustment

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



83 60 010





| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Handles | Ø Inch | O]; Ø mm | OI Inch | ۵'۵ g |
|-------------|-----------------|------------------|---|-----------------------------------|----------------|--------|-------------|------------|----------|
| 83 60 010 | 075424 | 330 | | | 1 5/8 | 42 | 1 | 955 | |
| 83 60 015 | 075677 | 420 | | red powder-coated | | 2 3/8 | 60 | 1 1/2 | 1470 |
| 83 60 020 | 078838 | 560 | | | | 2 3/4 | 70 | 2 | 2420 |
| 83 61 010 | 077602 | 330 | | | | 1 5/8 | 42 | 1 | 955 |
| 83 61 015 | 077619 | 420 | | grey powder-coated plastic coated | plastic coated | 2 3/8 | 60 | 1 1/2 | 1470 |
| 83 61 020 | 077602 | 560 | 1 | | 2 3/4 | 70 | 2 | 2480 | |



83 30 015

PIPE WRENCHES

Siphon- and Connector Pliers for traps, tube fittings and connectors DIN ISO 5743

81

For siphons, tube fittings and connectors up to 80 mm diameter Fine adjustment for ideal adjustment to diverse diameters Robust, heavy duty

- > ideal for tightening and loosening siphon screw connections, plastic pipe fittings and round union nuts
- > for connectors and couplings with screw connection, such as Cannon circular connectors
- > for gentle loosening of hoses on nozzles
- > 25 adjustment positions, box-joint design
- > ergonomic handle geometry
- > Chrome vanadium electric steel, forged, oil-hardened

81 01 250 / 81 03 250

with serrated gripping jaws; up to \emptyset 80 mm

81 11 250 / 81 13 250 with exchangeable plastic jaws for sensitive surfaces; up to Ø 75 mm



81 03 250



81 11 250

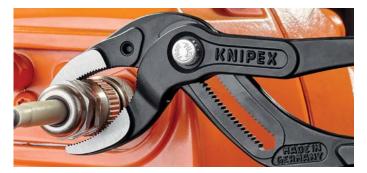


81 13 250















| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Working Capacity Ø mm | Adjustment positions | ۲ g |
|-------------|-----------------|------------------|--------|------------------------------|-----------|-----------------|--------------------------|-------------------------|--------|
| 81 01 250 | 078463 | 250 | | black atramentized | polished | | 25 - 80 | 25 | 355 |
| 81 03 250 | 078487 | 250 | | chrome plated | | with non-slip | 25 - 80 | 25 | 355 |
| 81 11 250 | 078470 | 250 | | black atramentized | polished | plastic coating | 10 - 75 | 25 | 355 |
| 81 13 250 | 078494 | 250 | | chrome plated | | | 10 - 75 | 25 | 355 |
| 81 19 230 | 050124 | 2 pairs | of pla | astic jaws for 81 11 250 / 8 | 31 13 250 | | | | |



Special Pliers and Control Cabinet Keys 15 WIDE

+MIPE+

Filesenbrechua

| Ear Clamp Pliers | 132 |
|--|-----|
| Cutter for ribbon cable | 133 |
| Mitre Shears for plastic and rubber sections | 133 |
| Vinyl Shears | 134 |
| Shears for KEVLAR® fibres | 134 |
| Combination Shears | 135 |
| Pipe Cutter for plastic conduit pipes and hoses | 135 |
| Pipe Cutter for composite pipes and protective tubes | 136 |
| Pipe Cutter for composite and plastic pipes | 137 |
| Pipe Cutter for plastic conduit pipes | 137 |
| Punch Lock Riveters | 138 |
| Sheet Metal Nibblers | 138 |
| Notching Pliers | 139 |
| Cycle Pliers | 139 |
| Spring Hose Clamp Pliers | 140 |
| Spring Hose Clamp Pliers with retainer | 142 |
| Hose Clamp Pliers for Click clamps | 143 |
| Revolving Punch Pliers | 144 |
| Tile Nibbling Pincer | 144 |
| Upholstery pliers | 144 |
| Tile Breaking Pliers | 145 |
| Pliers for working on glass | 146 |
| Halogen Bulb Exchange Pliers | 147 |
| Magnetic LED Lamp | 147 |
| TwinKey® | 148 |
| Control Cabinet Keys | 149 |



Ear Clamp Pliers



Suitable for universal use, for 1-ear and 2-ear clamps (Oetiker system or similar)

- > for the simple and reliable mounting of 1-ear and 2-ear clamps
- > 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

especially suitable for universal use thanks to the additional side jaw





Product video





10 98 1220





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 nib



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



Using the side press nib



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

| | EAN | ∢ → | | | | 55 |
|-------------|----------|------------|--------------------|----------|----------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | Handles | g |
| 10 98 1220 | 080749 | 220 | black atramentized | polished | plastic coated | 494 |
| 10 99 1220 | 080756 | 220 | black atramentized | polished | plastic coated | 494 |

Cutter for ribbon cable

> for crushing-free cutting of ribbon cable up to 56 mm width

- > exchangeable cutting base with try square for rectangular cuts
- > with opening spring and locking device
- > tool body: tool steel, rolled, oil-hardened
- > blade: standard trapezoidal blade, replaceable





| Article No. | EAN 4003773- | ∢ > mm | | Tool | Handles | Blade length mm | ۵'۵ g |
|------------------------|-----------------|------------------|-------------------------|---------------|--------------------|--------------------|----------|
| 94 15 215 94 19 215 | 046011 | 215 | h 10 spare blades for b | chrome plated | with plastic grips | 56 | 346 |

94

3

94

15

Mitre Shears

for plastic and rubber sections

- > for crushing-free cutting of plastic, rubber and soft timber sections; also for ribbon cable up to 56 mm width
- > exchangeable cutting base with try square for 45°-cuts and markings for 60°-, 75°-, and 90°-cuts
- > with opening spring and locking device
- > tool body: special tool steel, rolled, oil-hardened
- > blade: standard trapezoidal blade, replaceable



94 35 215 MM



| | EAN | ∢ → | | | | Blade length | 52 |
|-------------|----------|------------|----------------|-----------------------|--------------------|--------------|-----|
| Article No. | 4003773- | mm | | Tool | Handles | mm | g |
| 94 35 215 | 046028 | 215 | | chrome plated | with plastic grips | 56 | 397 |
| 94 19 215 | 046219 | Set wit | h 10 spare bla | des for 94 15 215 / 9 | 94 35 215 | | |

SPECIAL PLIERS

Vinyl Shears also for cable ducts



- > for cutting and shortening cable ducts, also for plastic material up to 4 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 MM (PATENTED)

| 95 | 02 | 21: | blade | lenath | 110 | mm | for | cutting | wide | cable | ducts |
|----|----|-----|-------|--------|-----|----|-----|---------|------|-------|-------|
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| Article No. | EAN 4003773- | ∢- ► mm | | Tool | Handles | Cutting capacities mm | Blade length mm | ۲ <u>ک</u> g |
|-------------|-----------------|-------------------|----|-----------|----------------------------|--------------------------|--------------------|-----------------|
| 95 02 21 | 052128 | 275 | MM | burnished | with multi-component grips | max. 4.0 | 110 | 665 |

95

03

Shears for KEVLAR[®] fibres

- > only for cutting fibres of KEVLAR[®] in optical fibre cables, not recommended for other materials
- > precisely ground blades with serration prevent the fibres from slipping and guarantee a clean cut
- > hard-chrome plated, ground surface
- > shears body: chrome vanadium electric steel, oil-hardened
- > user-friendly handles: plastic, impact-proof





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

| | EAN | | | | 52 |
|--------------|----------|---------|---------------|----------------|----|
| Article No. | 4003773- | mm | Shears | Handles | g |
| 95 03 160 SB | 043362 | 160 | chrome plated | plastic coated | 85 |

Combination Shears

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

95 05 185

angled shape - for easy execution of long cuttings; ergonomically shaped plastic handles





| | EAN | ∢ —▶ | | | | 52 |
|-------------|----------|-------------|-----------------|----------|----------------|-----|
| Article No. | 4003773- | mm | | Head | Handles | g |
| 95 05 140 | 019589 | 140 | MM | polished | plastic coated | 67 |
| 95 05 185 | 060277 | 185 | <u>∡4</u> 0° MM | polished | plastic coated | 115 |
| 95 05 190 | 019602 | 190 | MM | polished | plastic coated | 116 |

90

20

95 05

Pipe Cutter for plastic conduit pipes and hoses

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







With replaceable blade

| Article No. | EAN 4003773- | ∢→ mm | | Cutting capacities Ø mm | ۵ g |
|-------------|-----------------|-----------------|-----------|----------------------------|--------|
| 90 20 185 | 067122 | 185 | MM | 25 | 172 |
| 90 29 185 | 067139 | Spare | blade for | 90 20 185 | |



SPECIAL PLIERS

Pipe Cutter for composite pipes and protective tubes

- > for cutting composite pipes with diameters from 12 to 25 mm and for cutting flexible protective tubes with a diameter of 18 - 35 mm without damaging a potentially pipe inside
- > a calibration arbor can be fitted, for example for Geberit composite pipes with 11.5 and 15 mm dia.
- > tool body: high-grade chrome vanadium electric steel, oil-hardened
- > blades: special tool steel, oil-hardened, interchangeable



90 25 20 MM (PATENTED)

90



Composite pipes of 12 - 25 mm dia. are cut cleanly and without deformation



Clean cut of protective tubes 18 - 35 mm diameter



| Article No. | EAN 4003773- | ∢ ≻ mm | | Tool | Handles | Cutting capacities Composite pipes Ø mm | Cutting capacities Protective tubes Ø mm | Blade length mm | ۲ <mark>۵</mark> | |
|-------------|--|------------------|--|------|---------|---|--|--------------------|------------------|--|
| 90 25 20 | 046004 | 210 | 210 MM galvanized with multi-component grips | | 12 - 25 | 18 - 35 | 25 | 332 | | |
| 90 29 01 | 0 29 01 031932 Spare blade for 90 25 20 (composite pipes) | | | | | | | | | |
| 90 29 02 | 031949 | 1 pair (| pair of spare blades for 90 25 20 (protective pipes) | | | | | | | |
| 90 29 15 | 031956 | Calibra | alibration arbor for 90 25 20 (Geberit pipes) | | | | | | | |



Pipe Cutter for composite and plastic pipes

90 25

- > for cutting thick walled plastic and composite pipes with diameters from 26 to 40 mm
- > cuts pipes using 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





Clean cut of thick walled plastic and composite pipes

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





| Article No. | EAN 4003773- | 4− ► mm | | Tool | Handles | Cutting capacities Ø mm | Cutting edge length mm | ۵ ^۲ ۵ g |
|--|-----------------|-------------------|----|------------|----------------------------|----------------------------|---------------------------|-----------------------|
| 90 25 40 | 045182 | 210 | MM | galvanized | with multi-component grips | 26 - 40 | 40 | 500 |
| 90 29 40 045199 Spare blade for 90 25 40 | | | | | | | | |

94

10

Pipe Cutter

for plastic conduit pipes (electrical installation work)

- > for clean cutting of plastic pipes (e.g. plastic conduit pipes) with 6 - 35 mm dia.
- > not suitable for cutting cables
- > blade is replaceable and can be retracted from any position
- > low force requirement due to special blade geometry and optimum transmission
- > minimum operator fatigue due to ergonomic handle design and incremental ratchet blade feed
- > housing: die-cast aluminium, red lacquered
- > blade: special tool steel, oil-hardened





| Article No. | EAN 4003773- | ∢— ► mm | | Body | Cutting capacities Ø mm | Cutting edge length mm | ۲۵ g |
|-------------|-----------------|-------------------|----|--|----------------------------|---------------------------|---------|
| 94 10 185 | 047025 | 185 | MM | die-cast aluminium body, red lacquered | 6 - 35 | 35 | 583 |

SPECIAL PLIERS

Punch Lock Riveters

90 4

> to join metal section sheets used in dry walling with a lock seam

> minimum handforce required due to optimum lever transmission

> pliers body: special tool steel, rolled, oil-hardened

90 42 250 for one-hand operation



The punching tool is squeezed through the

metal section sheets



Setting the pliers for connection of two metal section sheets



Sheet Metal Nibbler



Notching and chip breaking in a single pass





Notching without chip breaking

- > for cutting iron, copper or aluminium sheet metal up to max. 1.2 mm thickness, plastic up to max. 2.0 mm thickness
 > materials are cut without deformation
- > clean cut edges no trimming activities needed
- > with chip breaker
- > easy handling
- > cutting width: 2.7 mm
- > tool body: special tool steel, rolled, oil-hardened
- > blades: special tool steel, oil-hardened, interchangeable



| | EAN | - | | | | 27 |
|-------------|----------|----------|----------------|---------------|----------------------------|-----|
| Article No. | 4003773- | mm | | Tool | Handles | g |
| 90 55 280 | 026730 | 280 | | nickel plated | with multi-component grips | 461 |
| | | | | | | |
| 90 59 280 | 027355 | Spare | blade fo 90 55 | 280 | | |





Notching Pliers

90 61

- > special pliers for notching recesses into plastic ledges and plastic casings for electric and sanitary installation
- > clean cut edges no trimming activities needed
- > easy handling
- > with opening spring, opening limiter and locking lever
- > pliers body: special tool steel, rolled, oil-hardened





The KNIPEX Notching Pliers produces 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.

| | EAN | ∢ —▶ | | | | | 52 |
|-------------|----------|-------------|-------|------------|--------------------|------------|-----|
| Article No. | 4003773- | mm | | Pliers | Handles | Capacity | g |
| 90 61 16 | 051947 | 250 | M | burnished | with plastic grips | 16 x 32 mm | 403 |
| 90 61 20 | 051954 | 250 | ///// | buttistieu | with plastic grips | 20 x 29 mm | 414 |

84

Cycle Pliers DIN ISO 5743

> for very narrow screw connections

> Special tool steel, forged, oil-hardened

84 11 200 straight head

84 21 200 20° angled head



84 21 200 ∡20° আ∭

| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Recess Ø mm | Head thickness mm | ۵'۵ g |
|-------------|-----------------|------------------|----------------|--------------------|----------|----------------|----------------|----------------------|----------|
| 84 11 200 | 051923 | 200 | | black atramentized | polished | plastic coated | 6 / 10 | 3.5 | 177 |
| 84 21 200 | 051930 | 200 | <u>√</u> 20° আ | black atramentized | polished | plastic coated | 6 / 10 | 3.5 | 182 |



Spring Hose Clamp Pliers

85 51

- > rotatable, universal grip inserts for reliably gripping the clamps in all positions
- > extremely good leverage which allows clamps to be opened easily without great effort
- > quick-set adjustment:
- adjusts by shifting directly onto the workpiece
- > slim head design; narrow head width, rotatable grip inserts: an ideal tool, especially in confined areas
- > can be used for standard, space-saving and spring wire hose clamps and for spring band clamps up to 70 mm nominal size
- > maximum jaw opening 80 mm; over 40 mm clamping range
- > Chrome vanadium electric steel, forged, oil-hardened



85 51 250 A





The proven features of the Cobra[®] also apply to the KNIPEX Spring Hose Clamp Pliers

- > less effort required due to extremely good transmission ratio
- > first class guard to prevent fingers being pinched
- > reliable gripping with hand-friendly handle position
- > fine adjustment ensures a precise fit to suit the most diverse clamp sizes
- > opens at the touch of a button
- > box-joint design: high stability due to the double guidance











A single pair of pliers for clamps and spring band clamps of different sizes up to 70 mm. Adapts to all positions due to rotatable grip inserts. Secure position of clamps in the pliers nevertheless guaranteed.

APPLICATION AREAS CARS / TRUCKS: air intake, cooling, charged air, water return flow, thermostat, fuel, heating

| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Handles | Capacity | Adjustment positions | ۲۵ g |
|-------------|-----------------|-----------------|------------|-----------------------------|-------------------------------|------------|-------------------------|---------|
| 85 51 250 A | 077329 | 250 | S | grey atramentized | with non-slip plastic coating | max. 70 mm | 25 | 340 |
| 85 59 250 A | 077336 | Spare | oarts asso | rtment grip inserts, for 85 | 5 51 250 A / 85 51 250 AF | | | |

SPECIAL PLIERS

Spring Hose Clamp Pliers with retainer

The locking device enables simple and secure work on clamps under tension without effort One-hand release

- > rotating, universal grip inserts for reliably gripping the clamps in all positions
- > extremely good leverage which allows clamps to be opened easily without great effort
- > slim head design; narrow head width, rotating grip inserts make this an ideal tool, especially in confined areas
- > can be used for standard, space-saving, spring wire hose clamps and for spring band clamps up to 70 mm nominal size
- > maximum jaw opening 80 mm; allows more than 40 mm clamping range
- > Chrome vanadium electric steel, forged, oil-hardened









| Article No. | EAN 4003773- | ∢ →→ mm | | Pliers | Handles | Capa | bacity | Adjustment positions | Δ ['] Δ g |
|--------------|-----------------|-------------------|------------|--------------------------|----------------------------|--------|--------|-------------------------|-----------------------|
| 85 51 250 AF | 078623 | 250 | S | grey atramentized | plastic coated | max. 7 | 70 mm | 19 | 350 |
| 85 59 250 A | 077336 | Spare | oarts asso | rtment arip inserts. for | 85 51 250 A / 85 51 250 AF | | | | |

Hose Clamp Pliers

To open and close Click clamps

- > rotating jaw inserts for the safe actuation of clamps in any position good leverage which 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 and suction nozzles and many other applications
- > additional function: detach hoses gently using the serrated jaw
- > slim head design; narrow head width, rotating grip inserts make this an ideal tool, especially in confined areas
- > Chrome vanadium electric steel, forged, oil-hardened



85 51 250 C

85

51







Serrated gripping jaws for easy loosening of tight hoses

The proven advantages of the Cobra® also apply to this KNIPEX Hose Clamp Pliers

- > guard prevents operators' fingers being pinched
- > reliable gripping with hand-friendly handle position
- > box-joint design for high stability due to double guide









| | EAN | 4- | | | 52 | | | | | |
|-------------|----------|---|-------------------|----------------|-----|--|--|--|--|--|
| Article No. | 4003773- | mm | Pliers | Handles | g | | | | | |
| 85 51 250 C | 078517 | 250 | grey atramentized | plastic coated | 340 | | | | | |
| | | | | | | | | | | |
| 85 59 250 C | 078999 | Spare parts assortment grip inserts for 85 51 250 C | | | | | | | | |

SPECIAL PLIERS



90 70 220 MM

| | EAN | ∢ —▶ | | | | 52 |
|-------------|----------|-------------|----|-------------------|---------------|-----|
| Article No. | 4003773- | mm | | Pliers | Finish | g |
| 90 70 220 | 019411 | 220 | MM | red powder-coated | powder coated | 251 |



| | EAN | ∢ —▶ | | | 52 |
|-------------|----------|-------------|--------------------|----------|-----|
| Article No. | 4003773- | mm | Pliers | Head | g |
| 91 00 200 | 013754 | 200 | black atramentized | polished | 158 |

Upholstery pliers

- 91
- > for the professional fixing of seat covers on profiled seats to the seat frame with all popular upholstery clips
- > Securely insert upholstery clips, guide and hold: the special groove fixes the upholstery clips in the correct position
- > easy positioning of the upholstery clips: a closing spring holds the pliers closed, the clip can be securely positioned and pressed
- > upholstery clips can be easily pressed together due to a good transmission ratio of the pliers
- > user-friendly operation thanks to multi-component grips
- > durable and strong
- > Special tool steel, forged, oil-hardened





| | EAN | ∢ —▶ | | | 52 |
|-------------|----------|-------------|-----------------|----------------------------|-----|
| Article No. | 4003773- | mm | Pliers | Handles | g |
| 91 92 180 | 080725 | 185 | mirror-polished | with multi-component grips | 195 |

Tile Breaking Pliers

91

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

- > ideal protection of tiles against damage: replaceable positioning jaw made from soft, stable plastic
- > great crushing force thanks to 10-fold increase of manual force
 > easily adjusted to the required tile thickness at the press
- of a button > Chrome vanadium electric steel, forged, oil-hardened









Plastic positioning jaw: tilting for a clean break line and optimum protection of the tiles against damage

| Article No. | EAN 4003773- | ∢− ► mm | | Pliers | Handle | ۲ م |
|--------------|-----------------|-------------------|------------------|---------------|----------------|--------|
| 91 13 250 | 079538 | 250 | - | chrome plated | plastic coated | 560 |
| 91 19 250 01 | 079545 | Spare | jaw for 91 13 25 | 0 | | |

Glass Breaking Pincer DIN ISO 5743

> for breaking glass to a scored line

> Special tool steel, forged, oil-hardened



| Article No. | EAN 4003773- | ∢ ≻ mm | Pliers | Head | Handles | Jaw width mm | ۵'ک g |
|-------------|-----------------|------------------|--------------------|----------|----------------|-----------------|----------|
| 91 31 180 | 069744 | 180 | black atramentized | polished | plastic coated | 24 | 245 |

91 3

Glass Nibbling Pincers DIN ISO 5743

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



| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Jaw width mm | ۲۵ g |
|-------------|-----------------|------------------|--------------|--------------------|----------|----------------|-----------------|---------|
| 91 51 160 | 014355 | 160 | | black atramentized | polished | plastic coated | 9.5 | 148 |
| 91 71 160 | 019565 | 160 | ■ ■ MM | black atramentized | polished | plastic coated | 4.0 | 141 |

91 6

Flat Nose Grozing Pliers DIN ISO 5743

> with soft gripping jaws

> for trimming glass edges, e. g. when making leaded glass windows

> Special tool steel, forged, oil-hardened



| | EAN | - | | | | Jaw width | 52 |
|-------------|----------|----------|--------------------|----------|----------------|-----------|-----|
| Article No. | 4003773- | mm | Pliers | Head | Handles | mm | g |
| 91 61 160 | 019527 | 160 | black atramentized | polished | plastic coated | 9.5 | 141 |

Halogen Bulb Exchange Pliers

30 41

- > for the installation of wedge base bulbs
- > gripping surfaces plastic coated
- > Chrome vanadium electric steel, forged, oil-hardened





| | EAN | 4- | | | | 52 |
|-------------|-----------------|-----------|--------------------|----------|----------------|-----|
| Article No. | 4003773- | mm | Pliers | Head | Handles | g |
| 30 41 16 |) 048480 | 160 | black atramentized | polished | plastic coated | 120 |

Magnetic LED Lamp 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



00 11 V50



| Article No. | EAN 4003773- | ۵'ک g |
|-------------|-----------------|----------|
| 00 11 V50 | 075387 | 8 |





CONTROL CABINET KEYS

KNIPEX TwinKey® for all standard cabinets and shut-off systems

10 profiles. 2 crosses. 1 key. All established 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: two 4-way spider keys connected in a space-saving way using magnets
- > reversible bit: 1.0 x 7 mm slot and PH2 cross slot
- > key and reversible bit joined by stable stainless steel wire
- > quality surface coating
- > weight-optimised zinc die-cast design



Well thought out equipment, quality processing.

The KNIPEX TwinKey[®] has eight arms and consists of two cross keys that are held inside each other with a magnet.



00

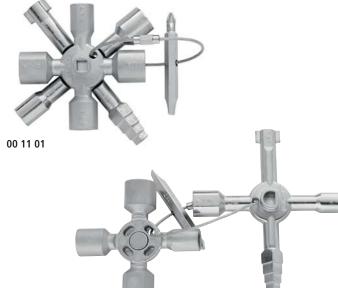
11







| | EAN | - | 03 | O] | -0-1 | Q∃ | | 55 |
|-------------|----------|----------|-----------------|--------------------------|-------|-----|-------|-----|
| Article No. | 4003773- | mm | Ømm | Ømm | Ømm | Ømm | Ømm | g |
| 00 11 01 | 074670 | 95 | 5/6-7/8-9/10-11 | 7 - 8 / 9 - 10 / 11 - 12 | 3 - 5 | 6 | 6 - 9 | 135 |



CONTROL CABINET KEYS

Control Cabinet Keys 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, mains switchboards, etc.
- $_{>}$ with bit insert: slot 1.0 x 7 mm and cross recess PH2
- > with adapter for 1/4" bits chained to key
- > additional bit adapter for 1/4" bits inside one profile
- > Zinc die-casted

Profi-Key

00 11 02

short version, total length 44 mm

00 11 03

long execution, total length 76 mm



00 11 03

00

00 11

| Article No. | EAN 4003773- | ∢ → mm | O⊐ mm | ∕] mm | -O=1 mm | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|----------|------------------|------------|-----------------------|
| 00 11 02 | 048947 | 44 | 5/6/8 | 9 | 3 - 5 | 65 |
| 00 11 03 | 041658 | 76 | 5/6/8 | 9 | 3 - 5 | 88 |

| for all standard shut-off systems | |
|-----------------------------------|--|
| | |

- > key for heating, air conditioning, sanitary and building technology, e.g. for door and window handles or for radiator-bleeding
- > with bit insert: slot 1.0 x 7 mm and cross recess PH2
- > with adapter for 1/4" bits chained to key
- > additional bit adapter for 1/4" bits inside one profile
- > total length: 90 mm
- > Zinc die-casted



00 11 04

| Article No. | EAN 4003773- | ∢→ mm | O⊒ mm | ∆ ⊒ mm | mm | ۲ g |
|-------------|-----------------|-----------------|----------|------------------|---------|--------|
| 00 11 04 | 048954 | 90 | 5/7/8 | 9 - 10 | 6/7/8/9 | 86 |

| Universa for all standa | al Key ard cabinets and | l shut-off | systems | 00 11 | -170 | | E | |
|--|----------------------------|-------------|--------------|-----------------|-------------------|----------------|----|-----|
| > 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: 90 mm > Zinc die-casted | | | | | 00 11 06 | CON CONTRACTOR | | |
| | EAN | ∢ —▶ | O∃ | | <u>v</u>] (0) | - O -] | ₽∃ | 52 |
| Article No. | 4003773- | mm | mm | | mm | mm | mm | g |
| 00 11 06 | 071334 | 90 | 5/6/7-8/9-10 | | 7 / 8-9 / 10 - 11 | 3 - 5 | 6 | 220 |

00

Universal Key "Construction" for all standard cabinets and shut-off systems

- > 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: 157 / 95 mm
- > Zinc die-casted

| ~10000 | 000000000000000000000000000000000000000 | |
|-------------|---|--|
| ALTRAC | - | |
| 1 | | |
| "search for | and a | |
| Gra | 2Hro | |
| tel 1 | | |

00 11 06 V01

| | EAN | ∢ → | O∃ | \bigcirc | -0-1 | ₽∃ | | 52 |
|--------------|----------|------------|--------------|---------------------|-------|-----|------------|-----|
| Article No. | 4003773- | mm | Ømm | Ømm | Ømm | Ømm | Ømm | g |
| 00 11 06 V01 | 075394 | 160 | 5/6/7-8/9-10 | 7 / 8 - 9 / 10 - 11 | 3 - 5 | 6 | 6/7/8/9/10 | 255 |

CONTROL CABINET KEYS

Universal Key for all standard cabinets and shut-off systems

> for locking systems in electrical engineering, the supply of gas and water, air conditioning and ventilation systems, industry, technical installations in buildings, etc.

- > four different zinc die-cast key profiles in a single key
- > with bit adapter for 1/4" bits with magnet
- > total length: 97 mm
- > plastic body, varnished



00 11 06 V02

00





| Article No. | EAN | ∢ → | O⊐ | ∆ ∃ | -OEI | ۵'۵ |
|--------------|----------|------------|---------|------------|-------|-----|
| | 4003773- | mm | mm | mm | mm | g |
| 00 11 06 V02 | 075400 | 97 | 5/6/7-8 | 9 | 3 - 5 | 70 |

Pen-Style Control Cabinet Key for all standard cabinets and shut-off systems

00 11

- > easy to carry pen-style control cabinet key with fastening clip
- > four different key profiles can be utilised by swivelling the key holder
- > 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, mains switchboards, etc.
- > universal 1/4" bit adapter for standard bits (permanent magnet for retaining)
- > additional bit adapter for 1/4" bits inside one key profile
- > with 2 reversible bits: cross recess PH / slot 7.0 x 1.2 mm and TX20 / TX25
- > tool body: plastic, fibreglass-reinforced
- > key profiles: zinc die-casted







| | EAN | ∢ > | O⊐ | \bigcirc | -O -1 | 52 |
|-------------|----------|------------|-------|------------|--------------|----|
| Article No. | 4003773- | mm | mm | mm | mm | g |
| 00 11 07 | 063018 | 145 | 5/6/8 | 9 | 3 - 5 | 95 |

Pen-Style Profi-Key for all standard shut-off systems

> easy to carry pen-style control cabinet key with fastening clip three different key profiles can be utilised by swivelling the key holder

00

- > multi-purpose wrench for access on construction sites with profiles for the areas of heating, air conditioning, plumbing and building technology, e.g. for door and window handles or for radiator-bleeding
- > universal 1/4" bit adapter for standard bits (permanent magnet for retaining)
- > additional bit adapter for 1/4" bits inside one key profile
- > with inserted bit: cross recess PH2 and possibility of safekeeping a second bit
- > tool body: plastic, fibreglass-reinforced
- > key profiles: zinc die-casted



00 11 08

| | EAN 4003773- | - | O∃ | \bigcirc | | 5 |
|-------------|-----------------|----------|-----|------------|---------|-----|
| Article No. | 4003773- | mm | mm | mm | mm | g |
| 00 11 08 | 063025 | 145 | 5/8 | 9 | 6/7/8/9 | 142 |

Pen-Style Control Cabinet Key with voltage and magnetic field detector for all standard cabinets and shut-off systems







- > easy to carry pen-style control cabinet key with fastening clip
- > contactless detection of alternating current with optical indication (red LED); range of voltage 50 - 600 V; frequency range 50 - 60 Hz
- contactless detection of magnetic fields with optical indication (green LED)
- > start button

00

11

- > battery saving automatic switch-off. The device switches off automatically after 2 minutes not in use.
- > indicated by means of a bright LED: start-up self test, battery control and live conductor close-by
- > battery case with bayonet catch
- > four different key profiles can be utilised by swivelling the key holder
- > 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, mains switchboards, etc.
- > universal 1/4" bit adapter for standard bits (permanent magnet for retaining)

- > tool body: plastic, fibreglass-reinforced
- > key profiles: zinc die-casted

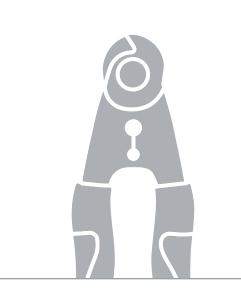
Cable and Wire Rope Shears

95 62 190

CrV cap

610-

| Cable Shears | 154 |
|-------------------------------------|-----|
| Cable Shears with twin cutting edge | 155 |
| Electricians Shears | 156 |
| Cable Cutters (ratchet action) | 158 |
| Wire Rope Shears | 162 |
| Bowden Cable Cutter | 163 |
| Wire Rope and Cable Cutters | 163 |



CABLE AND WIRE ROPE SHEARS

Cable Shears

95

- > for cutting copper and aluminium single conductors as well as multiple stranded 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
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-retaining screw
- > 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 mm² to 5 x 2.5 mm² (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*

Pliers with tether attachment point for mounting a fall protection





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



95 41 165: with stripping function

cut without any deformation of the cable



The locking device keeps shears with spring inside the joint closed









95 41 165

| | | | | | | | Cutting | capacities | | |
|-------------|----------|----------|---------------------------------------|-------|------------------|---|---------|-----------------|-----|-----|
| | EAN | - | | | | | • | • | | 52 |
| Article No. | 4003773- | mm | | Style | Tool | Handles | Ømm | mm ² | AWG | g |
| 95 11 165 | 040323 | 165 | | 1 | burnished | plastic coated | 15 | 50 | 1/0 | 215 |
| 95 12 165 | 029182 | 165 | 813 | 1 | burnished | with multi-component grips | 15 | 50 | 1/0 | 250 |
| 95 12 165 T | 080190 | 165 | * * * | 1 | burnished | with multi-component grips and integrated tether attachment point | 15 | 50 | 1/0 | 254 |
| 95 16 165 | 039648 | 165 | £ 1000 V 🏝 🖨 🔁 🖺 🐒 | 1 | chrome plated | insulated with multi-component grips, VDE-tested | 15 | 50 | 1/0 | 262 |
| 95 21 165 | 069805 | 165 | | 2 | burnished | plastic coated | 15 | 50 | 1/0 | 215 |
| 95 22 165 | 069812 | 165 | I I I I I I I I I I I I I I I I I I I | 2 | burnished | with multi-component grips | 15 | 50 | 1/0 | 254 |
| 95 26 165 | 069980 | 165 | ≙ 1000 V @@ ♥ ♥ ♥ ♥ ₩ ₩ | 2 | chrome plated | insulated with multi-component grips, VDE-tested | 15 | 50 | 1/0 | 275 |
| 95 41 165 | 078609 | 165 | | 4 | burnished | plastic coated | 12 | 35 | 1/0 | 220 |

Cable Shears with twin cutting edge

95

- > for cutting copper and aluminium 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 \emptyset 20 mm can be cut in one-hand operation
- > less effort required due to favourable lever ratio and optimised cuttingedge geometry
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-retaining screw
- > 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 in the rear part are cut. Initial cut in the front profile, final cut in the rear profile – to keep it as easy as possible.











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

| | | | | | | Cutting c | apacities | | |
|-------------|----------|----------|--------------------|---------------|---|-----------|-----------------|-----|-----|
| | EAN | - | | | | | | | 52 |
| Article No. | 4003773- | mm | | Tool | Handles | Ømm | mm ² | AWG | g |
| 95 11 200 | 043928 | 200 | | burnished | plastic coated | 20 | 70 | 2/0 | 283 |
| 95 12 200 | 047834 | 200 | | burnished | with multi-component grips | 20 | 70 | 2/0 | 324 |
| 95 16 200 | 026761 | 200 | A 1000 V 🏝 🚭 🤁 🖺 🖺 | chrome plated | insulated with multi-component grips, VDE-tested | 20 | 70 | 2/0 | 340 |
| 95 17 200 | 026952 | 200 | 🚖 1000 V 🖄 😭 🔂 🝧 🕤 | chrome plated | handles with dipped insulation, VDE-tested | 20 | 70 | 2/0 | 360 |

CABLE AND WIRE ROPE SHEARS

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
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > shears body: surgical steel, stainless, vacuum-hardened
- > handles: plastic, impact-proof

95 05 165

cuts cables up to 10 mm dia. / 24 mm²; with opening spring and locking device; blades made of stainless steel; oil-hardened and tempered

95 06 230

for copper single conductors up to 16 mm², multiple stranded wires up to 50 mm², fine stranded up to 70 mm² and aluminium conductors multiple stranded wires up to 70 mm²; easy cutting with one-hand operation due to high transmission ratio; stainless - special grade - steel, oil-hardened and tempered



| | | | | | | Cutting o | apacities | | |
|-------------|----------|-------------|------------------|----------|-------------------------------|-----------|-----------------|-----|-----|
| | EAN | ∢ —▶ | | | | • | • | | 5 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | AWG | g |
| 95 05 165 | 019596 | 165 | | polished | plastic coated | 10 | 24 | 3 | 111 |
| 95 06 230 | 006305 | 230 | A 1000 V 🖄 🖨 🛠 🛐 | polished | plastic insulated, VDE-tested | 16 | 50 | 1/0 | 274 |

Electricians' Shears

95

Precisely 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, fibreglass-reinforced
- > cutting edges made from stainless steel, hardness of cutting edges 56 HRC











| Article No. | EAN | ⊲- ► | ۵'ک |
|--------------|----------|-------------|-----|
| | 4003773- | mm | g |
| 95 05 155 SB | 077725 | 155 | 110 |

Cable Shears

95

Short design, length only 500 mm Low weight, high leverage

- > for cutting copper and aluminium single conductors as well as multiple stranded cables
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- > low weight
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > cutter head: vanadium electric steel, forged, oil-hardened
- > handles: aluminium tube, high-strength



Large cutting capacity: max. 27 mm dia. / 150 mm 2

| | | | | | | Cutting o | Cutting capacities | | |
|-------------|----------|-------------|---|-----------|--|-----------|--------------------|-----|------|
| | EAN | ∢ —▶ | | | | • | • | | 52 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | AWG | g |
| 95 12 500 | 069966 | 500 | • | burnished | with multi-component grips | 27 | 150 | 5/0 | 1090 |
| 95 17 500 | 026785 | 500 | 🚖 1000 V 🖄 🚭 😂 🖺 👅 | polished | handles with dipped insulation, VDE-tested | 27 | 150 | 5/0 | 1477 |

Cable Shears

95

- > for cutting copper and aluminium single conductors as well as multiple stranded cables
- > not suitable for steel wire and wire ropes
- > precision ground, hardened blades
- $\ensuremath{\scriptstyle >}$ clean and smooth cut without crushing and deformation
- > favourable lever ratio due to toggle lever
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint
- > bolted cutter head, replaceable
- > cutter head: high-grade chrome vanadium electric steel, forged, oil-hardened
- > handles: steel tube



| | | | | | | Cutting ca | apacities | | | |
|-------------|----------|-------------|---|------------|--|------------|-----------------|-----|------|--|
| | EAN | ∢ —▶ | | | | • | • | | 5 | |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | AWG | g | |
| 95 21 600 | 025252 | 600 | • | polished | with plastic grips | 27 | 150 | 5/0 | 1836 | |
| 95 27 600 | 021797 | 600 | £ 1000 V 🖄 🖨 🛠 📲 🖫 | polished | handles with dipped insulation, VDE-tested | 27 | 150 | 5/0 | 2301 | |
| 05 30 600 | 021002 | Chara | witter based for OF 21 COO | 105 27 600 | | | | | | |
| 95 29 600 | 021803 | spare (| e cutter head for 95 21 600 / 95 27 600 | | | | | | | |



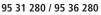
95 17 500 ☆1000 V 🏤 🚭 😌 🖺 🖺

CABLE AND WIRE ROPE SHEARS

Cable Cutters (ratchet action)

95 3

- > for cutting copper and aluminium single conductors as well as multiple stranded cables
- > 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
- > little handforce required due to very high transmission ratio
- > two-stage ratchet drive for easy cutting
- > simple handling as a result of low weight and compact design can be used even in confined areas
- > guard prevents operators' fingers being pinched
- > High-grade special tool steel, forged, oil-hardened



suitable for aluminium sector cable up to 4 x 150 \mbox{mm}^2



95 31 280: Large cutting capacity: max. 52 mm dia. / 380 mm²



Ratchet principle and two-stage ratchet drive for easier cutting



95 31 250/280: fixed handle with support area as an aid to position the cutters on a flat surface







95 31 280

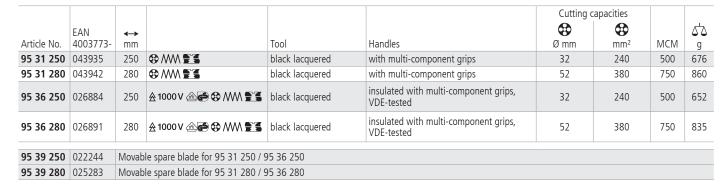


95 36 250 桧1000V € & MM ₽€



Product video 95 36 280





Cable Cutters (ratchet principle, 3-stage)

95 3

Sturdy. Easy to use. Stable. Innovative ratchet-drive. For cable up to 60 mm diameter.

- > easy handling due to low weight (825 g) and compact construction (320 mm length) – also usable in confined areas
- > cutting through copper and aluminium cables with diameters of up to 60 mm in one-hand and two-hand operation
- > hardened cutting edges, precisely ground, cut smoothly and neatly without crushing
- > for cutting copper and aluminium single conductors as well as multiple stranded cables (not suitable for steel wire and wire ropes)
- > innovative three-stage ratchet-drive with high leverage for easy cutting in one-hand and two-hand operation
- > fixed handle with support area for putting down the pliers when cutting
- > High-grade special tool steel, forged, oil-hardened













95 36 320

The innovative three gear drive permits three operating modes:

- Fast working with full lift of handles and one-handed operation when cutting through insulation material
- > Powerfully sliding the sickle knife forward when cutting through the stranded conductor with two hand through use of the central lifting area (handling opening of between 1/3 and 2/3)
- > 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-hand operation for cutting copper and aluminium cables with diameters of up to 60 mm!

| | | | | | Cutting c | apacities | acities | | | |
|--|----------|-----------|-----------------------------|--------------------|-----------|---|---------|-----------------|------|-----|
| | EAN | 4- | | | | | • | • | | 42 |
| Article No. | 4003773- | mm | | Tool | Head | Handles | Ømm | mm ² | MCM | g |
| 95 32 320 | 075172 | 320 | @ MM E S | black atramentized | polished | with multi-component grips | 60 | 600 | 1200 | 825 |
| 95 36 320 | 075189 | 320 | ≙ 1000 V @€ � /\\\\ €`\$ | black atramentized | polished | insulated with multi-component grips, VDE-tested | 60 | 600 | 1200 | 830 |
| 95 39 320 01 075714 Pivot cutter repair kit for 95 32 320 and 95 36 320 | | | | | | | | | | |
| 95 39 320 01 | | | | | | | | | | |

CABLE AND WIRE ROPE SHEARS

Cable Cutter (ratchet action) for steel wire armoured cables (SWA cable)

95 3

Cuts through steel wire armoured cables with a diameter of up to 45 mm / 380 mm^2 (e.g. 4 x 95 mm²) using one or two-handed operation

Sturdy. Easy to use. Stable.

- > simple handling due to low weight (800 g) 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
- > support area for putting down the pliers when cutting
- > not suitable for cutting ACSR cable and wire rope!
- > High-grade special tool steel, forged, multi stage oil-hardened



95 32 315 A





95 36 315 A



Precision milled and induction hardened cutting edge





| | | | | | | Cutting of | apacities | | | |
|---|-----------------|------------------|-------------------|-----------------|---|------------|-----------------|-----|--------------|--|
| Article No. | EAN 4003773- | ∢ ► mm | | Tool | Handles | Ø mm | mm ² | МСМ | 2 <u>7</u> 2 | |
| 95 32 315 A | 078562 | 315 | ⊗ ///// | black lacquered | with multi-component grips | 45 | 380 | 750 | 800 | |
| 95 36 315 A | 078579 | 315 | � ☆ 1000 V 🏤 🚭 MM | black lacquered | insulated with multi-component grips, VDE-tested | 45 | 380 | 750 | 800 | |
| 95 39 315 A 01 078586 Pivot cutter repair kit for 95 32 315 A and 95 36 315 A (ratchet action) | | | | | | | | | | |
| 95 39 315 A 02 078593 Fixed cutter repair kit for 95 32 315 A and 95 36 315 A (ratchet action) | | | | | | | | | | |

| Cable Shears |
|-------------------------|
| (ratchet action) |
| with telescopic handles |

95 32

Cable shears with adjustable telescopic handles allowing angular positioning

- > for cable diameters up to 38 mm, handles can be positioned at an angle to set the optimum handle width, which makes the shear also suitable for work in confined areas
- > comfortable work thanks to ratchet action and low weight
- > heavy duty telescopic handles made of oval aluminium tubing; extendable up to 770 mm for maximum leverage on large cable diameters; retractable down to 570 mm for minimum space requirements during transport
- > replaceable cutting head
- > extensive cutting range up to max. Ø 38 mm or max. 280 mm² (e.g. 4 x 70 mm² NYY) in copper and aluminium cables
- > easier, neater cut due to optimised cutting-edge geometry
- > adjustable bolted joint
- > cutting head: special quality high-grade tool steel, oil-hardened
- > handles: high-strength oval aluminium tubing



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

| | | | | | | Cutting capacities | | | |
|-------------|----------|---------------------------------|---|-----------|----------------------------|--------------------|-----------------|-----|------|
| | EAN | - | | | | ₿ | • | | 52 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | MCM | g |
| 95 32 038 | 071556 | 570 | • | burnished | with multi-component grips | 38 | 280 | 550 | 1980 |
| | | | | | | | | | |
| 95 39 038 | 073260 | Spare cutter head for 95 32 038 | | | | | | | |

Cable Cutters (ratchet action)

with telescopic handles

95 32

- > for copper and aluminium single conductors as well as multiple stranded cables – also with hard rubber or plastic sheath
- > not suitable for steel wire and wire ropes
- > also suitable for cables with iron sheath reinforcement
- > little hand force required for cutting due to optimum transmission ratio
- > high cutting capacity due to two-hand operation and ratchet action
- > the blade can be opened in any cutting position
- > blade: special-quality high-grade tool steel, oil-hardened
- > handles: high-strength oval aluminium tubing
- > handle length with multiple position adjustment from
- 400 610 mm (short transport length, individual adaptation to working conditions)

95 32 060

tool length: 600 - 810 mm; weight only 3820 g

95 32 100

tool length: 650 - 860 mm; weight only 4980 g



95 32 060

| | | | | | | (| Cutting capacities | | |
|-------------|----------|----------|---|------------|----------------------------|-----|--------------------|------|------|
| | EAN | - | | | | • | • | | 5 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | MCM | g |
| 95 32 060 | 071563 | 600 | 8 | burnished | with multi component aving | 60 | 740 | 1400 | 3820 |
| 95 32 100 | 071570 | 650 | W | burnisried | with multi-component grips | 100 | 960 | 1900 | 4980 |
| | | | | | | | | | |
| 95 39 720 | 025290 | Movab | wable spare blade for 95 31 720 / 95 32 060 (ratchet action) | | | | | | |
| 95 39 870 | 025306 | Movab | ovable spare blade for 95 31 870 / 95 32 100 (ratchet action) | | | | | | |

CABLE AND WIRE ROPE SHEARS

Wire Rope Shears forged
95
6
Double function: neat cutting, precise crimping

- > with two crimping dies for end caps on Bowden cable sheaths and end ferrules for traction cables
- > comfortable work thanks to handy, slim design and internal opening spring
- > bolted joint for precise blade guidance, re-adjustable
- > high leverage for reduced effort
- > cutting-edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

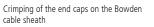
95 62 190 T*

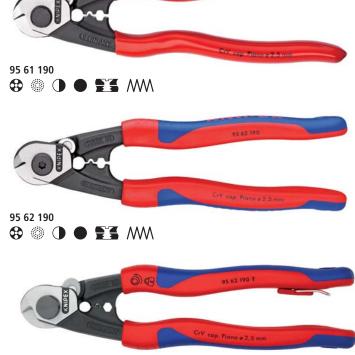
Pliers with tether attachment point for mounting a fall protection





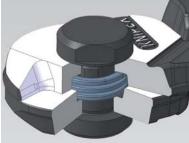
Crimping of the end ferrule onto the traction cable





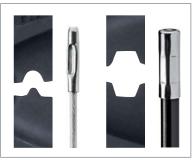
95 62 190 T 🔁 🌑 🛈 🗢 🖭 MM





Internal opening spring

Transport lock and opening limiter



Crimp profiles

| | | | | | Cutting capacities | | | | |
|-------------|----------|------------|----------|---|--------------------|-----|-----|-----|-----|
| | EAN | ∢ → | | | • | ٢ | | | 52 |
| Article No. | 4003773- | mm | Head | Handles | Ømm | Ømm | Ømm | Ømm | g |
| 95 61 190 | 040651 | | 11 | plastic coated | 7.0 | 5.0 | 4.0 | 2.5 | 314 |
| 95 62 190 | 071976 | 190 | polished | with multi-component grips | 7.0 | 5.0 | 4.0 | 2.5 | 314 |
| 95 62 190 T | 080206 | 190 | polished | with multi-component grips and integrated tether attachment point | 7.0 | 5.0 | 4.0 | 2.5 | 318 |

Cuts all wire ropes without splaying, including those that are extremely

strong

Bowden Cable Cutter



- > for Bowden cables and soft wire rope up to 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
- > little handforce required due to very high transmission ratio
- > with opening spring and locking device
- > cutting edges additionally induction hardened
- > High-grade special tool steel, forged, multi stage oil-hardened





| | | | | | | | Cutting capacities | |
|-------------|----------|----------|----------|--------------------|----------|----------------|--------------------|-----|
| | EAN | - | | | | | 0 | 55 |
| Article No. | 4003773- | mm | | Shears | Head | Handles | Ømm | g |
| 95 61 150 | 065197 | 150 | © E'S MM | black atramentized | polished | plastic coated | 3.0 | 205 |

95

6

Wire Rope and ACSR-Cable Cutters 95

- > for wire ropes and steel rods, copper and aluminium cables
 > suitable for cutting overhead cables with strain relief wire
- (ACSR-cables)
- > angular cutting blades allow cutting of single rope wire
- > optimum transmission ratio for high cutting performance
- > bolted cutter head, replaceable low weight
- > cutter head: high-grade special tool steel, oil-hardened
- > handles: aluminium, high-strength





95 81 600

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

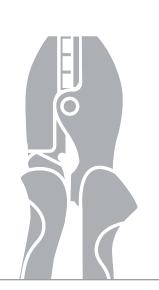
| | | | | | | | Cutting o | apacities | | | |
|-------------|----------|-------------|-------------------------|-----------------|------------------------|-----------------|-----------|-----------|-----|-----|------|
| | EAN | 4- > | | | | | 0 | | | | 52 |
| Article No. | 4003773- | mm | | Head | Handles | mm ² | Ømm | Ømm | Ømm | AWG | g |
| 95 71 445 | 014522 | 445 | ♦♥₽₹ | polished | with plastic grips | 95 | 10.0 | 7.0 | | 3/0 | 1083 |
| 95 71 600 | 014539 | 600 | ♦♥₽₹ | polished | with plastic grips | 150 | 14.0 | 9.0 | | 5/0 | 1716 |
| 95 77 600 | 025313 | 600 | A 1000 V 🕄 🛞 🝧 🕤 | polished | with dipped insulation | 150 | 14.0 | 9.0 | | 5/0 | 2359 |
| 95 81 600 | 025344 | 600 | � * * * * | polished | with plastic grips | 150 | 16.0 | 10.0 | 4.5 | 5/0 | 2256 |
| | | 1 | | | | - | · | | | | |
| 95 79 445 | 025320 | Spare of | cutter head for 95 71 4 | 145 | | | | | | | |
| 95 79 600 | 025337 | Spare of | cutter head for 95 71 6 | 500 / 95 77 600 | | | | | | | |
| 95 89 600 | 025351 | Spare of | cutter head for 95 81 6 | 500 | | | | | | | |

Crimping Pliers and Crimp Assortments

Manager 91 52 36 Marines

1.

| Crimp Grip Pliers | 166 |
|---|-----|
| Criming Pliers | 166 |
| Insertion Tool | 167 |
| MultiCrimp® | 168 |
| Crimp System Pliers | 170 |
| eCrimp | 171 |
| Crimping Dies | 172 |
| Locators | 174 |
| Tool Case for Photovoltaics | 174 |
| Tool Case for Photovoltaics MC3 | 175 |
| Mounting Tool for MC3 connectors | 175 |
| Set of Mounting Tools MC4 connectors | 175 |
| Compression Tool | 176 |
| Crimping Pliers for Scotchlok connectors | 176 |
| Crimping Pliers for Western plugs | 176 |
| Crimping Pliers short design | 177 |
| Crimping Pliers also for two-hand operation | 178 |
| PreciForce® | 179 |
| Four-Mandrel Crimping Pliers for turned contacts | 180 |
| Self-Adjusting Crimping Pliers for end sleeves (ferrules) with lateral access | 182 |
| Self-Adjusting Crimping Pliers for end sleeves (ferrules) with front loading | 183 |
| Crimping Pliers for micro plugs | 184 |
| Crimping Pliers for end sleeves (ferrules) | 184 |
| Crimping Pliers for end sleeves (ferrules) with front loading | 185 |
| Crimp Assortments for end sleeves (ferrules) | 186 |
| Crimp Assortments for cable connectors | 187 |
| Cable Connectors | 189 |



Crimp Grip Pliers

- > for solder-free electrical connections
- > quick release lever
- > high contact pressure with minimum handforce using toggle lever transmission
- > reproducible crimping quality with high tensile strength because of zero point lock
- > adjustable crimping pressure
- > Special steel, high-strength



KNIPEX 97 21 21

KNIPEX 97 22 24

_

97 00 215 A

| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Applications | Capacity mm ² | AWG | ۵'۵ g |
|-------------|-----------------|------------------|-----|-----------|---|-----------------------------|---------|----------|
| 97 00 215 A | 006497 | 215 | A - | burnished | insulated terminals and plug connectors | 0.5 - 6 | 20 - 10 | 520 |

97 21 215

97 22 240

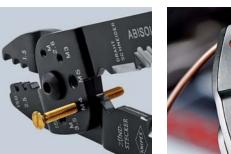
97 32 240

97

Crimping Pliers

97

- > 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 M 2.6 / M 3 / M 3.5 / M 4 and M 5
- > bolted joint for higher stability and even movement
- > Special steel, high-strength













| Article No. | EAN 4003773- | ∢ —► mm | | | Pliers | Handles | Applications | Capacity mm ² | AWG | ۵۵ g |
|-------------|-----------------|-------------------|---|---|---|-------------------------------|---|-----------------------------|---------|---------|
| 97 21 215 | 019688 | 230 | <i>I</i> | | J black with multi-component insulated terminals and cable connectors | | | 0.75 - 6 | 18 - 10 | 224 |
| 97 21 215 B | 019695 | 230 | and the second se | ٨ | black lacquered | with multi-component grips | non-insulated open plug-type connectors (plug width 6.3 mm) | 0.5 - 2.5 | 20 - 13 | 290 |
| 97 21 215 C | 019701 | 230 | | V | black lacquered | with multi-component grips | uninsulated terminals and cable connectors | 0.5 - 6 | 20 - 10 | 290 |
| 97 22 240 | 070726 | 240 | <i>,</i> | Ы | black | with multi-component | insulated terminals and cable connectors | 0.75 - 6 | 18 - 10 | 300 |
| 97 22 240 | 070720 | 240 | and the second se | ٨ | lacquered | grips | non-insulated open plug-type connectors (plug width 6.3 mm) | 0.5 - 2.5 | 20 - 13 | 300 |
| 97 32 240 | 079491 | 240 | A 100 | | black | with multi-component | insulated terminals and cable connectors | 1.5 - 6 | 15 - 10 | 300 |
| 57 52 240 | 075491 | 240 | A | V | lacquered | grips | uninsulated terminals and cable connectors | 0.5 - 6 | 20 - 10 | 300 |

Insertion Tool for LSA-Plus and identical constructional design

97 40

- > tool for putting on boards, sockets and fields
- > pushing down and cutting in one operation
- > for UTP and STP cables, conductor 0.4 0.8 mm dia.
- > with integrated pulling hook and release blade
- > housing: plastic, impact-proof



97 40 10





Putting down and cutting the cable in one operation

With integrated pulling hook



| | EAN | ∢ —▶ | | | Capacity | 52 |
|-------------|----------|-------------|-----------|---|-----------|-----|
| Article No. | 4003773- | mm | Head | Applications | Ømm | g |
| 97 40 10 | 044895 | 175 | burnished | UTP- and STP-cables, LSA-Plus and identical | 0.4 - 0.8 | 100 |



KNIPEX MultiCrimp[®] Crimping Pliers with changer magazine

97 33

- > just one tool for the most common crimping applications
- > crimping dies changed quickly and easily without any additional tool
- > sorted and predected storage of the interchangeable dies in a round magazine
- > comfortable, powerful crimping pliers in professional quality
- > 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, fibreglass-reinforced



Changing position: service lever opens out for parallel jaw positioning



Changing the crimping dies: unlock the magazine position, take out the set of dies which the pliers have been pushed on



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 die sets for non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) from 0.5 - 6 mm²; for insulated terminals, plug connectors and butt connectors from 0.5 - 6 mm² and for insulated and non-insulated end sleeves (ferrules) from 0.25 - 6 mm²

Now also for insulated and non-insulated end sleeves (ferrules) 10 / 16 / 25 mm² Universal indent crimping die for non-insulated connectors



97 33 02

Crimping pliers with round magazine and five interchangeable crimping dies for non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) from 0.5 - 6 mm²; for insulated terminals, plug connectors and butt connectors from 0.5 - 6 mm²; for insulated and non-insulated end sleeves (ferrules) from 0.25 - 6 mm²; for insulated and non-insulated end sleeves (ferrules) with 10 / 16 / 25 mm² and for 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

Compact, inexpensive and light-weight crimping pliers for fitting and repairs. The electrician needs only one tool now instead of five as before.





Magazine for crimping dies can be carried on a belt





Clearly visible marking on the crimping dies with pictograms

| Article No. | EAN 4003773- | ← ► mm | | | | Applications | Capacity mm ² | AWG | ۵ ^۲ ۵ g | |
|-------------|-----------------|------------------|----------------|-------------|---|--|---|-----------|-----------------------|--|
| 97 33 01 | 066927 | 250 | Cali | M | | non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 770 | |
| | | | | | MM | insulated terminals, plug connectors and butt connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | | |
| | | | | | - | insulated and non-insulated end sleeves (ferrules) | 0.25 - 0.75 1 - 1.5 2.5 4 6 | 23 - 10 | | |
| 97 33 02 | 066934 | 250 | (Cale | ٨ | | non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 870 | |
| | | | | | | insulated terminals. plug connectors and butt connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | | |
| | | | | | MM | insulated and non-insulated end sleeves (ferrules) | 0.25 - 0.75 1 - 1.5 2.5 4 6 | 23 - 10 | | |
| | | | | | | insulated and non-insulated end sleeves (ferrules) | 10 / 16 / 25 | 7 / 5 / 3 | | |
| | | | OV- | w | _ | 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 - 1 1.5 - 2.5 4 - 6 10 | 20 - 7 | | |
| 97 39 05 | 070078 | Crimpir | na dies for i | non-insula | ited open | plug type connectors (plug width 4.8 + 6.3 mm) | | | | |
| 97 39 06 | 070085 | | | | | plug connectors and butt connectors | | | | |
| 97 39 08 | 070092 | · · | - | | | nsulated end sleeves (ferrules) | | | | |
| 97 39 09 | 077763 | Crimpin | ng dies, for i | insulated a | and non-i | nsulated end sleeves (ferrules) | | | | |
| 97 39 13 | 070108 | Crimpir | ng dies, for i | non-insula | ted crimp | terminals, tube and compression cable lugs in | | | | |
| 97 39 13 A | 077770 | accorda | ance with D | IN 46234 | 234 and DIN 46235 and non-insulated crimp, butt and press connectors in accordance with DIN 46341 and DIN 46267 | | | | | |
| 97 39 30 | 070115 | Crimpir | ng dies, for (| compressi | on joints a | according to DIN 46267 | | | | |
| 97 39 90 | 070061 | Change | er Magazine | e, empty | | | | | | |

Crimp System Pliers for exchangeable crimping dies

- > just one tool for almost 1,000 crimping applications
- > almost 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, re-adjustable
- > optimum transmission of force due to lever action for fatigue-reduced operation
- > ergonomically designed handles
- > different locators for precise positioning of the connectors
- > crimping dies for applications not covered in the range offered here, may be available on request
- > Chrome vanadium electric steel in special quality, oil-hardened



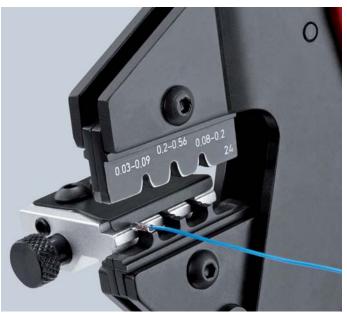


97

43

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

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



97 43 400 with crimping dies 97 49 24 and locator 97 49 93 for D-Sub plugs





97 43 05

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

9743 06

with attached crimping dies for insulated terminals and plug connectors

97 43 200

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

97 43 200 A

pliers without crimping dies, without case

With the possibility of crimping almost all currently available crimping connections with just one tool and state-of-the-art crimping pliers technology, the crimp system pliers solves almost all tasks in mobile and stationary crimping technology and is an excellent tool for professionals to use for standard crimping.

| Article No. | EAN 4003773- | ∢→ mm | | | Pliers | Handles | Applications | Capacity mm ² | AWG | ۲۵ g |
|-------------|-----------------|-----------------|---------|----|-----------|--------------------------------|--|-----------------------------|---------|---------|
| 97 43 200 | 030812 | 200 | | MM | burnished | with multi- component grips | see crimping dies table | | | 988 |
| 97 43 200 A | 071587 | 200 | | MM | burnished | with multi- component grips | see crimping dies table | | | 574 |
| 97 43 05 | 031031 | 200 | (See | | burnished | with multi- component grips | Crimp System Pliers for non-insulated open plug- type connectors (4.8 and 6.3 mm connector width) | 0.5 - 6 | 20 - 10 | 618 |
| 97 43 06 | 031048 | 200 | <i></i> | | burnished | with multi- component grips | Crimp System Pliers for insulated terminals plug connectors and butt connectors | 0.5 - 6 | 20 - 10 | 610 |

KNIPEX eCrimp Electromechanical Crimp System Pliers for exchangeable crimping dies

97 43

- > strong electromechanical drive, no hydraulic components, no leakages
- > max. pressing force of the jaws approx. 11 kN
- > ergonomically optimised, user-friendly working height during workshop operation
- > LED working light for targeted illumination of the crimping area low noise level
- > long servicing intervals (up to 25,000 crimping actions)! The KNIPEX eCrimp is designed to only require servicing after 25,000 crimping actions. This means the intervals between servicing the electromechanical crimping pliers is 2.5 : 1 in relation to conventionally actuated crimping pliers. The pliers are therefore available for crimping use for considerably longer. They do not need to be sent away frequently for servicing. High availability without downtimes while being serviced
- > powerful li-ion rechargeable battery (12 V; 1.5 Ah; 18 Wh); charge time approx. 30 min; no memory effect
- > approx. 170 operating cycles for plug-in connectors with 10 mm² nominal size with a single battery charge
- > tether attachment point to prevent falling during field work



97 43 E

97 43 E with euro plug

97 43 E AUS with plug adapter for AS/NSZ 3112 (AUS+NZ)

97 43 E UK with plug adapter for BS 5733 (GB)

97 43 E US with plug NEMA 1-15P (USA / Canada / Mexico)



Product video



The KNIPEX eCrimp is the first electromechanically actuated model of crimping pliers in the world. The possible use of over 40 KNIPEX crimping dies and locators as well as more than 1,000 special crimping dies from the proven Crimp System Pliers (97 43 200). Its universal application range makes it an essential tool in the workshop and for rough field work.

| | EAN | Mains voltage/ | | 47 |
|-------------|----------|-----------------------------|------------------|------|
| Article No. | 4003773- | frequency | Connector socket | g |
| 97 43 E | 076858 | 230 V / 50 Hz | CEE 7/16 | 1960 |
| 97 43 E UK | 076865 | 230 V / 50 Hz | BS 5733 | 1960 |
| 97 43 E AUS | 076872 | 230 V / 50 Hz | AS/NSZ 3112 | 1960 |
| 97 43 E US | 077008 | 120 V / 60 Hz | NEMA 1-15P | 1960 |
| 97 43 E 01 | 076889 | Spare Storage Battery for k | NIPEX eCrimp | |

Crimping Dies for Crimp System Pliers

for different applications 1,000 special crimping dies upon request)

| Article No. | EAN 4003773- | | | Applications | Capacity mm² | AWG | Capacity SW mm | Sleeve Ømm |
|-------------|-----------------|------------|--------------|---|---|--------------------------|-------------------|---------------|
| 97 49 04 | 030850 | (Sale | A | non-insulated open plug type connectors (plug width 2.8 + 4.8 mm) | plug width 2.8 mm: 0.1 - 0.25 plug width 2.8 mm: 0.5 - 1 plug width 4.8 mm: 0.5 - 1 plug width 4.8 mm: 1.5 - 2.5 | 27 - 13 | | |
| 97 49 05 | 030867 | See. | <u>~</u> | non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | | |
| 97 49 06 | 030836 | <i>,</i> , | | insulated terminals, plug connectors and butt connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | | |
| 97 49 07 | 077749 | - | | heat shrinkeable sleeve connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | | |
| 97 49 08 | 030874 | | V | insulated and non-insulated end sleeves (ferrules) | 0.25 - 0.75 1 - 1.5 2.5 4 6 | 23 - 10 | | |
| 97 49 09 | 030881 | | \mathbf{V} | | 10 / 16 / 25 | 7 / 5 / 3 | | |
| 97 49 10 | 076896 | | V | non-insulated tubular cable lugs and crimp terminals in accordance with DIN 46237 and non-insulated butt and crimp connectors in accordance with DIN 46341 | 0.75 / 1.5 / 2.5 0.5 - 0.75 | 13 15 - 17 19 - 20 | | |
| 97 49 11 | 076902 | | ~ | 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 | 4 / 6 / 10 | 7 / 10 / 11 | | |
| 97 49 14 | 077756 | of- | ~ | 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 - 1 1.5 - 2.5 4 - 6 10 | | | |
| 97 49 15 | 043164 | | <u>~</u> | plug connectors (plug width 6.3 mm) and non-insulated open plug type connectors (plug width 4.8 mm) | plug width 6.3 mm: 1.25 - 2.5 plug width 4.8 mm: 1.25 - 2.5 plug width 4.8 mm: 3 - 6 | 17 - 13 17 - 10 | | |
| 97 49 16 | 040675 | <i>,</i> | | insulated terminals + cable connectors | 10 16 | 7 / 5 | | |
| 97 49 18 | 063186 | | V | twin end sleeves | 2 x 6 / 2 x 10 / 2 x 16 | 2 x 10 2 x 7 2 x 5 | | |
| 97 49 19 | 030898 | | | insulated and non-insulated end sleeves (ferrules) | 35 / 50 | 2 / 0 | | |

16 + 25

0.03 - 0.09 0.2 - 0.56 0.08 - 0.2

0.35 - 0.75 / 0.5 - 1.0 / 0.2 - 0.5

7.7 / 9.5 / 9.5

7.0 / 8.4 / 8.1

5 + 3

32 - 20

20 / 22-24 / 26-30

97 49

97 49 20

97 49 23

97 49 24

97 49 25

(F

or

SAL

045069

052135

030911

079798

V

-^-

Micro-Fit™

F-connectors for TV and satellite connections

non-insulated terminals + cable connectors

D-Sub; HD 20; HDE plugs

| | EAN | | | | Capacity | | Capacity SW | Sleeves |
|-------------------------|--------------------|-----------------------|-------------------------------|---|--|---------------|--|--|
| Article No. 97 49 26 | 4003773- 079804 | ملاته | _ | Applications Mini-Fit® | mm ² | AWG | mm | Ømm |
| | | - All | | | | 107 187 20-24 | | |
| 97 49 27 | 079811 | - | _ | MQS-Stecker compression joints according | 0.25 / 0.35 / 0.5 | 45 44 | | |
| 97 49 30 | 030904 | Frank | | to DIN 46267 | 1.5 - 4 | 15 - 11 | | |
| 97 49 35 | 034315 | 9 | <u>~</u> | spark plug connectors and distributors (snap-on sleeves, saw tooth couplings, threaded sleeves, ignition cable sleeves and ignition distributor couplings) | 1 | 17 | | |
| 97 49 40 | 030959 | S | | Coax connectors RG 58, 59, 62, 71, 223 | | | 5.4 / 6.48 / 1.72 | 6.4 / 7.6 / 2.1 |
| 97 49 44 | 041443 | and the second second | <u>~</u> | rolled contacts | 0.14 - 0.25 0.3 - 0.5 0.75 - 1.5 | 26 - 15 | | |
| 97 49 50 | 030966 | 6 30° | | Coax connectors/Car phone RG 58, 174, 188, 316 | | | 3.25 / 4.52 / 5.4 / 1.72 / 1.07 / 0.72 | 3.9 / 5.4 / 6.4 / 2.1 / 1.3 / 0.95 |
| 97 49 54 | 041450 | en Al | <u>~</u> | modular plugs | 0.5 - 1 0.5 - 1 1.5 - 2.5 1.5 - 2.5 | 20 - 13 | | |
| 97 49 59 | 073734 | | | solar cable connectors Helios H4 (Amphenol) | 2.5 + 4 + 6 | 13 - 10 | | |
| 97 49 60 | 030928 | - | | turned contacts (HTS + Harting) | 0.14 - 4 | 26 - 11 | | |
| 97 49 61 | 045137 | | | turned contacts | 1.5 / 2.5 / 4 / 6 | 10/11/13/15 | | |
| 97 49 62 | 063179 | | | solar cable connectors (Huber + Suhner) | 2.5 + 4 | 13 + 11 | | |
| 97 49 63 | 066675 | | ↓↓ | solar cable connectors (Huber + Suhner) | 4 + 6 | 11 + 10 | | |
| 97 49 64 | 044055 | | | ABS connectors in motor vehicles | 1 - 6 | 17 - 10 | | |
| 97 49 65 | 066682 | - | | solar cable connectors MC3 (Multi-Contact) | 2.5 - 6 | 13 - 10 | | |
| 97 49 66 | 066699 | - | ۸ | solar cable connectors MC4 (Multi-Contact) | 2.5 - 6 | 13 - 10 | | |
| 97 49 66 4 | 072096 | - | <u>~</u> | solar cable connectors MC4 (Multi-Contact) | 4 | 11 | | |
| 97 49 66 6 | 072102 | | <u>~</u> | cutting - stripping - crimping | 6 | 10 | | |
| 97 49 67 | 066705 | a bei | ~ | solar cable connectors (Hirschmann) | 2.5 - 6 | 13 - 10 | | |
| 97 49 68 | 066712 | (Carrow) | | solar cable connectors (Tyco) | 1.5 - 6 | 15 - 10 | | |
| 97 49 69 1 | 072119 | | | solar cable connectors gesis® | 1.5 - 2.5 | 15 / 13 | | |
| 97 49 69 2 | 072126 | | | solar PST 40 (Wieland) | 4 - 10 | 11 - 7 | | |
| 97 49 70 | 030942 | S | ئىيى آ | Western plugs | 4 / 6 / 8-pole RJ 10; 11; 12; 45 | | | |
| 97 49 71 | 075066 | - tok | ~ | solar cable connectors MC4 (Multi-Contact) | 4 - 10 | 11 - 7 | | |
| 97 49 72 | 076957 | - | | solar cable connectors MC3 (Multi-Contact) | | 7 / 10 / 11 | | |

| Article No. | EAN 4003773- | | Applications | Capacity mm ² | AWG | Capacity SW mm | Sleeves Ø mm |
|-------------|-----------------|-------------|---|----------------------------------|-----|-----------------------|--------------------|
| 97 49 74 | 044062 | ٩ | unshielded Molex plugs (short design) | 4 / 6 / 8-pole RJ 10; 11; 12; 45 | | | |
| 97 49 76 | 047513 | <u> </u> | shielded Stewart plugs | | | | |
| 97 49 81 | 042778 | K | fibre optic connectors, e.g. Harting | | | 3.0 / 4.95 / 6.5 | 3.5 / 6.0 / 7.5 |
| 97 49 82 | 042785 | K | fibre optic connectors, e.g. Telegärtner | | | 3.25 / 3.65 / 4.52 | 3.6 / 4.0 / 5.4 |
| 97 49 83 | 044079 | -99° | fibre optic connectors, e.g. FSMA-, ST-, So STSC- / K-connectors | C- + | | 3.65 / 4.2 / 5.0 | 4.3 / 5.4 / 6.0 |
| 97 49 84 | 042792 | | fibre optic connectors, e.g. Huber / Suhner | | | 3.8 / 4.3 / 4.95 | 4.5 / 5.2 / 6.0 |
| 97 49 87 | 043331 | K | fibre optic connectors, e.g. FSMA-; ST- and MIC-connectors | | | 8.7 | 9.5 |
| 97 49 25 1 | 079828 | Locator for | 97 49 25 | | | | |
| 97 49 26 1 | 079835 | Locator for | 97 49 26 | | | | |
| 97 49 27 1 | 079842 | Locator for | 97 49 27 | | | | |
| 97 49 94 | 030997 | Locator for | r 97 49 04 / 97 52 04 / 97 52 34 | | | | |
| 97 49 95 | 031000 | Locator for | 97 49 05 / 97 52 05 / 97 52 35 | | | | |
| 97 49 93 | 047926 | Locator for | r 97 49 24 (D-Sub-plugs) | | | | |
| 97 49 59 1 | 073741 | Locator for | 97 49 59 (solar cable connectors Helios H4) | | | | |
| 97 49 90 | 031017 | Locator for | r 97 49 60 (HTS + Harting) | | | | |
| 97 49 65 1 | 066729 | Locator for | 97 49 65 (solar cable connectors MC3) | | | | |
| 97 49 66 1 | 066736 | Locator for | 97 49 66 (solar cable connectors MC4) | | | | |
| 97 49 68 1 | 066743 | Locator for | 97 49 68 (solar cable connectors Solarlok) | | | | |
| 97 49 69 11 | 072133 | Locator for | 97 49 69 1 and 97 49 69 2 | | | | |
| 97 49 71 1 | 075073 | Locator for | r 97 49 71 (solar cable connectors MC4) | | | | |

Tool Case for Photovoltaics

97 91

> with tools for photovoltaics

- > without crimping dies please order separately (see ref. 97 49...) for individual assortment
- > with service tools (hexagonal key) for the change of crimping dies

> shock-resistant plastic case

- > foam insert with recesses for tools, crimping dies and locators
- > dimensions, exterior (W x H x D): 345 x 80 x 280 mm



| Article No. | EAN 4003773- | | | | Quantity | ۲ <mark>۵</mark> |
|-------------|-----------------|--------------------|---------------|---|----------|------------------|
| 97 91 01 | 070351 | | Tool Case for | Photovoltaics | | 1964 |
| | | MM | 12 12 11 | Precision Insulation Stripper, with adapted blades | 1 | |
| | | 🛧 1000 V 🖄 🚰 🔂 📲 🕤 | 95 16 165 | Cable Shears | 1 | |
| | | MM | 97 43 200 | Crimp System Pliers, for exchangeable crimping dies | 1 | |

Tool Case for Photovoltaics, MC3 (Multi-Contact)

- > the complete tool set to install MC3 connectors
- > with service tools (hexagonal key) for the change of crimping dies shock-resistant plastic case
- > foam inserts with recesses for the tools, crimping dies and locators
- with four empty plastic boxes for consumables; for individual equipping
- > dimensions, exterior (W x H x D): 360 x 105 x 300 mm



| Article No. | EAN 4003773- | | | | Quantity | ۵'۵ g |
|-------------|-----------------|--------------------|-----------------|---|----------|----------|
| 97 91 02 | 074083 | | Tool Case for P | hotovoltaics, MC3 (Multi-Contact) | | 3280 |
| | | MM | 12 12 11 | Precision Insulation Stripper, with adapted blades | 1 | |
| | | 🚖 1000 V 🖄 🚭 🤁 🖺 🕤 | 95 16 165 | Cable Shears | 1 | |
| | | MM | 97 43 200 | Crimp System Pliers, for exchangeable crimping dies | 1 | |
| | | | 97 49 65 | Crimping dies, for solar cable connectors MC3 (Multi-Contact) | 1 | |
| | | | 97 49 65 1 | Locator for 97 49 65 (solar cable connectors MC3) | 1 | |
| | | | 97 49 65 2 | Mounting Tool for MC3 connectors | 1 | |

97

97 91

Mounting Tool for MC3 connectors

- > for easy and quick assembly of MC3 solar cable connectors
- > for fit solar sleeves for connectors from 2.5 to 10 \mbox{mm}^2
- > three capsules (2.5 / 4; 6; 10 mm²) for pulling on the sleeves, integrated in the detachable handle
- > body: plastic, fibreglass-reinforced





The assembly tool comes with three torpedo mandrels for the various cable cross-sections

| | | EAN | ∢ —▶ | Capacity | 52 |
|------|---------|----------|-------------|-----------------|-----|
| Arti | cle No. | 4003773- | mm | mm ² | g |
| 97 | 49 65 2 | 072010 | 325 | 2.5 - 10 | 460 |

115

| Set of Mounting Tools for solar cable connectors MC4 (Multi-Contact) | 97 | 6 | | |
|---|----|-------------|-----------------|-----------------|
| > set of two mounting tools > to tighten cable glands of MC4 solar plugs > to open the locking of MC4 housings (even in case of mounted lock clip) | | 97 49 66 2 | A a a | |
| > tool: plastic, fibreglass-reinforced | | Article No. | EAN 4003773- | ←→ mm |

97 49 66 2

074106

18 175

5

g

Compression Tool for Coax connectors

Crimping Pliers

with side cutter

> with opening spring

for Scotchlok connectors

> cutting edges additionally induction hardened

> Vanadium electric steel; forged, oil-hardened

For crimping F, BNC and RCA connectors Robust design

- > suitable for RG 59 / 6 / 11 cable redatable head for different cable sizes
- > redatable insert for various types of connector
- > adjusting screw for various connector lengths
- > applicable among others for compression connectors Kathrein EMK 12; Cablecon F-56 CX3 5.1; Astro FKS 06



> for crimping plastic-insulated telecommunication or signal cables using the U-contact principle in single Scotchlok connectors

> no stripping necessary, U-shaped elements establish the connection



97 40 20 SB

97

40

| Size X after compression | plugs | | | |
|--------------------------|-------|------------------|--|--|
| 17 - 24 mm | | F (RG 59/6) | | |
| 30 - 37 mm | | BNC (RG 59/6) | | |
| 22 - 29 mm | | RCA (59/6) | | |
| 35 - 42 mm | | F (RG 11) | | |
| | | | | |
| EAN | | 52 | | |

| Article No. | EAN 4003773- | ∢ —► mm | Applications | g |
|-------------|-----------------|-------------------|--------------------------|-----|
| 97 40 20 SB | 077626 | 175 | for F, BNC and RCA-plugs | 430 |





| Article No. | EAN 4003773- | ∢→ mm | | | Head | Handles | Applications | Capacity Ø mm | ۵'۵ g |
|-------------|-----------------|-----------------|------------|----|----------|----------------|----------------------------|------------------|----------|
| 97 50 01 | 028239 | 155 | <u>@</u> > | MM | polished | plastic coated | Scotchlok single connector | 0.4 - 1.1 | 135 |

97

50

Crimping Pliers for Western plugs

- > professional tool for cutting and stripping unshielded ribbon telephone cables
- > for crimping 6- and 8-pole Western plugs type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)
- > exact crimping process due to parallel crimping
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > with length cutter and dismantling knife for ribbon cables 6 and 12 mm length
- > with additional stripping device for round cables
- > Chrome vanadium electric steel in special quality, oil-hardened



| Article No. | EAN 4003773- | ∢→ mm | | Handles | Capacity | ۵'۵ g |
|-------------|-----------------|-----------------|-----------|----------------------------|--|----------|
| 97 51 10 | 043171 | 190 | \$ | with multi-component grips | RJ 11/12 (6-poles) 9.65 mm RJ 45 (8-poles) 11.68 mm | 340 |

97 59 06 029700 4 spare blades for poles 97 51 10

| 1 | 7 | 6 |
|---|---|---|
| | ' | v |

Crimping Pliers for Western plugs

97 51

- > professional tool for cutting and stripping unshielded ribbon telephone cables
- > for crimping 6- and 8-pole Western plugs type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)
- > exact crimping process due to parallel crimping
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > with length cutter and dismantling knife for ribbon cables6 and 12 mm length
- > with additional stripping device for round cables
- > Chrome vanadium electric steel in special quality, oil-hardened



97 51 12







| Article No. | EAN 4003773- | ∢ —► mm | | | Handles | Capacity | ۲ <mark>۵</mark> | | | | |
|-------------|-----------------|-------------------|-------------------------|--|----------------------------|---|------------------|--|--|--|--|
| 97 51 12 | 043188 | 200 | <u></u> | | with multi-component grips | RJ 10 (4-poles) 7.65 mm RJ 11/12 (6-poles) 9.65 mm RJ 45 (8-poles) 11.68 mm | 522 | | | | |
| 97 59 12 | 069997 | Spare b | are blades for 97 51 12 | | | | | | | | |

97

52

Crimping Pliers short design

97 52 14



available as accessory: locator for non-insulated open plug-type connectors

lock (self-releasing mechanism) > crimping pressure has been set precisely (calibrated) in the factory,

> repetitive, high crimping quality due to precision dies and integral

- re-adjustable > optimum transmission of force thanks to toggle lever for fatiguereduced operation
- > good handling due to 20° angled head, low weight and short design
- > Chrome vanadium electric steel in special quality, oil-hardened



| Article No. | EAN 4003773- | ∢→ mm | | | Handles | Applications | Capacity mm ² | AWG | ۵ ^۲ ۵ g | | | |
|-------------|---|-----------------|--|----------|----------------------------|--|-----------------------------|---------|-----------------------|--|--|--|
| 97 52 14 | 026808 | 195 | (Section of the section of the secti | ~ | with multi-component grips | non-insulated open plug type connectors (plug width 2.8 + 4.8 mm) | 0.10 - 1.5 | 27 - 16 | 387 | | | |
| 97 52 20 | 026853 | 195 | <u>م</u> | | with multi-component grips | COAX-, BNC- and TNC connectors RG 58 / 59 / 62 / 71 / 223 | | | 380 | | | |
| 97 59 14 | 97 59 14 026976 Locator for 97 52 14 | | | | | | | | | | | |

Crimping Pliers also for two-hand operation

> for solder-free electrical connections

- > the ingenious 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, re-adjustable
- > two-hand operation for easy crimping of large conductor diameters
- > easy handling as a result of well balanced centre of gravity, angled head and ergnomically shaped handles
- > Chrome vanadium electric steel in special quality, oil-hardened





First step: move the handle with two fingers only until both jaws touch the connector to be crimped



97

52

Second step: now use the whole hand for further crimping procedure



Third step: when greater hand force is required, such as e.g. when crimping insulated connectors 6 mm², two-hand operation is possible by the longer handles



| Article No. | EAN 4003773- | ←→ mm | | | Applications | Capacity mm² | AWG | ۵ ^۲ ۵ g |
|----------------------|------------------|-----------------|----------------|--|--|---|---------|-----------------------|
| 97 52 04 | 025450 | 250 | (Sech | ~ | non-insulated open plug type connectors (plug width 2.8 + 4.8 mm) | 2.8 mm: 0.1 - 0.25 2.8 mm: 0.5 - 1 4.8 mm: 0.5 - 1 4.8 mm: 1.5 - 2.5 | 27 - 13 | 562 |
| 97 52 05 | 025467 | 250 | 1 and a second | ~~ ~~ | non-insulated open plug type connectors (plug width 2.8 + 4.8 mm) | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 572 |
| 97 52 06 | 025474 | 250 | , , , | | insulated terminals, plug connectors and butt connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 565 |
| 97 52 08 | 025481 | 250 | <i>i</i> | 1 | insulated and non-insulated end sleeves (ferrules) | 0.25 - 0.75 1 - 1.5 2.5 4 6 | 23 - 10 | 565 |
| 97 52 09 | 025498 | 250 | 2 | W MM | insulated and non-insulated end sleeves (ferrules) | 10 / 16 / 25 | 7/ 5/ 3 | 571 |
| 97 52 10 | 023678 | 250 | (S)° | | Coax-, BNC- and TNC-connectors | | | 577 |
| 97 52 13 | 048084 | 250 | of- | ••• //// | 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 - 1 1.5 - 2.5 4 - 6 10 | 20 - 7 | 558 |
| 97 52 19 | 052142 | 250 | | W MM | insulated and non-insulated end sleeves (ferrules) | 35 / 50 | 2 / 0 | 567 |
| 97 52 23 | 052159 | 250 | eren Of | | non-insulated terminals + cable connectors | 16 / 25 | 5/3 | 565 |
| 97 49 94 97 49 95 | 030997 031000 | | | 9 04 / 97 52 04 / 9 05 / 97 52 05 / | | | | |

R

KNIPEX PreciForce® 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, re-adjustable
- > optimum transmission of force thanks to toggle lever for fatigue-reduced operation
- > good handling thanks to favourable handle position, low weight, compact design and ergonomically shaped handles
- > Chrome vanadium electric steel in special quality, oil-hardened



97 52 37

Product video 97 52 36



For daily crimping applications, the specialist likes crimping pliers that work precisely and reliably. In addition, they should be light, comfortable to use, robust and reasonably priced: PreciForce®.



97 52 30



| Article No. | EAN 4003773- | ∢ ► mm | | | Applications | Capacity mm ² | AWG | ۵'۵ g |
|-------------|-----------------|------------------|------------|--------------------|---|---|-------------------|----------|
| 97 52 30 | 051855 | 220 | Frank | | compression joints according to DIN 46267 | 1.5 - 4 (6 - 10) | 15 - 11 10 / 7 | 477 |
| 97 52 33 | 051862 | 220 | nan Ofe | ~ //// | 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 - 1 1.5 - 2.5 4 - 6 10 | 20 - 7 | 478 |
| 97 52 34 | 051879 | 220 | (Sel | ~ | non-insulated open plug type connectors (plug width 2.8 + 4.8 mm) | 2.8 mm: 0.1 - 0.25 2.8 mm: 0.5 - 1 4.8 mm: 0.5 - 1 4.8 mm: 1.5 - 2.5 | 27 - 13 | 483 |
| 97 52 35 | 051886 | 220 | (Sech | ~ | non-insulated open plug type connectors (plug width 4.8 + 6.3 mm) | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 494 |
| 97 52 36 | 051893 | 220 | | | insulated terminals + cable connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 487 |
| 97 52 37 | 063193 | 220 | | | heat shrinkeable sleeve connectors | 0.5 - 1 1.5 - 2.5 4 - 6 | 20 - 10 | 478 |
| 97 52 38 | 051909 | 220 | | • | insulated and non-insulated end sleeves (ferrules) | 0.25 - 0.75 1 - 1.5 2.5 4 6 | 23 - 10 | 493 |
| 97 52 50 | 051916 | 220 | 6 | ● ◆ //// | COAX-, BNC- and TNC-connectors for RG 58; 174; 188; 316 | | | 498 |
| 97 49 94 | 030997 | Locat | or for 97 | 7 49 04 / 97 | 52 04 / 97 52 34 | | | |
| 97 49 95 | 031000 | Locat | or for 97 | 7 49 05 / 97 | 52 05 / 97 52 35 | | | |

97 52

Four-Mandrel Crimping Pliers for turned contacts

97 52

- > 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 thanks to handy shape
- > Chrome vanadium electric steel in special quality, oil-hardened

97 52 63

fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; pliers in a plastic case with foam insert and standard locator for precise positioning of the contacts

97 52 63 DG

crimping capacity can be adjusted in increments of 0.01 mm; with digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring; adjustment in mm, inches or comparable selection positions according to MIL; pliers in a plastic case with foam insert and standard locator for precise positioning of the contacts

97 52 64

pressure adjustment depending on the conductor's diameter by means of adjusting wheel in 4 different positions; locator for positioning the contacts

97 52 65

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 A

fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; 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 0.01 mm; with digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring; adjustment in mm, inches or comparable selection positions according to MIL; with table for calculating the settings; pliers in a plastic case with foam insert and standard locator for precise positioning of the contacts

97 52 65 DG A

crimping capacity can be adjusted in increments of 0.01 mm; with digital display of the preset crimping capacities and possibility of re-calibration via RESET function with electronic wear monitoring; adjustment in mm, inches or comparable selection positions according to MIL; with table for calculating the settings; pliers in a plastic case with foam insert; without locator

97 59 65 2

universal locator for holding turned contacts for crimping; precisely adjustable to the length (20 - 45 mm) and diameter (1 - 8 mm) of the crimping connector; 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



Turned contacts are used for particularly demanding plug-type connections, e.g. in medical industry and aeronautics. 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.

97 59 65 2 Universal Locator



Standard locator



| • | - | • | | | | | | | | |
|--|-----------------|------------------|-----|----------|------------------|----------------------------|---|-----------------------------|---------|----------|
| Multifunctional digita inches or comparable | | | | | | | | | | |
| Article No. | EAN 4003773- | ∢ ► mm | | | Pliers | Handles | Applications | Capacity mm ² | AWG | ۵'ک g |
| 97 52 63 | 050148 | 180 | | | chrome plated | with multi-component grips | turned contacts | 0.08 - 2.5 | 28 - 13 | 388 |
| 97 52 63 DG | 063209 | 195 | | | chrome plated | with multi-component grips | turned contacts | 0.08 - 2.5 | 28 - 13 | 388 |
| 97 52 64 | 044093 | 180 | 100 | | chrome plated | with multi-component grips | turned contacts | 0.08 - 2.5 | 28 - 13 | 424 |
| 97 52 65 | 045236 | 230 | | PATENTED | chrome plated | with multi-component grips | turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller) | 0.14 - 6 | 25 - 10 | 676 |
| 97 52 65 A | 071594 | 250 | 150 | PATENTED | chrome plated | with multi-component grips | turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller) | 0.14 - 6 | 25 - 10 | 604 |
| 97 52 65 DG | 063216 | 250 | | PATENTED | chrome plated | with multi-component grips | turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller) | 0.14 - 6 | 25 - 10 | 633 |
| 97 52 65 DG A | 071990 | 250 | 150 | PATENTED | chrome plated | with multi-component grips | turned contacts (Harting; Ilme; Phoenix; Amphenol; Walther; HTS; Contact; Weidmüller) | 0.14 - 6 | 25 - 10 | 633 |



Self-Adjusting Crimping Pliers for end sleeves (ferrules) with lateral access

97 53

Square compression now additionally also for end sleeves (ferrules) up to 16 mm² Narrow handle width



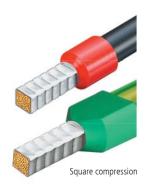
Crimping capacity can be switched over from 10 mm² to 16 mm²

97 53 04

Particularly suitable for all twin-ferrules up to 2 x 6 mm² or 2 x AWG 8 0.08 - 10 mm² + 16 mm²



Square compression for optimum contact areas in the clamp connection



NIPEX 97 53 04 GERMAN

0.08-16 mm²/AWG 28-5

Compact crimping pliers for end sleeves (ferrules) with two great advantages for the user:

> Automatic self-adjustment to the end sleeve (ferrule) used: this allows the specialist to work with less strain and enables secure, reliable and quick crimping



Proven functions

- > for crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4
- > self-adjusting adaptation to the desired end sleeve (ferrule) size: no wrong crimps caused by using the wrong die
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > tools have been set precisely (calibrated) in the factory
- > optimum transmission of force thanks to toggle lever for fatigue-reduced operation
- > handy shape and low weight provide high operation comfort

Capacity up to 10 mm² Narrow handle width





| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Handles | Applications | Capacity mm ² | AWG | ۲۵ g |
|-------------|-----------------|-----------------|--------|-----------|-------------------------------|---------------------------|-----------------------------|------------|---------|
| 97 53 04 | 028017 | 180 | @ 🥔 🗢 | burnished | with multi-component grips | End Sleeves (ferrules) | 0.08 - 10 / 16 | 28 - 7 / 5 | 405 |
| 97 53 14 | 041474 | 180 | 6 60 🔊 | burnished | with multi-component grips | End Sleeves (ferrules) | 0.08 - 10 | 28 - 7 | 404 |

Self-Adjusting Crimping Pliers for end sleeves (ferrules) with front loading

> for crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4

97

53

- > self-adjusting adaptation to the desired end sleeve (ferrule) size: no wrong crimps caused by using the wrong die
- > front loading of the end sleeves (ferrules) into the tool
- > repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- > crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > optimum transmission of force thanks to toggle lever for fatigue-reduced operation
- > high operation comfort thanks to handy shape and low weight
- > Chrome vanadium electric steel in special quality, oil-hardened

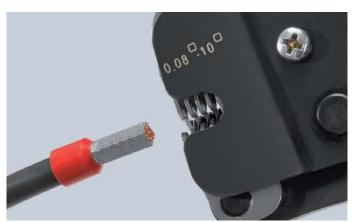
97 53 08

compression from 0.08 - 10 $\rm mm^2$ in one profile; end sleeves (ferrules) up to 2.5 $\rm mm^2$ can also be loaded parallely from the side;

suitable in particular for all twin end sleeves (ferrules) up to 2 x 4 mm² or 2 x AWG 10 97 53 09

compression from 0.08 - 10 mm² and 16 mm² in one profile; with selector lever for setting the crimping area either to 0.08 - 10 mm² or 16 mm²;

suitable in particular for all twin end sleeves (ferrules) up to 2 x 6 mm² or 2 x AWG 8



Square crimping



Front loading of end sleeves (ferrules) e.g. in switchboards



97 53 08: lateral loading of end sleeves (ferrules) up to 2.5 $\rm mm^2$ parallely from the side e.g. in confined areas



The crimping pliers for end sleeves (ferrules) with three great advantages for the user:

- > Automatic self-adjustment to the end sleeve (ferrule) used: this allows the specialist to work with less strain and enables secure, reliable and quick crimping
- > Range of applications also for large cross-sections: square crimping 0.08 to 10 + 16 mm²
- > Front loading: very helpful under difficult working conditions in confined areas

| Article No. | EAN 4003773- | ∢ ► mm | | | Pliers | Handles | Applications | Capacity mm ² | AWG | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|-------|----------|-----------|-------------------------------|---------------------------|-----------------------------|------------|-----------------------|
| 97 53 08 | 040187 | 190 | 6000 | | burnished | with multi-component grips | End Sleeves (ferrules) | 0.08 - 10 | 28 - 7 | 477 |
| 97 53 09 | 044550 | 190 | Ø 🥔 📣 | M | burnished | with multi-component grips | End Sleeves (ferrules) | 0.08 - 10 / 16 | 28 - 7 / 5 | 486 |

CRIMPING PLIERS

Crimping Pliers for micro plugs parallel crimping

- > parallel crimping performance to satisfy the particularly high standards of small connectors
- > repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- > fixed locator for D-Sub micro plugs for an exact positioning of connector and cable
- > crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- > optimum transmission of force thanks to toggle lever for fatigue-reduced operation
- > crimping pliers for other mini plugs such as HD 22, Modu IV, Micro Timer, MQS ... on request
- > Chrome vanadium electric steel in special quality, oil-hardened





97

54



| Article No. | EAN 4003773- | ∢- ► mm | | Pliers | Handles | Applications | Capacity mm ² | AWG | ۵'۵ g |
|-------------|-----------------|-------------------|------|-----------|----------------------------|--------------------------|-----------------------------|--------------------|----------|
| 97 54 24 | 060215 | 190 | S.M. | burnished | with multi-component grips | D-Sub-; HD 20-; HDE plug | 0.03 - 0.56 | 32 - 20 | 305 |
| 97 54 25 | 079859 | 190 | | burnished | with multi-component grips | Micro-Fit™ | | 20 / 22-24 / 26-30 | |
| 97 54 26 | 079866 | 190 | | burnished | with multi-component grips | Mini-Fit® | | 16 / 18 / 20-24 | |
| 97 54 27 | 079873 | 190 | E.M. | burnished | with multi-component grips | MQS plug | 0.25 / 0.35 / 0.5 | | |

Crimping Pliers for end sleeves (ferrules)

- > for crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4 in the range from 0.25 up to 2.5 mm²
- > crimping in marked trapezoidal dies for reliable connections between the sleeve and the conductor
- > Vanadium electric steel; forged, oil-hardened



| Article No. | EAN 4003773- | ∢ —► mm | | | Head | Handles | Capacity mm ² | AWG | ۵ ^۲ ۵ g |
|-------------|-----------------|-------------------|---|---------------------|----------|--|-----------------------------|---------|-----------------------|
| 97 61 145 A | 035558 | 145 | 6 | \mathbf{r} | polished | plastic coated | 0.25 - 2.5 | 23 - 13 | 140 |
| 97 61 145 F | 043980 | 145 | 6 | | polished | plastic coated | 0.25 - 2.5 | 23 - 13 | 140 |
| 97 62 145 A | 060154 | 145 | 6 | \mathbf{V} | polished | with multi-component grips | 0.25 - 2.5 | 23 - 13 | 170 |
| 97 68 145 A | 071754 | 145 | 6 | ₩ ≙ 1000 V @@ | polished | insulated with multi-component grips, VDE-tested | 0.25 - 2.5 | 23 - 13 | 175 |

Crimping Pliers for end sleeves (ferrules)

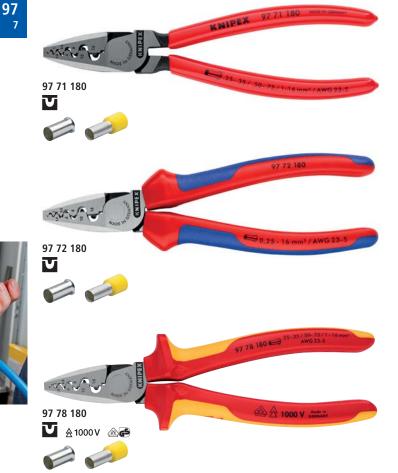
Also as VDE version

Easy crimping due to optimised transmission ratio Light and slim design

- > for crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4 from 0.25 to 16 mm²
- > crimping in marked half-round dies for reliable connections between the sleeve and the conductor

ARAANCE MAAR

- > 9 particularly deep dies with conical side faces
- > High-grade special tool steel, forged, oil-hardened





| Article No. | EAN 4003773- | ∢ ► mm | | | Head | Handles | Applications | Capacity mm ² | AWG | ۲ <mark>۵</mark> |
|-------------|-----------------|------------------|---|------------------|----------|---|------------------------|-----------------------------|--------|------------------|
| 97 71 180 | 040668 | 180 | 0 | V | polished | plastic coated | End Sleeves (ferrules) | 0.25 - 16 | 23 - 5 | 205 |
| 97 72 180 | 060185 | 180 | 0 | V | polished | with multi-component grips | End Sleeves (ferrules) | 0.25 - 16 | 23 - 5 | 242 |
| 97 78 180 | 072003 | 180 | 6 | Ŭ ≙ 1000 V @€ | polished | insulated with multi-component grips, VDE-tested | End Sleeves (ferrules) | 0.25 - 16 | 23 - 5 | 254 |

Crimping Pliers for end sleeves (ferrules) with front loading

- 97
- > for crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4 in the range 0.5 to 6 mm^2
- > ideal for work in confined areas, e.g. in narrow and deep switch boxes
- > Special tool steel, forged, oil-hardened



97 81 180

| Article No. | EAN 4003773- | ∢ ► mm | | | Head | Handles | Applications | Capacity mm ² | AWG | ۵'۵ g |
|-------------|-----------------|------------------|-----|-----------------|----------|----------------|------------------------|-----------------------------|---------|----------|
| 97 81 180 | 019794 | 180 | 600 | $\mathbf{\sim}$ | polished | plastic coated | End Sleeves (ferrules) | 0.5 - 6 | 20 - 10 | 227 |

CRIMP ASSORTMENTS

Crimp Assortments for end sleeves (ferrules)



> in a TANOS MINI-systainer® (solid plastic box)

- > T-Loc fastener for one-handed 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 disconnection
- > two stackable plastic inserts with 6 trays each for connectors
- > with an assortment of end sleeves (ferrules) with / without collar

97 90 05

with Crimping Pliers for end sleeves 97 71 180

97 90 06

with Crimping Pliers for end sleeves 97 71 180

97 90 09

with Self-Adjusting Crimping Pliers for End Sleeves (ferrules) 97 53 04

97 90 10

with Self-Adjusting Insulation Stripper 12 40 200; with Self-Adjusting Crimping Pliers for End Sleeves (ferrules) 97 53 04

97 90 12

with Self-Adjusting Insulation Stripper 12 40 200; with Self-Adjusting Crimping Pliers for End Sleeves (ferrules) 97 53 08

97 90 23

with Crimping Pliers "PreciForce" for End Sleeves (ferrules) 97 52 38

97 90 24

with Self-Adapting Universal Insulation Stripper "MultiStrip 10" 12 42 195; with Self-Adjusting Crimping Pliers for End Sleeves (ferrules) 97 53 08





97





97 90 10







Several boxes can be connected with each other



| Article No. | EAN 4003773- | Pliers | 200 x mm² | 150 x mm² | 100 x mm ² | 75 x mm² | 50 x mm² | 40 x mm² | ے لے g |
|-------------|-----------------|-----------------------------|----------------------------|--------------|--------------------------|-------------|-------------|-------------|-----------|
| 97 90 05 | 025535 | 97 71 180 | 0.5 / 0.75 / 1 / 1.5 / 2.5 | 4 / 6 | | | 10 / 16 | | 930 |
| 97 90 06 | 025542 | 97 71 180 | 0.5 / 0.75 / 1 / 1.5 | 2,5 | | 4 / 6 | 10 | 16 | 1000 |
| 97 90 09 | 028574 | 97 53 04 | 0.5 / 0.75 / 1 / 1.5 / 2.5 | | 4 / 6 | | 10 | | 1420 |
| 97 90 10 | 046202 | 97 53 04 / 12 40 200 | 0.5 / 0.75 / 1 / 1.5 / 2.5 | | 4 / 6 | | 10 | | 1353 |
| 97 90 12 | 048916 | 97 53 08 / 12 40 200 | 0.5 / 0.75 / 1 / 1.5 / 2.5 | | 4 / 6 | | 10 | | 1427 |
| 97 90 23 | 062158 | 97 52 38 | 0.5 / 0.75 / 1 / 1.5 / 2.5 | | 4 / 6 | | | | 1226 |
| 97 90 24 | 062394 | 97 53 08 / 12 42 195 | 0.5 / 0.75 / 1 / 1.5 / 2.5 | | 4 / 6 | | 10 | | 1348 |
| 97 90 00 LE | 054009 | TANOS MINI-systainer® empty | | | | | | | 900 |

Crimp Assortments for cable connectors



97 90 00

97

90

with Crimp Grip Pliers 97 00 215 A

97 90 01 with Crimping Pliers 97 32 225

97 90 21

with Crimping Pliers PreciForce® 97 52 36 (for insulated terminals and plug connectors) 97 90 22

with Self-Adapting Universal Insulation Stripper "MultiStrip 10" 12 42 195; with Crimping Pliers PreciForce® 97 52 36 (for insulated terminals and plug connectors)

| | | | | Cable Connectors | | | |
|-------------|-----------------|----------------|--------------------|--|----------|----------------------|-------------------|
| Article No. | EAN 4003773- | | Pliers | | Quantity | Cable mm² | ۵ <u>'</u> ۵ g |
| 97 90 00 | 025375 | | | | 25 | 4 - 6 | |
| | | | | Blade Terminal Sockets, 6.3 x 0.8 mm | 25 | 1.5 - 2.5 | |
| | | | | | 25 | 0.5 - 1 | |
| | | | 97 00 215 A | Round Sockets, Ø 4 mm | 25 | 0.5 - 1 | |
| | | 1 | | Cable Connectors, eye type, Ø 4 mm | 25 | 0.5 - 1 | |
| | | | | Cable Connectors, eye type, o 4 mm | 25 | 1.5 - 2.5 | 1391 |
| | | | | Cable Connectors, eye type, Ø 5 mm | 25 | 1.5 - 2.5 | 1221 |
| | | 1 | | Cable Connectors, eye type, o 5 min | 25 | 4 - 6 | |
| | | | | Cable Connectors, eye type, Ø 6 mm | 25 | 4 - 6 | |
| | | | | Butt Connectors, insulated, red | 25 | 0.5 - 1 | |
| | | | | Butt Connectors, insulated, blue | 25 | 1.5 - 2.5 | |
| | | | | Round Pin Plugs, Ø 4 mm | 25 | 0.5 - 1 | |
| 97 90 21 | 062134 | | | Blade Terminal Sockets, 6.3 x 0.8 mm | 25 | 0.5 - 1 | |
| | | | | | 25 | 1.5 - 2.5 | |
| | | Call - | to J ol | Cable Connectors, eye type, Ø 4 mm | 25 | 0.5 - 1 | |
| | | | | Cable Connectors, eye type, Ø 5 mm | 25 | 0.5 - 1 | |
| | | 3 | 97 52 36 | Cable Connectors, eye type, Ø 6 mm | 25 | 4 - 6 | |
| | | | | Cable Connectors, eye type, Ø 8 mm | 25 | 4 - 6 | 1416 |
| | | | | Cable Connectors, eye type, Ø 4 mm | 25 | 1.5 - 2.5 | |
| | | | | Cable Connectors, eye type, Ø 5 mm | 25 | 1.5 - 2.5 | _ |
| | | | | Cable Connectors, eye type, Ø 6 mm | 25 | 1.5 - 2.5 | _ |
| | | | | Butt Connectors, insulated, red | 25 | 0.5 - 1 | _ |
| | | | | Butt Connectors, insulated, blue | 25 | 4 - 6 | |
| | | | | Butt Connectors, insulated, yellow | 25 | 1.5 - 2.5 | |
| 97 90 22 | 062141 | | | Blade Terminal Sockets, 6.3 x 0.8 mm | 25 | 0.5 - 1 | |
| | | | | | 25 | 1.5 - 2.5 | |
| | | Call | | Cable Connectors, eye type, Ø 4 mm | 25 | 0.5 - 1 | |
| | | | | Cable Connectors, eye type, Ø 5 mm | 25 | 0.5 - 1 | |
| | | 0 | | Cable Connectors, eye type, Ø 4 mm | 25 | 1.5 - 2.5 | |
| | | | 97 52 36 12 42 195 | Cable Connectors, eye type, Ø 5 mm | 25 | 1.5 - 2.5 | 1527 |
| | | | | Cable Connectors, eye type, Ø 6 mm | 25 | 1.5 - 2.5 | |
| | | | | | 25 | 4 - 6 | - |
| | | | | Cable Connectors, eye type, Ø 8 mm | 25 | 4 - 6 | _ |
| | | | | Butt Connectors, insulated, red | 25 | 0.5 - 1 | - |
| | | | | Butt Connectors, insulated, blue | 25 | 1.5 - 2.5 | - |
| | | | | Butt Connectors, insulated, yellow | 25 | 4-6 | |
| 97 90 25 | 076971 | ∕へЪ | | Non-insulated Blade Terminal Sockets 6.3 x 0.8 mm | 25 25 | 0.5 - 1.5 1 - 2.5 | - |
| | | | | 0.5 × 0.0 mm | 25 | 0.5 - 1 | |
| | | -0 | | Blade Terminal Sockets | 25 | 1.5 - 2.5 | |
| | | Carls | 97 22 240 | 6.3 x 0.8 mm | 25 | 4 - 6 | - |
| | | | | Plade Terminal Diver | 25 | 0.5 - 1 | - |
| | | este Serete | | Blade Terminal Plugs 6.3 x 0.8 mm | 25 | 1.5 - 2.5 | 1150 |
| | | | | | 25 | 0.5 - 1 | - |
| | | | | Cable Connectors, eye type Ø 4 mm | 25 | 1.5 - 2.5 | - |
| | | | | Butt Connectors, insulated, red | 25 | 0.5 - 1 | - |
| | | | | Butt Connectors, insulated, icu | 25 | 1.5 - 2.5 | - |
| | | | | Butt Connectors, insulated, yellow | 25 | 4 - 6 | |
| | | | 1 | , | | | 107 |

Crimp Assortments for cable connectors



97 90 25 with Crimping Pliers 97 22 240 **97 90 26** with Crimping Pliers 97 32 240

| | | | | Cable Connectors | | | |
|-------------|-----------------|---------|-----------------------------------|--------------------------------------|----------|--------------------------|------------------|
| Article No. | EAN 4003773- | | Pliers | | Quantity | Cable mm ² | ۲ <mark>۵</mark> |
| 97 90 26 | 079521 | | | Blade Terminal Sockets, 6.3 x 0.8 mm | 25 | 1.5 - 2.5 | |
| | | | | Blade Terminal Sockets, 6.3 x 0.8 mm | 25 | 4 - 6 | |
| | | - | | Blade Terminal Sockets, 6.3 x 0.8 mm | 25 | 0.5 - 1 | |
| | | | 97 32 240 | Cable Connectors, eye type, Ø 4 mm | 25 | 0.5 - 1 | 1420 |
| | | 1 | | Cable Connectors, eye type, Ø 4 mm | 25 | 1.5 - 2.5 | |
| | | | | Cable Connectors, eye type, Ø 5 mm | 25 | 1.5 - 2.5 | |
| | | | | Cable Connectors, eye type, Ø 5 mm | 25 | 4 - 6 | |
| | | J. | | Cable Connectors, eye type, Ø 6 mm | 25 | 4 - 6 | |
| | | | | Butt Connectors, insulated, Red | 25 | 0.5 - 1 | |
| | | | | Butt Connectors, insulated, Blue | 25 | 1.5 - 2.5 | |
| | | | | Round Sockets, Ø 4 mm | 25 | 0.5 - 1 | |
| | | | | Round Pin Plugs, Ø 4 mm | 25 | 0.5 - 1 | |
| 97 90 00 LE | 054009 | TANOS M | IINI-systainer [®] empty | | | | 900 |

97



| Article No. | EAN 4003773- | | Width x Thickness mm² | Cable mm² | AWG | Colour | |
|-------------|-----------------|----------------|--------------------------|--------------|---------|--------|-----|
| 97 99 001 | 075882 | | 2.8 x 0.5 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 010 | 075899 | | 4.8 x 0.8 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 011 | 075905 | Blade Terminal | 4.8 x 0.8 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 020 | 075912 | Sockets, | 6.3 x 0.8 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 021 | 075929 | insulated | 6.3 x 0.8 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 022 | 075936 | _ | 6.3 x 0.8 | 4 - 6 | 11 - 10 | yellow | 100 |
| 97 99 030 | 075943 | _ | 7.7 x 0.8 | 1.5 - 2.5 | 15 - 13 | blue | 100 |

| Article No. | EAN 4003773- | | Width x Thickness mm² | Cable mm ² | AWG | F |
|-------------|-----------------|------------------|--------------------------|--------------------------|-------|-----|
| 97 99 050 | 075950 | | 2.8 x 0.8 | 0.5 - 1 | 20-17 | 100 |
| 97 99 060 | 075967 | Plug Connectors, | 4.8 x 0.8 | 1.5 - 2.5 | 16-14 | 100 |
| 97 99 070 | 075974 | non-insulated | 6.3 x 0.8 | 0.5 - 1.5 | 20-15 | 100 |
| 97 99 071 | 075981 | _ | 6.3 x 0.8 | 1 - 2.5 | 17-14 | 100 |

| Article No. | EAN 4003773- | | Width x Thickness mm ² | Cable mm² | AWG | Colour | £ |
|-------------|-----------------|--------------------|--------------------------------------|--------------|---------|--------|-----|
| 97 99 090 | 075998 | Flat Pin Accessory | 6.3 x 0.8 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 091 | 076001 | Distributors, | 6.3 x 0.8 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 092 | 076018 | insulated | 6.3 x 0.8 | 4 - 6 | 11 - 10 | yellow | 100 |

| Article No. | EAN 4003773- | | Width x Thickness mm² | Cable mm² | AWG | Colour | ß |
|-------------|-----------------|----------------|--------------------------|--------------|---------|--------|-----|
| 97 99 110 | 076025 | Blade Terminal | 6.3 x 0.8 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 111 | 076032 | Plugs, | 6.3 x 0.8 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 112 | 076049 | insulated | 6.3 x 0.8 | 4 - 6 | 11 - 10 | yellow | 100 |

| Article No. | EAN 4003773- | | Plug Ø mm | Cable mm² | AWG | Colour | F |
|-------------|-----------------|----------------|--------------|--------------|---------|--------|-----|
| 97 99 130 | 076056 | Round Sockets, | 4 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 131 | 076063 | insulated | 5 | 1.5 - 2.5 | 15 - 13 | blue | 100 |

| Article No. | EAN 4003773- | | Plug Ø mm | Cable mm ² | AWG | Colour | £ |
|-------------|-----------------|------------------|--------------|--------------------------|---------|--------|-----|
| 97 99 150 | 076070 | Round Pin Plugs, | 4 | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 151 | 076087 | insulated | 5 | 1.5 - 2.5 | 15 - 13 | blue | 100 |















Cable Connectors DIN 46247

| Article No. | EAN 4003773- | | Screws Ø mm | Cable mm² | AWG | Colour | F |
|-------------|-----------------|-------------------|----------------|--------------|---------|--------|-----|
| 97 99 170 | 076094 | | 3 | 0.5 - 1 | 20 - 17 | red | 200 |
| 97 99 171 | 076100 | | 4 | 0.5 - 1 | 20 - 17 | red | 200 |
| 97 99 172 | 076117 | _ | 5 | 0.5 - 1 | 20 - 17 | red | 200 |
| 97 99 173 | 076124 | | 4 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 174 | 076131 | Cable Connectors, | 5 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 175 | 076148 | eye type, | 6 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 176 | 076155 | insulated | 8 | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 177 | 076162 | _ | 5 | 4 - 6 | 11 - 10 | yellow | 100 |
| 97 99 178 | 076179 | _ | 6 | 4 - 6 | 11 - 10 | yellow | 100 |
| 97 99 179 | 076186 | | 8 | 4 - 6 | 11 - 10 | yellow | 100 |
| 97 99 180 | 076193 | | 10 | 4 - 6 | 11 - 10 | yellow | 100 |





| Article No. | EAN 4003773- | | Screws Ø mm | Cable mm ² | AWG | ł |
|-------------|-----------------|---------------|----------------|--------------------------|---------|-----|
| 97 99 210 | 076209 | | 3 | 0.5 - 1 | 20 - 17 | 200 |
| 97 99 211 | 076216 | _ | 4 | 0.5 - 1 | 20 - 17 | 200 |
| 97 99 212 | 076223 | _ | 5 | 0.5 - 1 | 20 - 17 | 200 |
| 97 99 213 | 076230 | | 4 | 1.5 - 2.5 | 15 - 13 | 100 |
| 97 99 214 | 076247 | Non-insulated | 5 | 1.5 - 2.5 | 15 - 13 | 100 |
| 97 99 215 | 076254 | Solderless | 6 | 1.5 - 2.5 | 15 - 13 | 100 |
| 97 99 216 | 076261 | Terminals | 8 | 1.5 - 2.5 | 15 - 13 | 100 |
| 97 99 217 | 076278 | _ | 5 | 4 - 6 | 11 - 10 | 100 |
| 97 99 218 | 076285 | | 6 | 4 - 6 | 11 - 10 | 100 |
| 97 99 219 | 076292 | | 8 | 4 - 6 | 11 - 10 | 100 |
| 97 99 220 | 076308 | | 10 | 4 - 6 | 11 - 10 | 100 |
| | | | | | | |

| Article No. | EAN 4003773- | | Cable mm ² | AWG | Colour | |
|-------------|-----------------|------------------------------------|--------------------------|---------|--------|-----|
| 97 99 250 | 076315 | Heat Shrinkable Butt Connectors | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 251 | 076322 | | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 252 | 076339 | | 4 - 6 | 11 - 10 | yellow | 100 |

| Article No. | EAN 4003773- | | Cable mm² | AWG | Colour | F |
|-------------|-----------------|-------------------------------|--------------|---------|--------|-----|
| 97 99 270 | 076346 | | 0.5 - 1 | 20 - 17 | red | 100 |
| 97 99 271 | 076353 | Butt Connectors, insulated | 1.5 - 2.5 | 15 - 13 | blue | 100 |
| 97 99 272 | 076360 | | 4 - 6 | 11 - 10 | yellow | 100 |

| Article No. | EAN 4003773- | | Cable mm² | AWG | mm | |
|-------------|-----------------|------------------|--------------|---------|----|-----|
| 97 99 290 | 076377 | | 0.5 - 1 | 20 - 17 | 15 | 200 |
| 97 99 291 | 076384 | Butt Connectors, | 1.5 - 2.5 | 15 - 13 | 15 | 200 |
| 97 99 292 | 076391 | non-insulated | 4 - 6 | 11 - 10 | 15 | 100 |
| 97 99 293 | 076407 | | 10 | 7 | 15 | 100 |







| 9 | 7 |
|---|----|
| 9 | 99 |

| Article No. | EAN 4003773- | | ⊲ ► mm | Cable mm² | AWG | Colour | F |
|-------------|-----------------|------------------------|------------------|--------------|-----|--------|-----|
| 97 99 330 | 076414 | | 14 | 0.5 | 20 | white | 200 |
| 97 99 331 | 076421 | | 14 | 0.75 | 18 | grey | 200 |
| 97 99 332 | 076438 | | 14 | 1 | 17 | red | 200 |
| 97 99 333 | 076445 | | 14 | 1.5 | 15 | black | 200 |
| 97 99 334 | 076452 | End Sleeves | 14 | 2.5 | 13 | blue | 200 |
| 97 99 335 | 076469 | (ferrules) with collar | 17 | 4 | 11 | grey | 200 |
| 97 99 336 | 076476 | _ | 20 | 6 | 10 | yellow | 100 |
| 97 99 337 | 076483 | _ | 22 | 10 | 7 | red | 100 |
| 97 99 338 | 076490 | _ | 24 | 16 | 5 | blue | 100 |
| 97 99 339 | 076506 | _ | 30 | 25 | 3 | yellow | 50 |
| 97 99 350 | 076513 | | 16 | 0.5 | 20 | white | 200 |
| 97 99 351 | 076520 | | 16 | 0.75 | 18 | grey | 200 |
| 97 99 352 | 076537 | | 16 | 1 | 17 | red | 200 |
| 97 99 353 | 076544 | | 16 | 1.5 | 15 | black | 200 |
| 97 99 354 | 076551 | End Sleeves | 16 | 2.5 | 13 | blue | 200 |
| 97 99 355 | 076568 | (ferrules) with collar | 20 | 4 | 11 | grey | 200 |
| 97 99 356 | 076575 | | 26 | 6 | 10 | yellow | 100 |
| 97 99 357 | 076582 | - | 28 | 10 | 7 | red | 100 |
| 97 99 358 | 076599 | - | 28 | 16 | 5 | blue | 100 |
| 97 99 359 | 076605 | | 32 | 25 | 3 | yellow | 50 |

| 97 99 336 |
|-----------|



97 99 353

| Article No. | EAN 4003773- | | ∢ → mm | Cable mm² | AWG | Colour | ł |
|-------------|-----------------|----------------------------|------------------|--------------|--------|--------|-----|
| 97 99 370 | 076612 | | 15 | 2 x 0.5 | 2 x 20 | white | 200 |
| 97 99 371 | 076629 | | 16 | 2 x 0.75 | 2 x 18 | grey | 200 |
| 97 99 372 | 076636 | _ | 15 | 2 x 1 | 2 x 17 | red | 200 |
| 97 99 373 | 076643 | Twin wire-end | 18 | 2 x 1.5 | 2 x 15 | black | 200 |
| 97 99 374 | 076650 | Twin wire-end ferrules, | 18 | 2 x 2.5 | 2 x 13 | blue | 100 |
| 97 99 375 | 076667 | with plastic collar | 23 | 2 x 4 | 2 x 11 | grey | 100 |
| 97 99 376 | 076674 | _ | 26 | 2 x 6 | 2 x 10 | yellow | 50 |
| 97 99 377 | 076681 | | 24 | 2 x 10 | 2 x 7 | red | 50 |
| 97 99 378 | 076698 | | 29 | 2 x 16 | 2 x 5 | blue | 25 |

| | | | | - LL | | |
|-------------|-----------------|------------------------------|-------------------|--------------|-----|-----|
| Article No. | EAN 4003773- | | ⊲- ► mm | Cable mm² | AWG | |
| 97 99 390 | 076704 | | 6 | 0.50 | 20 | 200 |
| 97 99 391 | 076711 | | 6 | 0.75 | 18 | 200 |
| 97 99 392 | 076728 | _ | 6 | 1 | 17 | 200 |
| 97 99 393 | 076735 | _ | 7 | 1.5 | 15 | 200 |
| 97 99 394 | 076742 | Non-insulated End Sleeves | 7 | 2.5 | 13 | 200 |
| 97 99 395 | 076759 | (ferrules) | 9 | 4 | 11 | 200 |
| 97 99 396 | 076766 | _ | 12 | 6 | 10 | 100 |
| 97 99 397 | 076773 | | 12 | 10 | 7 | 100 |
| 97 99 398 | 076780 | _ | 12 | 16 | 5 | 100 |
| 97 99 399 | 076797 | | 12 | 25 | 3 | 50 |







| Pliers | 196 |
|---------------------------------|-----|
| Precision Tweezers | 208 |
| Cable Shears | 208 |
| Cable Cutters | 211 |
| Crimping Pliers | 213 |
| Wrenches | 214 |
| Screwdrivers | 216 |
| Hexagon Sockets | 220 |
| Cable Knives | 222 |
| Insulated Pliers of plastic | 224 |
| Insulating Clamp from plastic | 224 |
| Plastic Slip-On Caps | 225 |
| Self-Clamping Slip-On Caps | 225 |
| Electricians' Gloves | 225 |
| Insulating Mats | 225 |
| PUK [®] Junior Hacksaw | 226 |
| Tool Kits | 226 |





TO OS ISO Janadin. SUR

1000 X

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 and the international EN 50110 and IEC 60364. In each case they must deploy special tools that have been specifically manufactured and tested for this work. Which requirements have to be met by tools used in live work is determined by DIN EN / IEC 60900. KNIPEX tools which bear the special mark **1000V** are approved for work up to 1000 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 centres such as the VDE guarantee that all VDE criteria have been satisfied. We go through this effort to safeguard the user. He trusts his well-being with our pliers, day in and day out. In return we want to give him the best possible safety at all times. 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 it does not cut, grip or crimp. The mechanical properties of the basic tool, such as cutting performance, precision and stability, therefore style part of the overall quality 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 currently 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.

Combination Pliers

Chrome plated Vanadium DIN ISO 5746 IEC 60900 DIN EN 60900

01

- > for heaviest duty
- > with gripping zones for flat and round material, suitable for versatile use
- > with cutting edges for soft, hard and piano wire long cutting edges for thicker cables
- > cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- > particularly wear resistant gripping jaws; hardness of the gripping jaws approx. 53 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened



| | | | | | | Cutting capacities | | | | |
|-------------|----------|------------|----------------|---------------|--------------------------------|--------------------|-----|------|-----------------|-----|
| | EAN | ∢ → | | | | | | • | • | 52 |
| Article No. | 4003773- | mm | | Pliers | Handles | Ømm | Ømm | Ømm | mm ² | g |
| 01 06 160 | 040729 | 160 | A 1000 V 🖄 🗗 💷 | chrome plated | insulated with multi-component | 2.0 | 1.5 | 10.0 | 16 | 201 |
| 01 06 190 | 040415 | 190 | | chrome plated | grips, VDE-tested | 2.5 | 2.0 | 13.0 | 25 | 320 |

High Leverage Combination Pliers DIN ISO 5746 IEC 60900 DIN EN 60900

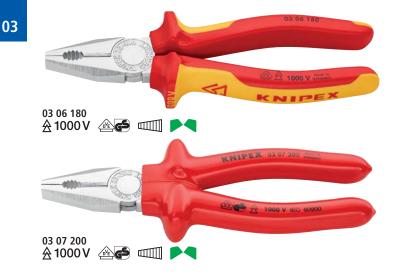
- 02
- > 35% less effort required than with conventional combination pliers easier work due to optimised leverage
- > with cutting edges (hardness approx. 63 HRC) for soft and hard wire and piano wire
- > long cutting edges for thicker cables
- > with gripping zones for flat and round material, suitable for versatile use
- > High-grade special tool steel, forged, multi stage oil-hardened



| | | | | | | Cutting capacities | | | | |
|-------------|----------|-------------|--------------------|-----------------|---|--------------------|-----|------|-----------------|-----|
| | EAN | ∢ —▶ | | | | \bullet | | • | • | 5 |
| Article No. | 4003773- | mm | | Pliers | Handles | Ømm | Ømm | Ømm | mm ² | g |
| 02 06 180 | 010012 | 180 | 2 1000 V 🖄 🖨 💷 🕅 | chrome plated | | 2.5 | 2.0 | 11.5 | 16 | 247 |
| 02 06 200 | 010029 | 200 | | | insulated with multi-component grips, VDE-tested | 2.8 | 2.2 | 13.0 | 25 | 343 |
| 02 06 225 | 010036 | 225 | | | | 3.0 | 2.5 | 14.0 | 25 | 401 |
| 02 07 200 | 022299 | 200 | A 1000 V 🖄 🖨 💷 🗖 🖊 | chrome plated | with dipped insulation, VDE-tested | 2.8 | 2.2 | 13.0 | 25 | 380 |
| 02 07 225 | 022305 | 225 | | cilionie plateu | with dipped insulation, VDE-tested | 3.0 | 2.5 | 14.0 | 25 | 486 |

Combination Pliers DIN ISO 5746 IEC 60900 DIN EN 60900

- > with gripping zones for flat and round material, suitable for versatile use
- > with cutting edges for soft and hard wire
- > long cutting edges for thicker cables
- > cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
- > Special tool steel, forged, multi stage oil-hardened



| | | | | | | | Cutting capacities | | | | | |
|-------------|-----------------|------------------|--------------------------------------|---------------|---|------|--------------------|------|-----------------|-----------------------|--|--|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Handles | Ø mm | Ø mm | Ø mm | mm ² | ۵ ^۲ ۵ g | | |
| 03 06 160 | 021902 | 160 | | | | 3.1 | 2.0 | 10.0 | 16 | 228 | | |
| 03 06 180 | 021926 | 180 | | chrome plated | insulated with multi-component grips, VDE-tested | 3.4 | 2.2 | 12.0 | 16 | 264 | | |
| 03 06 200 | 033776 | 200 | - | | grips, voe tested | 3.8 | 2.5 | 13.0 | 16 | 326 | | |
| 03 07 160 | 015307 | 160 | | | | 3.1 | 2.0 | 10.0 | 16 | 254 | | |
| 03 07 180 | 015314 | 180 | A 10001/ @ 🖛 🛲 💼 | chrome plated | with dispad insulation VDE tested | 3.4 | 2.2 | 12.0 | 16 | 285 | | |
| 03 07 200 | 015321 | 200 | - <u>A</u> 1000 V ≙ } ∰ 🚛 🖡 🔍 | chrome plated | with dipped insulation, VDE-tested | 3.8 | 2.5 | 13.0 | 16 | 339 | | |
| 03 07 250 | 015345 | 250 | | | | 3.8 | 2.5 | 15.0 | 25 | 597 | | |

Needle-Nose Combination Pliers DIN ISO 5746

Small High Leverage Combination Pliers with pointed jaw. For all common installation and repair work.

Handy use when working in confined areas thanks 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

- > the reliable and diverse combination pliers when out and about
- > easy cutting thanks to the high leverage joint
- > with 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 | | | | | |
|-------------|----------|-------------|----------------|---------------|---|--------------------|-----|-----|-------------------|-----|--|
| | EAN | ∢ —► | | | | \bullet | | | • | 5 | |
| Article No. | 4003773- | mm | | Pliers | Handles | Ømm | Ømm | Ømm | Ø mm ² | g | |
| 08 26 145 | 079361 | 145 | ₩₩ 1000 V @ | chrome plated | insulated with multi-component grips, VDE-tested | 3.0 | 2.0 | 8.0 | 16 | 154 | |

Insulation Strippers IEC 60900 DIN EN 60900

- > for single, multiple and fine stranded conductors with plastic or rubber insulation max. 5.0 mm dia. or resp. 10 mm² cable cross section
- > easy adjustment to the required diameter of solid or stranded wire with knurled screw and lock nut
- > Special tool steel, forged, oil-hardened





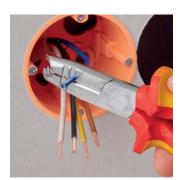


| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Handles | Stripping capacities Ø mm | Stripping capacities mm ² | AWG | ۵۵ g |
|-------------|-----------------|------------------|--------------|---------------|---|------------------------------|---|-----|---------|
| 11 06 160 | 021933 | 160 | <u> </u> | chrome plated | insulated with multi-component grips, VDE-tested | 5.0 | 10 | 7 | 166 |
| 11 07 160 | 015499 | 160 | <u> </u> | chrome plated | with dipped insulation, VDE-tested | 5.0 | 10 | 7 | 180 |
| 11 17 160 | 015505 | 160 | £ 1000 V 🖄 🚰 | chrome plated | with dipped insulation, VDE-tested | 5.0 | 10 | 7 | 181 |

13

11

Dismantling Pliers





Multifunctional – cutting, dismantling and stripping 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 deep mounted flush sockets thanks to slim head design and optimally angled cable sheath cutter

Strip cables easily and without damage thanks to circular cutting edge with depth limit

- > suitable for universal use: precision wire stripping holes for conductors from 1.5 and 2.5 mm²
- > with diagonal cutters for cutting and trimming conductors, wires, small screws and nails
- > all cutters additionally induction hardened to approx. 61 HRC for high wear resistance
- > 30% lighter than comparable pliers
- > Vanadium steel, forged, multi stage oil-hardened





Diagonal Insulation Stripper IEC 60900 DIN EN 60900

14

With long cutting edges High cutting capacity due to high leverage joint

- > precision stripping holes for single conductors of 1.5 and 2.5 mm²
- > convenient cutting of NYM cables up to 5 x 2.5 mm²
- > long tips for ultra fine cutting work also in confined areas
- > induction hardened precision blades, cutting edge hardness approx. 60 HRC
- > Vanadium steel, forged, multi stage oil-hardened



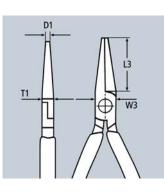


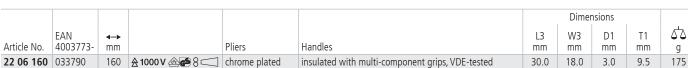
| | | | | | | | | Cutting capacities | | |
|-------------|-----------------|------------------|----------|--------|---|---|---------|--------------------|------|---------|
| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Handles | Stripping capacities mm ² | AWG | Ø mm | Ø mm | ۲۵ g |
| 14 26 160 | 040279 | 160 | <u> </u> | | insulated with multi-component grips, VDE-tested | 1.5 + 2.5 | 15 + 13 | 2.5 | 1.5 | 216 |

Round Nose Pliers DIN ISO 5745 IEC 60900 DIN EN 60900

- > for bending wire loops
- > precision ground, short, round jaws
- > smooth tips
- > Chrome vanadium electric steel, forged, oil-hardened









Pliers for Electrical Installation IEC 60900 DIN EN 60900

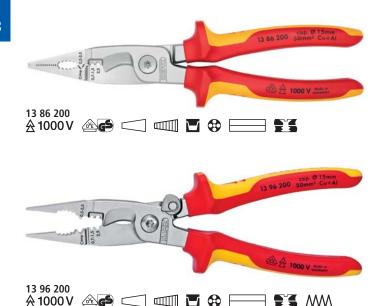
13

The all-rounder for professionals

Multifunctional pliers for the electrical installation; to grip flat and round material, for bending, deburring, cutting cable, stripping and crimping end sleeves (ferrules)

6 functions in one pair of pliers

- > smooth surfaces near the tips grip single cores 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 conductors of ~0.75 $1.5~mm^2$ and $2.5~mm^2$ crimp die for wire-end ferrules 0.5 $2.5~mm^2$
- > cable shears with (induction-hardened) precision cutting edges for copper and aluminium cables up to 5 x 2.5 mm² / dia. 15 mm
- > slim dimensions for easy access
- > bolted joint: precise, zero backlash operation of pliers
- > High-grade special tool steel, forged, multi stage oil-hardened



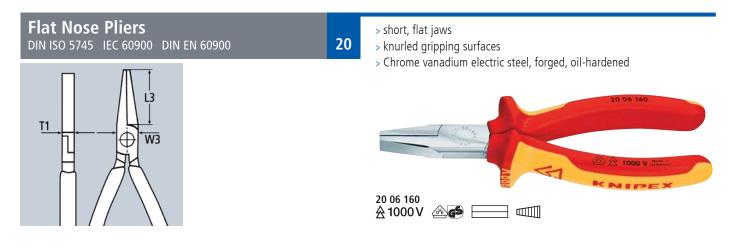


13 96 200

in case of models with opening spring integrated in the joint, the activated locking lever keeps the cutting edges closed while other functions remain active; the intelligent latching mechanism enables you to ,grip' without opening the pliers. The cutting edge remains closed and protected.



| | | | | | Cutting capacities | | Stripping capacity | | |
|-------------|----------|------------|---------------|--|--------------------|-----------------|--------------------|-----------|-----|
| | EAN | ∢ → | | | | • | for cross-sections | Capacity | 52 |
| Article No. | 4003773- | mm | Pliers | Handles | Ømm | mm ² | mm ² | mm² | g |
| 13 86 200 | 075097 | 200 | chrome plated | insulated with multi-component grips, VDE-tested | 15 | 50 | 0.75 - 1.5 / 2.5 | 0.5 - 2.5 | 280 |
| 13 96 200 | 075110 | 200 | chrome plated | insulated with multi-component grips, VDE-tested | 15 | 50 | 0.75 - 1.5 / 2.5 | 0.5 - 2.5 | 280 |



| | | | | | | Dimensions | | | |
|-------------|----------|-------------|------------|---------------|--|------------|------|-----|-----|
| | EAN | ∢ —▶ | | | | L3 | W3 | T1 | 52 |
| Article No. | 4003773- | mm | | Pliers | Handles | mm | mm | mm | g |
| 20 06 160 | 033783 | 160 | A 1000 V A | chrome plated | insulated with multi-component grips, VDE-tested | 30.0 | 17.0 | 9.5 | 176 |

Snipe Nose Side Cutting Pliers (Radio Pliers)

DIN ISO 5745 IEC 60900 DIN EN 60900

- > suitable for finer gripping and cutting work
- > pointd, half-round jaws
- > knurled gripping surfaces
- > with cutting edges for medium hard and hard wire
- > cutting edges additionally induction hardened, cutting edge hardness approx. 61 HRC
- > Vanadium steel, forged, multi stage oil-hardened

A 1000 V 🖄 🗲

200

26 27 200 016090

chrome

plated

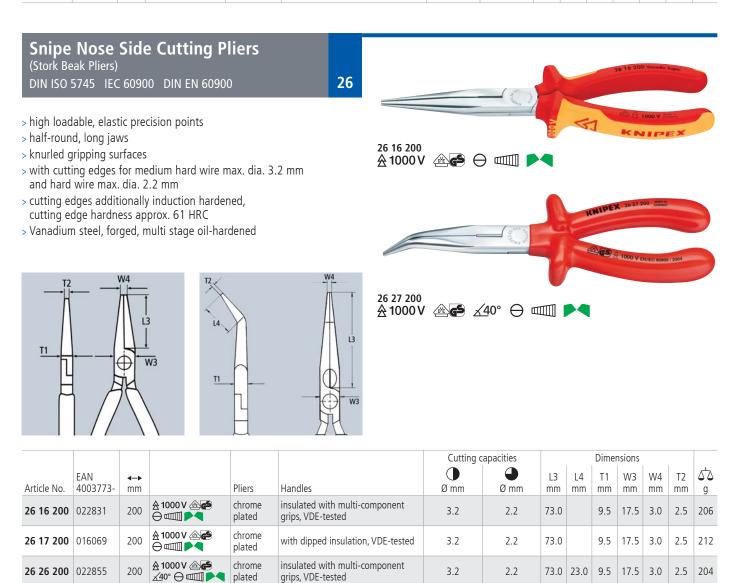


2.2

73.0 23.0 9.5 17.5 3.0

3.2

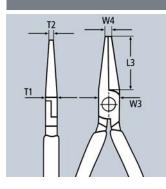
| | | | | | | Cutting capacities | | Dimensions | | | | | | |
|-------------|----------|-----|--|------------------|---|--------------------|-----|------------|------|------|-----|-----|-----|-----|
| | EAN | > | | | | | | L3 | L4 | W3 | T1 | W4 | T2 | 52 |
| Article No. | 4003773- | mm | | Pliers | Handles | Ømm | Ømm | mm | mm | mm | mm | mm | mm | g |
| 25 06 160 | 033806 | 160 | ≜ 1000 V @@ | chrome plated | insulated with multi-component grips, VDE-tested | 2.5 | 1.6 | 50.0 | | 16.5 | 9.0 | 3.0 | 2.5 | 146 |
| 25 26 160 | 052111 | 160 | ≙ 1000 V @ੴ ∡40° ⊖ תותו ווי | chrome plated | insulated with multi-component grips, VDE-tested | 2.5 | 1.6 | 50.0 | 23.0 | 16.5 | 9.0 | 3.0 | 2.5 | 144 |



with dipped insulation, VDE-tested

2.5 220

Long Nose Pliers <u>DIN ISO 5745</u> IEC 60900 DIN EN 60900



30

- > heavy duty and wear resisting
- > different jaw styles
- > Chrome vanadium electric steel, forged, oil-hardened

Style 1

long, trapezoidal jaws; knurled gripping surfaces

Style 3

long, round jaws; smooth gripping surfaces



| | | | | | | | Dimensions | | | | | |
|-------------|----------|-------------|------------------------|-------|------------------|---|------------|------|-----|-----|-----|-----|
| | EAN | ∢ —▶ | | | | | L3 | W3 | T1 | W4 | T2 | 5 |
| Article No. | 4003773- | mm | | Style | Pliers | Handles | mm | mm | mm | mm | mm | g |
| 30 16 160 | 001904 | 160 | £ 1000 V 🏝 📻 💷 আ∭ | 1 | chrome plated | insulated with multi-component grips, VDE-tested | 46.5 | 16.5 | 9.5 | 3.0 | 5.0 | 150 |
| 30 36 160 | 002123 | 160 | ☆1000 V 🏝 € 8 🤇 | 3 | chrome plated | insulated with multi-component grips, VDE-tested | 41.0 | 16.5 | 9.5 | 5.0 | 2.5 | 141 |

Diagonal Cutters DIN ISO 5749 IEC 60900 DIN EN 60900

- > the indispensable diagonal cutter for all-round 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, also at the cutting-edge tips
- > cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- > narrow head style for use in confined areas
- > Vanadium steel, forged, multi stage oil-hardened







| | | | | | | | Cutting capacities | | | |
|-------------|-----------------|------------------|------------------|---------------|---|------|--------------------|------|------------------|--|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Handles | Ø mm | Ø mm | Ø mm | ۲ <mark>۵</mark> | |
| 70 06 125 | 018124 | 125 | | | | 3.0 | 2.3 | 1.5 | 121 | |
| 70 06 140 | 040293 | 140 | 🚖 1000 V 🖄 🚰 🕨 🗨 | | insulated with multi-component grips, VDE-tested | 4.0 | 2.5 | 1.8 | 160 | |
| 70 06 180 | 033813 | 180 | | | | 4.0 | 3.0 | 2.5 | 254 | |
| 70 07 180 | 018179 | 180 | <u> </u> | chrome plated | with dipped insulation, VDE-tested | 4.0 | 3.0 | 2.5 | 269 | |



Diagonal Cutters DIN ISO 5749 IEC 60900 DIN EN 60900

70 NE

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

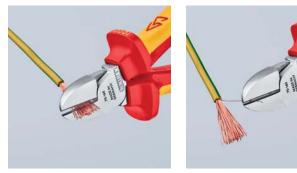
- > strong precison rivet for even movement and long service-life
- > high-precision cutting edges: additionally induction hardened, cutting-edge hardness approx. 62 HRC
- > narrow head with long cutting edges: good access also in confined areas
- > long tool life and high loading capacity
- > the essential diagonal cutters for diverse use
- > Vanadium steel, forged, multi stage oil-hardened









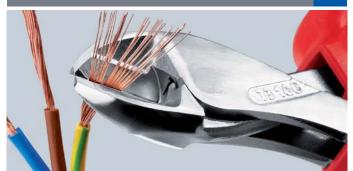


Cuts thin Cu wire accurately, also at the cutting-edge tips

| | | | | | | Cut | ting capaci | ties | |
|-------------|-----------------|------------------|------------------|---------------|---|------|-------------|------|---------|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Handles | Ø mm | 0 Ø mm | Ø mm | ۲۵ g |
| 70 06 160 | 021995 | 160 | 桧 1000 V 🏝 💕 🕨 ◄ | chrome plated | insulated with multi-component grips, VDE-tested | 4.0 | 3.0 | 2.0 | 216 |
| 70 07 160 | 018155 | 160 | 숲 1000 V 🖄 🚭 ► 🗨 | chrome plated | with dipped insulation, VDE-tested | 4.0 | 3.0 | 2.0 | 227 |
| 70 26 160 | 018223 | 160 | 桧 1000 V 🆄 🖨 🦯 🥄 | chrome plated | insulated with multi-component grips, VDE-tested | 4.0 | | | 216 |

KNIPEX X-Cut[®] Compact Diagonal Cutters DIN ISO 5749 IEC 60900 DIN EN 60900

73



Powerful, light and universal Cuts precisely finest strands as well as multi-core cables and piano wires

- > box-joint design: highest stability with low weight
- > doubly supported joint axis for heaviest duty
- > high cutting capacity with very little effort thanks to the optimum co-ordination of cutting-edge angle and leverage ratio
- > large opening width for thicker cables
- > cuts precisely, even through fine copper wires
- > compact, low-weight construction

â1000V @ ₽ Γ Γ

- > universally usable, in the assembly, maintenance and production
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened





40% less effort required

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

| | 73 06 160 cap.Plano Ø 2,2 mm |
|-----------|------------------------------|
| · Celemon | AND PARTY AND AND |
| | |
| Ag | |
| 73 06 160 | NIPEA |

| | | | | | | Cutting capacities | | | | | |
|-------------|-----------------|-----------------|-------------|------------------|---|--------------------|-----------|------|------|------|----------|
| Article No. | EAN 4003773- | ←→ mm | | Pliers | Handles | Ømm | 0 Ø mm | Ø mm | Ø mm | Ø mm | ۵'ک g |
| 73 06 160 | 075141 | 160 | £ 1000 V @€ | chrome plated | insulated with multi-component grips, VDE-tested | 4.8 | 3.8 | 2.7 | 2.2 | 12.0 | 175 |

High Leverage Diagonal Cutters DIN ISO 5749 IEC 60900 DIN EN 60900

- > with integrated forged axle for heaviest duty
- > suitable for all types of wire including piano wire
- > high cutting performance with minimum effort due to optimum co-ordination
- > of the cutting edge angle and transmission ratio
- > precision cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- > Chrome vanadium heavy-duty steel, forged, multi stage oil-hardened

Length 250 mm

the $\bar{2}50\text{-}mm\text{-}long$ diagonal cutter is suitable for copper conductors up to 16 mm² and aluminium conductors up to 35 mm²



20% less effort required

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

| | | | | | | | Cu | ties | | |
|-------------|-----------------|------------------|------------------|---|--|------|------|------|------------------|--|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Handles | Ø mm | Ø mm | Ømm | ۲ <mark>۵</mark> | |
| 74 06 160 | 040705 | 160 | | | ne insulated with multi-component grips, | 3.4 | 2.5 | 2.0 | 215 | |
| 74 06 180 | 022985 | 180 | 🛧 1000 V 🖄 🚰 🗲 🖣 | chrome | | 3.8 | 2.7 | 2.2 | 280 | |
| 74 06 200 | 033820 | 200 | | plated | VDE-tested | 4.2 | 3.0 | 2.5 | 308 | |
| 74 06 250 | 041955 | 250 | | | | 4.6 | 3.5 | 3.0 | 453 | |
| 74 07 200 | 018414 | 200 | A 10001/ @ 🛋 🚺 | chrome | with dispading VDE tested | 4.2 | 3.0 | 2.5 | 328 | |
| 74 07 250 | 018421 | 250 | 🛧 1000 V 🖄 🚰 🗲 🕇 | plated with dipped insulation, VDE-tested | 4.6 | 3.5 | 3.0 | 510 | | |

Pliers Wrench insulated IEC 60900 DIN EN 60900

> pliers and a wrench in a single tool

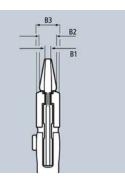
- > also excellent for gripping, holding, pressing and bending workpieces zero backlash jaw pressure prevents damage to edges of sensitive and soft nuts (Cu)
- > with scale for presetting the opening width apart from the workpiece
- > no unintentional shift of the gripping jaws and no slipping of the joint
- > parallel jaws give a more solid grip; the construction gives infinite adjustment of all widths up to the specified maximum size
- > the action of the jaws allows quick tightening and release of bolted connections using the ratchet principle
- > lever transmission greater than 10 : 1 for strong gripping power
- > Chrome vanadium electric steel, forged, oil-hardened



Scale for setting the opening width, apart from the workpiece







| | | | | | | | | | | Dimensions | | | |
|---|-------------|----------|------------|---------------|---------------|------------------------------------|------------|------------|------------|------------|-----|----|-----|
| | | EAN | ∢ → | | | | \bigcirc | \bigcirc | Adjustment | B1 | B2 | B3 | 52 |
| А | Article No. | 4003773- | mm | | Pliers | Handles | Inch | mm | positions | mm | mm | mm | g |
| 8 | 6 07 250 | 065067 | 250 | £1000V @€ ⊂ ⊑ | chrome plated | with dipped insulation, VDE-tested | 1 3/4 | 46 | 17 | 8.0 | 8.0 | 14 | 615 |

86

07

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: 9-notch adjustment positioning 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 on the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness approx.
 61 HRC: low wear and stable gripping
- > box-joint design: high stability because of the double guide guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened







| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Handles | O] Ø Inch | O] Ø mm | mm mm | Adjustment positions | ۵'۵ g |
|-------------|-----------------|-----------------|--------------------------|---------------|---|--------------|------------|----------|-------------------------|----------|
| 88 06 250 | 039303 | 250 | ≙1000 V 🏝 🗗 🖂 | chrome plated | insulated with multi-component grips, VDE-tested | 2 | 50 | 46 | 9 | 374 |
| 88 07 250 | 019343 | 250 | ♠ 1000 V ֎ আ∭ ፲፫፲ | chrome plated | with disped inculation VDE tested | 2 | 50 | 46 | 9 | 420 |
| 88 07 300 | 022350 | 300 | | chiome plated | with dipped insulation, VDE-tested | 2 3/4 | 70 | 60 | 9 | 661 |

I Cla

KNIPEX Cobra[®] VDE

Hightech Water Pump Pliers, insulated DIN ISO 8976 IEC 60900 DIN EN 60900

- > adjustment by shifting one jaw directly on to the workpiece: fast, reliable and comfortable handling
- > opening at the touch of a button apart form the workpiece
- > fine adjustment to fit very different workpiece sizes with a comfortable handle position

87

26

- > good access to the workpiece due to slim size in the head and joint area
- > self-locking on pipes and nuts: no slipping on the workpiece and low handforce required
- > gripping surfaces with special hardened teeth, teeth hardness approx.61 HRC: low wear and stable gripping
- > box-joint design: high stability because of the double guide
- > guard prevents operators' fingers being pinched
- > Chrome vanadium electric steel, forged, multi stage oil-hardened







Quick setting without using a push-button



Just push the pliers handle to adjust!



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

| Article No. | EAN 4003773- | ∢→ mm | | Pliers | Handles | O] Ø Inch | O] Ømm | mm | Adjustment positions | ۵'۵ g |
|-------------|-----------------|-----------------|----------------------|------------------|---|--------------|-----------|----|-------------------------|----------|
| 87 26 250 | 071495 | 250 | â 1000 V බුළු আ∭ []] | chrome plated | insulated with multi-component grips, VDE-tested | 2 | 50 | 46 | 24 | 340 |



Precision Tweezers 92 IEC 60900 DIN EN 60900 > tested according to IEC 60900 KNIPEX 92 27 61 4 > with dipped insulation > nickel plated 92 27 61 > Spring steel, high-strength £1000V ⊂ 92 27 61 for ultra fine mounting work; extra fine tips; straight pattern; gripping surfaces matt finished for optimum grip KNIPEX 92 27 62 straight pattern; gripping surfaces with fine transverse serration 92 27 62 A 1000 V 🕸 আ∭ 92 37 64 angled tips; gripping surfaces with fine transverse serration 92 67 63 straight pattern; knurled gripping surfaces KNIPEX 92 37 64 92 37 64

<u>A</u>1000V ℜ <u>∠</u>45° □□□

| | EAN | ∢ ► | | | 5 |
|-------------|----------|------------|---|------------------------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 27 61 | 054757 | 130 | ≙ 1000 V | with dipped insulation | 32 |
| 92 27 62 | 054764 | 150 | 会 1000 V আ∭ | with dipped insulation | 35 |
| 92 37 64 | 054856 | 150 | <u></u> <u>A</u> 1000 V ℜ <u>∡</u> 45° □□□□ | with dipped insulation | 34 |
| 92 67 63 | 054931 | 145 | ≙ 1000 V আ∭ | with dipped insulation | 43 |



- > for copper single conductors up to 16 mm², multiple stranded wires up to 50 mm², fine stranded up to 70 mm² and aluminium conductors multiple stranded wires up to 70 mm²
- > easy cutting with one-hand operation due to high transmission ratio
- > not suitable for steel wire and hard drawn copper conductors
- > precision ground, hardened blades
- > no crushing, slight deformation of the cable only
- > with guard
- > adjustable bolted joint
- > shears body: surgical steel, stainless, vacuum-hardened
- > handles: plastic, impact-proof



| | | | | | | Cutting capacities | | | |
|-------------|----------|-------------|--------------------|----------|-------------------------------|--------------------|-----------------|-----|-----|
| | EAN | ∢ —▶ | | | | • | • | | 52 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | AWG | g |
| 95 06 230 | 006305 | 230 | £ 1000 V 🖄 🚭 😂 📲 🖫 | polished | plastic insulated, VDE-tested | 16 | 50 | 1/0 | 274 |

Cable Shears IEC 60900 DIN EN 60900

95

- > for cutting copper and aluminium single conductors as well as multiple stranded cables
- > precision ground, hardened blades
- > clean and smooth cut without crushing and deformation
- > easy cutting with one-hand operation
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-retaining screw
- > High-grade special tool steel, forged, oil-hardened

Style 2

internal opening spring, protected and captive







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

| | | | | | | | Cutting capacities | | | |
|-------------|-----------------|------------------|-----------------------|-------|---------------|---|--------------------|-----------------|-----|------------------|
| Article No. | EAN 4003773- | ∢ ► mm | | Style | Tool | Handles | Ø mm | mm ² | AWG | ۲ <mark>۵</mark> |
| 95 16 165 | 039648 | 165 | ≙ 1000 V 🖄 🚭 🤁 🖺 🐒 | 1 | chrome plated | insulated with multi-component grips, VDE-tested | 15 | 50 | 1/0 | 262 |
| 95 26 165 | 069980 | 165 | ≙ 1000 V @ 🚭 🤁 🝧 S MM | 2 | chrome plated | insulated with multi-component grips, VDE-tested | 15 | 50 | 1/0 | 275 |



95 26 165 ☆ 1000 V € MM 😨 🖭

Cable Shears with twin cutting edge IEC 60900 DIN EN 60900





95

1

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 in the rear part are cut. Initial cut in the front profile, final cut in the rear profile – to keep it as easy as possible.



95 16 200 🛧 1000 V 🖄 🚭 🔁 🎦 (PATENTED)

| | | | | | | Cutting capacities | | | |
|-------------|----------|------------|--------------------|---------------|---|--------------------|-----------------|-----|-----|
| | EAN | ∢ → | | | | • | • | | 52 |
| Article No. | 4003773- | mm | | Tool | Handles | Ømm | mm ² | AWG | g |
| 95 16 200 | 026761 | 200 | £ 1000 V 🏝 🚭 🔁 🖺 🕻 | chrome plated | insulated with multi-component grips, VDE-tested | 20 | 70 | 2/0 | 340 |
| 95 17 200 | 026952 | 200 | 🚖 1000 V 🖄 🚭 🔁 🖺 🖫 | chrome plated | with dipped insulation, VDE-tested | 20 | 70 | 2/0 | 360 |

95 17 200

Cable Shears

IEC 60900 DIN EN 60900



Large cutting capacity: max. 27 mm dia. / 150 mm²

- 95 > 1
 - > for cutting copper and aluminium single conductors as well as multiple stranded cables
 - > 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 favourable lever ratio and optimised cutting-edge geometry
 - > short design, length only 500 mm
 - > low weight
 - > guard prevents operators' fingers being pinched
 - > adjustable bolted joint
 - > Cutter head: vanadium electric steel, forged, oil-hardened
 - > handles: aluminium tube, high-strength



| | | | | | | Cutting capacities | | | |
|-------------|----------|------------|--------------------|----------|------------------------------------|--------------------|-----------------|-----|------|
| | EAN | ∢ → | | | | ₿ | • | | 52 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | AWG | g |
| 95 17 500 | 026785 | 500 | 🛧 1000 V 🖄 😭 🔂 🖺 🕤 | polished | with dipped insulation, VDE-tested | 27 | 150 | 5/0 | 1477 |

- > for cutting copper and aluminium 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 \emptyset 20 mm can be cut in one-hand operation

KNIPEX 95 17 2

1000 V EN/IEC 80900 : 200

- > less effort required due to favourable lever ratio and optimised cutting-edge geometry
- > guard prevents operators' fingers being pinched
- > adjustable bolted joint, self-retaining screw

> High-grade special tool steel, forged, oil-hardened

Cable Shears IEC 60900 DIN EN 60900

95

2

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



£1000V @ € 🔂

| | | | | | | Cutting capacities | | | |
|-------------|----------|---|--------------------|----------|------------------------------------|--------------------|-----------------|-----|------|
| | EAN | 4- | | | | ₿ | ₿ | | 52 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm ² | AWG | g |
| 95 27 600 | 021797 | 600 | 🚖 1000 V 🖄 😭 🔁 🖺 🕤 | polished | with dipped insulation, VDE-tested | 27 | 150 | 5/0 | 2301 |
| | | | | | | | | | |
| 95 29 600 | 021803 | Spare cutter head for 95 21 600 / 95 27 600 | | | | | | | |

95

3

Cable Cutters ratchet action IEC 60900 DIN EN 60900

- > for cutting copper and aluminium single conductors as well as multiple stranded cables
- > 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
- > little handforce required due to very high transmission ratio
- > two-stage ratchet drive for easy cutting
- > simple handling as a result of low weight and compact design can be used even in confined areas
- > guard prevents operators' fingers being pinched
- > High-grade special tool steel, forged, oil-hardened



Ratchet principle and two-stage ratchet drive for easier cutting

| | | | | | | Cutting capacities | | | | |
|-------------|-----------------|-----------------|---|-----------------|---|--------------------|-----------------|-----|----------|--|
| Article No. | EAN 4003773- | ∢→ mm | | Tool | Handles | Ø mm | mm ² | MCM | ۵'۵ g | |
| 95 36 250 | 026884 | 250 | £ 1000 V @ € € MM 5 5 | black lacquered | insulated with multi-component grips, VDE-tested | 32 | 240 | 500 | 652 | |
| 95 36 280 | 026891 | 280 | ≙ 1000 V @@ � MM 🐒 | black lacquered | insulated with multi-component grips, VDE-tested | 52 | 380 | 750 | 835 | |
| | | | | · | | | | | | |
| 95 39 250 | 022244 | Movab | le spare blade for 95 31 250 / 9 | 95 36 250 | | | | | | |
| 95 39 280 | 025283 | Movab | vable spare blade for 95 31 280 / 95 36 280 | | | | | | | |



95 36 250 ☆1000V @ 🚭 🚱 MM 📲



95 36 280 £1000V @ € \$ MM \$

| 95 36 280 | |
|-------------------------------|--|
| suitable for aluminium sector | |

cable up to 4 x 150 mm²

Product video 95 36 250



Product video

Cable Cutter ratchet principle, 3-stage IEC 60900 DIN EN 60900

Sturdy. Easy to use. Stable. Innovative ratchet-drive

For cable up to 60 mm diameter

- > easy handling due to low weight (830 g) and compact construction (320 mm length) – also usable in confined areas
- > cutting through copper and aluminium cables with diameters of up to 60 mm in one-hand and two-hand operation
- > hardened cutting edges, precisely ground, cut smoothly and neatly without crushing
- > for cutting copper and aluminium single conductors as well as multiple stranded cables (not suitable for steel wire and wire ropes)
- > innovative three-stage ratchet-drive with high leverage for easy cutting in one-hand and two-hand operation
- > fixed handle with support area for putting down the pliers when cutting
- > High-grade special tool steel, forged, oil-hardened



95 36 320 ≙1000 V 🖄 🚭 🏵 MM 🖭

| | | | | | | Cutting capacities | | | | |
|--------------|-----------------|------------------|--|--------------------|---|--------------------|-----------------|------|------------------|--|
| Article No. | EAN 4003773- | ∢ → mm | | Tool | Handles | Ø mm | mm ² | MCM | ۲ <mark>۵</mark> | |
| 95 36 320 | 075189 | 320 | 1000 V 🏝 🚭 ↔ MM 🛒 | black atramentized | insulated with multi-component grips, VDE-tested | 60 | 600 | 1200 | 830 | |
| 95 39 320 01 | 075714 | | cutter repair kit for 95 32 320 and 95 36 320 | | | | | | | |
| 95 39 320 02 | 075721 | Fixed | ixed cutter repair kit for 95 32 320 and 95 36 320 | | | | | | | |

95

3

Cable Cutter

ratchet action

for steel wire armoured cables (SWA cable)

95 36





Cuts through steel wire armoured cables with a diameter of up to 45 mm / 380 mm² (e.g. 4 x 95 mm²) using one or two-handed operation Sturdy. Easy to use. Stable.

> simple handling due to low weight (800 g) 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
- > support area for putting down the pliers when cutting
- > not suitable for cutting ACSR cable and wire rope!
- > High-grade special tool steel, forged, multi stage oil-hardened



Product video



cutting edge

95 36 315 A ☆ 1000 V 🍂 🚱 🛞 MM 🐒

| | | | | | | Cutting c | apacities | | | | |
|----------------|-----------------|------------------|--|--|---|-----------|-----------------|-----|----------|--|--|
| Article No. | EAN 4003773- | ∢ ► mm | | Tool | Handles | Ø mm | mm ² | MCM | ۵'۵ g | | |
| 95 36 315 A | 078579 | 315 | ֎ ≙1000 V 🕸 🔁 MM | black lacquered | insulated with multi-component grips, VDE-tested | 45 | 380 | 750 | 800 | | |
| 95 39 315 A 01 | 078586 | Pivot c | utter repair kit for 95 32 31 | tter repair kit for 95 32 315 A and 95 36 315 A (ratchet action) | | | | | | | |
| 95 39 315 A 02 | 078593 | Fixed c | d cutter repair kit for 95 32 315 A and 95 36 315 A (ratchet action) | | | | | | | | |

Wire Rope and ACSR-Cable Cutter IEC 60900 DIN EN 60900



- > for wire ropes and steel rods, copper and aluminium cables
- > suitable for cutting overhead line cables with strain relief wire (ACSR cables)
- > angular cutting blades allow cutting of single rope wire
- > optimum transmission ratio for high cutting performance
- > bolted cutter head, replaceable low weight
- > cutter head: high-grade special tool steel, multi stage oil-hardened
- > handles: aluminium, highstrength



| | | | | | | Cutting capacities | | | | |
|-------------|-----------------|-----------------|-----------------------|----------|------------------------|--------------------|------|------|-----|--------|
| Article No. | EAN 4003773- | ∢→ mm | | Head | Handles | mm ² | Ø mm | Ø mm | AWG | ۲ ع |
| 95 77 600 | 025313 | 600 | ≙ 1000 V 🕄 ◎ 📰 | polished | with dipped insulation | 150 | 14.0 | 9.0 | 5/0 | 2359 |

97

68

95

7

95 79 600 025337 Spare cutter head for 95 71 600 / 95 77 600

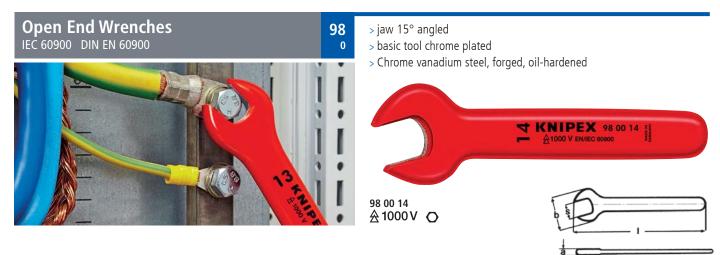
Crimping Pliers for end sleeves (ferrules) IEC 60900 DIN EN 60900



- > for crimping end sleeves (ferrules) according to DIN 46228 parts 1 + 4 in the range from 0.25 up to 2.5 mm^2
- > crimping in marked trapezoidal dies for reliable connections between the sleeve and the conductor
- > Vanadium electric steel; forged, oil-hardened







| Article No. | EAN 4003773- | | Width across flats S mm | Width across flats S Inch | Length I max. mm | Head width b max. mm | Head thickness a max. mm | ۲ <mark>۵</mark> |
|-------------|-----------------|------------|----------------------------|------------------------------|---------------------|-------------------------|--------------------------|------------------|
| 98 00 07 | 019824 | | 7.0 | | 105.0 | 20.0 | 4.0 | 15 |
| 98 00 08 | 019831 | | 8.0 | | 105.0 | 22.0 | 4.0 | 31 |
| 98 00 09 | 019848 | | 9.0 | | 105.0 | 24.0 | 4.0 | 29 |
| 98 00 10 | 019893 | | 10.0 | | 105.0 | 27.0 | 5.0 | 40 |
| 98 00 11 | 019909 | | 11.0 | | 120.0 | 30.0 | 5.5 | 45 |
| 98 00 12 | 019923 | | 12.0 | | 125.0 | 32.0 | 5.5 | 70 |
| 98 00 13 | 019930 | | 13.0 | | 130.0 | 34.0 | 6.5 | 68 |
| 98 00 14 | 019947 | | 14.0 | | 135.0 | 35.0 | 6.5 | 86 |
| 98 00 15 | 019954 | | 15.0 | | 145.0 | 37.0 | 7.0 | 80 |
| 98 00 16 | 019961 | | 16.0 | | 155.0 | 38.0 | 7.0 | 112 |
| 98 00 17 | 019978 | | 17.0 | | 155.0 | 42.0 | 8.0 | 119 |
| 98 00 18 | 019985 | A 1000 V O | 18.0 | | 160.0 | 44.0 | 8.0 | 149 |
| 98 00 19 | 019992 | × 1000 V O | 19.0 | | 165.0 | 47.0 | 9.0 | 154 |
| 98 00 22 | 020004 | | 22.0 | | 190.0 | 52.0 | 9.0 | 216 |
| 98 00 24 | 020011 | | 24.0 | | 210.0 | 56.0 | 9.0 | 262 |
| 98 00 27 | 020028 | | 27.0 | | 215.0 | 63.0 | 9.0 | 307 |
| 98 00 1/4" | 019886 | | | 1/4 | 108.0 | 20.0 | 4.0 | 32 |
| 98 00 5/16" | 020073 | | | 5/16 | 108.0 | 22.0 | 4.0 | 36 |
| 98 00 3/8" | 020042 | | | 3/8 | 108.0 | 27.0 | 5.0 | 37 |
| 98 00 7/16" | 020097 | | | 7/16 | 120.7 | 30.0 | 5.5 | 53 |
| 98 00 1/2" | 019879 | | | 1/2 | 139.7 | 34.0 | 6.5 | 60 |
| 98 00 9/16" | 020110 | | | 9/16 | 152.4 | 35.0 | 6.5 | 102 |
| 98 00 5/8" | 020080 | | | 5/8 | 165.1 | 38.0 | 7.0 | 124 |
| 98 00 3/4" | 020035 | | | 3/4 | 190.5 | 47.0 | 9.0 | 164 |

98

07

Adjustable Wrench IEC 60900 DIN EN 60900



> parallel smooth gripping jaws

> continuously variable gripping width

> with scaling for presetting the width apart from the workpiece

> Chrome Vanadium steel



| | EAN | ∢ —▶ | | | | \bigcirc | \bigcirc | Jaw width | Head width | Width | Depth | 52 |
|-------------|----------|-------------|-------------------------------|---------------|------------------------|------------|------------|-----------|------------|-------|-------|-----|
| Article No. | 4003773- | mm | | Tool | Handle | mm | Inch | mm | mm | mm | mm | g |
| 98 07 250 | 071518 | 260 | ≜1000V ⊂ √22° Ο | chrome plated | with dipped insulation | 30 | 1 1/8 | 8.0 | 16.0 | 73.0 | 20.0 | 500 |

Box Wrenches IEC 60900 DIN EN 60900

> cranked

> basic tool chrome plated

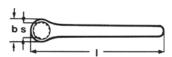
03

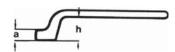
> Chrome vanadium steel, forged, oil-hardened



98 0

A KUIPEX 98 0





| Article No. | EAN 4003773- | | Width across flats S mm | Length I max. mm | Head width b max. mm | Head thickness a max. mm | Depth of crank h max. mm | ۵'ک g |
|-------------|-----------------|---------------------------|----------------------------|---------------------|-------------------------|--------------------------|-----------------------------|----------|
| 98 01 07 | 020134 | | 7.0 | 150.0 | 12.0 | 7.0 | 18.0 | 55 |
| 98 01 08 | 020141 | | 8.0 | 155.0 | 14.0 | 7.0 | 19.0 | 68 |
| 98 01 09 | 020158 | | 9.0 | 165.0 | 15.5 | 8.0 | 19.0 | 78 |
| 98 01 10 | 020196 | | 10.0 | 160.0 | 17.0 | 9.0 | 20.0 | 75 |
| 98 01 11 | 020202 | | 11.0 | 165.0 | 18.5 | 10.0 | 21.0 | 93 |
| 98 01 12 | 020226 | | 12.0 | 185.0 | 18.5 | 10.0 | 23.0 | 118 |
| 98 01 13 | 020233 | | 13.0 | 185.0 | 21.5 | 11.0 | 23.0 | 125 |
| 98 01 14 | 020240 | <u></u> £ 1000 V ○ | 14.0 | 195.0 | 23.0 | 12.0 | 24.0 | 147 |
| 98 01 15 | 020257 | | 15.0 | 200.0 | 24.0 | 12.0 | 24.0 | 143 |
| 98 01 16 | 020264 | | 16.0 | 200.0 | 26.0 | 12.0 | 26.0 | 172 |
| 98 01 17 | 020271 | | 17.0 | 205.0 | 27.0 | 13.0 | 26.0 | 184 |
| 98 01 18 | 020288 | | 18.0 | 210.0 | 29.0 | 13.0 | 28.0 | 210 |
| 98 01 19 | 020295 | | 19.0 | 225.0 | 30.0 | 14.0 | 28.0 | 245 |
| 98 01 22 | 020301 | | 22.0 | 225.0 | 35.0 | 15.0 | 30.0 | 278 |
| 98 01 24 | 020318 | | 24.0 | 265.0 | 38.0 | 16.0 | 30.0 | 415 |

98

Nut Drivers with screwdriver handle EC 60900 DIN EN 60900

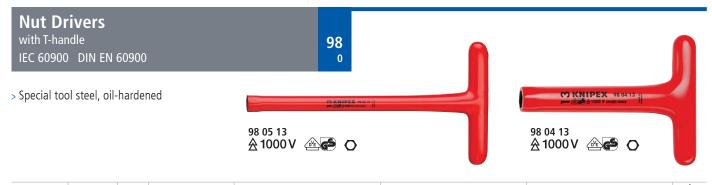
> ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force

- > handle design prevents rolling
- > Chrome vanadium molybdenum steel

| Article No. | EAN 4003773- | ∢ ► mm | | Point | Handle | Width across flats S mm | Blade length mm | Handle length mm | Head dia. mm | ۵'۵ g |
|-------------|-----------------|------------------|-------------------|-----------|---|----------------------------|--------------------|---------------------|-----------------|----------|
| 98 03 04 | 071679 | 230 | ≜ 1000 V @ € O | burnished | insulating multi-component handle, VDE-tested | 4.0 | 125.0 | 107 | 9.0 | 70 |
| 98 03 05 | 071686 | 230 | | | | 5.0 | 125.0 | 107 | 10.0 | 70 |
| 98 03 055 | 026082 | 232 | | | | 5.5 | 125.0 | 107 | 11.0 | 87 |
| 98 03 06 | 026099 | 232 | | | | 6.0 | 125.0 | 107 | 12.0 | 88 |
| 98 03 07 | 026105 | 237 | | | | 7.0 | 125.0 | 112 | 14.0 | 123 |
| 98 03 08 | 024095 | 237 | | | | 8.0 | 125.0 | 112 | 15.0 | 125 |
| 98 03 09 | 026112 | 237 | | | | 9.0 | 125.0 | 112 | 16.0 | 129 |
| 98 03 10 | 026129 | 237 | | | | 10.0 | 125.0 | 112 | 17.0 | 118 |
| 98 03 11 | 026136 | 237 | | | | 11.0 | 125.0 | 112 | 19.0 | 148 |
| 98 03 12 | 026143 | 237 | | | | 12.0 | 125.0 | 112 | 20.0 | 150 |
| 98 03 13 | 026150 | 237 | | | | 13.0 | 125.0 | 112 | 21.0 | 152 |



98 03 10 ☆ 1000 V 🖄 🚰 🔿



| Article No. | EAN 4003773- | ∢ —► mm | | Width across flats S mm | Handle length max. mm | Head dia. mm | Δ΄Δ g |
|-------------|-----------------|-------------------|----------------|----------------------------|--------------------------|-----------------|----------|
| 98 04 08 | 071341 | 200 | | 8.0 | 90 | 15.0 | 344 |
| 98 04 10 | 026167 | 200 | - | 10.0 | 155 | 19.5 | 324 |
| 98 04 13 | 026198 | 200 | | 13.0 | 155 | 23.5 | 344 |
| 98 04 17 | 026211 | 200 | â 1000 V @ 🚰 🔿 | 17.0 | 155 | 28.5 | 426 |
| 98 04 19 | 020424 | 200 | _ | 19.0 | 155 | 31.0 | 525 |
| 98 04 22 | 026228 | 200 | _ | 22.0 | 155 | 34.5 | 560 |
| 98 05 13 | 026273 | 300 | | 13.0 | 155 | 23.5 | 409 |
| 98 05 17 | 026297 | 300 | 🏦 1000 V 🖄 🚰 🔿 | 17.0 | 155 | 28.5 | 544 |
| 98 05 19 | 026303 | 300 | | 19.0 | 155 | 31.0 | 674 |

Screwdrivers for hexagon socket screws IEC 60900 DIN EN 60900

98 1





90.0

90.0

90.0

90.0

286

363

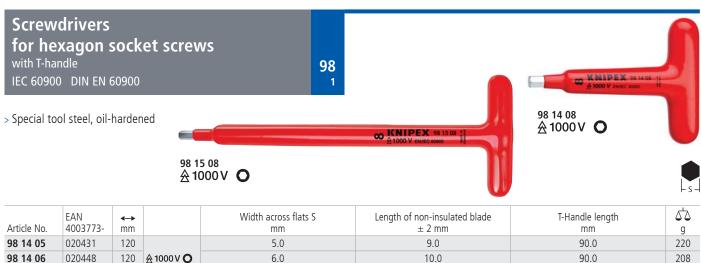
452

359

(NIPE)

- > ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > handle design prevents rolling
- > Chrome vanadium molybdenum steel

| Article No. | EAN 4003773- | ∢ ► mm | | Тір | Handle | Width across flats S mm | Blade length mm | Length of non-insulated blade mm | Handle length mm | Δ ['] Δ q |
|-------------|-----------------|------------------|------------------|-----------|-----------------|----------------------------|--------------------|-------------------------------------|---------------------|-----------------------|
| 98 13 20 | 071693 | 175 | | 1 | | 2.0 | 75.0 | 15.0 | 102 | 40 |
| 98 13 25 | 026334 | 177 | | | insulating | 2.5 | 75.0 | 15.0 | 102 | 32 |
| 98 13 30 | 026341 | 182 | <u></u> £ 1000 V | | multi component | 3.0 | 75.0 | 15.0 | 107 | 49 |
| 98 13 40 | 026358 | 182 | @@ 0 | burnished | | 4.0 | 75.0 | 15.0 | 107 | 55 |
| 98 13 50 | 026365 | 187 | | | | 5.0 | 75.0 | 15.0 | 112 | 82 |
| 98 13 60 | 026372 | 212 | | | | 6.0 | 100.0 | 15.0 | 112 | 98 |

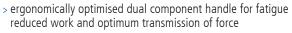


Screwdrivers for slotted screws IEC 60900 DIN EN 60900

98 2

98 20 55

A 1000 V ASC C



- > handle design prevents rolling
- > Chrome vanadium molybdenum steel

98 21 45

especially for meter assembly with blade length of 180 mm

| Article No. | EAN 4003773- | ⊲- ► mm | | Point | Handle | Blade width mm | Blade thickness mm | Blade length mm | Length of non- insulated blade mm | Handle length mm | ۵'ک g |
|-------------|-----------------|-------------------|---------|-----------|--|-------------------|-----------------------|--------------------|--------------------------------------|---------------------|----------|
| 98 20 10 | 026396 | 320 | | | | 10.0 | 1.6 | 200 | 15 | 120 | 184 |
| 98 20 25 | 062325 | 177 | | | | 2.5 | 0.4 | 75 | 15 | 102 | 32 |
| 98 20 30 | 062332 | 202 | | | | 3.0 | 0.5 | 100 | 15 | 102 | 35 |
| 98 20 35 | 024217 | 202 | <u></u> | | insulating multi- | 3.5 | 0.6 | 100 | 15 | 102 | 35 |
| 98 20 40 | 026402 | 202 | ◈€● | burnished | component handle, VDE-tested | 4.0 | 0.8 | 100 | 15 | 102 | 38 |
| 98 20 55 | 024224 | 232 | | | | 5.5 | 1.0 | 125 | 15 | 107 | 69 |
| 98 20 65 | 026419 | 262 | | | | 6.5 | 1.2 | 150 | 15 | 112 | 105 |
| 98 20 80 | 024231 | 295 | | | | 8.0 | 1.2 | 175 | 15 | 120 | 152 |
| 98 21 45 | 026426 | 287 | | burnished | insulating multi- component handle, VDE-tested | 4.5 | 0.8 | 180 | 15 | 107 | 66 |

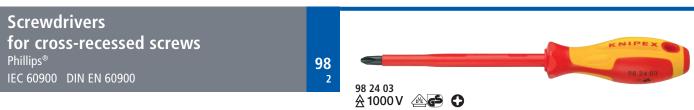
98

2

Screwdrivers (Slim) for slotted screws IEC 60900 DIN EN 60900

- > Reduced blade isolation diameter for recessed spring and screw elements
- > ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > handle design prevents rolling
- > Chrome vanadium molybdenum steel

| Article No. | EAN 4003773- | ∢ ► mm | | Point | Handle | Blade width mm | Blade thickness mm | Blade length mm | Length of non- insulated blade mm | Handle length mm | ۵'ک g |
|-------------|-----------------|------------------|------------------|-------------|---------------------------------|-------------------|-----------------------|--------------------|--------------------------------------|---------------------|----------|
| 98 20 35 SL | 079712 | 202 | | | | 3.5 | 0.6 | 100 | 15 | 102 | 35 |
| 98 20 40 SL | 079729 | 202 | <u></u> £ 1000 V | burnished | insulating multi- | 4.0 | 0.8 | 100 | 15 | 102 | 38 |
| 98 20 55 SL | 079736 | 232 | ~~ ~ | Duffiistieu | component handle, VDE-tested | 5.5 | 1.0 | 125 | 15 | 107 | 69 |
| 98 20 65 SL | 079743 | 262 | | | | 6.5 | 1.2 | 150 | 15 | 112 | 105 |



> ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force

> handle design prevents rolling

> Chrome vanadium molybdenum steel

| 8 | KNIPEX | |
|---|---------------------------|--|
| 2 | 98 24 03 À 1000 V ≧€ € | |

Phillips® is a registered trademark of Phillips Screw Company

| Article No. | EAN 4003773- | ←→ mm | | Point | Handle | Size | Blade length mm | Length of non-insulated blade mm | Handle length mm | ۵'۵ g |
|-------------|-----------------|-----------------|----------|-----------|--|------|--------------------|-------------------------------------|---------------------|----------|
| 98 24 00 | 026433 | 162 | | | | PH0 | 60 | 15 | 102 | 32 |
| 98 24 01 | 026440 | 187 | | | insulating multi- component handle, VDE-tested | PH1 | 80 | 15 | 107 | 58 |
| 98 24 02 | 026457 | 212 | A 1000 V | burnished | | PH2 | 100 | 18 | 112 | 94 |
| 98 24 03 | 026464 | 270 | | | | PH3 | 150 | 18 | 120 | 165 |
| 98 24 04 | 026471 | 320 |] | | | PH4 | 200 | 18 | 120 | 244 |



☆1000 V ☆ €

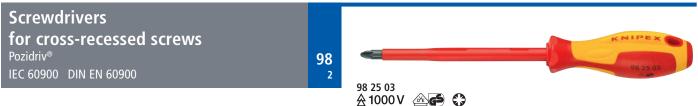
Screwdrivers (Slim) for cross-recessed screws Phillips® IEC 60900 DIN EN 60900



- > Reduced blade isolation diameter for recessed spring and screw elements
- > ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force
- > handle design prevents rolling
- > Chrome vanadium molybdenum steel

Phillips® is a registered trademark of Phillips Screw Company

| Article No. | EAN 4003773- | ∢→ mm | | Point | Handle | Size | Blade length mm | Length of non-insulated blade mm | Handle length mm | ۵'۵ g |
|-------------|-----------------|-----------------|------------------|-------------|---------------------------------|------|--------------------|-------------------------------------|---------------------|----------|
| 98 24 01 SL | 079750 | 187 | <u> 余</u> 1000 V | burnished | insulating multi- | PH1 | 80 | 15 | 107 | 58 |
| 98 24 02 SL | 079767 | 212 | @€ 0 | buillistied | component handle, VDE-tested | PH2 | 100 | 18 | 112 | 94 |



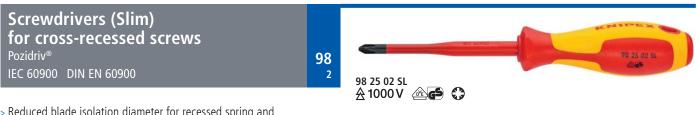
> ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force

> handle design prevents rolling

> Chrome vanadium molybdenum steel

Pozidriv[®] is a registered trademark of European Ind. Serv. Ltd.

| Article No. | EAN 4003773- | ∢ ► mm | | Point | Handle | Size | Blade length mm | Length of non-insulated blade mm | Handle length mm | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|---|-----------|--|------|--------------------|-------------------------------------|---------------------|-----------------------|
| 98 25 00 | 062370 | 162 | | | | PZ0 | 60 | 15 | 102 | 40 |
| 98 25 01 | 031260 | 187 | | | insulating multi- component handle, | PZ1 | 80 | 15 | 107 | 58 |
| 98 25 02 | 031277 | 212 | A 1000 V A C C C C C C C C C C C C C C C C C C C | burnished | | PZ2 | 100 | 18 | 112 | 94 |
| 98 25 03 | 031284 | 270 | | N 1 | VDE-tested | PZ3 | 150 | 18 | 120 | 165 |
| 98 25 04 | 062387 | 320 | | | | PZ4 | 200 | 18 | 120 | 244 |



> Reduced blade isolation diameter for recessed spring and screw elements

> ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force

> handle design prevents rolling

> Chrome vanadium molybdenum steel

 $\mathsf{Pozidriv}^{\otimes}$ is a registered trademark of European Ind. Serv. Ltd.

| Artikel-Nr. | EAN 4003773- | ∢ → mm | | Point | Handle | Size | Blade length mm | Length of non-insulated blade mm | Handle length mm | ۵ ^۲ ۵ g |
|-------------|-----------------|------------------|--------------|-----------|--|------|--------------------|-------------------------------------|---------------------|-----------------------|
| 98 25 01 SL | 079774 | 187 | <u> </u> | burnished | insulating multi- | PZ1 | 80 | 15 | 107 | 58 |
| 98 25 02 SL | 079781 | 212 | @ @ ♥ | burnished | urnished component handle, VDE-tested | PZ2 | 100 | 18 | 112 | 94 |

Screwdrivers for Torx[®] screws IEC 60900 DIN EN 60900

98 2

> ergonomically optimised dual component handle for fatigue reduced work and optimum transmission of force

- > handle design prevents rolling
- > Chrome vanadium molybdenum steel



Torx® is a registered trademark of Acument Global Technologies, Inc.

| Article No. | EAN 4003773- | ∢ ► mm | | Point | Handle | Size | Blade length mm | Length of non-insulated blade mm | Handle length mm | ۲ _۵ ع |
|-------------|-----------------|------------------|---|-----------|--|------|--------------------|-------------------------------------|---------------------|---------------------|
| 98 26 10 | 071709 | 160 | | | | TX10 | 60 | 15 | 102 | 33 |
| 98 26 15 | 071716 | 185 | | | insulating multi-com- ponent handle, | TX15 | 80 | 15 | 107 | 58 |
| 98 26 20 | 071723 | 185 | A 1000 V A I I I I I I I I I I I I I I I I I I I | burnished | | TX20 | 80 | 15 | 107 | 58 |
| 98 26 25 | 071730 | 185 | | | VDE-tested | TX25 | 80 | 15 | 107 | 58 |
| 98 26 30 | 071747 | 210 | | | | TX30 | 100 | 18 | 112 | 95 |



> for use with sockets

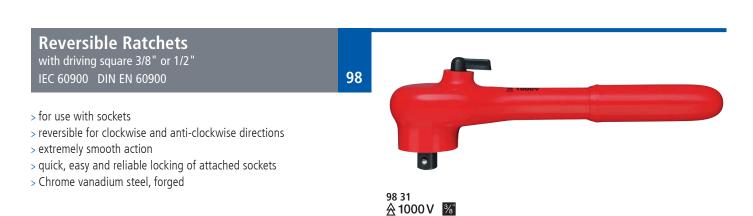
> quick, easy and reliable locking of attached sockets

> basic tool chrome plated

> High-grade special tool steel, forged, oil-hardened



5 EAN **∢**—▶ Handle length Square drive Article No. 4003773mm Inch mm g 98 30 026488 200 **☆ 1000 V** 3⁄6 165 3/8 447 98 40 026501 200 **≙ 1000 V** 1⁄2 165 1/2 631



| Article No. | EAN 4003773- | ←→ mm | | Square drive Inch | ۵ ^۲ ۵ g |
|-------------|-----------------|-----------------|-------------------|----------------------|-----------------------|
| 98 31 | 026495 | 190 | <u>A</u> 1000 V 🌃 | 3/8 | 324 |
| 98 41 | 026518 | 265 | 🛧 1000 V 🌆 | 1/2 | 625 |

Extension Bars

with internal and driving square 3/8" or 1/2" IEC 60900 DIN EN 60900

> for use with sockets

- > with internal and external square
- > quick, easy and reliable locking of attached sockets
- > Chrome vanadium steel, forged

| Article No. | EAN 4003773- | ∢ ► mm | | Square drive Inch | ۲۵ g |
|-------------|-----------------|------------------|---|----------------------|---------|
| 98 35 125 | 020530 | 125 | ☆ 1000 V 第 ⑨☆ 1000 V 第 ⑨ | 3/8 | 149 |
| 98 35 250 | 020547 | 250 | | 3/8 | 294 |
| 98 45 125 | 020813 | 125 | | 1/2 | 258 |
| 98 45 250 | 020820 | 250 | | 1/2 | 490 |

Hexagon Sockets

for hexagonal screws for internal square 3/8" or 1/2"

for internal square 3/8" or 1/2 IEC 60900 DIN EN 60900

98

98

0

0

KNIPEX 48 35 125

98 35 125 <u>А</u> 1000 V № ®

98 45 250 会 1000 V ½ 👔

> for metric hexagonal head screws

> basic tool chrome plated

> Chrome Vanadium steel



KNIPEX



98 37 17 ☆1000V ◎ 🚱



98 47 17 ☆1000V © 🔞

| Article No. | EAN 4003773- | | Width across flats S mm | Dia. of effective tool side d max. mm | Square drive Inch | ۲۵ g |
|-------------|-----------------|----------------------|----------------------------|--|----------------------|---------|
| 98 37 10 | 020578 | | 10.0 | 18.7 | 3/8 | 32 |
| 98 37 11 | 020585 | | 11.0 | 20.0 | 3/8 | 32 |
| 98 37 12 | 020608 | | 12.0 | 21.2 | 3/8 | 33 |
| 98 37 13 | 020615 | | 13.0 | 22.5 | 3/8 | 33 |
| 98 37 14 | 020622 | A 1000 V 🔿 🛞 | 14.0 | 23.7 | 3/8 | 39 |
| 98 37 16 | 027263 | | 16.0 | 26.2 | 3/8 | 53 |
| 98 37 17 | 020639 | | 17.0 | 27.5 | 3/8 | 61 |
| 98 37 19 | 020646 | | 19.0 | 30.0 | 3/8 | 73 |
| 98 47 10 | 020882 | | 10.0 | 19.5 | 1/2 | 63 |
| 98 47 11 | 020899 | | 11.0 | 20.7 | 1/2 | 61 |
| 98 47 12 | 020912 | | 12.0 | 23.0 | 1/2 | 64 |
| 98 47 13 | 020929 | | 13.0 | 23.2 | 1/2 | 64 |
| 98 47 14 | 020943 | | 14.0 | 24.5 | 1/2 | 67 |
| 98 47 16 | 027287 | | 16.0 | 26.9 | 1/2 | 69 |
| 98 47 17 | 020967 | ≙ 1000 V O Ø | 17.0 | 28.2 | 1/2 | 75 |
| 98 47 18 | 027294 | | 18.0 | 29.0 | 1/2 | 81 |
| 98 47 19 | 020974 |] [| 19.0 | 30.7 | 1/2 | 99 |
| 98 47 22 | 020981 | 1 | 22.0 | 34.5 | 1/2 | 125 |
| 98 47 24 | 020998 | 1 | 24.0 | 37.0 | 1/2 | 151 |
| 98 47 27 | 021001 | | 27.0 | 41.0 | 1/2 | 183 |

Hexagon Sockets for internal square 3/8" or 1/2" IEC 60900 DIN EN 60900

> with double-hex

- > for imperial hexagonal head screws
- > basic tool chrome plated
- > Chrome Vanadium steel

98

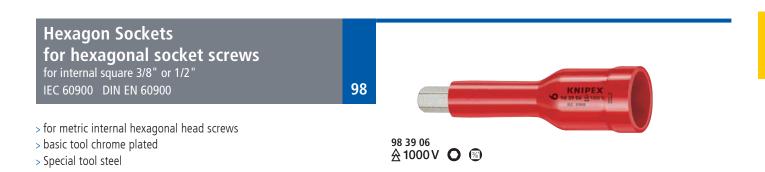




98 37 5/8" À 1000 V ◎ 🚱



| Article No. | EAN 4003773- | | Width across flats S Inch | Dia. of effective tool side d max. mm | Square drive Inch | ۲۵ و |
|--------------|-----------------|--------------------|------------------------------|--|----------------------|---------|
| 98 37 5/16" | 020684 | | 5/16 | 16.2 | 3/8 | 30 |
| 98 37 3/8" | 020677 | | 3/8 | 18.7 | 3/8 | 31 |
| 98 37 7/16" | 020707 | | 7/16 | 20.0 | 3/8 | 31 |
| 98 37 1/2" | 020554 | 会1000∨ © | 1/2 | 22.5 | 3/8 | 33 |
| 98 37 9/16" | 020721 | | 9/16 | 23.7 | 3/8 | 39 |
| 98 37 5/8" | 020691 | | 5/8 | 26.2 | 3/8 | 51 |
| 98 37 3/4" | 020660 | | 3/4 | 30.0 | 3/8 | 71 |
| 98 47 1/2" | 020875 | | 1/2 | 23.2 | 1/2 | 67 |
| 98 47 9/16" | 021094 | | 9/16 | 24.5 | 1/2 | 64 |
| 98 47 5/8" | 021063 | | 5/8 | 26.9 | 1/2 | 72 |
| 98 47 11/16" | 020905 | ≙ 1000 V O | 11/16 | 28.2 | 1/2 | 88 |
| 98 47 3/4" | 021018 | | 3/4 | 30.7 | 1/2 | 97 |
| 98 47 7/8" | 021087 | | 7/8 | 34.5 | 1/2 | 124 |
| 98 47 1" | 020868 | | 1 | 41.0 | 1/2 | 167 |



| Article No. | EAN 4003773- | ∢ ► mm | | Width across flats S mm | Length of non-insulated blade \pm 2 mm | Square drive Inch | ۲۵ g |
|-------------|-----------------|------------------|-----------------------------|----------------------------|--|----------------------|---------|
| 98 39 05 | 020776 | 75 | | 5.0 | 9 | 3/8 | 59 |
| 98 39 06 | 020783 | 75 | <u> </u> | 6.0 | 10 | 3/8 | 58 |
| 98 39 08 | 020790 | 75 | | 8.0 | 11 | 3/8 | 71 |
| 98 49 05 | 021155 | 75 | | 5.0 | 9 | 1/2 | 68 |
| 98 49 06 | 021162 | 75 | <u></u> £ 1000 V O ⊗ | 6.0 | 10 | 1/2 | 72 |
| 98 49 08 | 021179 | 75 | | 8.0 | 11 | 1/2 | 87 |

Reversible Ratchet with driving square 1/2" ISO 3315 IEC 60900 DIN EN 60900

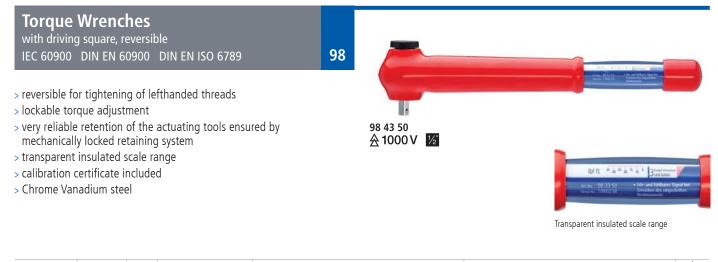
- > reversible for clockwise and anti-clockwise directions
- > very reliable retention of the actuating tools ensured by mechanically locked retaining system
- > Chrome Vanadium steel



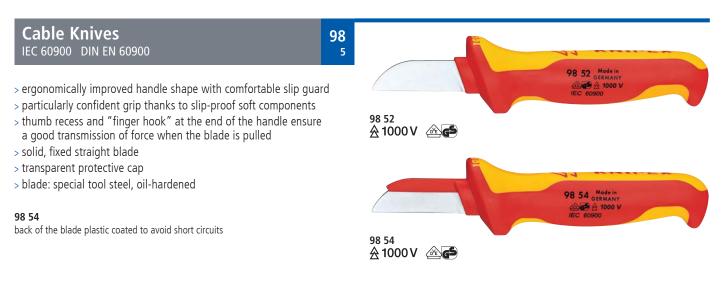
98 42 会 1000 V 1⁄2

98

| Article No. | EAN 4003773- | ∢-→ mm | | Square drive Inch | ۵'۵ g |
|-------------|-----------------|------------------|------------|----------------------|----------|
| 98 42 | 026525 | 265 | 🛧 1000 V ½ | 1/2 | 599 |



| Article No. | EAN 4003773- | ∢— ► mm | | Range of Application | Square drive Inch | ۲ ع |
|-------------|-----------------|-------------------|----------------------------|----------------------|----------------------|--------|
| 98 33 25 | 072676 | 290 | - <u>A</u> 1000 V ‰ | 5 - 25 Nm | 3/8 | 1230 |
| 98 33 50 | 071761 | 385 | X 1000 V 128 | 5 - 50 Nm | 3/8 | 1230 |
| 98 43 50 | 071778 | 385 | 会 1000 V 1⁄2 | 5 - 50 Nm | 1/2 | 1230 |



| Article No. | EAN 4003773- | ∢ ► mm | | Handle | Blade length mm | ۲ <mark>۵</mark> |
|-------------|-----------------|------------------|-------------------|---|--------------------|------------------|
| 98 52 | 035565 | 185 | 会 1000 V @ | insulating multi-component handle, VDE-tested | 50 | 77 |
| 98 54 | 026563 | 180 | £ 1000 V 🖄 🖨 | insulating multi-component handle, VDE-tested | 50 | 77 |

Dismantling Knives IEC 60900 DIN EN 60900

> ergonomically improved handle shape with comfortable slip guard

- > particularly confident grip thanks 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, vacuum-hardened





Guide shoe 98 55

| Article No. | EAN 4003773- | ∢→ mm | | Handle | Blade length mm | Radius mm | ۲ <u>۵</u> g |
|-------------|-----------------|-----------------|---------------------|---|--------------------|--------------|-----------------|
| 98 53 03 | 026549 | 155 | 🛧 1000 V 🖄 🖨 | insulating multi-component handle, VDE-tested | 28 | 7.0 | 77 |
| 98 53 13 | 026556 | 180 | 🛧 1000 V 🖄 🖨 | insulating multi-component handle, VDE-tested | 50 | 40.0 | 77 |
| 98 55 | 022558 | 155 | ≙ 1000 V 🖄 🚅 | insulating multi-component handle, VDE-tested | 38 | 23.5 | 77 |

98

5

98 55

£1000V ▲

98 5

Cable Knife

with replaceable blade IEC 60900 DIN EN 60900

> straight blade with special sharpening; replaceable

- > with hinged blade guard, integrated in the handle, captive
- > back of the blade plastic coated to avoid short circuits
- > ergonomically shaped insulating handle
- > blade: surgical steel, stainless, vacuum-hardened



1000 V @€

| Article No. | EAN 4003773- | 4− ► mm | | Blade length mm | ۲ <mark>۵</mark> |
|-------------|-----------------|-------------------|-----------------|--------------------|------------------|
| 98 56 | 026570 | 185 | 50 | 64 | |
| 98 56 SB | 033516 | 185 | 1000 V 🖄 🖨 | 50 | 64 |
| | | | | | |
| 98 56 09 | 030829 | Spare b | blade for 98 56 | | |

Flat Nose Pliers of plastic insulating IEC 60900 DIN EN 60900 ASTM F1505

- > fully insulating to reduce risk of short circuit
- > for meter assembly and meter blocking
- > class C; range of use up to -40°C
- > plastic material, fibreglass-reinforced
- > handles with soft plastic zone for better grip





| Article No. | EAN 4003773- | ∢→ mm | | ے'ک g |
|-------------|-----------------|-----------------|-------------------|----------|
| 98 62 01 | 073956 | 180 | A 1000 V 🎪 🚅 🥅 আ∭ | 120 |

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 either and they are fully spark-free. They are also excellent for use in chemically aggressive environments.

| Snipe N | lose Pliers | of plastic |
|------------|--------------|------------|
| insulating | | |
| IEC 60900 | DIN EN 60900 | ASTM F1505 |

> fully insulating to reduce risk of short circuit

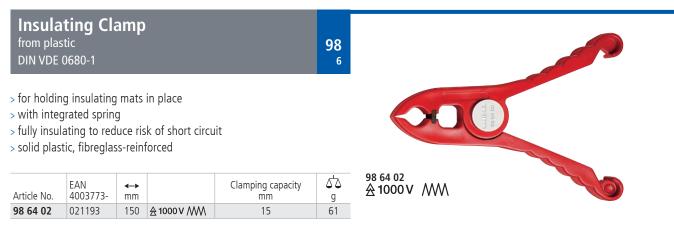
- > class C; range of use up to -40°C
- > plastic material, fibreglass-reinforced
- > handles with soft plastic zone for better grip



98 62 02 ≙ 1000 V ≧€ ⊖ □□□



| | EAN | - | | 5 |
|-------------|----------|----------|-------------------|-----|
| Article No. | 4003773- | mm | | g |
| 98 62 02 | 073963 | 220 | £ 1000 V 🖄 💕 🕀 আ∭ | 130 |



| 80 | <u></u> £ 1000 V | 2 | 8 | | |
|------------------|------------------|-------------------|-----------------------|----------------------|--|
| 80 | | 3 | 8 | | |
| | | | | | |
| g Sli | ip-On (| Caps | 98 6 | | |
| le end | S | | | | |
| ∢ ► mm | | Inside dia. mm | ۵ ^۲ ۵ g | 98 65 30 会 1000 V | |
| 80 | | 10 | 9 | | |
| 100 | <u></u> £ 1000 V | 20 | 39 | | |
| | | | | | |

Conductor key

1

30

Electricians' Gloves

Plastic Slip-On Caps

EAN

4003773-

021209

021216

021223

Self-Clamping DIN VDE 0680-1

> to cover bare live cable

EAN

4003773-

021230

021247

021261

> to cover bare live cable ends (max. 10 mm dia.)

∢—▶

mm

80

DIN VDE 0680-1

> Plastic

Article No.

98 65 01

98 65 02

98 65 03

> Plastic

Article No.

98 65 10

98 65 20

98 65 30

> for added protection when working live or close to live parts
 > classification: 0

110

| Article No. | EAN 4003773- | | Size | ۵'۵ g | |
|-------------|-----------------|------------------|------|----------|----------|
| 98 65 40 | 021285 | | 9 | 290 | |
| 98 65 41 | 021292 | <u></u> ★ 1000 V | 10 | 288 | 98 65 40 |
| 98 65 42 | 077862 | | 11 | 290 | 会 1000 V |

Insulating Mats from rubber IEC 61112 DIN EN 61112

Stand Mats

> for added protection when working live or close to live parts

| Article No. | EAN 4003773- | | Dimensions mm | Thickness mm | ۵'۵ g |
|-------------|-----------------|--------------|------------------|-----------------|----------|
| 98 67 05 | 026600 | A 10001/ @ - | 500 x 500 | 1.0 | 301 |
| 98 67 10 | 026617 | <u> </u> | 1,000 x 1,000 | 1.0 | 1200 |
| 98 67 15 | 077831 | | 10,000 x 1,000 | 1.0 | 12000 |

from rubber IEC 61112 DIN EN 61112

> for site insulation when working live or close to live parts

| Article No. | EAN 4003773- | | Dimensions mm | Thickness mm | ۵'۵ g |
|-------------|-----------------|------------|------------------|-----------------|----------|
| 98 67 20 | 077848 | | 1,000 x 1,000 | 4.0 | 4700 |
| 98 67 25 | 077855 | ≙1000V @ € | 10,000 x 1,000 | 4.0 | 40000 |



98 65 03 ☆ 1000 V

98

52

g

7

52

98

98

98

6

6





PUK[®] Junior Hacksaw IEC 60900 DIN EN 60900

> saw blade for metal and wood with 25 teeth per inch, exchangeable

98 90

| Article No. | EAN 4003773- | ∢— ► mm | | Saw blade length mm | ۲۵ g |
|-------------|-----------------|-------------------|------------------|------------------------|---------|
| 98 90 | 028321 | 240 | <u></u> £ 1000 V | 150 | 174 |



PUK[®] is a registered trade mark of Josef Haunstetter Sägenfabrik KG

Compact Tool Case

| 17 parts with insulated tools for works on electrical installations | 98 |
|--|----|
| IEC 60900 DIN EN 60900 | 9 |

- > shock-resistant plastic case
- > equipped with a range of insulated KNIPEX tools for works on electrical installations
- > foam inserts with recesses for the tools
- > fixable partition wall
- > dimensions, exterior (W x H x D): 360 x 110 x 310 mm



98 99 11 ☆ 1000 V

| Article No. | EAN 4003773- | | | | Quantity | ۵'۵ g |
|-------------|-----------------|-------------------------|------------|--|----------|----------|
| 98 99 11 | 026624 | | Compact To | ol Case 17 parts | | 3675 |
| | | 🛧 1000 V 🖄 🖨 💷 🕨 💙 | 03 07 200 | Combination Pliers | 1 | |
| | | | 70 07 160 | Diagonal Cutter | 1 | |
| | | | 98 20 35 | | 1 | |
| | | 🛧 1000 V 🖄 😭 🖨 | 98 20 40 | Screwdrivers for slotted screws | 1 | |
| | | | 98 20 55 | | 1 | |
| | | 🛧 1000 V 🖄 😭 🗘 | 98 24 00 | Screwdriver for cross recessed screws, Phillips® | 1 | |
| | | <u> </u> | 98 42 | Reversible Ratchet, with driving square 1/2" | 1 | |
| | | ☆ 1000 V 1⁄2 1⁄2 | 98 45 125 | Extension Bar, with internal/external square 1/2" | 1 | |
| | | | 98 45 250 | | 1 | |
| | | | 98 47 10 | | 1 | |
| | | | 98 47 11 | | 1 | |
| | | _ | 98 47 12 | | 1 | |
| | | <u></u> £ 1000 V 🔿 🕼 | 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 | |
| | | <u></u> £ 1000 V @ € | 98 52 | Cable Knife | 1 | |

00 20

- > high quality, versatile, shock-resistant plastic case
- > foam insert with honeycomb structure for variable equipment
- > dimensions, exterior (H x W x D): 65 x 327 x 275 mmm

00 20 15

all pliers VDE tested according to DIN EN/IEC 60900 1000V, pliers finish 6

00 21 15 LE without tools



00 20 15 <u>∧</u> 1000 V ▲

| Article No. | EAN 4003773- | | | | Quantity | ۵ ^۲ ۵ g |
|-------------|-----------------|--------------------|--------------|--------------------------------|----------|-----------------------|
| 00 20 15 | 024804 | | Compact-Box | k 4 parts | | 1430 |
| | | 1000 V @ 🚰 💷 🚺 🕨 🗨 | 03 06 180 | Combination Pliers | 1 | |
| | | £ 1000 V @ € MM | 11 06 160 | Wire Stripper | 1 | |
| | | | 26 16 200 | Snipe Nose Side Cutting Pliers | 1 | |
| | | £ 1000 V @ 🚰 🗲 | 70 06 160 | Diagonal Cutter | 1 | |
| 00 21 15 LE | 045175 | | Tool Box emp | oty | | 530 |

00 21

| Tool-Box | |
|---------------------------------------|--|
| 7 parts for electrical contractors | |
| for electrical contractors | |

> high quality, versatile, shock-resistant plastic case

- > foam insert with honeycomb structure for variable equipment
- > dimensions, exterior (H x W x D): 65 x 327 x 275 mm

00 21 15

all pliers and screwdrivers except Water Pump Pliers VDE tested according to DIN EN/IEC 60900

00 21 15 LE without tools



00 21 15

| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۲ <mark>۵</mark> |
|-------------|-----------------|---------------------|---------------|---|--------|----------|-----------------------|------------------|
| 00 21 15 | 042853 | | Tool Box 7 pa | arts | | | | 1520 |
| | | 🛧 1000 V 🖄 🚭 💷 🚺 💌 | 03 06 180 | Combination Pliers | | 1 | 180 mm | |
| | | £ 1000 V @ € ⊖ ==== | 26 16 200 | Snipe Nose Side Cutting Pliers | Knipex | 1 | 200 mm | |
| | | 🛧 1000 V 🖄 🚭 💌 🗨 | 70 06 160 | Diagonal Cutter | 1 | 1 | 160 mm | |
| | | | 88 03 180 | KNIPEX Alligator® | | 1 | 180 mm | |
| | | ♠ 1000 V ● | 006100 | Screwdrivers for slotted screws, 160i | | 1 | 0.4 x 2.5 x 80 mm | |
| | | | 006115 | Sciewalivers for slotted sciews, 1001 | Wera | 1 | 0.8 x 4.0 x 100 mm | |
| | | A 1000 V 🖄 🚭 🗘 | 006152 | Screwdrivers for cross recessed Phillips® screws, 162i PH | | 1 | PH1 x 80 mm | |
| 00 21 15 LE | 045175 | | Tool-Box emp | oty | | | | 530 |



98 99 12 ☆ 1000 V

| Article No. | EAN 4003773- | | | | Quantity | ۲ g |
|-------------|-----------------|---------------------------|-------------|--|----------|--------|
| 98 99 12 | 026631 | | Standard To | ool Case 26 parts | | 5533 |
| | | 🛧 1000 V 🖄 🖨 🏧 🕨 🕈 | 03 07 200 | Combination Pliers | 1 | |
| | | 🛧 1000 V 🖄 🚅 🕨 ◄ | 70 07 160 | Diagonal Cutter | 1 | |
| | | | 98 00 10 | | 1 | |
| | | | 98 00 11 | | 1 | |
| | | | 98 00 12 | | 1 | |
| | | <u></u> £ 1000 V ○ | 98 00 13 | Open End Wrench | 1 | |
| | | | 98 00 14 | | 1 | |
| | | | 98 00 17 | | 1 | |
| | | | 98 00 19 | | 1 | |
| | | <u> </u> | 98 53 03 | Dismantling Knife for round cables | 1 | |
| | | | 98 20 25 | | 1 | |
| | | | 98 20 35 | Screwdrivers for slotted screws | 1 | |
| | | | 98 20 40 | | 1 | |
| | | | 98 20 55 | | 1 | |
| | | | 98 24 00 | | 1 | |
| | | 🛧 1000 V 🖄 😭 🗘 | 98 24 01 | Screwdriver for cross recessed screws, Phillips® | 1 | |
| | | | 98 24 02 | | 1 | |
| | | <u> </u> | 98 40 | T-Handle Drive, with driving square 1/2" | 1 | |
| | | | 98 47 10 | | 1 | |
| | | | 98 47 11 | | 1 | |
| | | | 98 47 12 | | 1 | |
| | | ≙ 1000 V () (2) | 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 | |
| | | <u> </u> | 98 52 | Cable Knife | 1 | |

Tool Roll 15 parts with insulated tools for works on electrical installations IEC 60900 DIN EN 60900

98

- > tool roll made of hard-wearing polyester fabric
- with practical, adjustable quick release fastener
 equipped with a range of insulated KNIPEX tools for works on electrical installations



98 99 13 ☆1000 V

| Article No. | EAN 4003773- | | | | Quantity | ۲۵ g |
|-------------|-----------------|-------------------------|--------------|---|----------|---------|
| 98 99 13 | 026648 | | Tool Roll 15 | parts | | 2455 |
| | | 🛧 1000 V 🖄 💕 💷 🕅 🕨 🕇 | 03 07 200 | Combination Pliers | 1 | |
| | | <u> </u> | 11 07 160 | Insulation Stripper | 1 | |
| | | A 1000 V A P → 1000 V | 26 17 200 | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers) | 1 | |
| | | 🛧 1000 V 🖄 🚰 🗲 🕇 | 70 07 160 | Diagonal Cutter | 1 | |
| | | 🛧 1000 V 🖄 😭 🔁 🖺 🕤 | 95 17 200 | Cable Shears, with twin cutting edge | 1 | |
| | | | 98 00 10 | | 1 | |
| | | | 98 00 13 | | 1 | |
| | | <u></u> 1000 V ○ | 98 00 14 | Open End Wrench | 1 | |
| | | | 98 00 17 | | 1 | |
| | | | 98 00 19 | | 1 | |
| | | | 98 20 25 | | 1 | |
| | | A 1000)/ @ 🛋 🖱 | 98 20 40 | Screwdrivers for slotted screws | 1 | |
| | 1000 V @€ ● | | 98 20 55 | Screwarivers for slotted screws | 1 | |
| | | | 98 20 65 | | 1 | |
| | | <u> </u> | 98 52 | Cable Knife | 1 | |

Universal Tool Case

48 parts with insulated tools for works on electrical installations IEC 60900 DIN EN 60900

98 9

98 99 14

- > hard-wearing case made of ABS material, red; containing a range of KNIPEX tools for works on electrical installations, tested according to DIN EN/IEC 60900, as well as insulating mats, clamps and gloves for added protection
- > sturdy aluminium frame with D-shape rings for belt and fix, sturdy centre board with multi-purpose push-in facilities by elastic loops and 12 small pockets
- > comfortable handle and mounting device for a "Trolley" embedded in the bottom (available ordering ref. 00 21 40 T)
- > metal hinges
- > 30 kg maximum load
- > can be opened on one or both sides; bottom tray and cover can be opened independently
- > stands stable 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 two flip-locks for fixation of the cover
- > removable document compartment and removable tool board, with 13 push-in compartments on one side
- > two flip-locks to fix the bottom

- > base tray, height 58 mm, can be subdivided by flexible inserts; cover plate with six large push-in compartments, can be fixed by popper
- > dimensions, external (H x W x D): 255 x 490 x 410 mm dimensions, internal (H x W x D) : (105 + 105) x 445 x 350 mm

00 21 40 T

- > telescopic handle for rolling transport of tool case
- > applicable for cases: 00 21 40 LE Tool Case "BIG Twin", 98 99 14 Universal Tool Case
- > height adjustable handle with catch
- > integrated mechanism for fixation to the case, for rapid assembly and removal
- > with two smooth running rolls
- > dimensions: 60 x 245 x 400 (1.000) mm (extended)

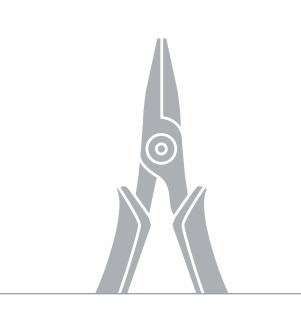




| Article No. | EAN 4003773- | | | | Quantity | ۵'۵ g |
|---------------------------|-----------------|-----------------------------|----------------------|--|----------|--------------|
| 98 99 14 | 026655 | Universal Tool Case 48 part | s | | | 16250 |
| | | | 03 07 200 | Combination Pliers | 1 | |
| | | <u> </u> | 11 17 160 | Insulation Stripper | 1 | |
| | | A 1000 V 🖄 🚰 ► 🗨 | 70 07 160 | Diagonal Cutter | 1 | |
| | | £1000 V @€ আ∭ ⊆ | 88 07 250 | KNIPEX Alligator [®] , Water Pump Pliers | 1 | |
| | | 🛧 1000 V 🖄 🚭 🛠 🖺 🕻 | 95 17 200 | Cable Shears, with twin cutting edge | 1 | |
| | | | 98 00 10 | | 1 | |
| | | | 98 00 13 | | 1 | |
| | | _ | 98 00 14 | Open End Wrench | 1 | |
| | | | 98 00 17 | | 1 | |
| | | | 98 00 19 | | 1 | |
| | | A 1000 V O | 98 00 22 | | 1 | |
| | | | 98 01 10 | | 1 | |
| | | _ | 98 01 13 | | 1 | |
| | | _ | 98 01 14 | Box Wrench | 1 | |
| | | | 98 01 17 | | 1 | |
| | | | 98 01 19 | _ | 1 | |
| | | | 98 01 22 | | 1 | |
| | | <u>A</u> 1000 V @ € | 98 67 05 | Insulating Mat, from rubber | 3 | |
| | | £ 1000 V @€ ● | 98 20 25 | Screwdrivers for slotted screws | 1 | |
| | | | 98 20 40 | | 1 | |
| | | | 98 20 55 | | 1 | |
| | | | 98 20 65 | | 1 | |
| | | A 1000 V 🖄 💕 🗘 | 98 24 01 | Screwdriver for cross recessed screws, Phillips® | 1 | |
| | | | 98 24 02 | | 1 | |
| | | 会 1000 V 1/2 | 98 40 | T-Handle Drive, with driving square 1/2" | 1 | |
| | | A 1000 V 1∕2 | 98 42 | Reversible Ratchet, with driving square 1/2" | 1 | |
| | | A 1000 V 1⁄2 1⁄2 | 98 45 125 | Extension Bar, with internal/external square 1/2" | 1 | |
| | | | 98 45 250 | | 1 | |
| | | _ | 98 47 10 | _ | 1 | |
| | | _ | 98 47 11 | _ | 1 | |
| | | _ | 98 47 12 | _ | 1 | |
| | | | 98 47 13 | | 1 | |
| | | A 1000 V 🔿 🕲 | 98 47 14 | Hexagon Socket for hexagonal screws, with internal square 1/2" | 1 | |
| | | | 98 47 17 | | 1 | |
| | | | 98 47 19 | | 1 | _ |
| | | _ | 98 47 22 | | 1 | |
| | | | 98 47 24 98 52 | Cable Knife | 1 | _ |
| | | ☆ 1000 V 🆄 😭 | 98 52 98 53 03 | Dismantling Knife for round cables | 1 | |
| | | | | | | |
| | | 읍1000 V MM ☆1000 V | 98 64 02 98 65 40 | Insulating Clamp, from plastic Electricians' Gloves | 6 | |
| 00 00 14 15 | 060702 | Z 1000 V | | lectricians Gioves lol Case empty | 1 | 0725 |
| 98 99 14 LE 00 21 40 T | 062981 | | | ol Case empty Illing case transport | | 8235 1200 |

Electronics Pliers and Precision Tweezers

| Electronic <i>Super Knips</i> ® / ESD | 234 |
|---|-----|
| Precision Electronics Diagonal Cutters / ESD | 236 |
| Electronics Diagonal Cutters / ESD | 238 |
| Electronics Diagonal Cutters with carbide metal cutting edges | 241 |
| Electronics End Cutting Nippers / ESD | 242 |
| Electronics Oblique Cutting Nipper | 243 |
| Precision Electronics Gripping Pliers / ESD | 244 |
| - with precision laser cut cross-shaping | 244 |
| Electronics Pliers / ESD | 245 |
| Electronics Mounting Pliers | 247 |
| Electronics Pliers Sets | 248 |
| Precision Tweezers | 249 |
| | |



Electronic Super Knips® DIN ISO 9654

78

- > precision pliers for ultra fine cutting work,
- e. g. in electronics and fine mechanics
- > ground, very sharp cutting edges without bevel
- > precision shaped tips cut wires resting on a board from 0.2 mm dia.
- > joint with stainless steel rivet
- > cutting edges additionally induction hardened
- > extremely smooth movement for minimum operator fatigue
- > with opening spring and opening limiter
- > in INOX or special tool steel

78 03 125/ESD / 78 23 125

INOX - stainless steel; cutting edge hardness approx. 54 HRC

78 13 125/ESD

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

78 31 125

cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC; with narrow head; special tool steel, polished

78 41 125

cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC; with narrow head; with lead catcher – no uncontrolled loss of cut wire ends; special tool steel, polished

78 61 125/ESD

cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC; also suitable for cutting glass fibre cables (fibre optics)

78 71 125/ESD

special tool steel, polished; with lead catcher – no uncontrolled loss of cut wire ends; cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC





Models also for hard wire

78 81 125

precision ground cutting edges with very small bevel suitable also for hard wire; special tool steel, polished; cutting-edge hardness approx. 64 HRC

78 91 125

precision ground cutting edges with very small bevel suitable also for hard wire; with lead catcher – no uncontrolled loss of cut wire ends; special tool steel, polished; cutting edges additionally induction hardened, cutting edge hardness approx. 64 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









 $MM \gg$

78 71 125



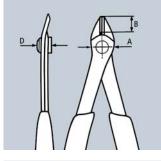


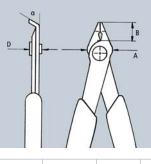












| | | | | | | | Cut | ting capac | ities | D | imensior | IS | |
|---------------|-----------------|------------------|---|-----------|----------|-------------------------------|-----------|------------|-------|---------|----------|---------|----------|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Ø mm | 0 Ømm | Ø mm | B mm | A mm | D mm | ۵'ک g |
| 78 03 125 | 035381 | 125 | x8x 🗾 XXX | | polished | with multi-component grips | 0.2 - 1.6 | 1.0 | | 9.0 | 13.5 | 7.5 | 56 |
| 78 03 125 ESD | 025146 | 125 | 🛦 🕸 🖊 MM | | polished | with multi-component grips | 0.2 - 1.6 | 1.0 | | 9.0 | 13.5 | 7.5 | 55 |
| 78 13 125 | 035398 | 125 | × MM >> | | polished | with multi-component grips | 0.2 - 1.6 | 1.0 | | 9.0 | 13.5 | 7.5 | 57 |
| 78 13 125 ESD | 025153 | 125 | 🛦 🕸 🔼 MM >> | | polished | with multi-component grips | 0.2 - 1.6 | 1.0 | | 9.0 | 13.5 | 7.5 | 57 |
| 78 23 125 | 043096 | 125 | x\$8 <u>∡6</u> 0° / | | polished | with multi-component grips | 0.2 - 1.0 | 0.6 | | 5.5 | 13.5 | 7.5 | 55 |
| 78 31 125 | 039778 | 125 | × 🔨 🕅 | burnished | polished | with multi-component grips | 0.2 - 1.0 | | | 9.0 | 12.5 | 7.5 | 55 |
| 78 41 125 | 040767 | 125 | & /// / | burnished | polished | with multi-component grips | 0.2 - 1.0 | | | 9.0 | 12.5 | 7.5 | 57 |
| 78 61 125 | 035404 | 125 | × 🔨 🕅 | burnished | polished | with multi-component grips | 0.2 - 1.6 | 1.2 | | 9.0 | 13.5 | 7.5 | 56 |
| 78 61 125 ESD | 025184 | 125 | A 🔊 🕸 🖊 🔊 | burnished | polished | with multi-component grips | 0.2 - 1.6 | 1.2 | | 9.0 | 13.5 | 7.5 | 56 |
| 78 71 125 | 043799 | 125 | & MM >> | burnished | polished | with multi-component grips | 0.2 - 1.6 | 1.2 | | 9.0 | 13.5 | 7.5 | 57 |
| 78 71 125 ESD | 025191 | 125 | 🛦 🕸 🔼 MM >> | burnished | polished | with multi-component grips | 0.2 - 1.6 | 1.2 | | 9.0 | 13.5 | 7.5 | 57 |
| 78 81 125 | 065074 | 125 | X88 🔽 XVVV | burnished | polished | with multi-component grips | 0.2 - 1.6 | 1.2 | 0.6 | 9.0 | 13.5 | 7.5 | 57 |
| 78 91 125 | 065081 | 125 | & /// / | burnished | polished | with multi-component grips | 0.2 - 1.6 | 1.2 | 0.6 | 9.0 | 13.5 | 7.5 | 57 |

Precision Electronics Diagonal Cutters DIN ISO 5746

- > precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- > very precisely ground and sharp cutting edges with very small bevels for exact cutting on delicate electronic components; also available without bevel for flush cutting
- > cutting edges additionally induction hardened, 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
- > smooth-running double spring for a gentle and even opening
- > ergonomically optimised multi- component handles
- > Chrome vanadium ball-bearing steel, forged, multi stage oil-hardened

Cut with

79 42 125

(without bevel)

79 02 120

mini-head

79 02 125 round head

79 12 125

specially for cutting through hard wire and piano wire

79 32 125 pointed head

79 42 125 Z for an optimised flush cutting result of soft materials

79 52 125

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



79

79 02 120

79 02 125

88 🗾

88 🗾

Cut with 79 42 125 Z (flush cut)





79 02 120

Cu/hard max. Ø 0,2-1,4/max. 0,6mm



NM 🛃 📕







The subtle difference

KNIPEX precision electronics pliers are made of high-guality 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.

🔰 flush cut cutting edges without bevel

cutting edges with very small bevel

| | | | | | | | | Cutting o | apacities | | D | mensio | ns | |
|-------------|-----------------|------------------|--|-----------|----------|-------------------------------|-----------|-----------|-----------|------|---------|---------|---------|---------|
| Article No. | EAN 4003773- | ∢ ► mm | | Pliers | Head | Handles | Ø mm | 0 Ømm | Ø mm | Ø mm | B mm | A mm | D mm | ۲۵ g |
| 79 02 120 | 061403 | 120 | * ~~E WM | burnished | polished | with multi-component grips | 0.2 - 1.4 | 1.0 | 0.6 | | 6.5 | 9.0 | 6.5 | 57 |
| 79 02 125 | 061281 | 125 | * ~~** | burnished | polished | with multi-component grips | 0.2 - 1.7 | 1.3 | 0.7 | | 10.0 | 11.0 | 6.5 | 59 |
| 79 12 125 | 071365 | 125 | ** ~ ~ £ 3 /W/ | burnished | polished | with multi-component grips | 0.3 - 1.7 | 1.3 | 1.0 | 0.6 | 10.0 | 11.0 | 6.5 | 59 |
| 79 22 120 | 061427 | 120 | * * * * * * * * * * * * * * * * * * * | burnished | polished | with multi-component grips | 0.1 - 1.3 | 0.8 | | | 6.5 | 9.0 | 6.5 | 56 |
| 79 22 125 | 061342 | 125 | XX 🗾 🚺 XX | burnished | polished | with multi-component grips | 0.1 - 1.7 | 1.0 | | | 10.0 | 11.0 | 6.5 | 60 |
| 79 32 125 | 061366 | 125 | * * * * * * * * * * * * * * * * * * * | burnished | polished | with multi-component grips | 0.2 - 1.5 | 1.1 | 0.6 | | 11.0 | 11.0 | 6.5 | 58 |
| 79 42 125 | 061380 | 125 | * * * * * * * * * * * | burnished | polished | with multi-component grips | 0.1 - 1.5 | 0.8 | | | 11.0 | 11.0 | 6.5 | 58 |
| 79 42 125 Z | 078449 | 125 | * * * * * * * * * * * * * * * * * * * | burnished | polished | with multi-component grips | 0.1 - 1.3 | | | | 11.0 | 11.0 | 6.5 | 58 |
| 79 52 125 | 065135 | 125 | * ~ 13 M> | burnished | polished | with multi-component grips | 0.2 - 1.3 | 0.9 | 0.5 | | 11.0 | 11.0 | 6.5 | 58 |
| 79 62 125 | 065142 | 125 | * / \]\$/\/> | burnished | polished | with multi-component grips | 0.1 - 1.3 | 0.8 | | | 11.0 | 11.0 | 6.5 | 58 |

79 02 120 ESD

Cu/hard max. Ø 0,2-1,4/max

Precision Electronics Diagonal Cutters ESD DIN ISO 9654

Electrically discharging handles – dissipative

779 02 120 ESD mini-head

79 02 125 ESD round head

79 12 125 ESD specially 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 42 125 Z ESD for an optimised flush cutting result of soft materials 79

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



NM 🛃 🔽

79 02 120 ESD

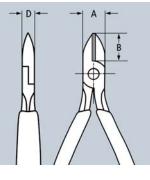
🔬 🕸 🚩

🛦 🕸 🏹 🛒 MM



0





79 22 125 ESD

MM 🛃 📕

79 42 125 ESD

🛦 🕸 🚩





79 42 125 Z 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 c | apacities | | Di | mensio | ns | |
|-----------------|-----------------|------------------|-----------------------|-----------|----------|-------------------------------|-----------|-----------|-----------|-----|---------|--------|---------|---------|
| Article No. | EAN 4003773- | ∢ → mm | | Pliers | Head | Handles | Ømm | Ømm | Ø mm | Ømm | B mm | A | D mm | ۲۵ g |
| 79 02 120 ESD | 061595 | 120 | 🕰 🕸 🏲 📲 🕅 | burnished | polished | with multi-component grips | 0.2 - 1.4 | 1.0 | 0.6 | | 6.5 | 9.0 | 6.5 | 60 |
| 79 02 125 ESD | 061519 | 125 | a 🕸 🖍 🏲 🗲 🕷 🔊 | burnished | polished | with multi-component grips | 0.2 - 1.7 | 1.3 | 0.7 | | 10.0 | 11.0 | 6.5 | 61 |
| 79 12 125 ESD | 071389 | 125 | MM 23 🖍 🔊 | burnished | polished | with multi-component grips | 0.3 - 1.7 | 1.3 | 1.0 | 0.6 | 10.0 | 11.0 | 6.5 | 61 |
| 79 22 120 ESD | 061618 | 120 | 🛦 🕸 🖍 💽 MM | burnished | polished | with multi-component grips | 0.1 - 1.3 | 0.8 | | | 6.5 | 9.0 | 6.5 | 61 |
| 79 22 125 ESD | 061533 | 125 | 🛦 🕸 🎮 📷 MM | burnished | polished | with multi-component grips | 0.1 - 1.7 | 1.0 | | | 10.0 | 11.0 | 6.5 | 61 |
| 79 32 125 ESD | 061557 | 125 | MM 23 🖍 🔊 | burnished | polished | with multi-component grips | 0.2 - 1.5 | 1.1 | 0.6 | | 10.5 | 11.0 | 6.5 | 61 |
| 79 42 125 ESD | 061571 | 125 | 🛦 🕸 🏲 🍡 🔛 MM | burnished | polished | with multi-component grips | 0.1 - 1.5 | 0.8 | | | 10.5 | 11.0 | 6.5 | 58 |
| 79 42 125 Z ESD | 078456 | 125 | 🛦 🕸 🎮 🖭 MM | burnished | polished | with multi-component grips | 0.1 - 1.3 | | | | 11.0 | 11.0 | 6.5 | 58 |
| 79 52 125 ESD | 065159 | 125 | « M Z M > | burnished | polished | with multi-component grips | 0.2 - 1.3 | 0.9 | 0.5 | | 11.0 | 11.0 | 6.5 | 58 |
| 79 62 125 ESD | 065166 | 125 | ▲ * / 1 I M >> | burnished | polished | with multi-component grips | 0.1 - 1.3 | 0.8 | | | 11.0 | 11.0 | 6.5 | 58 |

Electronics Diagonal Cutters DIN ISO 9654

- > bolted joint for high precision and stress tolerance
- > for ultra fine cutting work, e.g. in electronics and fine mechanics
- > with sharp, ground cutting edges for soft and hard wire and piano wire
- > cutting edges additionally induction hardened,
- 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

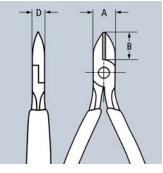
with small bevel

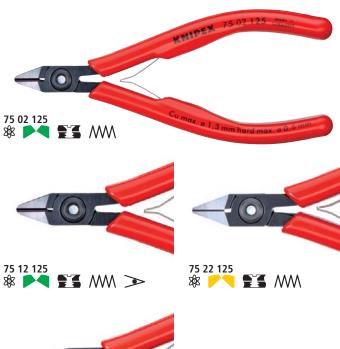
Style 5

particularly narrow head, with bevel



Bolted joint







| | | | | | | | Ci | utting car | oacities | | D | imensio | ns | |
|-------------|-----------------|------------------|-------------------------|-------|-----------|--------------------|-----------|------------|----------|-----|---------|---------|---------|---------|
| Article No. | EAN 4003773- | ∢ → mm | | Style | Pliers | Handles | Ømm | Ømm | Ømm | Ømm | A mm | B | D mm | ۲۵ g |
| 75 02 125 | | | * * 1 5 5 1 1 | 0 | burnished | with plastic grips | 0.2 - 1.3 | 1.0 | 0.6 | 0.4 | 10.5 | 14.0 | 6.5 | 81 |
| 75 12 125 | 040514 | 125 | ▶٩≌ℑ₩Ѡ≫ | 1 | burnished | with plastic grips | 0.2 - 1.3 | 1.0 | 0.6 | 0.4 | 10.5 | 14.0 | 6.5 | 80 |
| 75 22 125 | 040538 | 125 | 88 📂 🤜 📲 🖊 MM | 2 | burnished | with plastic grips | 0.2 - 1.3 | 0.9 | 0.4 | 0.3 | 10.5 | 14.0 | 6.5 | 79 |
| 75 52 125 | 040576 | 125 | * > 1 5 5 1 1 | 5 | burnished | with plastic grips | 0.2 - 0.8 | 0.5 | 0.3 | | 10.5 | 14.0 | 6.5 | 79 |

Electronics Diagonal Cutters DIN ISO 9654

77

- > for fine cutting work, e.g. in electronics and fine mechanics
- > sturdy, zero-backlash box joint
- > low-friction double spring for gentle and even opening
- > the polish or mirror polish (only finish 2) together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened

77 01 115 / 77 02 130 round head, with bevel

77 32 115 pointed head, with small bevel

77 52 115

77 72 115

77 02 115 / 77 22 130 round head, with small bevel

77 42 115 / 77 42 130 pointed head, without bevel; cutting edge

pointed, flat head, with small bevel; cutting edge hardness approx. 57 HRC

pointed mini-head, with small bevel

hardness approx. 57 HRC

77 11 115 / 77 12 115 round head, with bevel and lead catcher – no uncontrolled loss of cut wire ends

77 21 115 pointed head, without bevel

77 21 130 round head, without bevel

77 22 115

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

















| | | | | | | Cutt | ing capac | ities | D | imensio | าร | |
|-------------|----------|------------|---|-----------------|----------------------------|-----------|-----------|-------|------|---------|-----|-----|
| A .1 1 AL | EAN | ∢ → | | | | | | | В | А | D | 52 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | Ømm | Ømm | mm | mm | mm | g |
| 77 01 115 | 018568 | 115 | * > < < < > < < > < < < < < < < < < < < < | mirror polished | plastic coated | 0.3 - 1.6 | 1.2 | 0.6 | 14.0 | 11.0 | 7.5 | 67 |
| 77 01 130 | 018575 | 130 | | minor polished | | 0.3 - 2.0 | 1.5 | 0.8 | 18.0 | 15.0 | 9.5 | 108 |
| 77 02 115 | 039334 | 115 | * 🗲 🦳 🖾 MM | mirror polished | with multi-component grips | 0.3 - 1.6 | 1.2 | 0.6 | 14.0 | 11.0 | 7.5 | 80 |
| 77 02 130 | 039341 | 130 | ₩ ▶ ◀ ⊆ MM | mirror polished | with multi-component grips | 0.3 - 2.0 | 1.5 | 0.8 | 18.0 | 15.0 | 9.5 | 124 |
| 77 11 115 | 018629 | 115 | ★ M 2 A | mirror polished | plastic coated | 0.3 - 1.6 | 1.2 | 0.6 | 14.0 | 11.0 | 7.5 | 70 |
| 77 12 115 | 043768 | 115 | *► | mirror polished | with multi-component grips | 0.3 - 1.6 | 1.2 | 0.6 | 14.0 | 11.0 | 7.5 | 80 |
| 77 21 115 | 018650 | 115 | * * 1 53 MM | mirror polished | plastic coated | 0.3 - 1.3 | 1.0 | | 14.0 | 11.0 | 7.5 | 64 |
| 77 21 130 | 018667 | 130 | | minor polished | | 0.3 - 1.6 | 1.3 | | 18.0 | 14.0 | 9.5 | 110 |
| 77 22 115 | 043782 | 115 | * /] | mirror polished | with multi-component grips | 0.3 - 1.3 | 1.0 | | 14.0 | 11.0 | 7.0 | 80 |
| 77 22 130 | 040446 | 130 | * / | mirror polished | with multi-component grips | 0.3 - 2.0 | 1.5 | | 18.0 | 15.0 | 9.0 | 124 |
| 77 32 115 | 044307 | 115 | * 🗲 🖂 MM | mirror polished | with multi-component grips | 0.3 - 1.3 | 1.0 | 0.5 | 14.0 | 11.0 | 7.5 | 80 |
| 77 42 115 | 039761 | 115 | * * 🔨 🖂 MM | mirror polished | with multi component gring | 0.3 - 1.3 | 0.8 | | 14.0 | 11.0 | 7.5 | 80 |
| 77 42 130 | 018773 | 130 | ^∞ / ∖ ⊥⊆∖ /۷۷۷\ | minor polisned | with multi-component grips | 0.3 - 1.6 | 1.3 | | 18.0 | 15.0 | 9.5 | 122 |
| 77 52 115 | 040750 | 115 | * - | mirror polished | with multi-component grips | 0.3 - 1.0 | 0.8 | 0.5 | 14.0 | 11.0 | 7.5 | 77 |
| 77 72 115 | 040958 | 115 | * / | mirror polished | with multi-component grips | 0.3 - 0.8 | | | 10.5 | 9.5 | 6.0 | 69 |

Electronics Diagonal Cutters ESD DIN ISO 9654

77

- > for fine cutting work, e.g. 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 together with a fine film of oil offer effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- > with two-colour dual component grips, black/grey
- > High-grade special tool steel, forged, multi stage oil-hardened

77 02 115 ESD round head, with small bevel

77 42 115 ESD pointed head, without bevel

pointed, flat head, with small bevel

pointed mini-head, with small bevel

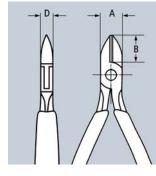
77 52 115 ESD

77 72 115 ESD

77 12 115 ESD round head, with bevel and lead catcher no uncontrolled loss of cut wire ends

77 22 115 ESD round head, without bevel

77 32 115 ESD pointed head, 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















77 32 115 ESD ▲ 왕 ▶ □ □ MM









🍙 🕸 🦰 🖾 MM

| | | | | | | Cut | ting capac | ities | D | imensio | ns | |
|---------------|-----------------|------------------|---------------------|-----------------|-------------------------------|-----------|------------|-------|---------|---------|---------|----------|
| Article No. | EAN 4003773- | ∢ ► mm | | Head | Handles | Ø mm | 0 Ømm | Ø mm | B mm | A mm | D mm | ۵'ک g |
| 77 02 115 ESD | 025092 | 115 | 🛦 🕸 🥕 🖾 MM | mirror polished | with multi-component grips | 0.3 - 1.6 | 1.2 | 0.6 | 14.0 | 11.0 | 7.5 | 82 |
| 77 12 115 ESD | 025108 | 115 | â≉▶٩⊡₩≫ | mirror polished | with multi-component grips | 0.3 - 1.6 | 1.2 | 0.6 | 14.0 | 11.0 | 7.5 | 80 |
| 77 22 115 ESD | 025115 | 115 | 🛦 🕸 🔼 🖂 MM | mirror polished | with multi-component grips | 0.3 - 1.3 | 1.0 | | 14.0 | 11.0 | 7.5 | 80 |
| 77 32 115 ESD | 025122 | 115 | 🛦 🕸 🦰 🖂 MM | mirror polished | with multi-component grips | 0.3 - 1.3 | 1.0 | 0.5 | 14.0 | 11.0 | 7.0 | 79 |
| 77 42 115 ESD | 031901 | 115 | 🛦 🕸 🎮 🖂 MM | mirror polished | with multi-component grips | 0.3 - 1.3 | 0.8 | | 14.0 | 11.0 | 7.0 | 78 |
| 77 52 115 ESD | 025139 | 115 | 🛆 🕸 🦰 🖂 MM | mirror polished | with multi-component grips | 0.3 - 1.0 | 0.8 | 0.5 | 11.5 | 14.0 | 7.0 | 79 |
| 77 72 115 ESD | 024330 | 115 | ▲ * / ⊂ I MM | mirror polished | with multi-component grips | 0.3 - 0.8 | | | 10.5 | 9.5 | 6.0 | 69 |

77 02 120 H

Electronics Diagonal Cutters with inserted carbide metal cutting edges DIN ISO 9654

> for extreme demands on cutting pliers caused by hard or tough materials, e.g. piano, nickel, tungsten and diode wire, such as those used more frequently in the electronics and aerospace industries

77

Н

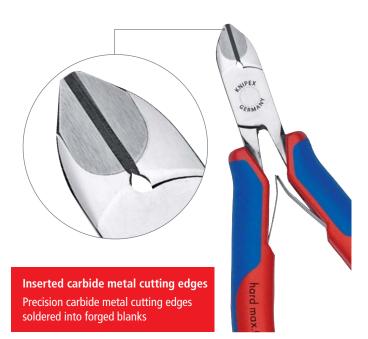
- > always the right cutting tool, even with the hardest material
- > precision carbide metal cutting edges soldered into forged blanks
- > sturdy, zero-backlash box joint
- > hardness of the carbide cutting edges 80 83 HRC
- > pliers with carbide metal cutting edges have a substantially longer service life than such with conventional cutting edges
- > constantly reliable cutting results due to the avoidance of cutter deformations
- > high cost saving due to longer service life of the pliers

77 02 120 H / 77 02 135 H / ESD round head, with bevel

77 32 120 H / ESD pointed head with chamfer, with smal bevel







| | | | | | | | Cutting | capacities | | Di | mensic | ns | |
|-----------------|----------|-----|--------------|-----------------|----------------------|-----------|---------|------------|-----|----|--------|-----|-----|
| | EAN | | | | | \bullet | | | | В | A | D | 5 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | Ømm | Ømm | Ømm | mm | mm | mm | g |
| 77 02 120 H | 075783 | 120 | * 🗖 🖾 MM | mirror polichod | with multi-component | 2.0 | 1.4 | 1.0 | 0.6 | 14 | 11 | 7.5 | 85 |
| 77 02 120 H ESD | 075813 | 120 | MM 🗁 🗲 🕸 🛕 | mirror polished | grips | 2.0 | 1.4 | 1.0 | 0.6 | 14 | 11 | 7.5 | 85 |
| 77 02 135 H | 075806 | 135 | * 🗖 🖾 MM | mirror polished | with multi-component | 2.2 | 1.6 | 1.2 | 0.8 | 18 | 15 | 9.5 | 115 |
| 77 02 135 H ESD | 075837 | 135 | 🛦 🕸 🗲 🖾 MM | minor polisneu | grips | 2.2 | 1.6 | 1.2 | 0.8 | 18 | 15 | 9.5 | 115 |
| 77 32 120 H | 075790 | 120 | * 📂 🦳 🕼 | mirror polished | with multi-component | 1.6 | 1.0 | 0.6 | 0.2 | 14 | 11 | 7.5 | 80 |
| 77 32 120 H ESD | 075820 | 120 | 🛦 🕸 🧲 🥆 🖾 MM | | grips | 1.6 | 1.0 | 0.6 | 0.2 | 14 | 11 | 7 | 80 |

Electronics End Cutting Nippers DIN ISO 5746

64

- > precision pliers for ultra fine cutting work, e. g. in electronics and fine mechanics
- > sturdy, zero backlash box joint
- > low-friction double spring for gentle and even opening
- > the polish or mirror polish (only finish 2) together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > cutting edges additionally induction hardened, cutting edge hardness at least 56 HRC
- > High-grade special tool steel, forged, multi stage oil-hardened

Style 6

Style 7

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, $\alpha = 15^{\circ}$

Style 4 Oblique End Cutter, short head, with small bevel, $\alpha = 27^{\circ}$

Style 5 Oblique End Cutter, short head, without bevel, for flush cutting, $\alpha = 27^{\circ}$



64 12 115 ESD



Oblique End Cutter, mini-blade with small bevel, head with recess, $\alpha = 35^{\circ}$ Style 1 / 64 11 115

End Cutter, without bevel Style 1 / 64 12 115 / ESD

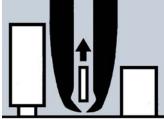
End Cutter, with smal bevel



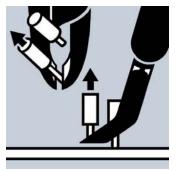


🛦 🕸 🖌 90° 🦰 🗔 MM

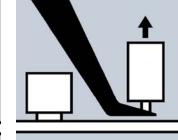




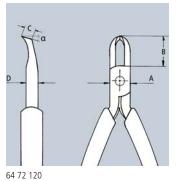
64 22 115



64 72 120



64 62 120



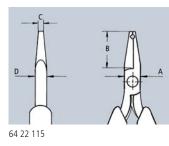


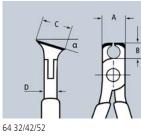


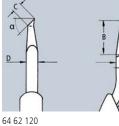


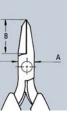


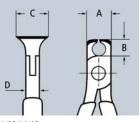












64 01/02/11/12

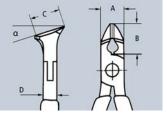
| | | | | | | | Cut | ting capac | ities | | Dimer | nsions | | |
|---------------|-----------------|-------------------|-----------------------------------|-------|-----------------|--------------------------------|------|------------|-------|---------|---------|---------|---------|--------|
| Article No. | EAN 4003773- | ∢— ► mm | | Style | Head | Handles | Ø mm | Ø mm | Ø mm | A mm | B mm | D mm | C mm | ے g |
| 64 01 115 | 017745 | 115 | & <u>⊀90°</u> ► < ⊡ MM | 0 | mirror polished | plastic coated | 2.0 | 1.0 | 0.6 | 11.0 | 6.0 | 7.5 | 16.0 | 76 |
| 64 02 115 | 035343 | 115 | & ∡90° ▶٩ ⊆ WM | 0 | mirror polished | with multi- component grips | 2.0 | 1.0 | 0.6 | 11.0 | 6.0 | 7.5 | 16.0 | 94 |
| 64 11 115 | 017769 | 115 | & <u>∡90°</u> 🔽 KM | 1 | mirror polished | plastic coated | 1.4 | 0.8 | | 11.0 | 6.0 | 7.0 | 16.0 | 74 |
| 64 12 115 | 040743 | 115 | \$\$ £90° 📂 🖂 MM | 1 | mirror polished | with multi- component grips | 2.0 | 0.8 | 0.5 | 11.0 | 6.0 | 7.0 | 16.0 | 91 |
| 64 12 115 ESD | 024323 | 115 | ☎ ॐ∡೨º° ァ ヽ⊑ऽ₩ | 1 | mirror polished | with multi- component grips | 2.0 | 0.8 | 0.5 | 11.0 | 6.0 | 7.0 | 16.0 | 94 |
| 64 22 115 | 017806 | 115 | & <u>∡90° / ⊂</u> MM | 2 | mirror polished | with multi- component grips | 0.8 | | | 10.0 | 20.0 | 6.0 | 3.0 | 65 |
| 64 32 120 | 017820 | 120 | \$% ∡15° 🥕 🖂 MM | 3 | mirror polished | with multi- component grips | 1.5 | 1.0 | 0.5 | 11.0 | 10.0 | 7.0 | 17.0 | 92 |
| 64 32 120 ESD | 025078 | 120 | ``` \$\$ ∡15° ┍ ヽ ⊑``MM | 3 | mirror polished | with multi- component grips | 1.5 | 1.0 | 0.5 | 11.0 | 10.0 | 7.0 | 17.0 | 92 |
| 64 42 115 | 017844 | 115 | \$≹∡27° <mark>/ <</mark> ⊡ MM | 4 | mirror polished | with multi- component grips | 1.5 | 1.0 | 0.5 | 10.5 | 10.0 | 7.0 | 12.0 | 69 |
| 64 52 115 | 040439 | 115 | & ∡27° / ⊡ MM | 5 | mirror polished | with multi- component grips | 1.3 | | | 10.5 | 10.0 | 7.0 | 12.0 | 69 |
| 64 62 120 | 046998 | 120 | \$ x65° / ∖ ⊡ MM | 6 | mirror polished | with multi- component grips | 0.6 | | | 9.5 | 18.5 | 6.0 | 5.0 | 70 |
| 64 62 120 ESD | 025085 | 120 | ▲ ೫ ∡65° ► ٦ ⊑ WM | 6 | mirror polished | with multi- component grips | 0.6 | | | 9.5 | 18.5 | 6.0 | 5.0 | 7(|
| 64 72 120 | 017882 | 120 | \$≹ ∡35° ~ \ ⊑J MM | 7 | mirror polished | with multi- component grips | 1.5 | | | 12.0 | 19.5 | 7.0 | 5.0 | 9! |

62 12

Electronics Oblique Cutting Nipper DIN ISO 9654

- > with cutting edges for soft and medium hard wire without bevel, for flush cutting
- > cutting edges additionally induction hardened, cutting edge hardness approx. 58 HRC
- > low-friction double spring for gentle and even opening
- > sturdy, zero backlash box joint
- > the polish together with a fine film of oil offer effective rust protection — no circuit faults caused by peeling chrome from plated tools
- > High-grade special tool steel, forged, multi stage oil-hardened





| | | | | | | Cutting c | apacities | | Dime | nsions | | |
|-------------|----------|-------------|------------------|----------|----------------------------|-----------|-----------|----|------|--------|----|----|
| | EAN | ∢ —▶ | | | | \bullet | | A | В | D | С | 5 |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | Ømm | mm | mm | mm | mm | g |
| 62 12 120 | 048008 | 120 | \$\$ ∡15° 🖊 🖾 MM | polished | with multi-component grips | 0.3 - 1.0 | 0.7 | 11 | 10 | 7.5 | 17 | 93 |

Precision Electronics Gripping Pliers DIN ISO 9655

- 34
- > for very precise assembly work, e.g. in electronics and fine mechanics
- > for gripping, holding and bending
- > smoothly ground gripping surfaces, edges finely rounded
- > approx. 20% lighter than conventional electronics pliers
- > bolted joint and carefully manufactured joint surfaces for even, low-friction movement throughout the entire opening range
- > smooth-running double spring for a gentle and even opening
- > ergonomically optimised multi-component handles
- > forged from chrome vanadium ball-bearing steel

Style 1 flat, wide jaws

Style 2

half-round jaws

Style 3 round, pointed jaws

Style 4

flat, wide jaws; with precision laser cut cross-shaping

Style 5 half-round jaws; with precision laser cut cross-shaping



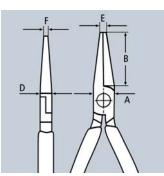








Cross-shaping: precision laser cut for a secure grip in ultra fine mounting work





34 32 130

\$888 ⊂

³⁴ 42 130 ³⁸ ₩ ₩ ₩ ₩ ₩



34 32 130 ESD ▲ 黎 8 🥌 👫 MM



34 42 130 ESD



³⁴ 52 130 ⊖ ∞∞ 🛒 MM

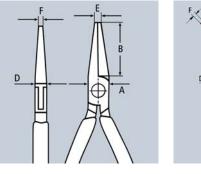


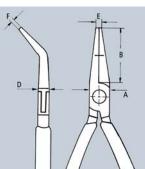
34 52 130 ESD ▲ 黎 ⊖ ⋘ ¶¶ MM

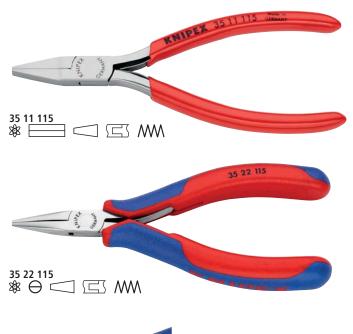
| | | | | | | | | | Di | mensio | ns | | |
|---------------|----------|-------------|--|-------|-------------|-----------|----------------------------|------|------|--------|-----|-----|----|
| | EAN | ∢ →► | | | | | | В | A | D | Е | F | 5 |
| Article No. | 4003773- | mm | | Style | Pliers | Head | Handles | mm | mm | mm | mm | mm | g |
| 34 12 130 | 061458 | 135 | *= | 1 | burnished | polished | with multi-component grips | 21.9 | 11.2 | 6.5 | 1.4 | 3.5 | 61 |
| 34 12 130 ESD | 061632 | 135 | ▲ * == <= * * * * | 1 | Dulliislieu | polisileu | with multi-component grips | 21.9 | 11.2 | 6.5 | 1.4 | 3.5 | 62 |
| 34 22 130 | 061472 | 135 | #0]]] ////////////////////////////////// | 2 | burnished | polished | with multi-component grips | 22.7 | 11.2 | 6.5 | 1.6 | 1.6 | 61 |
| 34 22 130 ESD | 061656 | 135 | ▲*⊖⊂]¶¶M | 2 | bullislieu | polistieu | with multi-component grips | 22.7 | 11.2 | 6.5 | 1.6 | 1.6 | 65 |
| 34 32 130 | 061496 | 135 | \$\$8 - 1 5 MM | 3 | burnished | polished | with multi component wine | 23.7 | 11.2 | 6.5 | 2.0 | 1.0 | 59 |
| 34 32 130 ESD | 061670 | 135 | 🛦 🕸 8 🗂 📰 MM | 3 | burnished | polisned | with multi-component grips | 23.7 | 11.2 | 6.5 | 2.0 | 1.0 | 62 |
| 34 42 130 | 080282 | 135 | 🕸 🔙 🚳 🛐 MM | 4 | humished | nalishad | with multi component aring | 21.9 | 11.2 | 6.5 | 1.4 | 3.5 | 61 |
| 34 42 130 ESD | 080299 | 135 | 🛦 🕸 💳 🚳 🖺 MM | 4 | burnished | polished | with multi-component grips | 21.9 | 11.2 | 6.5 | 1.4 | 3.5 | 61 |
| 34 52 130 | 080312 | 135 | &⊖ ∞ £ 5MM | 5 | humiched | polished | with multi component gring | 22.7 | 11.2 | 6.5 | 1.6 | 1.6 | 61 |
| 34 52 130 ESD | 080305 | 135 | 🛦 🕸 🖯 🐼 🛐 MM | 5 | burnished | polistied | with multi-component grips | 22.7 | 11.2 | 6.5 | 1.6 | 1.6 | 61 |

Electronics Pliers

- > precision pliers for fine assembly work, e g. in electronics and fine mechanics
- > for gripping, holding and bending
- > sturdy, zero backlash box joint
- > smooth ground gripping surfaces
- > edges carefully deburred
- > low-friction double spring for gentle and even opening
- > the polish or mirror polish (only finish 2) together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > Special tool steel, forged, oil-hardened







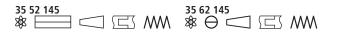




35 32 115 № 8 — ⊑ KM











35 82 145 ❀ ∡45° ⊖ ◯ ⊑ MM

| | | | | | | | Dii | mensio | ns | | |
|-------------|----------|------------|---------------|-----------------|----------------------------|------|------|--------|-----|-----|-----|
| | EAN | ∢ → | | | | В | А | D | Е | F | 52 |
| Article No. | 4003773- | mm | | Head | Handles | mm | mm | mm | mm | mm | g |
| 35 11 115 | 016694 | 115 | | mirror polished | plastic coated | 22.5 | 9.5 | 6.5 | 2.0 | 4.0 | 61 |
| 35 12 115 | 035107 | 115 | *=M | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 4.0 | 72 |
| 35 21 115 | 016724 | 115 | ₩⊖⊂]⊑JMM | mirror polished | plastic coated | 22.5 | 9.5 | 6.5 | 2.0 | 1.5 | 59 |
| 35 22 115 | 035114 | 115 | ₩⊖⊂]⊑/WM | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 1.5 | 73 |
| 35 31 115 | 016762 | 115 | ₩8⊂J⊑JMM | mirror polished | plastic coated | 22.5 | 9.5 | 6.5 | 2.0 | 1.0 | 58 |
| 35 32 115 | 035121 | 115 | ₩8⊂]⊑MM | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 1.0 | 72 |
| 35 42 115 | 040736 | 115 | &≴∡₄₅°⊖⊂∫⊑∖MM | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 1.5 | 74 |
| 35 52 145 | 039389 | 145 | *=M | mirror polished | with multi-component grips | 40.0 | 12.0 | 7.5 | 1.5 | 4.0 | 102 |
| 35 62 145 | 039556 | 145 | ₩0⊂]⊑JMM | mirror polished | with multi-component grips | 40.0 | 12.0 | 7.5 | 2.5 | 1.5 | 103 |
| 35 72 145 | 043607 | 145 | ₩8⊂J⊑JMM | mirror polished | with multi-component grips | 40.0 | 12.0 | 7.5 | 2.5 | 1.3 | 98 |
| 35 82 145 | 039396 | 145 | &≴∡₄₅°⊖⊂⊐⊡™M | mirror polished | with multi-component grips | 35.0 | 12.0 | 7.5 | 2.5 | 1.0 | 102 |

Electronics Pliers ESD DIN ISO 9655

35

35 12 115 ESD

35 22 115 ESD

- the second

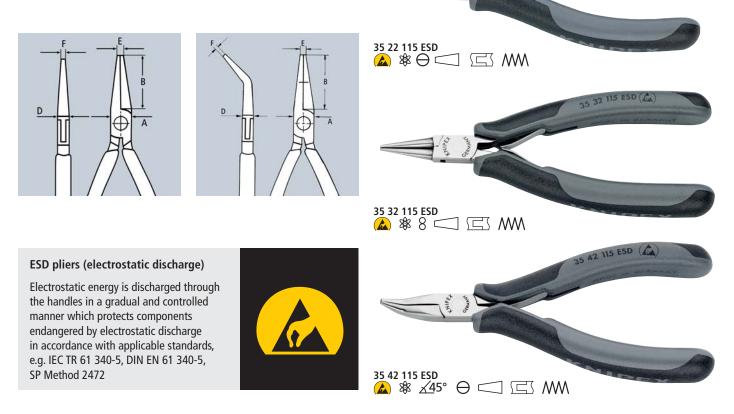
35 12 115 ESD

🛦 🕸 E

(CA)

(La

- > precision pliers for fine assembly work, e g. in electronics and fine mechanics
- > for gripping, holding and bending
- > electrically discharging handles dissipative
- > sturdy, zero backlash box joint
- > smooth ground gripping surfaces
- > edges carefully deburred
- > 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
- > with two-colour dual component grips, black/grey
- > Special tool steel, forged, oil-hardened



| | | | | | | Di | ns | | | | |
|---------------|----------|-------------|--|-----------------|----------------------------|------|-----|-----|-----|-----|----|
| | EAN | ∢ —▶ | | | | В | А | D | E | F | 52 |
| Article No. | 4003773- | mm | | Head | Handles | mm | mm | mm | mm | mm | g |
| 35 12 115 ESD | 024835 | 115 | ▲*== </td <td>mirror polished</td> <td>with multi-component grips</td> <td>22.5</td> <td>9.5</td> <td>6.5</td> <td>2.0</td> <td>4.0</td> <td>74</td> | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 4.0 | 74 |
| 35 22 115 ESD | 024842 | 115 | ▲≉⊖⊂⊐⊑™ | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 1.5 | 74 |
| 35 32 115 ESD | 024859 | 115 | ▲\$8<⊂]⊑™MM | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 1.0 | 70 |
| 35 42 115 ESD | 024866 | 115 | 🋦 ∡₄₅° ⊖ ⊂⊐ 🖾 MM | mirror polished | with multi-component grips | 22.5 | 9.5 | 6.5 | 2.0 | 1.5 | 74 |

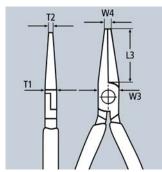
Electronics Mounting Pliers

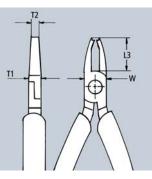
- 36
- > precision pliers for very fine assembly and repair work in electronics
- > for bending and cutting off wire ends on components
- > sturdy, zero backlash box joint smooth ground gripping surfaces edges carefully deburred
- > low-friction double spring for gentle and even opening
- > the mirror polish together with a fine film of oil offer effective rust protection – no circuit faults caused by peeling chrome from plated tools
- > High-grade special tool steel, forged, oil-hardened











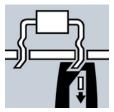


```
36 32 125
 ⊆ MM
```

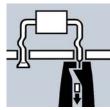
36 12 130 ⊆ MM



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



36 22 125 to bend and cut wire at 1.6 mm length below the board



36 32 125 to crunch and cut wire at 1.6 mm length below the board

| | | | | Cutting capacities | | | | Dimensions | | | | | | |
|-------------|----------|-------------|------------|--------------------|----------------------------|------------|------|------------|-----|-----|-----|-----|--|--|
| | EAN | ∢ —▶ | | | | \bigcirc | L3 | W | T1 | W1 | T2 | 52 | | |
| Article No. | 4003773- | mm | | Head | Handles | Ømm | mm | mm | mm | mm | mm | g | | |
| 36 12 130 | 016861 | 130 | * 5 M | mirror polished | with multi-component grips | | 23.0 | 12.0 | 9.5 | 5.5 | 6.0 | 94 | | |
| 36 22 125 | 046967 | 125 | \$%⊡™ | mirror polished | with multi-component grips | 1.2 | 18.0 | 11.5 | 7.5 | 7.5 | 2.6 | 94 | | |
| 36 32 125 | 016885 | 125 | \$% [⊆] MM | mirror polished | with multi-component grips | 1.0 | 18.0 | 11.5 | 7.5 | 7.5 | 4.0 | 108 | | |

Electronics Pliers Sets

for working on electronic components

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 electronics pliers and 6 electronics screwdrivers, ESD electrically discharging version; practical storage box, shock-resistant plastic, with foam insert



00



00 20 16 P ESD



00 20 17

00 20 16 P



00 20 18 ESD

| | EAN | | 5 |
|----------------|----------|--|-----|
| Article No. | 4003773- | Contents | g |
| 00 20 16 | 022619 | 35 12 115 / 35 22 115 / 35 32 115 / 64 32 120 / 77 02 115 / 77 42 115 / 92 34 36 | 720 |
| 00 20 16 P | 063223 | 34 12 130 / 34 22 130 / 34 32 130 / 79 02 120 / 79 02 120 / 79 02 125 / 79 42 125 | 575 |
| 00 20 16 P ESD | 063230 | 34 12 130 ESD / 34 22 130 ESD / 34 32 130 ESD / 79 02 120 ESD / 79 02 125 ESD / 79 42 125 ESD | 585 |
| 00 20 17 | 031222 | 35 12 115 ESD / 35 22 115 ESD / 35 42 115 ESD / 64 32 120 ESD / 77 02 115 ESD / 77 32 115 ESD | 695 |
| 00 20 18 | 033073 | 35 22 115 / 77 02 115 / screwdrivers 0.4 x 2.5 / 0.5 x 3.0 / 0.6 x 3.5 / 0.8 x 4.0 / PH0 / PH1 | 460 |
| 00 20 18 ESD | 051848 | 35 22 115 ESD / 77 02 115 ESD / screwdrivers 0.4 x 2.5 / 0.5 x 3.0 / 0.6 x 3.5 / 0.8 x 4.0 / PH0 / PH1 | 465 |

PRECISION TWEEZERS

Precision Tweezers

92

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

92 02 53

for SMD-technology^{*}; angled tips, width approx. 1 mm; gripping surfaces matt 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. 1 mm; with integrated profile for reliable gripping of cylindrical components of 0.6 mm dia.; gripping surfaces matt finish for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

92 02 55

gripping jaws 3.5 mm wide, for cylindrical components of 0.8 mm dia.; serrated handles; stainless, anti-magnetic and acid-proof

92 12 52

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



| | EAN | <> | | | 52 |
|-------------|----------|-----|---------------------|--------------------------------------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 02 53 | 054603 | 120 | \$\$ <u>∡4</u> 5° ⊂ | stainless, anti-magnetic | 16 |
| 92 02 54 | 054610 | 120 | \$\$ <u>∡</u> 45° ⊂ | stainless, anti-magnetic | 15 |
| 92 02 55 | 054627 | 115 | \$\$ | stainless, anti-magnetic, acid-proof | 16 |
| 92 12 52 | 054658 | 120 | 8\$ <u>∡</u> 85° ⊂ | stainless, anti-magnetic | 20 |

* SMD-Technology: technique for soldering surface mounted components on printed circuit boards without using holes

| Precision Tweezers pointed shape92> for fine mounting work > straight pattern > smooth gripping surfaces > particularly slim tips | 92 22 04 X | 12 22 04 standards and responds |
|--|-----------------|------------------------------------|
| 92 22 04 non-reflective matt finish; gripping surfaces matt finish for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality 92 22 06 non-reflective matt finish; gripping surfaces matt finish for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality | 92 22 06 X | 92 22 07 8 - |
| 92 22 07 non-reflective matt finish; Chrome nickel steel; stainless, anti-magnetic and acid-proof 92 23 05 Titanium; electrically conductive; lightweight; non-reflective matt finish; stainless, anti-magnetic and acid-proof 92 24 01 Spring steel; mirror finish nickel plated and polished | 92 23 05 8 - | 92 24 01 X |

| Article No. | EAN 4003773- | ∢ ► mm | | Finish | ۲ <mark>۵</mark> |
|-------------|-----------------|------------------|------|--|------------------|
| 92 22 04 | 054665 | 130 | \$8 | stainless, anti-magnetic | 20 |
| 92 22 06 | 054672 | 120 | \$\$ | stainless, anti-magnetic | 15 |
| 92 22 07 | 054689 | 115 | \$8 | stainless, anti-magnetic, acid-proof | 12 |
| 92 23 05 | 054726 | 120 | \$8 | Titanium, anti-magnetic, acid-proof, stainless | 10 |
| 92 24 01 | 054733 | 120 | 88 | nickel plated | 15 |

PRECISION TWEEZERS

| Precision Tweezers needle-pointed shape | 92 | | |
|---|--|-----------------------|---|
| > for ultra fine mounting work > extra fine tips > emoth grinning surfaces | | 92 22 12 88 | 92.22.12 standards and magnetic CMUD |
| > smooth gripping surfaces > stainless, anti-magnetic > non-reflective matt finish | | | |
| 92 22 12 straight pattern | 92 32 29 sickle-shaped tips; Chrome nickel steel: | 92 32 29 \$\$ _45° | 92 34 28 A 45° |
| 92 22 13 American shape, solid; straight pattern; stainless, anti-magnetic and acid-proof | stainless, anti-magnetic (18/10), very popular electronics quality; gripping surfaces matt finish for optimum grip | | |
| | 92 34 28 angled tips | 92 22 13 寒 | |

| | EAN | | | | 5 |
|-------------|----------|-----|--------------------|--------------------------------------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 22 12 | 054696 | 105 | 886 | stainless, anti-magnetic | 13 |
| 92 22 13 | 054702 | 135 | 88 | stainless, anti-magnetic, acid-proof | 21 |
| 92 32 29 | 054818 | 120 | & <u>⊀45°</u> | stainless, anti-magnetic | 16 |
| 92 34 28 | 054825 | 105 | X\$ <u>∡4</u> 5° ⊂ | stainless, anti-magnetic | 12 |

| Precision Tweezers with centering pin pointed shape | | 92 | <i>N</i> | NIS CO |
|--|---|----|----------------------------|---------------------|
| > universally applicable > narrow tips > gripping surfaces with fine trans | verse serration | | 92 22 35 ⁽¹⁾ | 1 |
| > serrated handles 92 22 35 straight pattern; non-reflective matt | 92 34 36 angled tips; nickel plated | | 92 24 34 இβ шЩ∭ | 92 34 36 ∡45° আ∭ |
| finish; stainless, anti-magnetic and acid-proof | 92 34 37 angled tips; black non-reflective | | | |
| 92 24 34 straight pattern; nickel plated | lacquered | | 92 34 37 ℜ ∡45° ∭ | |

| Article No. | EAN 4003773- | ∢ ► mm | | Finish | ۵'۵ g |
|-------------|-----------------|------------------|----------------------|--------------------------------------|----------|
| 92 22 35 | 054719 | 155 | 88 | stainless, anti-magnetic, acid-proof | 22 |
| 92 24 34 | 054740 | 155 | 88 💷 | nickel plated | 21 |
| 92 34 36 | 054832 | 155 | \$\$ <u>∡</u> 45° আ∭ | nickel plated | 23 |
| 92 34 37 | 054849 | 155 | \$ ∡45° আ | black lacquered | 21 |

| Precision Tweezers round slim shape | 92 |
|---|----|
| round tips, approx. 2 mm wide smooth gripping surfaces stainless, anti-magnetic and acid-proof Chrome nickel steel, stainless, anti-magnetic, acid-proof | |

| | EAN | ∢ —▶ | | | 52 |
|-------------|----------|-------------|-----|--------------------------------------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 52 23 | 054894 | 120 | 888 | stainless, anti-magnetic, acid-proof | 17 |

PRECISION TWEEZERS

| Precision Tweezers | 92 | | 940 Oms |
|---|---|-----------------------|-----------------------|
| > universally applicable > straight pattern > wide, round tips | | 92 44 42 AB III | |
| > serrated handles 92 44 42 | 92 70 46 | | |
| jewellers' tweezers; round tips, approx. 2 mm wide; gripping jaws with fine crosswise serration (cross-hatched); nickel plated | round tips, approx. 3.5 mm wide; gripping surfaces with fine transverse serration; black non-reflective lacquered | 92 64 43 இ யா | 92 64 44 இது பாறு |
| 92 64 43 round tips, approx. 3 mm wide; gripping surfaces with fine transverse serration; | 92 72 45 round tips, approx. 3.5 mm wide; serrated gripping surfaces; nonreflective matt finish; stainless, anti-magnetic and | | |
| nickel plated 92 64 44 | acid-proof | 92 70 46 अर्थ व्या | 92 72 45 अर्थ व्या |
| round tips, approx. 3.5 mm wide; gripping surfaces with fine transverse serration; nickel plated | | | |

| | EAN | ∢ → | | | 5 |
|-------------|----------|------------|---------|--------------------------------------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 44 42 | 054887 | 140 | 88 | nickel plated | 21 |
| 92 64 43 | 054917 | 120 | ≫ ==== | nickel plated | 17 |
| 92 64 44 | 054924 | 145 | \$8 | nickel plated | 23 |
| 92 70 46 | 055075 | 145 | \$8 111 | black lacquered | 26 |
| 92 72 45 | 054962 | 145 | \$8 | stainless, anti-magnetic, acid-proof | 27 |

92

Plastic Tweezers

....

- > trapezoidal tips, approx. 3.5 mm wide> knurled gripping surfaces
- > kilulleu ylippiliy sulla
- > serrated handles
- > tweezers body: solid plastic, temperature-resistant up to 130°C



| | EAN | ∢ —▶ | | | 5 |
|-------------|----------|-------------|-----|---------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 69 84 | 054948 | 130 | 888 | plastic | 19 |

92

| Precision Tweezers |
|---------------------------|
| rectangular blunt |

> mounting tweezers

- > rectangular tips, approx. 0.9 mm wide
- > gripping surfaces with fine transverse serration
- > nickel plated
- > Spring steel, high-strength

97 84 18

92 84 18 🕸 🎹

| | EAN | ∢ ► | | | 5 |
|-------------|----------|------------|-------|---------------|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 84 18 | 054986 | 125 | \$8 1 | nickel plated | 19 |



92.84.18 KNIPEX

PRECISION TWEEZERS

Cross-Over Tweezers

> for holding small parts without finger pressure

- > for efficient clamping
- > nickel plated
- > Spring steel, high-strength

92 94 91

for ultra fine mounting work; extra fine tips; straight pattern; gripping surfaces matt finish for optimum grip

92 27 62

straight pattern; gripping surfaces with fine transverse serration

92 37 64 angled tips; gripping surfaces with fine transverse serration

92 67 63 straight pattern; serrated gripping

surfaces

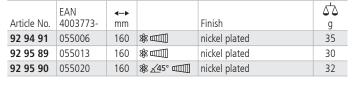


\$8 1

92









Precision Tweezers insulated 92 IEC 60900 KNIPEX 92 27 61 > tested according IEC 60900 > with dipped insulation 92 27 61 > nickel plated **A 1000 V** ℜ ⊂ > Spring steel, high-strength 92 27 61 for ultra fine mounting work; extra fine tips; straight pattern; KNIPEX 92 27 62 gripping surfaces matt finish for optimum grip 92 27 62 92 27 62 A1000V ℬ আ straight pattern; gripping surfaces with fine transverse serration 92 37 64 angled tips; gripping surfaces with fine KNIPEX 92 37 64 transverse serration 92 67 63 92 37 64 straight pattern; serrated gripping <u>A</u>1000V ℬ <u>∡</u>45° আ∭ surfaces KNIPEX 92 67 63

92 67 63 会1000 V আ∭

| Article No. | EAN 4003773- | ←→ mm | | Finish | ۵۵ g |
|-------------|-----------------|-----------------|------------------|------------------------|---------|
| 92 27 61 | 054757 | 130 | ≙ 1000 V | with dipped insulation | 32 |
| 92 27 62 | 054764 | 150 | A 1000 V ▥▥ | with dipped insulation | 35 |
| 92 37 64 | 054856 | 150 | <u> </u> | with dipped insulation | 34 |
| 92 67 63 | 054931 | 145 | £ 1000 V আ∭ | with dipped insulation | 43 |

PRECISION TWEEZERS

Precision Tweezers ESD

92

- > Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality
- > ESD coating: non-reflective black, with a surface resistance of approx. $10^5 \mbox{ Ohm}$
- > tips non-reflective brushed
- > gripping surfaces matt finish for optimum grip
- > Chrome nickel steel, stainless, anti-magnetic

92 08 78 ESD

for SMD-technology*; angled tips; smooth gripping surfaces

92 08 79 ESD shaped to grip horizontal cylindrical components of 1.0 mm dia.; smooth gripping surfaces; serrated handles

92 28 69 ESD straight pattern; strong tip; smooth gripping surfaces

92 28 70 ESD straight pattern; fine tip; smooth gripping surfaces

92 28 71 ESD needle-pointed tips; straight pattern; smooth gripping surfaces

92 28 72 ESD American shape, solid; long tips; straight pattern; smooth gripping surfaces

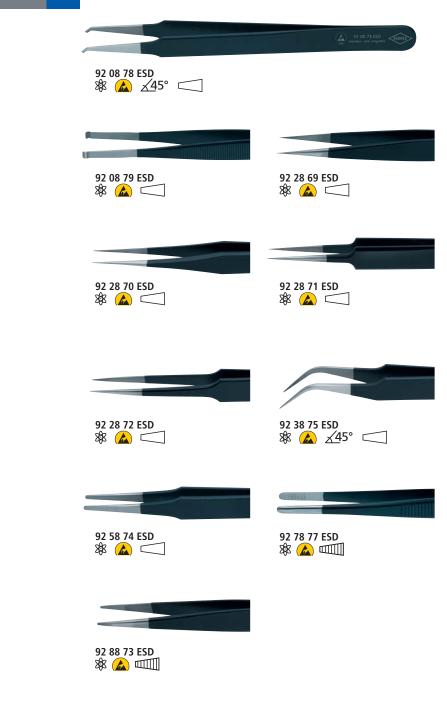
92 38 75 ESD sickle-shaped tips; smooth gripping surfaces

92 58 74 ESD round tips, approx. 2 mm wide; straight pattern; smooth gripping surfaces

92 78 77 ESD round tips, approx. 3.5 mm wide; straight pattern; serrated gripping surfaces; serrated handles

92 88 73 ESD

rectangular tips, approx. 0.9 mm wide; gripping surfaces with fine transverse serration



| | EAN | - | | | 52 |
|--------------|----------|----------|-----------------------|--|----|
| Article No. | 4003773- | mm | | Finish | g |
| 92 08 78 ESD | 054634 | 120 | \$\$ 🛕 <u>⊀</u> 45° ⊂ | stainless, anti-magnetic, electrically dissipative | 16 |
| 92 08 79 ESD | 054641 | 120 | 88 🛦 🥽 | stainless, anti-magnetic, electrically dissipative | 16 |
| 92 28 69 ESD | 054771 | 130 | 88 🛦 🥽 | stainless, anti-magnetic, electrically dissipative | 20 |
| 92 28 70 ESD | 054788 | 110 | \$ 🛦 🤇 | stainless, anti-magnetic, electrically dissipative | 13 |
| 92 28 71 ESD | 054795 | 110 | \$8 🛦 🤇 | stainless, anti-magnetic, electrically dissipative | 14 |
| 92 28 72 ESD | 054801 | 135 | 88 🛦 🥽 | stainless, anti-magnetic, electrically dissipative | 22 |
| 92 38 75 ESD | 054863 | 120 | \$\$ 🛦 <u>∡4</u> 5° ⊂ | stainless, anti-magnetic, electrically dissipative | 17 |
| 92 58 74 ESD | 054900 | 120 | \$\$ 🛦 🤇 | stainless, anti-magnetic, electrically dissipative | 19 |
| 92 78 77 ESD | 054979 | 145 | \$8 🛦 💷 | stainless, anti-magnetic, electrically dissipative | 27 |
| 92 88 73 ESD | 054993 | 130 | 88 🛕 🎹 | stainless, anti-magnetic, electrically dissipative | 20 |

* SMD-Technology: technique for soldering surface mounted components on printed circuit boards without using holes

Pliers with tether attachment point for mounting a fall protection

, INTHE JO

SS 13dr

Jonoin

Pliers range with tether attachment point for mounting a fall protection



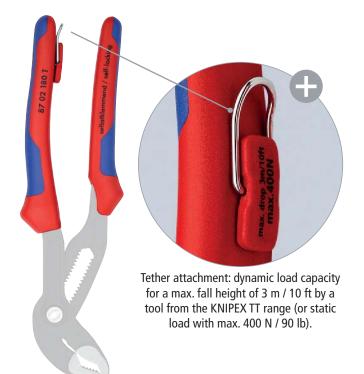


The tether attachment point for the range with multi-component handles

Tools can fall down when used on cherry pickers, scaffolding and ladders and when used by industrial climbers working with wire rope hoists.

KNIPEX offers a range of pliers with reliable protection to prevent them falling down.

An extremely stable tether attachment that is permanently welded to the handle is provided on the inside of the handle for attaching a tether. It enables equipment to be secured and put down quickly, either directly using the rope (paracord) strap or an appropriately small snap hook placed on a lanyard. In case of doubt, a rope (paracord) adapter can be used to adapt it to any existing tool fall arrest system.



Product video



PLIERS WITH TETHER ATTACHMENT POINT

| | A | Description | Dama |
|-----|-------------------------|--|------------|
| | Article No. 02 02 225 T | Description High Leverage Combination Pliers, | Page 29 |
| | 02 02 225 1 | with tether attachment point for a tool tether DIN ISO 5746 | 29 |
| ~ | 08 22 145 T | Needle-Nose Combination Pliers, with tether attachment point for a tool tether DIN ISO 5746 | 31 |
| | 09 02 240 T | Lineman's Pliers, with tether attachment point for a tool tether, American style DIN ISO 5746 | 33 |
| | 09 12 240 T | ASME B107.20 | 33 |
| | 13 05 160 T | Electricians' Pliers, with tether attachment point for a tool tether | 36 |
| ~~ | 13 82 200 T | Pliers for Electrical Installation, with tether attachment point for a tool tether | 34 |
| | 26 12 200 T | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers), with tether attachment point for a tool tether DIN ISO 5745 | 39 |
| | 26 15 200 T | | 39 |
| | 26 22 200 T | | 39 |
| ~~~ | 26 25 200 T | | 39 |
| | 70 05 160 T | Diagonal Cutters, with tether attachment point for a tool tether DIN ISO 5749 | 95 |
| | 70 05 180 T | | 94 |
| • | 71 02 200 T | KNIPEX CoBolt [®] , Compact Bolt Cutters, with tether attachment point for a tool tether DIN ISO 5743 | 102 |
| * | 71 22 200 T | | 103 |
| | 71 32 200 T | | 103 |

| | Article No. | Description | Page |
|------------------|-------------|--|------|
| | 73 05 160 T | KNIPEX X-Cut [®] , Compact Diagonal Cutters, with tether attachment point for a tool tether | 97 |
| | 74 02 200 T | High Leverage Diagonal Cutters, with tether attachment point for a tool tether DIN ISO 5746 | 98 |
| eu 🧲 | 74 02 250 T | - | 98 |
| | 74 22 200 T | | 98 |
| | 74 22 250 T | | 98 |
| | 86 05 180 T | Pliers Wrenches, pliers and a wrench in a single tool, with tether attachment point for a tool tether DIN ISO 5743 | 112 |
| 88 - 19 2 | 86 05 250 T | | 112 |
| | 87 02 180 T | KNIPEX Cobra®, Hightech Water Pump Pliers, with tether attachment point for a tool tether DIN ISO 8976 | 117 |
| ~ | 87 02 250 T | | 117 |
| , <u> </u> | 87 02 300 T | | 117 |
| <i>3</i> ***** | 88 02 250 T | KNIPEX Alligator®, Water Pump Pliers, with tether attachment point for a tool tether DIN ISO 8976 | 123 |
| <i>3</i> | 88 02 300 T | | 123 |
| | 95 12 165 T | Cable Shears, with tether attachment point for a tool tether | 154 |
| | 95 62 190 T | Wire Rope Cutters, forged, with tether attachment point for a tool tether | 162 |

Tool Assortment and Cases

bible

KNIPEX ®

0

| 260 |
|-----|
| 260 |
| 261 |
| 262 |
| 264 |
| 265 |
| 266 |
| 268 |
| 268 |
| 268 |
| 270 |
| 270 |
| 271 |
| 271 |
| 272 |
| 273 |
| 273 |
| |



TOOL ASSORTMENT

Tool Roll 11 parts

00 19

- > for telecommunications and electrical engineers
- > tool roll made of hard-wearing polyester fabric
- > with practical, adjustable quick release fastener
- > contains eight pliers and three scewdrivers
- > pliers with chrome plated heads and two-colour dual component handles
- > screwdrivers VDE tested according to DIN EN/IEC 60900 1000V



| Article No. | EAN 4003773- | | | | Quantity | ۵'۵ g |
|-------------|-----------------|------------------------------------|----------------|--|----------|----------|
| 00 19 41 | 024729 | | Tool Roll 11 p | parts | | 1620 |
| | | | 03 05 160 | Combination Pliers | 1 | |
| | | ٨٨٨ | 11 05 160 | Insulation Strippers | 1 | |
| | | $\Theta \blacksquare \blacksquare$ | 25 05 160 | Snipe Nose Side Cutting Pliers (Radio Pliers) | 1 | |
| | | | 30 15 160 | | 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 Nipper | 1 | |
| | | - | 70 05 140 | Diagonal Cutter | 1 | |
| | | | 98 20 25 | | 1 | |
| | | 🛧 1000 V 🖄 🚭 🖨 | 98 20 40 | Screwdriver for slotted screws | 1 | |
| | | £ 1000 V 🖄 🗲 🗘 | 98 24 01 | Screwdriver for cross recessed screws, Phillips® | 1 | |

KNIPEX Minis in belt pouch 2 parts

- **00** 20
- > made of hard-wearing polyester fabric
- > with hook and loop fastener
- > with elastic side holder for small flash lamp, pen or suchlike
- > with practical belt loop
- > dimensions (W x H x D): 70 x 170 x 50 mm





00 20 72 V01

| Article No. | EAN 4003773- | | | | Quantity | ۵ ^۲ ۵ g |
|--------------|-----------------|------------|-------------|--|----------|-----------------------|
| 00 20 72 V01 | 070832 | | KNIPEX Mini | s in belt pouch 2 parts | | 350 |
| | | SE | 86 03 150 | Mini Pliers Wrench, pliers and a wrench in a single tool | 1 | |
| | | | 87 01 125 | KNIPEX Cobra®, Hightech Water Pump Pliers | 1 | |
| 00 20 72 V02 | 075851 | | KNIPEX Mini | s in belt pouch 2 parts | | 390 |
| | | | 74 01 160 | High Leverage Diagonal Cutter | 1 | |
| | | | 87 01 150 | KNIPEX Cobra®, Hightech Water Pump Pliers | 1 | |
| 00 19 72 LE | 070191 | Belt Pouch | | | | |

TOOL ASSORTMENT

Pliers Sets in a foam tray

- > in a foam tray for workbenches and tool trolleys
- > clearly organised storage of tools
- > precisely-sized recesses for holding the pliers
- > foam tray dimensions (W x H x D): 335 x 165 x 33 mm
- > material: two colour, closed pore foam



00 20 01 V01 Pliers Set "Basic" – four pliers in a foam tray

00 20



00 20 01 V03 Water Pump Pliers Set – three pliers in a foam tray



00 20 01 V09

00 20 01 V02

Circlip Pliers Set "SRZ II" - four precision circlip pliers in a foam tray

Circlip Pliers Set - six precision circlip pliers in a foam tray



| Article No. | EAN 4003773- | | | | Quantity | ۲۵ g |
|--------------|-----------------|---|----------------|--|----------|---------|
| 00 20 01 V01 | 069645 | | Pliers Set "B | asic", four pliers in a foam tray | | 1095 |
| | | | 03 05 180 | Combination Pliers | 1 | |
| | | $\Theta \blacksquare \blacksquare \blacksquare$ | 26 15 200 | Snipe Nose Side Cutting Pliers (Stork Beak Pliers) | 1 | |
| | | | 74 05 180 | High Leverage Diagonal Cutter | 1 | |
| | | | 87 01 250 | KNIPEX Cobra®, Hightech Water Pump Pliers | 1 | |
| 00 20 01 V02 | 069652 | | Circlip Pliers | Set, six precision circlip pliers in a foam tray | | 915 |
| | | 23 5 7 | 48 11 J1 | | 1 | |
| | | 013 | 48 11 J2 | Precision Circlip Pliers, to assemble internal circlips into bores | 1 | |
| | | Ů ™ <u>×</u> 90° | 48 21 J21 | | 1 | |
| | | A | 49 11 A1 | | 1 | |
| | | ŐEIM | 49 11 A2 | Precision Circlip Pliers, to assemble external circlips on shafts | 1 | |
| | | Ů ≌≦ MM <u>∡</u> 90° | 49 21 A21 | | 1 | |
| 00 20 01 V03 | 069669 | | Water Pump | Pliers Set, three pliers in a foam tray | | 1065 |
| | | | 85 01 250 | KNIPEX SmartGrip®, Water Pump Pliers with automatic adjustment | 1 | |
| | | | 87 41 250 | Multiple Slip Joint Spanner | 1 | |
| | | | 87 51 250 | KNIPEX Cobra® ES, Water Pump Pliers extra-slim | 1 | |
| 00 20 01 V09 | 073291 | | Pliers Set "SF | Z II", four precision circlip pliers in a foam tray | | 820 |
| | | oti | 48 11 J2 | | 1 | |
| | | Ů ₽€ <u>×</u> 90° | 48 21 J21 | Precision Circlip Pliers, for internal circlips in bore holes | 1 | |
| | | OTIM | 49 11 A2 | | 1 | |
| | | Ů È ≦ MM <u>×</u> 90° | 49 21 A21 | Precision Circlip Pliers, for external circlips on shafts | 1 | |

Tool Kits



- > tools in a plastic deep-drawn tray with transparent lid
- > attractive sales packaging with Euro standard perforation
- > dimensions (W x H x D): 170 x 370 x 40 mm









00 20 09 V01 Bestseller Set pliers with polished heads; handles with non-slip plastic coating or with two-colour multi-components grips

| Article No. | EAN 4003773- | | | | Quantity | Nominal size | ۲ <mark>۵</mark> |
|--------------|-----------------|---------------|---|--------|----------|--------------|------------------|
| 00 20 09 V01 | 073994 | Bestseller-Se | t | | | | 950 |
| | | 03 02 180 | Combination Pliers | | 1 | 180 mm | |
| | | 70 02 160 | Diagonal Cutter | Knipex | 1 | 160 mm | |
| | | 87 01 250 | KNIPEX Cobra [®] , Hightech Water Pump Pliers | | 1 | 250 mm | |

00 20 09 V02 Cobra® Set

pliers grey atramentized, handles with non-slip plastic coating

| Article No. | EAN 4003773- | | | | Quantity | Nominal size | ۵ ^۲ ۵ g |
|--------------|-----------------|------------|--|----------|----------|--------------|-----------------------|
| 00 20 09 V02 | 074793 | Cobra® Set | | | | | 1220 |
| | | 87 01 180 | | Ka la su | 1 | 180 mm | |
| | | 87 01 250 | KNIPEX Cobra®, Hightech Water Pump Pliers | Knipex | 1 | 250 mm | |
| | | 87 01 300 | nightech water runp rilers | | 1 | 300 mm | |

00 20 09 V03 Alligator[®] Set

pliers with polished heads; handles with non-slip plastic coating

| Autiala Na | EAN | | | | Oursetitu | | $\Delta^{L}\Delta$ |
|--------------|----------|---------------------------|--|--------|-----------|--------------|--------------------|
| Article No. | 4003773- | | | | Quantity | Nominal size | g |
| 00 20 09 V03 | 074809 | Alligator [®] Se | et | | | | 1195 |
| | | 88 01 180 | | Kniney | 1 | 180 mm | |
| | | 88 01 250 | KNIPEX Alligator [®] , Water Pump Pliers | Knipex | 1 | 250 mm | |
| | | 88 01 300 | water rump mets | | 1 | 300 mm | |

00 20 10 Power Set pliers with polished heads and plastic coated handles

52 EAN Article No. 4003773-Quantity Nominal size g 00 20 10 010388 Power Set 990 02 01 180 High Leverage Combination Pliers 180 mm 1 74 01 160 High Leverage Diagonal Cutter 24 Knipex 1 160 mm KNIPEX Cobra®, 87 01 250 1 250 mm Hightech Water Pump Pliers



00 20 11 Assembly Set pliers with two-colour multi-component grips

| | EAN | | | | | | | 52 |
|-------------|----------|----------|-------------|---|--------|----------|--------------|-----|
| Article No. | 4003773- | | | | | Quantity | Nominal size | g |
| 00 20 11 | 012405 | | Assembly Se | t | | | | 810 |
| | | | 03 02 180 | Combination Pliers | | 1 | 180 mm | |
| | | Θ | 26 12 200 | Snipe Nose Side Cutting Pliers (Stork Beak Pliers) | Knipex | 1 | 200 mm | |
| | | | 70 02 160 | Diagonal Cutter | | 1 | 160 mm | |





00 20 12 Electro Set pliers VDE-tested in conformance with DIN EN/IEC 60900 1000V, pliers chrome-plated; handles with multi-component grips

| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۵'۵ g |
|-------------|-----------------|-------------------------|-------------|---|--------|----------|--------------|----------|
| 00 20 12 | 012412 | | Electro Set | lectro Set | | | | 960 |
| | | ★ 1000 V ▲ | 03 06 180 | Combination Pliers | | 1 | 180 mm | |
| | | ★ 1000 V ④ ← ■ | 26 16 200 | Snipe Nose Side Cutting Pliers (Stork Beak Pliers) | Knipex | 1 | 200 mm | |
| | | <u></u> £ 1000 V ﷺ ■ | 70 06 160 | Diagonal Cutter | | 1 | 160 mm | |



00 20 13 VDE Tool Set

tools VDE-tested in conformance to DIN EN/IEC 60900 1000V, pliers chrome-plated; handles with multi-component covers; with 3 WERA screwdrivers

| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۵ <mark>۵</mark> g |
|-------------|-----------------|---------------------|--------------|--|--------|----------|--------------------|-----------------------|
| 00 20 13 | 043287 | | VDE Tool Set | | | | | 850 |
| | | ≜ 1000 V @@ | 26 16 200 | Snipe Nose Side Cutting Pliers (Stork Beak Pliers) | Knipex | 1 | 200 mm | |
| | | ≙ 1000 V ≙ € | 70 06 160 | Diagonal Cutter | | 1 | 160 mm | |
| | | £ 1000 V 🖄 🛃 🖨 | 006110 | Screwdrivers for slotted | | 1 | 0.6 x 3.5 x 100 mm | |
| | | | 006120 | screws, 160i | Mora | 1 | 1.0 x 5.5 x 125 mm | |
| | | £ 1000 V 🖄 🚭 🗘 | 006154 | Screwdrivers for cross recessed Phillips [®] screws, 162i PH | Wera | 1 | PH2 x 100 mm | |

TOOL ASSORTMENT

Tool Bag 24 parts for electrical contractors, top model

> contains 24 brand name tools, partly VDE tested according to DIN EN/IEC 60900

- comfortable bag of hard-wearing leather, with front bag, adjustable retaining loops and belt
- > with galvanized steel base tray
- > edges of the tool case reinforced with aluminium
- > dimensions, interior (W x H x D): 420 x 250 x 160 mm



| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۲ <mark>۵</mark> |
|-------------|-----------------|----------------------|----------------|---|-------------|----------|--------------------|------------------|
| 00 21 01 TL | 032694 | | Tool Bag 24 pa | arts | | | | 6990 |
| | | 🛧 1000 V 🖄 🚰 💷 🚺 ► 🗨 | 03 06 180 | Combination Pliers | | 1 | 180 mm | |
| | | £ 1000 V 🖄 🖨 MM | 11 06 160 | Insulation Stripper | - | 1 | 160 mm | |
| | | 1000 V இ€ ⊖ আ∭ ▶٩ | 25 06 160 | Snipe Nose Side Cutting Pliers, Radio Pliers | Knipex | 1 | 160 mm | |
| | | £ 1000 V @ 🚰 🗲 | 70 06 160 | Diagonal Cutter | | 1 | 160 mm | |
| | | £ 1000 V 🖄 🚰 | 98 52 | Cable Knife | | 1 | 185 mm | |
| | | MM | 16 20 165 | Dismantling Tool | _ | 1 | 165 mm | |
| | | | 361 252 1 | Electrician's Chisel | Rennsteig | 1 | 250 x 10 mm | |
| | | | 340 300 1 | Mason's Chisels | Rennstely | 1 | | |
| | | | 006100 | | | 1 | 0.4 x 2.5 x 80 mm | |
| | | A 1000 V 🙉 🖨 🖨 | 006110 | Screwdrivers for slotted screws, 160i | | 1 | 0.6 x 3.5 x 100 mm | |
| | | | 006120 | Screwarivers for slotted screws, 1601 | | 1 | 1.0 x 5.5 x 125 mm | |
| | | | 006125 | | | 1 | 1.2 x 6.5 x 150 mm | |
| | | A 1000 V 🖄 🖨 🗘 | 006152 | Screwdrivers for cross recessed Phillips® | Wera | 1 | PH1 x 80 mm | |
| | | | 006154 | screws, 162i PH | | 1 | PH2 x 100 mm | |
| | | | 007620 | Screwdrivers for slotted screws, 334 | | 1 | 1.0 x 6.0 x 125 mm | |
| | | | 110010 | Screwarivers for slotted screws, 334 | | 1 | 1.2 x 6.5 x 150 mm | |
| | | | 005655 | Voltage Detector, 247 | | 1 | 0.5 x 3.0 x 70 mm | |
| | | | 101-0300 | Locksmith's hammer | | 1 | 300 g | |
| | | | 30490-800 | Chipping hammer | _ | 1 | 800 g | |
| | | | 75040-015 | Flat brush | Picard | 1 | 40 mm | |
| | | | 75075-040 | Painter's spatula | | 1 | 40 mm | |
| | | | 71510-000 | Metre ruler (yardstick) | | 1 | 2 m | |
| | | | 306125 | PUK [®] Junior Hacksaw | Haunstätter | 1 | 150 x 240 mm | |
| | | | 7165/50 | Plasterer's bowl | Nölle | 1 | 125 x 90 mm | |

00

Tool Bag 24 parts

apprentices tool bag for electrical contractors

00

- > light design made of hard-wearing, reinforced polyester fabric
- > front additionally reinforced with aluminium brackets
- > semi-fold-out front with adjustable loops and exterior document compartment
- > with galvanized steel base tray
- > with carrying handle and adjustable shoulder strap
- > dimensions, interior (W x H x D): 420 x 250 x 160 mm

Model 00 21 02 SL

contains 24 brand name tools, partly VDE tested according to DIN EN/IEC 60900

Model 00 21 02 LE without tools



| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۲ <mark>۵</mark> |
|-------------|-----------------|------------------------------------|--------------|---|-------------|----------|--------------------|------------------|
| 00 21 02 SL | 032687 | | Tool Bag 24 | parts | | | | 6980 |
| | | | 03 05 180 | Combination Pliers | | 1 | 180 mm | |
| | | | 11 05 160 | Insulation Stripper | | 1 | 160 mm | |
| | | MM | 16 20 165 | Dismantling Tool | Kniney | 1 | 165 mm | |
| | | $\Theta \blacksquare \blacksquare$ | 25 05 160 | Snipe Nose Side Cutting Pliers (Radio Pliers) | Knipex | 1 | 160 mm | |
| | | P1 | 70 05 160 | Diagonal Cutter | | 1 | 160 mm | |
| | | <u> </u> | 98 52 | Cable Knife | | 1 | 185 mm | |
| | | | 361 252 1 | Electrician's Chisel | Demostalia | 1 | 250 x 10 mm | |
| | | | 340 250 1 | Mason's Chisels | Rennsteig | 1 | 250 mm | |
| | | | 101-0300 | Locksmith's hammer | | 1 | 300 g | |
| | | | 401-1000 | Sledge hammer | | 1 | 1000 g | |
| | | | 75040-015 | Flat brush | Picard | 1 | 40 mm | |
| | | | 75075-040 | Painter's spatula | | 1 | 40 mm | |
| | | | 71501-024 | Carpenter's pencil | | 1 | 24 cm | |
| | | | 031580 | | | 1 | 0.4 x 2.5 x 80 mm | |
| | | | 031582 | | | 1 | 0.6 x 3.5 x 100 mm | |
| | | A 1000 V 🖄 🚭 🖨 | 031587 | Screwdrivers for slotted screws, 1160i | | 1 | 1.0 x 5.5 x 125 mm | |
| | | _ | 031588 | | | 1 | 1.2 x 6.5 x 150 mm | |
| | | | 031601 | | Wera | 1 | PH1 x 80mm | |
| | | A 1000 V 🖄 🗲 🗘 | 031603 | | | 1 | PH2 x 100 mm | |
| | | | 031611 | Screwdrivers for cross recessed Phillips [®] screws, 1162i | | 1 | PZ1 x 80 mm | |
| | <u> </u> | 🛧 1000 V 🖄 🗲 🛟 | 031613 | Screwdrivers for cross recessed Pozidriv [®] , 1165i | | 1 | PZ2 x 100 mm | |
| | | • | 005655 | Voltage Detector, 247 | | 1 | 0.5 x 3.0 x 70 mm | |
| | | | 306125 | PUK [®] Junior Hacksaw | Haunstätter | 1 | 150 x 240 mm | |
| | | | 7165/50 | Plasterer's bowl | Nölle | 1 | 125 x 90 mm | |
| 00 21 02 LE | 057499 | | Tool Bag "Ne | w Classic Basic" empty | | | | 3400 |

Tool Case "Electric" 20 parts

00 21

- > heavy duty ABS material, black
- > with circumferential double aluminium frame
- > register hinges working as lid holder
- > strong, ergonomic handle
- > two flip-locks, lockable
- > one removable tool board in the lid with 15 push-in compartments on the bottom side and six big push-in compartments and a clamp compartment (400 mm width) on the lid side, fixed by push-button
- > base tray, height 58 mm, can be subdivided by flexible inserts; cover plate with six large push-in compartments, can be fixed by popper
- > cover and tool plate made of Con-Pearl® material
- > 20 kg maximum load
- > dimensions, exterior (W x H x D): 480 x 175 x 370 mm dimensions, interior (W x H x D): 460 x 170 x 310 mm

00 21 20

with 20 brand name tools, partly VDE tested according to DIN EN/IEC 60900

00 21 20 LE without tools



00 21 20

| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۲ <u>۵</u> g |
|-------------|-----------------|-------------------------|---------------|---|--------|----------|-----------------------|-----------------|
| 00 21 20 | 052166 | | Tool Case "El | ectric", 20 parts | | | | 7225 |
| | | A 1000 V 🖄 🚰 💷 🗖 🖊 | 03 06 180 | Combination Pliers | | 1 | 180 mm | |
| | | MM | 12 40 200 | Self-Adjusting Insulation Stripper | | 1 | 200 mm | |
| | | / ۷ ۷ ۷ ۱ | 16 80 125 | Universal Dismantling Tool | | 1 | 125 mm | |
| | | A 1000 V 🏤 🖨 🖓 আ∭ 🗲 ◄ | 26 16 200 | Coine Nees Cide Cutties Diese | | 1 | 200 mm | |
| | | ≙ 1000 V @ 🚭 ∡40° ⊖ ा∭ | 26 26 200 | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers) | | 1 | 200 mm | |
| | | | 70 06 160 | Diagonal Cutter | | 1 | 160 mm | |
| | | - A 1000 V 🖄 🚰 ► 🗨 | 74 06 200 | High Leverage Diagonal Cutter | Knipex | 1 | 200 mm | |
| | | | 86 03 180 | Pliers Wrench, pliers and a wrench in a single tool | | 1 | 180 mm | |
| | | | 87 03 250 | KNIPEX Cobra®, Hightech Water Pump Pliers | | 1 | 250 mm | |
| | | 🛧 1000 V 🖄 🚭 🤁 🖺 🕤 | 95 16 200 | Cable Shears, with twin cutting edge | | 1 | 200 mm | |
| | | <u></u> £ 1000 V ≙ 🚅 | 98 56 | Cable Knife, with replaceable blade | | 1 | 185 mm | |
| | | | 006100 | | | 1 | 0.4 x 2.5 x 80 mm | |
| | | | 006115 | | | 1 | 0.8 x 4.0 x 100 mm | |
| | | - <u>A</u> 1000 V 🏝 🖨 🖨 | 006120 | Screwdrivers for slotted screws, 160i | Wera | 1 | 1.0 x 5.5 x 125 mm | |
| | | _ | 006125 | | | 1 | 1.2 x 6.5 x 150 mm | |
| | | | 006152 | Screwdrivers for cross recessed | | 1 | PH1 x 80 mm | |
| | | - 🛧 1000 V 🖄 🚰 🗘 | 006154 | Phillips [®] screws, 162i PH | | 1 | PH2 x 100 mm | |
| | | A 1000 V @ 🛋 🚳 | 006162 | Screwdrivers for cross recessed | | 1 | PZ1 x 80 mm | |
| | | <u> </u> | 006164 | Pozidriv [®] screws, 165i | | 1 | PZ2 x 100 mm | |
| | | • | 005655 | Voltage Detector | | 1 | 0.5 x 3.0 x 70 mm | |
| 00 21 20 LE | 044567 | | Tool Case "S | tandard" empty | | | | 4485 |

TOOL ASSORTMENT

Tool Case "Electric" 23 parts

00 21

- > contains 23 brand name tools, partly VDE tested according to DIN EN/IEC 60900, 1000 V
- > hard-wearing ABS hard-shell construction with aluminium frame and circular buffer protection
- > document compartment and pen holding straps
- > one removable tool plate, with elastic loops on both sides
- > one cover plate with elastic loops and tool protection cloth
- > large base tray with variable separations (e.g. for measuring and testing devices). Interior dimensions: 420 x 320 x 85 mm
- > sturdy metal locks and 3-digit-lock
- > strong, ergonomic handle
- > feet on both sides
- > colour: silver / aluminium look



00 21 30

| Article No. | EAN 4003773- | | | | | Quantity | Nominal size | ۲ _۵ |
|-------------|-----------------|-------------------------------------|----------------|---|--------|--------------|--------------------|----------------|
| 00 21 30 | 051084 | Tool Case for electrical contrac | tors, 23 parts | | | | | 9440 |
| | | | 00 11 03 | Control Cabinet Key, for all standard cabinets and shut-off systems | | 1 | 76 mm | |
| | | 🛧 1000 V 🖄 🚰 💷 🕅 🗲 🕇 | 03 06 180 | Combination Pliers | | 1 | 180 mm | |
| | | | 12 40 200 | Self-Adjusting Insulation Stripper | | 1 | 200 mm | |
| | | - MM | 16 80 125 | Universal Dismantling Tool | | 1 | 125 mm | |
| | | A 1000 V 🖄 🖨 ⊖ 💷 🕨 💙 | 26 16 200 | Calina Mana Cida Cuttina Dilana | | 1 | 200 mm | |
| | | ≙ 1000 V @ 🚰 🔏 40° ⊖ আ∭ | 26 26 200 | Snipe Nose Side Cutting Pliers, (Stork Beak Pliers) | | 1 | 200 mm | |
| | | | 70 06 125 | | Knipex | 1 | 125 mm | |
| | | A 1000 V 🖄 🛃 🗲 🕇 | 70 06 160 | Diagonal Cutter | | 1 | 160 mm | |
| | | | 86 03 180 | Pliers Wrench, pliers and a wrench in a single tool | | 1 | 180 mm | |
| | | | 87 03 250 | KNIPEX Cobra®, Hightech Water Pump Pliers | | 1 | 250 mm | |
| | | £ 1000 V আ∭ | 92 27 62 | Precision Tweezers | | 1 | 150 mm | |
| | | <u></u> £ 1000 V | 98 56 | Cable Knife, with replaceable blade | | 1 | 185 mm | |
| | | | 006100 | | | 1 | 0.4 x 2.5 x 80 mm | |
| | | | 006110 | | | 1 | 0.6 x 3.5 x 100 mm | |
| | | | 006115 | Screwdrivers for slotted screws, | | 1 | 0.8 x 4.0 x 100 mm | |
| | | | 006120 | 160i | | 1 | 1.0 x 5.5 x 125 mm | |
| | | | 006125 | | | 1 | 1.2 x 6.5 x 150 mm | |
| | | | 006130 | | Wera | 1 1 1 | 1.2 x 8.0 x 175 mm | |
| | | | 006150 | | | | PH0 x 80 mm | |
| | | 🛧 1000 V 🖄 🚰 🗘 | 006152 | Screwdrivers for cross recessed Phillips® screws | | | PH1 x 80 mm | |
| | | 006154 Phillips [©] screws | | | 1 | PH2 x 100 mm | | |
| | | | 006162 | Screwdrivers for cross recessed | | 1 | PZ1 x 80 mm | |
| | | X 1000 V @\$ | 006164 | Pozidriv [®] screws | | 1 | PZ2 x 100 mm | |

TOOL CASES

Belt Pouch for two pliers

- > for two pliers up to 150 mm length
- > made of hard-wearing polyester fabric
- > with hook and loop fastener
- > with elastic side holder for small flash lamp, pen or suchlike
- > with practical belt loop

| Article No. | EAN 4003773- | Width mm | Height mm | Depth mm | ۵'۵ g | 00 19 72 LE |
|-------------|-----------------|-------------|--------------|-------------|----------|-------------|
| 00 19 72 LE | 070191 | 65 | 155 | 25 | 65 | |

Belt Tool Pouch

00 19

00

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

| KNIPEX |
|--------|

| Article No. | EAN 4003773- | Width mm | Height mm | Depth mm | ۵'۵ g | 00 19 73 LE |
|-------------|-----------------|-------------|--------------|-------------|----------|-------------|
| 00 19 73 LE | 072065 | 170 | 235 | 75 | 210 | |

Tool Bag "New Classic Basic"



- > light design made of hard-wearing, reinforced polyester fabric
- > front additionally reinforced with aluminium brackets
- > semi-fold-out front with adjustable loops and exterior
- document compartment
- > with galvanized steel base tray
- > with carrying handle and adjustable shoulder strap



00 21 02 LE

| Article No. | EAN | Dimension exterior width | Dimension exterior height | Dimension exterior depth | ۵'۵ |
|-------------|----------|--------------------------|---------------------------|--------------------------|------|
| | 4003773- | mm | mm | mm | g |
| 00 21 02 LE | 057499 | 440 | 270 | 180 | 2970 |

Model 00 21 02 LE without tools

Traditional Tool Pouch empty

- > made of hard-wearing polyester fabric
- > for tools up to approx. 450 mm in length
- > with document compartment on the back
- > with carrying handle and adjustable shoulder strap
- > closing strap made of leather
- > dimensions, exterior (W x H x D): 520 x 200 x 230 mm, dimensions, interior (W x H x D): 490 x 140 x 155 mm

| Article No. | EAN 4003773- | Width mm | Height mm | Depth mm | ۲ _a | |
|-------------|-----------------|-------------|--------------|-------------|----------------|--|
| 00 21 07 LE | 071358 | 520 | 200 | 230 | 1510 | |

Tool Bag "LightPack" empty

- > can be opened both sides
- > made from tough polyester fabric, with zip fasteners and hook and loop fastener
- > tool loops inside
- > plastic base tray
- > steel handle with softgrip
- > shoulder strap (can also be used as tool belt) with small pouch for the mobile
- > 20 kg maximum load

| Article No. | EAN | Width | Height | Depth | ۵'۵ |
|-------------|----------|-------|--------|-------|------|
| | 4003773- | mm | mm | mm | g |
| 00 21 08 LE | 077787 | 480 | 380 | 300 | 3450 |



00 21 07 LE

00 21

00 21



Tool and notebook bag for service technicians empty

- 2
- > lined inside pouch for notebook and DIN A4 documents; also 1 DIN A4 zipped compartment
- > 90° fold-out front pouch with 8 tool pouches and 1 small inside pouch
- > reverse side of the front pouch with 5 tool pouches and 3 pen pouches
- > 1 removeable tool panel with 8 tool pouches on the front and 2 rows of elastic loops on the back
- > splash-water-protected bottom
- > adjustable shoulder belt with quick-release fastener
- > with two carry loops
- > made of hard-wearing polyester fabric



00 21 10 LE

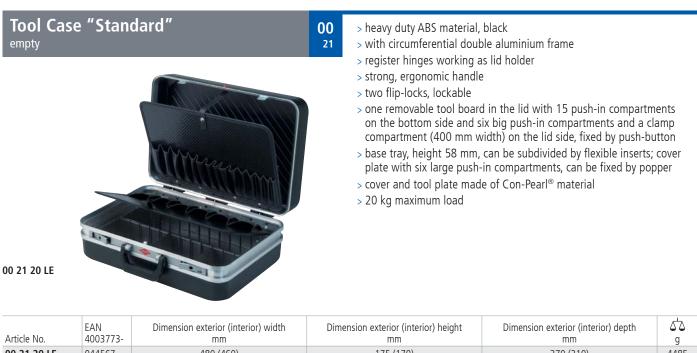
| | EAN | Dimension exterior width | Dimension exterior height | Dimension exterior depth | 52 |
|-------------|----------|--------------------------|---------------------------|--------------------------|------|
| Article No. | 4003773- | mm | mm | mm | g |
| 00 21 10 LE | 074472 | 440 | 200 | 340 | 2700 |

TOOL CASES



00 21 05 LE

| Article No. | EAN | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | ۵'۵ |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|------|
| | 4003773- | mm | mm | mm | g |
| 00 21 05 LE | 056904 | 465 (440) | 200 (180) | 410 (350) | 5680 |



044567 175 (170) 370 (310) 00 21 20 LE 480 (460) 4485 Tool Case "Classic II" empty



> heavy duty ABS material, black

- > with circumferential double aluminium frame
- > register hinges working as lid holder
- > sturdy multi-component handle with grip recesses
- > two flip-locks, lockable
- > document compartment in the cover
- > one removable tool board in the lid with CP7-tool holder (thickness 11 mm) on the bottom side
- > one tool board in the lid with CP7-tool holder (thickness 11 mm) on the lid side and CP7- tool holder (thickness 15 mm) on the bottom side
- > base tray, height 58 mm, can be subdivided by flexible inserts; cover plate with CP7-tool holder (thickness 25 mm) on the lid side, can be fixed by popper
- > cover and tool plate made of Con-Pearl® material
- > 30 kg maximum load

| Article No. | EAN | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | ۵'۵ |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|------|
| | 4003773- | mm | mm | mm | g |
| 00 21 32 LE | 057536 | 480 (415) | 180 (160) | 365 (300) | 5235 |

00 21

00

21

Tool Case "BIG Twin" empty

00 21 40 LE

- > heavy duty ABS material, black
- > sturdy aluminium frame with D-shape rings for belt and fix, sturdy centre board with multi-purpose push-in facilities by elastic loops and twelve small pockets
- > comfortable handle and mounting device for a "Trolley" embedded in the bottom (available ordering ref. 00 21 40 T)
- > metal hinges
- > 30 kg maximum load
- > can be opened on one or both sides; bottom tray and cover can be opened independently
- > stands stable 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 two flip-locks for fixation of the cover
- > removable document compartment and removable tool board, with 13 push-in compartments on one side
- > two flip-locks to fix the bottom
- > base tray, height 58 mm, can be subdivided by flexible inserts; cover plate with six large push-in compartments, can be fixed by popper
- > dimensions exterior: (W x H x D): 490 x 255 x 410 mm dimensions interior: (W x H x D): 445 x (105 + 105) x 350 mm

00 21 40 T

- > telescopic handle for rolling transport of tool case
- > applicable for cases:
- 00 21 40 LE Tool Case "BIG Twin", 98 99 14 Universal Tool Case > height adjustable handle with catch
- > integrated mechanism for fixation to the case, for rapid assembly and removal
- > with two smooth castors
- > dimensions: 60 x 245 x 400 (1,000) mm (extended)



| Article No. | EAN 4003773- | Dimension exterior (interior) width mm | Dimension exterior (interior) height mm | Dimension exterior (interior) depth mm | ۵'۵ g |
|-------------|-----------------|--|--|---|----------|
| 00 21 40 LE | 057673 | 490 (445) | 255 (105 + 105) | 410 (350) | 7550 |
| 00 21 40 T | 062981 | Trolley for rolling case transport | | | 1200 |

271

TOOL CASES

Tool Case "BIG Twin-Move" with integrated rollers and telescopic handle, empty

00 21

- > heavy duty ABS material, black
- > all-round aluminium frame and firmly mounted sturdy centre board, each side offering 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
- > 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 60 mm, can be subdivided by flexible inserts; tool panel as cover plate with 13 tool pouches



| A | EAN | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | 52 |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|------|
| Article No. | 4003773- | mm | mm | mm | g |
| 00 21 41 LE | 071549 | 510 (480/445) | 270 (105) | 410 (370/330) | 8600 |

Tool bag
empty00
21Conpact tool bag for the service technician> perfectly fits in the KNIPEX BIG Twin 00 21 40 LE / 00 21 41 LE
and other standard tool cases> with 8 tool pouches and 7 tool straps> slip-through back strap to attach to a trolley> made from tough polyester fabric, with zip fastenerOut the tot of the service technicianOut the tot of the service technician> with 8 tool pouches and 7 tool straps> slip-through back strap to attach to a trolley> made from tough polyester fabric, with zip fastenerOut the tot of the service technicianOut the tot of the service technicianOut the tot of tot of the service technicianOut the tot of tot of tot of the service technicianOut the tot of t

| Article No. | EAN | Dimension exterior width | Dimension exterior height | Dimension exterior depth | ۵'۵ |
|-------------|----------|--------------------------|---------------------------|--------------------------|-----|
| | 4003773- | mm | mm | mm | g |
| 00 21 11 LE | 077718 | 410 | 60 | 290 | 450 |

Tool case "ROBUST"

00 21

Fit to fly case made from impact-resistant polypropylene

- > dustproof, airtight, watertight
- > air pressure compensation valve
- > temperatures ranging from -40° up to +80° C
- > padlock eyelets
- > document compartment; tool panels with 35 push-in compartments which can be filled with tools
- > 2 aluminium dividers to customize the bottom tray
- > 30 kg maximum load



Two-stage locks, easy to open – also with one hand



Automatic pressure compensation valve, permeable to air while keeping out water



| Article No. | EAN | Dimension exterior (interior) width | Dimension exterior (interior) height | Dimension exterior (interior) depth | ۵'۵ |
|-------------|----------|-------------------------------------|--------------------------------------|-------------------------------------|------|
| | 4003773- | mm | mm | mm | g |
| 00 21 35 LE | 077596 | 470 (437) | 190 (172) | 370 (307) | 4800 |

| 00 11 01 | 148 | 00 21 40 T | 231 | 09 02 240 T | 33 | 13 42 165 | 50 | 23 01 140 | 37 | 30 33 160 | 64 | 40 14 250 | 68 |
|------------------------------|------------|------------------------|-----------|--------------------------|----------|------------------------|----------|----------------------------|----------|----------------------------|------------|-----------------------|----------|
| 00 11 02 | 149 | 00 21 40 T | 271 | 09 02 240 T | 257 | 13 45 165 | 50 | 25 01 125 | 38 | 30 35 140 | 64 | 41 04 180 | 69 |
| 00 11 03 | 149 | 00 21 41 LE | 272 | 09 11 240 | 33 | 13 46 165 | 50 | 25 01 140 | 38 | 30 35 160 | 64 | 41 04 250 | 69 |
| 00 11 04 | 149 | 01 06 160 | 32 | 09 12 240 | 33 | 13 46 165 | 198 | 25 01 160 | 38 | 30 36 160 | 64 | 41 04 300 | 69 |
| 00 11 06 | 149 | 01 06 160 | 196 | 09 12 240 T | 33 | 13 81 200 | 35 | 25 02 140 | 38 | 30 36 160 | 202 | 41 14 250 | 69 |
| 00 11 06 V01 | 149 | 01 06 190 | 32 | 09 12 240 T | 257 | 13 82 200 | 35 | 25 02 160 | 38 | 30 41 160 | 147 | 41 24 225 | 69 |
| 00 11 06 V02 | 150 | 01 06 190 | 196 | 10 98 1220 | 132 | 13 82 200 T | 35 | 25 03 125 | 38 | 31 11 160 | 63 | 41 34 165 | 69 |
| 00 11 07 | 150 | 02 01 180 | 29 | 10 99 1220 | 132 | 13 82 200 T | 257 | 25 05 140 | 38 | 31 15 160 | 63 | 41 44 200 | 69 |
| 00 11 08 | 151 | 02 01 200 | 29 | 11 01 160 | 42 | 13 86 200 | 35 | 25 05 160 | 38 | 31 21 160 | 63 | 42 14 280 | 68 |
| 00 11 17 | 151 | 02 01 225 | 29 | 11 02 160 | 42 | 13 86 200 | 200 | 25 06 160 | 38 | 31 25 160 | 63 | 42 24 280 | 68 |
| 00 11 V50 | 147 | 02 02 180 | 29 | 11 05 160 | 42 | 13 91 200 | 35 | 25 06 160 | 201 | 32 11 135 | 65 | 42 34 280 | 68 |
| 00 19 41 | 260 | 02 02 200 | 29 | 11 06 160 | 42 | 13 92 200 | 35 | 25 21 160 | 38 | 32 21 135 | 65 | 42 44 280 | 68 |
| 00 19 55 S4 | 113 | 02 02 225 | 29 | 11 06 160 | 198 | 13 96 200 | 35 | 25 25 160 | 38 | 32 31 135 | 65 | 44 10 J5 | 78 |
| 00 19 56 | 81 | 02 02 225 T | 29 | 11 07 160 | 42 | 13 96 200 | 200 | 25 26 160 | 38 | 33 01 160 | 65 | 44 10 J6 | 78 |
| 00 19 57 | 81 | 02 02 225 T | 257 | 11 07 160 | 198 | 14 22 160 | 43 | 25 26 160 | 201 | 33 03 160 | 65 | 44 11 J0 | 72 |
| 00 19 72 LE | 260 | 02 05 180 | 29 | 11 12 160 | 42 | 14 25 160 | 43 | 26 11 200 | 39 | 34 12 130 | 244 | 44 11 J1 | 72 |
| 00 19 72 LE | 268 | 02 05 200 | 29 | 11 17 160 | 42 | 14 26 160 | 43 | 26 12 200 | 39 | 34 12 130 ESD | 244 | 44 11 J2 | 72 |
| 00 19 73 LE | 268 | 02 05 225 | 29 | 11 17 160 | 198 | 14 26 160 | 199 | 26 12 200 T | 39 | 34 22 130 | 244 | 44 11 J3 | 72 |
| 00 20 01 V01 | 261 | 02 06 180 | 29 | 11 82 130 | 42 | 15 11 120 | 49 | 26 12 200 T | 257 | 34 22 130 ESD | 244 | 44 11 J4 | 72 72 |
| 00 20 01 V02 | 81 | 02 06 180 | 196 | 11 92 140 | 43 | 15 19 005 | 49 | 26 13 200 | 39 | 34 32 130 34 32 130 ESD | 244 | 44 13 J0 | |
| 00 20 01 V02 00 20 01 V03 | 261 261 | 02 06 200 02 06 200 | 29 196 | 12 11 180 12 12 02 | 45 45 | 15 19 006 15 19 008 | 49 49 | 26 15 200 26 15 200 T | 39 39 | 34 32 130 ESD 34 42 130 | 244 244 | 44 13 J1 44 13 J2 | 72 72 |
| 00 20 01 V03 | 81 | 02 06 200 | 29 | 12 12 02 | 45 | 15 19 008 | 49 | 26 15 200 T 26 15 200 T | 257 | 34 42 130 34 42 130 ESD | 244 | 44 13 J2 44 13 J3 | 72 |
| 00 20 01 V09 | 261 | 02 06 225 | 196 | 12 12 00 | 45 | 15 51 160 | 49 51 | 26 15 200 1 | 39 | 34 52 130 230 | 244 | 44 13 J3 44 13 J4 | 72 |
| 00 20 01 V09 | 82 | 02 00 225 | 29 | 12 12 10 | 45 | 15 61 160 | 51 | 26 16 200 | 201 | 34 52 130 34 52 130 ESD | 244 | 44 13 J4 44 19 J5 | 72 |
| 00 20 03 3b | 83 | 02 07 200 | 196 | 12 12 11 | 45 | 15 81 160 | 51 | 26 17 200 | 39 | 35 11 115 | 244 | 44 19 J6 | 78 |
| 00 20 04 SB | 82 | 02 07 200 | 29 | 12 12 12 | 45 | 16 20 16 SB | 51 | 26 17 200 | 201 | 35 12 115 | 245 | 44 20 J51 | 78 |
| 00 20 04 3D | 83 | 02 07 225 | 196 | 12 12 13 | 45 | 16 20 28 SB | 51 | 26 21 200 | 39 | 35 12 115 35 12 115 ESD | 246 | 44 20 J61 | 78 |
| 00 20 09 V01 | 263 | 03 01 140 | 28 | 12 19 02 | 45 | 16 20 165 SB | 51 | 26 22 200 | 39 | 35 21 115 | 245 | 44 21 J01 | 72 |
| 00 20 09 V02 | 263 | 03 01 160 | 28 | 12 19 06 | 45 | 16 29 165 | 51 | 26 22 200 T | 39 | 35 22 115 | 245 | 44 21 J11 | 72 |
| 00 20 09 V03 | 263 | 03 01 180 | 28 | 12 19 10 | 45 | 16 30 135 SB | 52 | 26 22 200 T | 257 | 35 22 115 ESD | 246 | 44 21 J21 | 72 |
| 00 20 10 | 263 | 03 01 200 | 28 | 12 19 11 | 45 | 16 39 135 | 52 | 26 25 200 | 39 | 35 31 115 | 245 | 44 21 J31 | 72 |
| 00 20 11 | 263 | 03 01 250 | 28 | 12 19 12 | 45 | 16 40 150 | 52 | 26 25 200 T | 39 | 35 32 115 | 245 | 44 21 J41 | 72 |
| 00 20 12 | 263 | 03 02 160 | 28 | 12 19 13 | 45 | 16 49 150 | 52 | 26 25 200 T | 257 | 35 32 115 ESD | 246 | 44 23 J11 | 72 |
| 00 20 13 | 263 | 03 02 180 | 28 | 12 19 14 | 45 | 16 60 05 SB | 53 | 26 26 200 | 39 | 35 42 115 | 245 | 44 23 J21 | 72 |
| 00 20 15 | 227 | 03 02 200 | 28 | 12 19 180 | 45 | 16 60 06 SB | 53 | 26 26 200 | 201 | 35 42 115 ESD | 246 | 44 23 J31 | 72 |
| 00 20 16 | 248 | 03 05 140 | 28 | 12 21 180 | 45 | 16 60 100 SB | 54 | 26 27 200 | 39 | 35 52 145 | 245 | 44 29 J51 | 78 |
| 00 20 16 P | 248 | 03 05 160 | 28 | 12 29 180 | 45 | 16 64 125 SB | 54 | 26 27 200 | 201 | 35 62 145 | 245 | 44 29 J61 | 78 |
| 00 20 16 P ESD | 248 | 03 05 180 | 28 | 12 40 200 | 47 | 16 65 125 SB | 54 | 27 01 160 | 37 | 35 72 145 | 245 | 44 31 J02 | 72 |
| 00 20 17 | 248 | 03 05 200 | 28 | 12 42 195 | 46 | 16 80 125 SB | 55 | 28 01 200 | 61 | 35 82 145 | 245 | 44 31 J12 | 72 |
| 00 20 18 | 248 | 03 06 160 | 28 | 12 49 01 | 47 | 16 85 125 SB | 55 | 28 21 200 | 61 | 36 12 130 | 247 | 44 31 J22 | 72 |
| 00 20 18 ESD | 248 | 03 06 160 | 197 | 12 49 02 | 47 | 16 90 130 SB | 55 | 28 71 280 | 62 | 36 22 125 | 247 | 44 31 J32 | 72 |
| 00 20 72 V01 | 260 | 03 06 180 | 28 | 12 49 03 | 47 | 16 95 01 SB | 57 | 28 81 280 | 62 | 36 32 125 | 247 | 44 31 J42 | 72 |
| 00 20 72 V02 | 260 | 03 06 180 | 197 | 12 49 04 | 47 | 19 01 130 | 37 | 29 11 160 | 63 | 37 11 125 | 66 | 45 10 170 | 80 |
| 00 21 01 TL | 264 | 03 06 200 | 28 | 12 49 05 | 47 | 19 03 130 | 37 | 29 21 160 | 63 | 37 13 125 | 66 | 45 21 200 | 80 |
| 00 21 02 LE | 265 | 03 06 200 | 197 | 12 49 21 | 46 | 20 01 125 | 60 | 29 25 160 | 63 | 37 21 125 | 66 | 46 10 100 46 10 45 | 79 79 |
| 00 21 02 LE 00 21 02 SL | 268 | 03 07 160 | 28 197 | 12 49 23 12 50 200 | 46 47 | 20 01 140 20 01 160 | 60 | 30 11 140 | 64 64 | 37 23 125 | 66 | 46 10 A5 | 78 78 |
| | 265 | 03 07 160 | | 12 50 200 | | | 60 | 30 11 160 | | 37 31 125 | 66 | 46 10 A6 | |
| 00 21 05 LE 00 21 07 LE | 270 | 03 07 180 03 07 180 | 28 197 | 12 59 01 12 59 02 | 47 47 | 20 01 180 20 02 140 | 60 60 | 30 11 190 30 13 140 | 64 64 | 37 33 125 37 41 125 | 66 | 46 11 A0 46 11 A1 | 73 73 |
| 00 21 07 LE | 269 269 | 03 07 180 | 28 | 12 59 02 | 47 | 20 02 140 | 60 | 30 13 140 | 64 | 37 43 125 | 66 66 | 46 11 A1 46 11 A2 | 73 |
| 00 21 08 LE | 269 | 03 07 200 | 197 | 12 62 180 | 47 | 20 02 100 | 60 | 30 15 140 | 64 | 38 11 200 | 67 | 46 11 A2 | 73 |
| 00 21 10 LL | 203 | 03 07 250 | 28 | 12 69 21 | 40 | 20 05 140 | 60 | 30 15 160 | 64 | 38 15 200 | 67 | 46 11 A4 | 73 |
| 00 21 15 | 275 | 03 07 250 | 197 | 12 69 23 | 47 | 20 05 160 | 60 | 30 15 190 | 64 | 38 21 200 | 67 | 46 11 G0 | 80 |
| 00 21 15 LE | 227 | 08 05 110 | 32 | 12 69 31 | 48 | 20 06 160 | 200 | 30 16 160 | 64 | 38 25 200 | 67 | 46 11 G0 | 80 |
| 00 21 15 LE | 227 | 08 21 145 | 31 | 12 09 51 12 80 040 SB | 48 | 22 00 100 | 61 | 30 16 160 | 202 | 38 31 200 | 67 | 46 11 G2 | 80 |
| 00 21 20 | 266 | 08 22 145 | 31 | 12 80 100 SB | 48 | 22 01 125 | 61 | 30 21 140 | 64 | 38 35 200 | 67 | 46 11 G3 | 80 |
| 00 21 20 LE | 266 | 08 22 145 T | 31 | 12 82 130 SB | 49 | 22 01 140 | 61 | 30 21 140 | 64 | 38 41 190 | 67 | 46 11 G4 | 80 |
| 00 21 20 LE | 270 | 08 22 145 T | 257 | 12 85 100 SB | 49 | 22 01 100 | 61 | 30 21 190 | 64 | 38 45 190 | 67 | 46 13 A0 | 73 |
| 00 21 25 | 82 | 08 25 145 | 31 | 13 01 160 | 36 | 22 02 160 | 61 | 30 23 140 | 64 | 38 71 200 | 67 | 46 13 A1 | 73 |
| 00 21 30 | 267 | 08 26 145 | 31 | 13 02 160 | 36 | 22 05 140 | 61 | 30 25 140 | 64 | 38 91 200 | 67 | 46 13 A2 | 73 |
| 00 21 32 LE | 271 | 08 26 145 | 197 | 13 05 160 | 36 | 22 05 160 | 61 | 30 25 160 | 64 | 38 95 200 | 67 | 46 13 A3 | 73 |
| 00 21 35 LE | 273 | 09 01 240 | 33 | 13 05 160 T | 36 | 22 06 160 | 61 | 30 25 190 | 64 | 40 04 180 | 68 | 46 19 A5 | 78 |
| 00 21 40 LE | 271 | 09 02 240 | 33 | 13 05 160 T | 257 | 22 06 160 | 199 | 30 31 160 | 64 | 40 04 250 | 68 | 46 19 A6 | 78 |
| | | | | | | | | | | | | | |

| 46 30 454 | 70 | 50.04.350 | 00 | 70.07.400 | 0.4 | 74.05.400 | 00 | 70.02.425 | 225 | 05 50 350 4 | 140 | 00.00.350 | 200 |
|------------------------|----------|---------------|----------|--------------------------|------------|------------------------------|------------|----------------|------------|------------------------|------------|--------------------------|-----|
| 46 20 A51 | 78 | 50 01 250 | 86 | 70 07 180 | 94 | 74 05 180 | 99 | 78 03 125 | 235 | 85 59 250 A | 142 | 88 06 250 | 206 |
| 46 20 A61 | 78 | 50 01 300 | 86 | 70 07 180 | 202 | 74 05 200 | 99 | 78 03 125 ESD | 235 | 85 59 250 C | 143 | 88 07 250 | 123 |
| 46 21 A01 | 73 | 51 01 210 | 86 | 70 11 110 | 94 | 74 05 250 | 99 | 78 13 125 | 235 | 86 03 125 | 113 | 88 07 250 | 206 |
| 46 21 A11 | 73 | 55 00 300 | 87 | 70 15 110 | 94 | 74 06 160 | 99 | 78 13 125 ESD | 235 | 86 03 150 | 113 | 88 07 300 | 123 |
| 46 21 A21 | 73 | 58 30 225 | 87 | 70 26 160 | 95 | 74 06 160 | 205 | 78 23 125 | 235 | 86 03 180 | 113 | 88 07 300 | 206 |
| 46 21 A31 | 73 | 61 01 200 | 108 | 70 26 160 | 204 | 74 06 180 | 99 | 78 31 125 | 235 | 86 03 250 | 113 | 89 01 250 | 125 |
| 46 21 A41 | 73 | 61 02 200 | 108 | 71 01 200 | 102 | 74 06 180 | 205 | 78 41 125 | 235 | 86 03 300 | 113 | 89 03 250 | 125 |
| 46 23 A01 | 73 | 62 12 120 | 243 | 71 01 250 | 105 | 74 06 200 | 99 | 78 61 125 | 235 | 86 03 400 | 114 | 89 05 250 | 125 |
| 46 23 A11 | 73 | 64 01 115 | 243 | 71 02 200 | 102 | 74 06 200 | 205 | 78 61 125 ESD | 235 | 86 05 150 | 113 | 90 01 125 | 125 |
| 46 23 A21 | 73 | 64 02 115 | 243 | 71 02 200 T | 102 | 74 06 250 | 99 | 78 71 125 | 235 | 86 05 180 | 113 | 90 03 125 | 125 |
| 46 23 A31 | 73 | 64 11 115 | 243 | 71 02 200 T | 257 | 74 06 250 | 205 | 78 71 125 ESD | 235 | 86 05 180 T | 113 | 90 20 185 | 135 |
| 46 29 A51 | 78 | 64 12 115 | 243 | 71 12 200 | 102 | 74 07 200 | 99 | 78 81 125 | 235 | 86 05 180 T | 257 | 90 25 20 | 136 |
| 46 29 A61 | 78 | 64 12 115 ESD | 243 | 71 21 200 | 103 | 74 07 200 | 205 | 78 91 125 | 235 | 86 05 250 | 113 | 90 25 40 | 137 |
| 46 31 A02 | 73 | 64 22 115 | 243 | 71 22 200 | 103 | 74 07 250 | 99 | 79 02 120 | 236 | 86 05 250 T | 113 | 90 29 01 | 136 |
| 46 31 A12 | 73 | 64 32 120 | 243 | 71 22 200 T | 103 | 74 07 250 | 205 | 79 02 120 ESD | 237 | 86 05 250 T | 257 | 90 29 02 | 136 |
| 46 31 A22 | 73 | 64 32 120 ESD | 243 | 71 22 200 T | 257 | 74 12 160 | 99 | 79 02 125 | 236 | 86 07 250 | 206 | 90 29 15 | 136 |
| 46 31 A32 | 73 | 64 42 115 | 243 | 71 31 200 | 103 | 74 12 180 | 99 | 79 02 125 ESD | 237 | 87 01 125 | 117 | 90 29 40 | 137 |
| 46 31 A42 | 73 | 64 52 115 | 243 | 71 31 250 | 105 | 74 21 180 | 99 | 79 12 125 | 236 | 87 01 150 | 117 | 90 29 185 | 135 |
| 48 11 J0 | 74 | 64 62 120 | 243 | 71 32 200 | 103 | 74 21 200 | 99 | 79 12 125 ESD | 237 | 87 01 180 | 117 | 90 42 250 | 138 |
| 48 11 J1 | 74 | 64 62 120 ESD | 243 | 71 32 200 T | 103 | 74 21 250 | 99 | 79 22 120 | 236 | 87 01 250 | 117 | 90 42 340 | 138 |
| 48 11 J2 | 74 | 64 72 120 | 243 | 71 32 200 T | 257 | 74 22 200 | 99 | 79 22 120 ESD | 237 | 87 01 300 | 117 | 90 49 340 | 138 |
| 48 11 J3 | 74 | 67 01 140 | 108 | 71 41 200 | 103 | 74 22 200 T | 99 | 79 22 125 | 236 | 87 01 400 | 118 | 90 49 340 M | 138 |
| 48 11 J4 | 74 | 67 01 160 | 108 | 71 72 460 | 106 | 74 22 200 T | 257 | 79 22 125 ESD | 237 | 87 01 560 | 118 | 90 55 280 | 138 |
| 48 21 J01 | 74 | 67 01 200 | 108 | 71 72 610 | 106 | 74 22 250 | 99 | 79 32 125 | 236 | 87 02 180 | 117 | 90 59 280 | 138 |
| 48 21 J11 | 74 | 67 05 140 | 108 | 71 72 760 | 106 | 74 22 250 T | 99 | 79 32 125 ESD | 237 | 87 02 180 T | 117 | 90 61 16 | 139 |
| 48 21 J21 | 74 | 67 05 160 | 108 | 71 72 910 | 106 | 74 22 250 T | 257 | 79 42 125 | 236 | 87 02 180 T | 257 | 90 61 20 | 139 |
| 48 21 J31 | 74 | 67 05 200 | 108 | 71 79 460 | 106 | 75 02 125 | 238 | 79 42 125 ESD | 237 | 87 02 250 | 117 | 90 70 220 | 144 |
| 48 21 J41 | 74 | 68 01 160 | 87 | 71 79 610 | 106 | 75 12 125 | 238 | 79 42 125Z | 236 | 87 02 250 T | 117 | 91 00 200 | 144 |
| 48 31 J0 | 75 | 68 01 160 | 109 | 71 79 760 | 106 | 75 22 125 | 238 | 79 42 125Z ESD | 237 | 87 02 250 T | 257 | 91 13 250 | 145 |
| 48 31 J1 | 75 | 68 01 180 | 87 | 71 79 910 | 106 | 75 52 125 | 238 | 79 52 125 | 236 | 87 02 300 | 117 | 91 19 250 01 | 145 |
| 48 31 J2 | 75 | 68 01 180 | 109 | 71 82 950 | 107 | 76 01 125 | 96 | 79 52 125 ESD | 237 | 87 02 300 T | 117 | 91 31 180 | 146 |
| 48 31 J3 | 75 | 68 01 200 | 87 | 71 89 950 | 107 | 76 03 125 | 96 | 79 62 125 | 236 | 87 02 300 T | 257 | 91 51 160 | 146 |
| 48 41 J01 | 75 | 68 01 200 | 109 | 72 01 140 | 92 | 76 05 125 | 96 | 79 62 125 ESD | 237 | 87 03 125 | 117 | 91 61 160 | 146 |
| 48 41 J11 | 75 | 68 01 280 | 87 | 72 01 140 | 92 | 76 12 125 | 96 | 81 01 250 | 128 | 87 03 180 | 117 | 91 71 160 | 146 |
| 48 41 J21 | 75 | 68 01 280 | 109 | 72 01 180 | 92 | 76 22 125 | 96 | 81 03 250 | 128 | 87 03 250 | 117 | 91 92 180 | 144 |
| 48 41 J31 | 75 | 69 01 130 | 109 | 72 02 125 | 92 | 76 81 125 | 96 | 81 11 250 | 128 | 87 03 300 | 117 | 91 92 180 | 144 |
| 49 11 A0 | 76 | 69 03 130 | 109 | 72 02 125 | 92 | 77 01 115 | 239 | 81 13 250 | 128 | 87 05 250 | 117 | 92 02 53 | 249 |
| 49 11 A1 | 76 | 70 01 110 | 94 | 72 21 160 | 92 | 77 01 130 | 239 | 81 19 230 | 128 | 87 05 300 | 117 | 92 02 55 | 249 |
| 49 11 A2 | 76 | 70 01 125 | 94 | 72 51 160 | 92 | 77 02 115 | 239 | 83 10 010 | 126 | 87 11 250 | 119 | 92 02 54 92 02 55 | 249 |
| 49 11 A3 | 76 | 70 01 120 | 94 | 73 02 160 | 97 | 77 02 115 ESD | 240 | 83 10 015 | 126 | 87 19 250 | 119 | 92 02 55 92 08 78 ESD | 253 |
| 49 11 A4 | 76 | 70 01 140 | 95 | 73 05 160 | 97 | 77 02 113 LSD 77 02 120 H | 240 | 83 10 020 | 120 | 87 21 250 | 120 | 92 08 79 ESD | 253 |
| 49 21 A01 | 76 | 70 01 180 | 94 | 73 05 160 T | 97 | 77 02 120 H ESD | | 83 10 030 | 120 | 87 21 200 | 120 | 92 12 52 | 235 |
| 49 21 A01 | 76 | 70 02 125 | 94 | 73 05 160 T | 257 | 77 02 120 11 250 | 239 | 83 10 030 | 120 | 87 22 250 | 120 | 92 22 04 | 249 |
| 49 21 A21 | 76 | 70 02 125 | 94 | 73 06 160 | 97 | 77 02 135 H | 233 | 83 20 010 | 120 | 87 26 250 | 120 | 92 22 04 | 249 |
| 49 21 A21 | | 70 02 140 | 95 | 73 06 160 | | 77 02 135 H ESD | | 83 20 010 | | 87 26 250 | | 92 22 00 92 22 07 | 249 |
| 49 21 A31 49 21 A41 | 76 76 | 70 02 180 | 95 94 | 73 71 180 | 205 100 | 77 02 135 H ESD | 241 239 | 83 20 015 | 126 126 | 87 26 250 87 41 250 | 207 115 | 92 22 07 92 22 12 | 249 |
| 49 21 A41 49 31 A0 | | 70 02 180 | 94 94 | 73 72 180 | | 77 12 115 | | 83 30 005 | 120 | 87 51 250 | | 92 22 12 | 250 |
| 49 31 A0 49 31 A1 | 77 77 | 70 05 125 | 94 94 | 73 72 180 73 72 180 F | 100 100 | 77 12 115 77 12 115 ESD | 239 240 | 83 30 005 | 127 | 87 51 250 88 01 180 | 121 123 | 92 22 13 92 22 35 | 250 |
| | | | | | | | | 83 30 015 | | | | 92 22 33 92 23 05 | |
| 49 31 A2 | 77 | 70 05 160 | 95 | 74 01 140 | 99 | 77 21 115 | 239 | | 127 | 88 01 250 | 123 | | 249 |
| 49 31 A3 | 77 | 70 05 160 T | 95 | 74 01 160 | 99 | 77 21 130 | 239 | 83 30 020 | 127 | 88 01 300 | 123 | 92 24 01 | 249 |
| 49 41 A01 | 77 | 70 05 160 T | 257 | 74 01 180 | 99 | 77 22 115 | 239 | 83 30 030 | 127 | 88 01 400 | 124 | 92 24 34 | 250 |
| 49 41 A11 | 77 | 70 05 180 | 94 | 74 01 200 | 99 | 77 22 115 ESD | 240 | 83 60 010 | 127 | 88 02 180 | 123 | 92 27 61 | 208 |
| 49 41 A21 | 77 | 70 05 180 T | 94 | 74 01 250 | 99 | 77 22 130 | 239 | 83 60 015 | 127 | 88 02 250 | 123 | 92 27 61 | 252 |
| 49 41 A31 | 77 | 70 05 180 T | 257 | 74 02 140 | 99 | 77 32 115 | 239 | 83 60 020 | 127 | 88 02 250 T | 123 | 92 27 62 | 208 |
| 50 00 160 | 86 | 70 06 125 | 94 | 74 02 160 | 99 | 77 32 115 ESD | 240 | 83 61 010 | 127 | 88 02 250 T | 257 | 92 27 62 | 252 |
| 50 00 180 | 86 | 70 06 125 | 202 | 74 02 180 | 99 | 77 32 120 H | 241 | 83 61 015 | 127 | 88 02 300 | 123 | 92 28 69 ESD | 253 |
| 50 00 210 | 86 | 70 06 140 | 94 | 74 02 200 | 99 | 77 32 120 H ESD | | 83 61 020 | 127 | 88 02 300 T | 123 | 92 28 70 ESD | 253 |
| 50 00 225 | 86 | 70 06 140 | 202 | 74 02 200 T | 99 | 77 42 115 | 239 | 84 11 200 | 139 | 88 02 300 T | 257 | 92 28 71 ESD | 253 |
| 50 00 250 | 86 | 70 06 160 | 95 | 74 02 200 T | 257 | 77 42 115 ESD | 240 | 84 21 200 | 139 | 88 03 180 | 123 | 92 28 72 ESD | 253 |
| 50 00 300 | 86 | 70 06 160 | 204 | 74 02 250 | 99 | 77 42 130 | 239 | 85 01 250 | 115 | 88 03 250 | 123 | 92 32 29 | 250 |
| 50 01 160 | 86 | 70 06 180 | 94 | 74 02 250 T | 99 | 77 52 115 | 239 | 85 51 250 A | 141 | 88 05 180 | 123 | 92 34 28 | 250 |
| 50 01 180 | 86 | 70 06 180 | 202 | 74 02 250 T | 257 | 77 52 115 ESD | 240 | 85 51 250 AF | 142 | 88 05 250 | 123 | 92 34 36 | 250 |
| 50 01 210 | 86 | 70 07 160 | 95 | 74 05 140 | 99 | 77 72 115 | 239 | 85 51 250 C | 143 | 88 05 300 | 123 | 92 34 37 | 250 |
| 50 01 225 | 86 | 70 07 160 | 204 | 74 05 160 | 99 | 77 72 115 ESD | 240 | 85 59 250 A | 141 | 88 06 250 | 123 | 92 37 64 | 208 |
| | | | | | | | | | | | | | |

| 92 37 64 | 252 | 95 36 250 | 158 | 97 43 E US | 171 | 97 49 94 | 178 | 97 90 21 | 187 | 97 99 333 | 191 | 98 01 11 | 215 |
|------------------------|------------|------------------------------|------------|--------------------------|------------|---------------------------|------------|------------------------|------------|-------------------------|------------|-----------------------|------------|
| 92 38 75 ESD | 253 | 95 36 250 | 211 | 97 49 04 | 172 | 97 49 94 | 179 | 97 90 22 | 187 | 97 99 334 | 191 | 98 01 12 | 215 |
| 92 44 42 | 251 | 95 36 280 | 158 | 97 49 05 | 172 | 97 49 95 | 174 | 97 90 23 | 186 | 97 99 335 | 191 | 98 01 13 | 215 |
| 92 52 23 | 250 | 95 36 280 | 211 | 97 49 06 | 172 | 97 49 95 | 178 | 97 90 24 | 186 | 97 99 336 | 191 | 98 01 14 | 215 |
| 92 58 74 ESD | 253 | 95 36 315 A | 160 | 97 49 07 | 172 | 97 49 95 | 179 | 97 90 25 | 187 | 97 99 337 | 191 | 98 01 15 | 215 |
| 92 64 43 | 251 | 95 36 315 A | 212 | 97 49 08 | 172 | 97 50 01 | 176 | 97 90 26 | 188 | 97 99 338 | 191 | 98 01 16 | 215 |
| 92 64 44 | 251 | 95 36 320 | 159 | 97 49 09 | 172 | 97 51 10 | 176 | 97 91 01 | 174 | 97 99 339 | 191 | 98 01 17 | 215 |
| 92 67 63 | 208 | 95 36 320 | 212 | 97 49 10 | 172 | 97 51 12 | 177 | 97 91 02 | 175 | 97 99 350 | 191 | 98 01 18 | 215 |
| 92 67 63 | 252 | 95 39 038 | 161 | 97 49 11 | 172 | 97 52 04 | 178 | 97 99 001 | 189 | 97 99 351 | 191 | 98 01 19 | 215 |
| 92 69 84 | 251 | 95 39 250 | 158 | 97 49 14 | 172 | 97 52 05 | 178 | 97 99 010 | 189 | 97 99 352 | 191 | 98 01 22 | 215 |
| 92 70 46 | 251 | 95 39 250 | 211 | 97 49 15 | 172 | 97 52 06 | 178 | 97 99 011 | 189 | 97 99 353 | 191 | 98 01 24 | 215 |
| 92 72 45 | 251 | 95 39 280 | 158 | 97 49 16 | 172 | 97 52 08 | 178 | 97 99 020 | 189 | 97 99 354 | 191 | 98 03 04 | 215 |
| 92 78 77 ESD | 253 | 95 39 280 | 211 | 97 49 18 | 172 | 97 52 09 | 178 | 97 99 021 | 189 | 97 99 355 | 191 | 98 03 05 | 215 |
| 92 84 18 | 251 | 95 39 315 A 01 | 160 | 97 49 19 | 172 | 97 52 10 | 178 | 97 99 022 | 189 | 97 99 356 | 191 | 98 03 06 | 215 |
| 92 88 73 ESD | 253 | 95 39 315 A 01 | 212 | 97 49 20 | 172 | 97 52 13 | 178 | 97 99 030 | 189 | 97 99 357 | 191 | 98 03 07 | 215 |
| 92 94 91 | 252 | 95 39 315 A 02 | 160 | 97 49 23 | 172 | 97 52 14 | 177 | 97 99 050 | 189 | 97 99 358 | 191 | 98 03 08 | 215 |
| 92 95 89 | 252 | 95 39 315 A 02 | 212 | 97 49 24 | 172 | 97 52 19 | 178 | 97 99 060 | 189 | 97 99 359 | 191 | 98 03 09 | 215 |
| 92 95 90 94 10 185 | 252 | 95 39 320 01 05 30 320 01 | 159 | 97 49 25 | 172 | 97 52 20 | 177 | 97 99 070 | 189 | 97 99 370 | 191 | 98 03 10 08 03 11 | 215 |
| 94 10 185 94 15 215 | 137 133 | 95 39 320 01 95 39 320 02 | 212 159 | 97 49 25 1 97 49 26 | 174 173 | 97 52 23 97 52 30 | 178 179 | 97 99 071 97 99 090 | 189 189 | 97 99 371 97 99 372 | 191 191 | 98 03 11 98 03 12 | 215 215 |
| 94 19 215 94 19 185 | 135 | 95 39 320 02 95 39 320 02 | 212 | 97 49 26 97 49 26 1 | 175 | 97 52 30 97 52 33 | 179 | 97 99 090 97 99 091 | 189 | 97 99 372 97 99 373 | 191 | 98 03 12 98 03 13 | 215 |
| 94 19 185 94 19 215 | 137 | 95 39 320 02 95 39 720 | 161 | 97 49 20 1 97 49 27 | 174 | 97 52 33 97 52 34 | 179 | 97 99 091 97 99 092 | 189 | 97 99 373 97 99 374 | 191 | 98 03 15 98 03 055 | 215 |
| 94 19 215 94 19 215 | 133 | 95 39 720 95 39 870 | 161 | 97 49 27 1 | 173 | 97 52 34 97 52 35 | 179 | 97 99 110 | 189 | 97 99 374 97 99 375 | 191 | 98 03 035 98 04 08 | 215 |
| 94 35 215 | 133 | 95 41 165 | 154 | 97 49 30 | 174 | 97 52 35 | 179 | 97 99 111 | 189 | 97 99 375 97 99 376 | 191 | 98 04 10 | 210 |
| 95 02 21 | 134 | 95 61 150 | 163 | 97 49 35 | 173 | 97 52 30 97 52 37 | 179 | 97 99 112 | 189 | 97 99 377 | 191 | 98 04 13 | 216 |
| 95 03 160 SB | 134 | 95 61 190 | 162 | 97 49 40 | 173 | 97 52 38 | 179 | 97 99 130 | 189 | 97 99 378 | 191 | 98 04 17 | 216 |
| 95 05 140 | 135 | 95 62 190 | 162 | 97 49 44 | 173 | 97 52 50 | 179 | 97 99 131 | 189 | 97 99 390 | 191 | 98 04 19 | 216 |
| 95 05 155 SB | 156 | 95 62 190 T | 162 | 97 49 50 | 173 | 97 52 63 | 181 | 97 99 150 | 189 | 97 99 391 | 191 | 98 04 22 | 216 |
| 95 05 165 | 156 | 95 62 190 T | 257 | 97 49 54 | 173 | 97 52 63 DG | 181 | 97 99 151 | 189 | 97 99 392 | 191 | 98 05 13 | 216 |
| 95 05 185 | 135 | 95 71 445 | 163 | 97 49 59 | 173 | 97 52 64 | 181 | 97 99 170 | 190 | 97 99 393 | 191 | 98 05 17 | 216 |
| 95 05 190 | 135 | 95 71 600 | 163 | 97 49 59 1 | 174 | 97 52 65 | 181 | 97 99 171 | 190 | 97 99 394 | 191 | 98 05 19 | 216 |
| 95 06 230 | 156 | 95 77 600 | 163 | 97 49 60 | 173 | 97 52 65 A | 181 | 97 99 172 | 190 | 97 99 395 | 191 | 98 07 250 | 214 |
| 95 06 230 | 208 | 95 77 600 | 213 | 97 49 61 | 173 | 97 52 65 DG | 181 | 97 99 173 | 190 | 97 99 396 | 191 | 98 13 20 | 216 |
| 95 11 165 | 154 | 95 79 445 | 163 | 97 49 62 | 173 | 97 52 65 DG A | 181 | 97 99 174 | 190 | 97 99 397 | 191 | 98 13 25 | 216 |
| 95 11 200 | 155 | 95 79 600 | 163 | 97 49 63 | 173 | 97 53 04 | 182 | 97 99 175 | 190 | 97 99 398 | 191 | 98 13 30 | 216 |
| 95 12 165 | 154 | 95 79 600 | 213 | 97 49 64 | 173 | 97 53 08 | 183 | 97 99 176 | 190 | 97 99 399 | 191 | 98 13 40 | 216 |
| 95 12 165 T | 154 | 95 81 600 | 163 | 97 49 65 | 173 | 97 53 09 | 183 | 97 99 177 | 190 | 98 00 1/2" | 214 | 98 13 50 | 216 |
| 95 12 165 T | 257 | 95 89 600 | 163 | 97 49 65 1 | 174 | 97 53 14 | 182 | 97 99 178 | 190 | 98 00 1/4" | 214 | 98 13 60 | 216 |
| 95 12 200 | 155 | 97 00 215 A | 166 | 97 49 65 2 | 175 | 97 54 24 | 184 | 97 99 179 | 190 | 98 00 3/4" | 214 | 98 14 05 | 216 |
| 95 12 500 | 157 | 97 21 215 | 166 | 97 49 66 | 173 | 97 54 25 | 184 | 97 99 180 | 190 | 98 00 3/8" | 214 | 98 14 06 | 216 |
| 95 16 165 | 154 | 97 21 215 B | 166 | 97 49 66 1 | 174 | 97 54 26 | 184 | 97 99 210 | 190 | 98 00 5/8" | 214 | 98 14 08 | 216 |
| 95 16 165 | 209 | 97 21 215 C | 166 | 97 49 66 2 | 175 | 97 54 27 | 184 | 97 99 211 | 190 | 98 00 5/16" | 214 | 98 15 05 | 216 |
| 95 16 200 | 155 | 97 22 240 | 166 | 97 49 66 4 | 173 | 97 59 06 | 176 | 97 99 212 | 190 | 98 00 07 | 214 | 98 15 06 | 216 |
| 95 16 200 05 17 200 | 210 | 97 32 240 97 33 01 | 166 | 97 49 66 6 | 173 | 97 59 12 | 177 | 97 99 213 | 190 | 98 00 7/16" | 214 | 98 15 08 | 216 |
| 95 17 200 95 17 200 | 155 210 | 97 33 01 97 33 02 | 169 169 | 97 49 67 97 49 68 | 173 173 | 97 59 14 97 59 65 2 | 177 181 | 97 99 214 97 99 215 | 190 190 | 98 00 08 98 00 09 | 214 214 | 98 20 10 98 20 25 | 217 217 |
| 95 17 200 95 17 500 | 157 | 97 39 02 97 39 05 | 169 | 97 49 68 1 97 49 68 1 | 173 | 97 59 65 2 97 61 145 A | 184 | 97 99 215 97 99 216 | 190 | 98 00 09 98 00 9/16" | 214 | 98 20 25 98 20 30 | 217 |
| 95 17 500 | 210 | 97 39 06 | 169 | 97 49 69 1 | 173 | 97 61 145 F | 184 | 97 99 217 | 190 | 98 00 10 | 214 | 98 20 35 | 217 |
| 95 21 165 | 154 | 97 39 08 | 169 | 97 49 69 1 97 49 69 2 | 173 | 97 62 145 A | 184 | 97 99 218 | 190 | 98 00 11 | 214 | 98 20 35 SL | 217 |
| 95 21 600 | 157 | 97 39 09 | 169 | 97 49 69 11 | 174 | 97 68 145 A | 184 | 97 99 219 | 190 | 98 00 12 | 214 | 98 20 40 | 217 |
| 95 22 165 | 154 | 97 39 13 | 169 | 97 49 70 | 173 | 97 68 145 A | 213 | 97 99 220 | 190 | 98 00 13 | 214 | 98 20 40 SL | 217 |
| 95 26 165 | 154 | 97 39 13 A | 169 | 97 49 71 | 173 | 97 71 180 | 185 | 97 99 250 | 190 | 98 00 14 | 214 | 98 20 55 | 217 |
| 95 26 165 | 209 | 97 39 30 | 169 | 97 49 71 1 | 174 | 97 72 180 | 185 | 97 99 251 | 190 | 98 00 15 | 214 | 98 20 55 SL | 217 |
| 95 27 600 | 157 | 97 39 90 | 169 | 97 49 72 | 173 | 97 78 180 | 185 | 97 99 252 | 190 | 98 00 16 | 214 | 98 20 65 | 217 |
| 95 27 600 | 211 | 97 40 10 | 167 | 97 49 74 | 174 | 97 78 180 | 213 | 97 99 270 | 190 | 98 00 17 | 214 | 98 20 65 SL | 217 |
| 95 29 600 | 157 | 97 40 20 SB | 176 | 97 49 76 | 174 | 97 81 180 | 185 | 97 99 271 | 190 | 98 00 18 | 214 | 98 20 80 | 217 |
| 95 29 600 | 211 | 97 43 05 | 170 | 97 49 81 | 174 | 97 90 00 | 187 | 97 99 272 | 190 | 98 00 19 | 214 | 98 21 45 | 217 |
| 95 31 250 | 158 | 97 43 06 | 170 | 97 49 82 | 174 | 97 90 00 LE | 186 | 97 99 290 | 190 | 98 00 22 | 214 | 98 24 00 | 217 |
| 95 31 280 | 158 | 97 43 200 | 170 | 97 49 83 | 174 | 97 90 00 LE | 188 | 97 99 291 | 190 | 98 00 24 | 214 | 98 24 01 | 217 |
| 95 32 038 | 161 | 97 43 200 A | 170 | 97 49 84 | 174 | 97 90 05 | 186 | 97 99 292 | 190 | 98 00 27 | 214 | 98 24 01 SL | 218 |
| 95 32 060 | 161 | 97 43 E | 171 | 97 49 87 | 174 | 97 90 06 | 186 | 97 99 293 | 190 | 98 01 07 | 215 | 98 24 02 | 217 |
| 95 32 100 | 161 | 97 43 E 01 | 171 | 97 49 90 | 174 | 97 90 09 | 186 | 97 99 330 | 191 | 98 01 08 | 215 | 98 24 02 SL | 218 |
| 95 32 315 A | 160 | 97 43 E AUS | 171 | 97 49 93 | 174 | 97 90 10 | 186 | 97 99 331 | 191 | 98 01 09 | 215 | 98 24 03 | 217 |
| 95 32 320 | 159 | 97 43 E UK | 171 | 97 49 94 | 174 | 97 90 12 | 186 | 97 99 332 | 191 | 98 01 10 | 215 | 98 24 04 | 217 |
| | | | | | | | | | | | | | |

| 98 25 00 | 218 | 98 52 | 222 | | | |
|----------------------------|------------|------------------------|------------|--|--|--|
| 98 25 01 | 218 | 98 53 03 | 223 | | | |
| 98 25 01 SL | 218 | 98 53 13 | 223 | | | |
| 98 25 02 | 218 | 98 54 | 222 | | | |
| 98 25 02 SL | 218 | 98 55 | 223 | | | |
| 98 25 03 | 218 | 98 56 | 223 | | | |
| 98 25 04 | 218 | 98 56 09 | 223 | | | |
| 98 26 10 | 219 | 98 56 SB | 223 | | | |
| 98 26 15 | 219 | 98 62 01 | 224 | | | |
| 98 26 20 | 219 | 98 62 02 | 224 | | | |
| 98 26 25 | 219 | 98 64 02 | 224 | | | |
| 98 26 30 | 219 | 98 65 01 | 225 | | | |
| 98 30 | 219 | 98 65 02 | 225 | | | |
| 98 31 | 219 | 98 65 03 | 225 | | | |
| 98 33 25 | 222 | 98 65 10 | 225 | | | |
| 98 33 50 | 222 | 98 65 20 | 225 | | | |
| 98 35 125 | 220 | 98 65 30 | 225 | | | |
| 98 35 250 | 220 | 98 65 40 | 225 | | | |
| 98 37 1/2" | 221 | 98 65 41 | 225 | | | |
| 98 37 3/4" 98 37 3/8" | 221 221 | 98 65 42 98 67 05 | 225 | | | |
| 98 37 5/8" 98 37 5/8" | 221 | 98 67 05 98 67 10 | 225 225 | | | |
| 98 37 5/8 98 37 5/16" | | 98 67 10 98 67 15 | 225 | | | |
| 98 37 5/16 98 37 7/16" | 221 221 | 98 67 15 98 67 20 | 225 | | | |
| 98 37 9/16" 98 37 9/16" | 221 | 98 67 20 98 67 25 | 225 | | | |
| 98 37 9/10 98 37 10 | 220 | 98 90 98 90 | 225 | | | |
| 98 37 10 98 37 11 | 220 | 98 99 11 | 226 | | | |
| 98 37 12 | 220 | 98 99 12 | 228 | | | |
| 98 37 13 | 220 | 98 99 13 | 229 | | | |
| 98 37 14 | 220 | 98 99 14 | 231 | | | |
| 98 37 16 | 220 | 98 99 14 LE | 231 | | | |
| 98 37 17 | 220 | 99 00 200 | 88 | | | |
| 98 37 19 | 220 | 99 00 220 | 88 | | | |
| 98 39 05 | 221 | 99 00 220 K12 | 88 | | | |
| 98 39 06 | 221 | 99 00 250 | 88 | | | |
| 98 39 08 | 221 | 99 00 280 | 88 | | | |
| 98 40 | 219 | 99 00 300 | 88 | | | |
| 98 41 | 219 | 99 01 200 | 88 | | | |
| 98 42 | 222 | 99 01 220 | 88 | | | |
| 98 43 50 | 222 | 99 01 250 | 88 | | | |
| 98 45 125 | 220 | 99 01 280 | 88 | | | |
| 98 45 250 | 220 | 99 01 300 | 88 | | | |
| 98 47 1" | 221 | 99 04 220 | 88 | | | |
| 98 47 1/2" | 221 | 99 04 250 | 88 | | | |
| 98 47 3/4" | 221 | 99 04 280 | 88 | | | |
| 98 47 5/8" 98 47 7/8" | 221 | 99 10 250 99 10 200 | 89 | | | |
| 98 47 7/8" 98 47 9/16" | 221 221 | 99 10 300 99 11 250 | 89 89 | | | |
| 98 47 9/10 98 47 10 | 221 | 99 11 200 99 11 300 | 89 | | | |
| 98 47 10 98 47 11 | 220 | 99 14 250 | 89 | | | |
| 98 47 11/16" | 220 | 99 14 300 | 89 | | | |
| 98 47 12 | 220 | 55 14 500 | 05 | | | |
| 98 47 13 | 220 | | | | | |
| 98 47 14 | 220 | | | | | |
| 98 47 16 | 220 | | | | | |
| 98 47 17 | 220 | | | | | |
| 98 47 18 | 220 | | | | | |
| 98 47 19 | 220 | | | | | |
| 98 47 22 | 220 | | | | | |
| 98 47 24 | 220 | | | | | |
| 98 47 27 | 220 | | | | | |
| 98 49 05 | 221 | | | | | |
| 98 49 06 | 221 | | | | | |
| 98 49 08 | 221 | | | | | |
| | | | | | | |

| Adjustable Wrench, insulated | |
|--|---|
| Alligator [®] 122, | 206 |
| Alligator® Set | 262 |
| Alligator® XL | 124 |
| Automatic Insulation Stripper | 47 |
| Automatic Insulation Stripper for flat cable | |
| Battery for KNIPEX eCrimp | |
| Belt Pouch | |
| Big Twin | |
| BigTwin Move | |
| Bolt Cutters | |
| Bolt End Cutting Nippers | |
| Bowden Cable Cutter | |
| | |
| Box Wrenches, insulated | |
| Brick Pincer | |
| Cable Connectors | |
| Cable Cutters (ratchet action) 158, | |
| Cable Knives, insulated | |
| Cable Shears | |
| Cable Shears (ratchet action) | |
| Cable Shears with twin cutting edge 155, | |
| Carpenters' Pincers | 86 |
| Circlip Pliers for grip rings on shafts | 80 |
| Circlip Pliers for large external circlips | 78 |
| Circlip Pliers for large internal circlips | |
| Circlip Pliers Sets | |
| Circlip Pliers to assemble external circlips on shafts | |
| Circlip Pliers to assemble internal circlips into bores | |
| Circlip Tool | |
| CoBolt® | |
| CoBolt XL ® | |
| | |
| Cobra [®] | |
| Cobra® ES | |
| Cobra®matic | |
| Cobra® QuickSet | |
| Cobra® XL / XXL | |
| Combination Pliers | |
| Combination Shears | 135 |
| Compact Bolt Cutters | 102 |
| Compact Diagonal Cutters | 205 |
| Compression Tool for Coax conectors | 176 |
| Concrete Mesh Cutter | 107 |
| Concreters' Nippers | 88 |
| Connector Pliers | 128 |
| Control Cabinet Keys | |
| Crimp Assortments | |
| Crimp Grip Pliers | |
| Crimp System Pliers | |
| Crimping Dies | 170 |
| | |
| Crimping Pliore | 172 |
| Crimping Pliers | 172 166 |
| Crimping Pliers also for two-hand operation | 172 166 178 |
| Crimping Pliers also for two-hand operation Crimping Pliers for end sleeves | 172 166 178 213 |
| Crimping Pliers also for two-hand operation Crimping Pliers for end sleeves | 172 166 178 213 184 |
| Crimping Pliers also for two-hand operation Crimping Pliers for end sleeves | 172 166 178 213 184 170 |
| Crimping Pliers also for two-hand operation | 172 166 178 213 184 170 176 |
| Crimping Pliers also for two-hand operation Crimping Pliers for end sleeves | 172 166 178 213 184 170 176 177 |
| Crimping Pliers also for two-hand operation | 172 166 178 213 184 170 176 177 |
| Crimping Pliers also for two-hand operation Crimping Pliers for end sleeves | 172 166 178 213 184 170 176 177 |
| Crimping Pliers also for two-hand operation | 172 166 178 213 184 170 176 177 177 133 139 |

| Diagonal Cutters | |
|---|--|
| Diagonal Cutters for electromechanics | |
| Diagonal Cutters for plastics | |
| Diagonal Insulation Strippers | |
| Dismantling Pliers | |
| Dismantling Tools | |
| Dismantling Tool for building and industrial cables | |
| Dismantling Tool for data cables | |
| Dismantling Tool for flat and round cables | |
| Duckbill Pliers | |
| Ear Clamp Pliers | |
| eCrimp | |
| Electricians' Gloves | |
| Electricians' Shears | |
| Electricians' Pliers | |
| Electronic Super Knips [®] / ESD | |
| Electronics Diagonal Cutters | |
| Electronics End Cutting Nippers / ESD | |
| Electronics Mounting Pliers | |
| Electronics Oblique Cutting Nipper | |
| Electronics Pliers Electronics Pliers / ESD | |
| Electronics Pliers / ESD | |
| Electronics Priers Sets | |
| Electronics Wire Stripping Shears | |
| End Cutting Nippers | |
| End Cutting Nippers for mechanics | |
| ErgoStrip® — Universal Dismantling Tool | |
| Extension Bars, insulated | |
| Extension dais, insulated | |
| Farriors' Pincors | 87 |
| Farriers' Pincers | |
| Flat Nose Grozing Pliers | |
| Flat Nose Grozing Pliers Flat Nose Pliers | 146 |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic | 146 60, 200 224 |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges | |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts | |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer | |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers | |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers | |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics | |
| Flat Nose Grozing Pliers Flat Nose Pliers Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripp Pliers Gripping Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated | 146 60, 200 224 37 180 146 146 69 63 66 147 86 220 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripp Pliers Gripping Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hamerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters | 146 60, 200 224 37 180 146 146 69 63 66 147 86 220 101 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Combination Pliers | 146 60, 200 224 37 180 146 146 69 63 66 147 86 220 101 29, 196 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers | 146 60, 200 224 37 180 146 146 69 69 63 66 147 86 220 101 29, 196 89 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripping Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers High Leverage Diagonal Cutters | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripp Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers. Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Combination Pliers. High Leverage Concreters' Nippers High Leverage Diagonal Cutters High Leverage End Cutting Nippers | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Combination Pliers High Leverage Concreters' Nippers High Leverage Diagonal Cutters High Leverage End Cutting Nippers Hose Clamp Pliers for Click clamps | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripp Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Combination Pliers High Leverage Concreters' Nippers High Leverage End Cutting Nippers Hose Clamp Pliers for Click clamps Insertion tool | 146 60, 200 224 37 180 146 146 146 69 63 66 147 86 220 101 29, 196 89 98, 205 108 143 167 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Combination Pliers High Leverage Concreters' Nippers High Leverage End Cutting Nippers Hose Clamp Pliers for Click clamps Insulated tools | 146 60, 200 224 37 180 146 146 69 63 66 147 86 220 101 29, 196 98, 205 98, 205 108 143 167 192 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers High Leverage Concreters' Nippers High Leverage End Cutting Nippers Hose Clamp Pliers for Click clamps Insulated tools Insulating Clamp | 146 60, 200 224 37 180 146 146 69 69 63 66 147 86 220 101 29, 196 89 98, 205 108 167 192 224 |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripping Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers High Leverage Concreters' Nippers High Leverage End Cutting Nippers Hose Clamp Pliers for Click clamps Insertion tool Insulated tools Insulating Clamp Insulating Mats | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Breaking Pincers Gripping Pliers for precision mechanics Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers. Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers High Leverage Concreters' Nippers High Leverage End Cutting Nippers. Hose Clamp Pliers for Click clamps Insertion tool Insulated tools Insulating Clamp Insulating Mats Insulation Stripper, automatic | |
| Flat Nose Grozing Pliers Flat Nose Pliers of plastic Flat Nose Pliers of plastic Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Gripping Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers High Leverage Concreters' Nippers High Leverage End Cutting Nippers Hose Clamp Pliers for Click clamps Insertion tool Insulated tools Insulating Clamp Insulating Mats | |
| Flat Nose Grozing Pliers | |
| Flat Nose Grozing Pliers | 146 60, 200 224 37 180 146 146 69 69 63 66 147 86 220 101 29, 196 98, 205 108 143 167 192 224 225 46 .2, 51, 198 45 37 |
| Flat Nose Grozing Pliers. Flat Nose Pliers Flat Nose Pliers of plastic. Flat Nose Pliers with cutting edges Four-Mandrel Crimping Pliers for turned contacts Glass Breaking Pincer Glass Nibbling Pincers Grip Pliers Gripping Pliers for precision mechanics Halogen Bulb Exchange Pliers. Hammerhead Style Carpenters' Pincers Hexagon Sockets, insulated High Leverage Centre Cutters High Leverage Concreters' Nippers High Leverage Diagonal Cutters. High Leverage End Cutting Nippers. Hose Clamp Pliers for Click clamps Insulating Mats Insulation Stripper, automatic Insulation Strippers with shaped blades Jewellers' Pliers | 146 60, 200 224 37 180 146 146 69 63 66 147 86 220 101 29, 196 98, 205 108 143 167 192 224 225 46 2, 51, 198 45 37 33 |

| Long Reach Needle Nose Pliers |
|---|
| Long Reach Needle Nose Pliers with transverse profiles |
| Magnetic LED Lamp |
| Mechanics' Pliers |
| Mini Stripping Tool |
| Mitre Shears for plastic and rubber sections |
| Mounting Tool for MC3 connectors 175 |
| MultiCrimp [®] |
| MultiStrip 10 |
| Multiple Slip Joint Spanner |
| Needle-Nose Pliers |
| Needle-Nose Combination Pliers |
| Notching Pliers |
| Nut Drivers |
| Open End Wrenches, insulated |
| Parrot Beak Pincer |
| Pen-Style Control Cabinet Key150 |
| Pipe Cutter for composite and plastic pipes |
| Pipe Cutter for composite pipes and protective tubes |
| Pipe Cutter for plastic conduit pipes and hoses |
| Pipe Cutter for plastic pipes |
| Pipe Gripping Pliers |
| Pipe Wrenches |
| Plastic Tweezers |
| Pliers for Electrical Installation |
| Pliers Sets |
| |
| Pliers Sets in a foam tray |
| Pliers Wrench XL |
| Pliers Wrench, insulated |
| Pliers Wrenches |
| Potters' Pincers |
| PreciForce [®] |
| Precision Circlip Pliers Sets |
| Precision Circlip Pliers to assemble external circlips on shafts |
| Precision Circlip Pliers to assemble internal circlips into bores |
| Precision Electronics Diagonal Cutters / ESD |
| Precision Electronics Gripping Pliers / ESD |
| Precision Insulation Strippers |
| Precision Mechanics Pliers |
| Precision Tweezers |
| Profi-Key |
| PUK® Junior Hacksaw |
| Punch Lock Riveters |
| Radio Pliers |
| Relay Adjusting Pliers65 |
| Reversible Ratchet, insulated |
| Reversible Ratchets, insulated |
| Revolving Punch Pliers |
| Round Nose Pliers |
| Round Nose Pliers with cutting edge |
| Screwdrivers |
| Self-Adjusting Crimping Pliers |
| Self-Adjusting Insulation Strippers |
| Set of Mounting Tools for solar cable connectors MC4 |
| Set of pliers in a foam tray |
| Set of pliers wrenches |
| Shears for KEVLAR® fibres |
| Sheet Metal Nibbler |
| Siphon Pliers |
| Jipinon i nici Ji |
| |

| Smart Grip [®] | |
|--|---|
| Siliare Grip | |
| Snipe Nose Pliers with centre cutter (Telephone Pliers) | |
| Snipe Nose Side Cutting Pliers | |
| Solar Tools | 44, 170, 174 |
| Special Retaining Ring Pliers for retaining rings on sha | fts 80 |
| Spring Hose Clamp Pliers | |
| Spring Hose Clamp Pliers with retainer | |
| Stand Mats | |
| Steel Fixers' Nippers | |
| Stork Beak Pliers | |
| Stripping Tool for coax cables | |
| Stripping Tool for fibre optics | |
| Stripping Tweezers for Coated Wire | |
| Tear-off Pliers for vehicle bodywork | |
| Telephone Pliers | |
| Tether attachment point | |
| T-handle, insulated | |
| Tile Breaking Pliers | |
| Tile Nibbling Pincer | |
| Tool bags and tool cases | |
| Tool Case for Photovoltaics | |
| Tool Case for Photovoltaics MC3 | |
| Tool kits | |
| Tools for Photovoltaics | 44, 170, 174 |
| T 147 1 1 1 1 1 | |
| Torque Wrenches, insulated | |
| Torque Wrenches, insulated Tower Pincers | |
| | |
| Tower Pincers | |
| Tower Pincers Tweezers | |
| Tower Pincers Tweezers TwinForce® | |
| Tower Pincers Tweezers TwinForce [®] TwinKey [®] | |
| Tower Pincers Tweezers TwinForce [®] TwinKey [®] Universal Dismantling Tools | |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers | |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key | |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers | |
| Tower Pincers Tweezers TwinForce [®] TwinKey [®] Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools | 88 208, 249 |
| Tower Pincers Tweezers TwinForce [®] TwinKey [®] Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Sets. VDE Tool Case | |
| Tower Pincers Tweezers TwinForce [®] TwinKey [®] Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Sets | 88 |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Sets VDE Tool Case Vinyl Shears | |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Tool Case VDE Tool Case Vinyl Shears Water Pump Pliers | |
| Tower Pincers Tweezers TwinForce® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Sets VDE Tool Case VDE Tool Case Water Pump Pliers Water Pump Pliers with groove joint | 88 |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Tools VDE-Sets VDE Tool Case Vinyl Shears Water Pump Pliers Water Pump Pliers Water Pump Pliers Water Pump Pliers Welding Grip Pliers Wire Rope Shears | |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Tools VDE-Sets VDE Tool Case VDE Tool Case Water Pump Pliers Water Pump Pliers with groove joint Welding Grip Pliers | 88 208, 249 100 148 55 68 149 144 192 263 226 226 134 125 125 68 162, 213 49 |
| Tower Pincers Tweezers TwinForce® TwinKey® Universal Dismantling Tools Universal Grip Pliers Universal Key Upholstery pliers VDE-Tools VDE-Tools VDE-Sets VDE Tool Case Vinyl Shears Water Pump Pliers with groove joint Water Pump Pliers Water Pump Pliers Water Rope Shears Wire Stripper for fibre optics | 88 208, 249 100 148 55 68 149 144 192 263 226 23 226 134 125 125 68 |

It is not permissible to copy the catalogue or parts of it in any way without our approval.

Subject to model modifications and technical changes.

Illustrations, dimensions and weights are just approximate. No liability is assumed for misprints or errors.

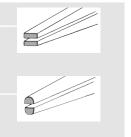
Printed in the Federal Republic of Germany.

KNIPEX-Werk C. Gustav Putsch KG 2016

BASIC SHAPES OF THE JAWS

flat jaws

half-round jaws



round jaws

JOINT CONNECTIONS



Forged-in joint axle The rivet is part of one handle (forged from one piece) - high stability for highest str





TYPES OF JOINTS

Lap joint

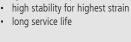
The two plier halves lie on top of each other but are not milled out.

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.



Joint with inserted rivet

A proved, 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).



Cutting Pliers for cutting or nipping (diagonal, centre and end cutters, carpenters' pincers etc.)



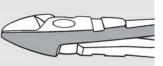
Gripping Pliers (flat-, long-nose and water pump pliers etc.)

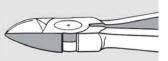


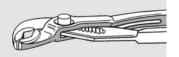
Combined Pliers for cutting and gripping (combination, stork beak and radio pliers etc.)

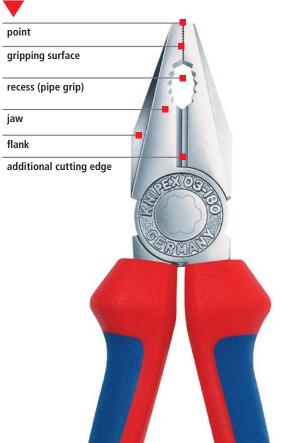


Special Pliers for special applications, e.g. notching or punching different types of materials (sheet-metal nibbler, tile nibbling pincers etc.)



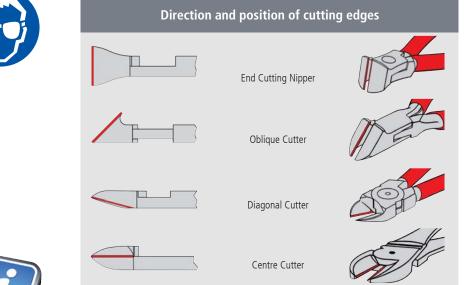






Safety instruction

- 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 A 1000 V are insulating.



Cutting edge shapes DIN ISO 5742



with bevel (outside bevel)

with small bevel

(outside bevel)

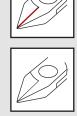






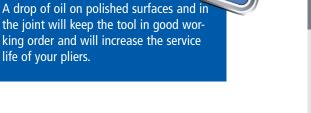
without bevel (outside bevel)

flush cut



WIRE CLASSES

| | Material examples | Type of wire | Tensile st N/mm² | rength kp/mm ² |
|---|------------------------------|--------------|---------------------|------------------------------|
| | 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 |

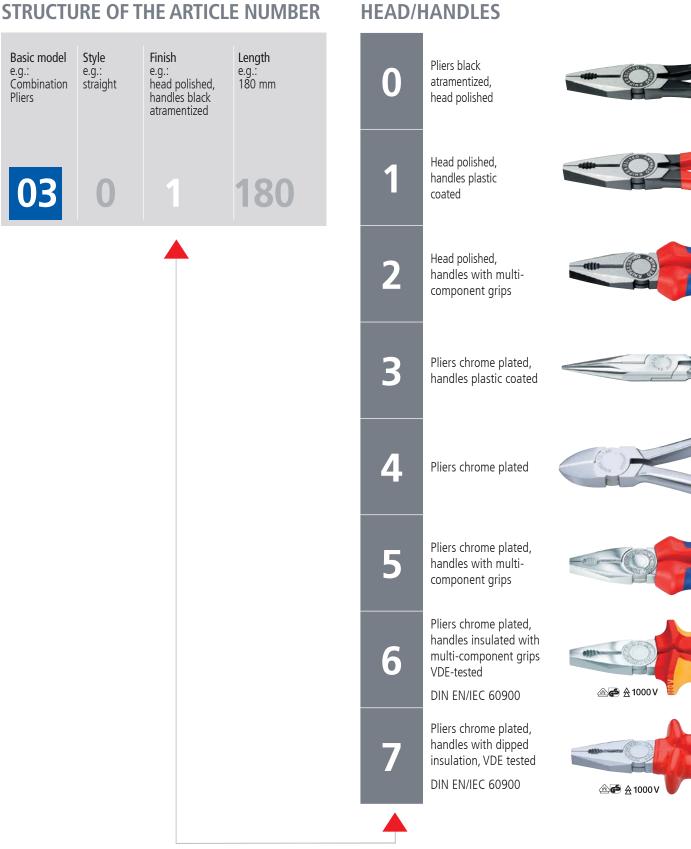


The maximum values always indicate

Care Tips

life of your pliers.

the performance limit under the most favourable cutting conditions, when the wire is placed as near as possible to the joint.



The maximum values always indicate the performance limit under the most favourable cutting conditions, when the wire is placed as near as possible to the joint.

CUTTING CAPACITIES

| Article no |). | | | | | page |
|------------|--------|-----------|------|------|------|----------|
| | Length | ø mm | ø mm | ø mm | ø mm | |
| 61 0 | 200 | 1.0 - 6.0 | 4.0 | 3.5 | 3.0 | 108 |
| 62 12 | 120 | 0.3 - 1.0 | 0.7 | | | 243 |
| 64 0 | 115 | 2.0 | 1.0 | 0.6 | | 243 |
| 64 11 | 115 | 1.4 | 0.8 | | | 243 |
| 64 12 | 115 | 2.0 | 0.8 | 0.5 | | 243 |
| 64 22 | 115 | 0.8 | | | | 243 |
| 64 32 | 120 | 1.5 | 1.0 | 0.5 | | 243 |
| 64 42 | 115 | 1.5 | 1.0 | 0.5 | | 243 |
| 64 52 | 115 | 1.3 | | | | 243 |
| 64 62 | 120 | 0.6 | | | | 243 |
| 64 72 | 120 | 1.5 | | | | 243 |
| 67 0 | 140 | 4.0 | 3.1 | 2.0 | 1.5 | 108 |
| | 160 | 4.5 | 3.4 | 2.5 | 2.0 | 108 |
| | 200 | 5.0 | 3.8 | 3.0 | 2.5 | 108 |
| 68 01 | 160 | 4.0 | 2.8 | 2.3 | | 87 / 109 |
| | 180 | 4.0 | 3.2 | 2.5 | | 87 / 109 |
| | 200 | 4.0 | 3.5 | 2.8 | | 87 / 109 |
| | 280 | 4.5 | 4.0 | 3.2 | | 87 / 109 |
| 69 0 | 130 | 0.4 - 2.0 | 1.3 | 1.0 | 0.8 | 109 |
| 70 | 110 | 3.0 | 2.0 | 1.2 | | 94 |
| | 125 | 3.0 | 2.3 | 1.5 | | 94 / 202 |
| | 140 | 4.0 | 2.5 | 1.8 | | 94 / 202 |
| | 160 | 4.0 | 3.0 | 2.0 | | 94 / 202 |
| | 180 | 4.0 | 3.0 | 2.5 | | 94 / 202 |
| 71 | 200 | 6.0 | 5.2 | 4.0 | 3.6 | 102 |
| 73 0 | 160 | 4.8 | 3.8 | 2.7 | 2.2 | 97 / 205 |
| 73 7 | 180 | 5.5 | 4.6 | 3.2 | 3.0 | 100 |
| 74 0 | 140 | | 3.1 | 2.0 | 1.5 | 99 |
| | 160 | | 3.4 | 2.5 | 2.0 | 99 / 205 |
| | 180 | | 3.8 | 2.7 | 2.2 | 99 / 205 |
| | 200 | | 4.2 | 3.0 | 2.5 | 99 / 205 |
| | 250 | | 4.6 | 3.5 | 3.0 | 99 / 205 |
| 74 91 | 250 | 5.0 | 5.0 | 3.8 | 3.5 | 101 |
| 75 02 | 125 | 0.2 - 1.3 | 1.0 | 0.6 | 0.4 | 238 |
| 75 12 | 125 | 0.2 - 1.3 | 1.0 | 0.6 | 0.4 | 238 |
| 75 22 | 125 | 0.2 - 1.3 | 0.9 | 0.4 | 0.3 | 238 |
| 75 52 | 125 | 0.2 - 0.8 | 0.5 | 0.3 | | 238 |
| 76 01 | 125 | 0.4 - 3.0 | 2.3 | 1.5 | 0.6 | 96 |

| Article no. | | | | | | page |
|-------------|--------|-----------|------|------|------|-----------|
| | Length | ø mm | ø mm | ø mm | ø mm | |
| 76 03/05 | 125 | 0.4 - 2.5 | 1.8 | 1.0 | 0.6 | 96 |
| 76 12 | 125 | 0.4 - 2.5 | 1.8 | 1.0 | 0.6 | 96 |
| 76 22 | 125 | 0.4 - 2.5 | | | | 96 |
| 76 81 | 125 | 0.4 - 1.7 | 1.3 | 0.8 | | 96 |
| 77 01/02 | 115 | 0.3 - 1.6 | 1.2 | 0.6 | | 239 |
| | 130 | 0.3 - 2.0 | 1.5 | 0.8 | | 239 |
| 77 11/12 | 115 | 0.3 - 1.6 | 1.2 | 0.6 | | 239 |
| 77 21 | 115 | 0.3 - 1.3 | 1.0 | | | 239 |
| | 130 | 0.3 - 1.6 | 1.3 | | | 239 |
| 77 22 | 115 | 0.3 - 1.3 | 1.0 | | | 239 |
| | 130 | 0.3 - 2.0 | 1.5 | | | 239 |
| 77 32 | 115 | 0.3 - 1.3 | 1.0 | 0.5 | | 239 |
| 77 42 | 115 | 0.3 - 1.3 | 0.8 | | | 239 |
| | 130 | 0.3 - 1.6 | 1.3 | | | 239 |
| 77 52 | 115 | 0.3 - 1.0 | 0.8 | 0.5 | | 239 |
| 77 72 | 115 | 0.3 - 0.8 | | | | 239 |
| 78 03/13 | 125 | 0.2 - 1.6 | 1.0 | | | 235 |
| 78 23 | 125 | 0.2 - 1.0 | 0.6 | | | 235 |
| 78 31/41 | 125 | 0.2 - 1.0 | | | | 235 |
| 78 61/71 | 125 | 0.2 - 1.6 | 1.2 | | | 235 |
| 78 81/91 | 125 | 0.2 - 1.6 | 1.2 | 0.6 | | 235 |
| 79 02 | 120 | 0.2 - 1.4 | 1.0 | 0.6 | | 236 / 237 |
| 79 02 | 125 | 0.2 - 1.7 | 1.3 | 0.7 | | 236 / 237 |
| 79 12 | 125 | 0.3 - 1.7 | 1.3 | 1.0 | 0.6 | 236 / 237 |
| 79 22 | 120 | 0.1 - 1.3 | 0.8 | | | 236 / 237 |
| 79 22 | 125 | 0.1 - 1.7 | 1.0 | | | 236 / 237 |
| 79 32 | 125 | 0.2 - 1.5 | 1.1 | 0.6 | | 236 / 237 |
| 79 42 | 125 | 0.1 - 1.5 | 0.8 | | | 236 / 237 |
| 79 52 | 125 | 0.2 - 1.3 | 0.9 | 0.5 | | 236 / 237 |
| 79 62 | 125 | 0.1 - 1.3 | 0.8 | | | 236 / 237 |
| 99 0 | 200 | | 1.8 | 1.4 | | 88 |
| | 220 | | 2.4 | 1.6 | | 88 |
| | 250 | | 2.4 | 1.6 | | 88 |
| | 280 | | 2.8 | 1.8 | | 88 |
| | 300 | | 3.1 | 1.8 | | 88 |
| 99 1 | 250 | | 3.3 | 1.8 | | 89 |
| | 300 | | 3.8 | 2.0 | | 89 |

SYMBOLS

| | flat jaws | > | with lead catcher |
|-----------|---|--------------|--|
| θ | half-round jaws | \checkmark | angle |
| 8 | round jaws | | |
| | flat and pointed jaws | | |
| | box joint | | centre cutter |
| | bolted joint | | cutting edges with bevel |
| \square | smooth gripping surfaces | | cutting edges with small bevel |
| | serrated gripping surfaces | | cutting edges with very small bevel |
| \otimes | cross-hatched, knurled gripping surfaces | | cutting edges without bevel |
| MM | with opening spring | | for flush cut of soft materials |

| | electrostatic discharging, dissipative | Δ^{L} | | weight |
|--------------|--|--------------|----|---|
| X \$K | electronics | - | | length |
| | VDE tested, also in conformance to GPSG (Equipment and Product Safety Act) | | | oft wire |
| <u> </u> | insulated according to IEC 60900, usable up to 1000 V AC/1500 V DC | | | edium hard wire ard wire |
| 습1000V | insulated according to DIN VDE 0680/1, suitable for the application up to 1000 V AC / 1500 V DC | | | ano wire u + Al multi-conductor cable, |
| CE | conforms to a European directive | | | olid and multi-stranded |
| | mechanically tested in accordance with the equipment and product | Fe | | on |
| | safety act | | ri | bbon cable |
| | WEEE marking (Waste Electrical and Electronic Equipment Directive) | ۲ | | eel wire armoured able (SWA) |

KNIPEX Quality – Made in Germany



Registered Trademarks of the companies

| Con-Pearl [®] | PARAT-WERK Schönenbach GmbH + Co. KG |
|---|---|
| gesis® | Wieland Electric GmbH |
| Kapton [®] , KEVLAR [®] | E. I. du Pont de Nemours and Company |
| Radox® | HUBER+SUHNER AG |
| Phillips [®] | Phillips Screw Company |
| Pozidriv [®] | European Industrial Service Ltd. |
| systainer® | TANOS GmbH |
| Mini-Fit [®] , Micro-Fit™ | Molex [®] Inc. |
| MC [®] | Multi-Contact AG |
| Solarlok® | Tyco Electronics |
| Torx [®] | Acument Global Technologies, Inc. |
| | |



Survey of pictograms on the inside of cover flap



KNIPEX-Werk C. Gustav Putsch KG

42337 Wuppertal

Tel +49 (0) 202 - 47 94-0 Fax +49 (0) 202 - 47 74 94

info@knipex.de www.knipex.de

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Pliers & Tweezers category:

Click to view products by Knipex manufacturer:

Other Similar products are found below :

 0031
 32750
 PN-5050/38D
 PG-TP-30D
 PG-DP-18-N
 G77015
 4-1532129-2
 77 12 115
 0037
 T0058765801
 571
 76C
 37 31 125
 RX 8130

 37 33
 125
 DRP10N
 32 11 135
 36 12 130
 0036
 64 11 115
 0032
 6231-08
 PN 5050/19D
 PNI 5000
 TP 5000/15D
 TR 30 15 V
 TR 5000 PR

 TR 58
 R A D
 00 20 08 US2
 13 01 614
 87 28 250 SBA
 INCP8
 30993
 011820101
 011830101
 011910110
 003780032
 003780041

 134-69-160
 134-69-180
 135-49-VDE-190
 137-49-VDE-180
 137-49-VDE-200
 137-69-180
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 137-69-200
 138-69-200
 140-49-VDE-170